

A  
MAJOR PROJECT REPORT  
ON  
“ENERGY AUDIT, GREEN AND ENVIRONMENT SURVEY OF  
KHARGONE GOVT. COLLEGE”



Submitted in the partial fulfillment of the award of Degree of  
**MASTER OF TECHNOLOGY**

IN  
**ENERGY MANAGEMENT**

2020-2022

**SUBMITTED BY**

ABHISHEK MONDAL (20EN7A436)

**Guided by**

**Dr. R.N. Singh**

Professor and HOD

Department of SEES

DAVV, Indore (M.P)

**Co – Guided By**

**Mr. Rambabu Raghuwanshi**

Technical Director

SABS Energy Enviro Pvt. Ltd.

90/2 Abhinav Nagar, Teen Emali Square,

Behind Vishesh Hospital, Indore, M.P

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES DEVI AHILYA  
VISHWAVIDYALAYA, INODRE (M.P)-452001**

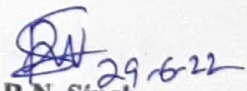
**JUNE 2020-22**

## CERTIFICATE

This is to certify that the Work in this thesis entitled "ENERGY AUDIT, GREEN AND ENVIRONMENT SURVEY OF KHARGONE GOVT. COLLEGE" submitted by **Abhishek Mondal** in the partial fulfillment of the award of the degree of Master of Technology (Energy Management), session (2020-2022), from Devi Ahilya Vishwavidyalaya, Indore. He has completed this thesis successfully and full filled all requirements.

Place- Indore

Date-

  
Dr. R.N. Singh

Professor and HOD

Department of SEES

DAVV, Indore (M.P)





# SABS ENERGY ENVIRO PVT. LTD.

GST No: 23ABDCS0344N1ZD

Date- 25/06/2022

## TO WHOM IT MAY CONCERN

This is to certify that **Mr. Abhishek Mondal**, a student of School of Energy & Environmental Studies, Indore (DAVV) has successfully completed 5 months (From the date of 31<sup>st</sup> Jan 2022 to 20<sup>th</sup> June 2022) of internship program at SABS Energy Enviro Pvt. Ltd.

He has successfully completed internship on the topic "**Energy Audit, Green and Environment Audit Survey**" under the guidance of Mr. Rambabu Raghuwanshi- Technical Director . During the period of his internship program with us, he was found **punctual, hardworking and inquisitive.**

We hereby certify his work satisfactory to the best of our knowledge.

We wish him every success in career & life.

For- **SABS Energy Enviro Pvt. Ltd.**



**MR. SANJAY SINGH**  
**EA-1462**  
**Director**  
**Certified Energy Auditor**  
**BEE**

**SABS ENERGY ENVIRO PVT. LTD.**

[www.sabs-india.com](http://www.sabs-india.com)

Works: 90/2 AbhinavNagar ,Chitawad Ring Road,TinEmali, Indore  
Mob. # 98260-12991, 8236088801 E-mail: [sabsind@yahoo.co.in](mailto:sabsind@yahoo.co.in), [sabsindia2018@gmail.com](mailto:sabsindia2018@gmail.com)

A  
MAJOR PROJECT  
ON

“On-grid roof top solar photovoltaic Power plant at Jaipur”



*Submitted in partial fulfilment of requirement for award of the degree of*  
**MASTERS OF TECHNOLOGY IN ENERGY MANAGEMENT**

**SUBMITTED BY**  
ABHISHEK NAMDEO (20EN7A452)

**GUIDED BY**  
DR. R.N. SINGH  
(Professor and Head, SEES)

**CO-GUIDED BY**  
HARSHIT RAJPUROHIT  
(Head, S.R. Sunpower Pvt. Ltd.)

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES**  
**DEVI AHILYA VISHWA VIDYALAYA,**  
**INDORE - 452001 (M.P.), INDIA**  
**(2020-2022)**



## CERTIFICATE

I hereby declare that the project work entitled "**On-grid roof top solar photovoltaic Power plant at Jaipur**" submitted to the SEES, DAVV, is a record of an original work done by me under the guidance of Dr. R.N. Singh, Professor & Head, School of Energy and Environmental Studies, DAVV, Indore, co-guidance of Harshit Rajpurohit, Director, S.R. Sunpower Pvt Ltd, Jaipur, Rajasthan. This project work is submitted in the partial fulfilment of the requirements for the award of the degree of Master of Technology in Energy Management. The results reported by Abhishek Namdeo (20EN7A452) is genuine and the script of this thesis has been written by the candidate. The thesis is therefore being recommended for acceptance.

Date: -----

  
ABHISHEK NAMDEO

(20EN7A452)

**S.R. Sunpower Pvt Ltd**



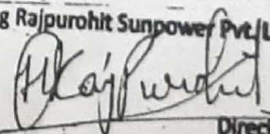
Letter No.: SR/JP/2022/06-1

Date: 20/06/2022

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Abhishek Namdeo, student of Master of Technology (Energy Management) (20EN7A452) of SEES DAVV, Indore, Madhya Pradesh has undergone "Internship Training" in the S.R. Sunpower Private Limited, Jaipur for a period from 10<sup>th</sup> January 2022 to 20<sup>th</sup> June 2022 and has developed Project Design Document on "4Kw On-Grid Solar PV plant in Jaipur (Rajasthan)".

During his internship tenure, we found him to be sincere and hardworking. We wish him for an exquisite career and future eminence.

Siyag Rajpurohit Sunpower Pvt./Ltd.  
  
Director

**Address: 504, Bigbenn Okey Plus, Swej Farm Circle Jaipur Rajasthan-302019**

**Website: [www.srsunpowerpvtltd.com](http://www.srsunpowerpvtltd.com)**

**Email: [srsunsolar@gmail.com](mailto:srsunsolar@gmail.com)**

**Phone: 7300101600, 9166668991**



**Major Project Report On**  
**Developing HYDRO-METEOROLOGICAL RESILIENCE ACTION PLANS**  
**(HMRAP) in Selected Urban Areas in India**



Submitted in the partial fulfillment for the award of degree of

**MASTER OF TECHNOLOGY**

**IN**

**ENERGY MANAGEMENT**

2020-2022

**SUBMITTED BY**

**AADITYA SHARMA**

Guided By:

Dr. Rubina Chaudhary

Professor

School of Energy and Environmental  
Studies

Devi Ahilya Vishwavidyalaya

Indore

Co-Guided By:

Mr Raman Kumar

Director Projects waters

Royal Haskoning DHV

Noida

**JUNE 2022**

SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES  
DEVI AHILIYA VISHWAVIDYALAYA  
INDORE (M.P)-452017



**CERTIFICATE**

This is to Certify that the work in this project entitled "Developing HYDRO-METEOROLOGICAL RESILIENCE ACTION PLANS in Selected Urban Areas in India" is a bonafide work carried out by Aaditya Sharma (20EN7A437) in partial fulfillment of the requirements of the prescribed curriculum for Masters of Technology in Energy Management, session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore. It is an authentic work carried out by his under my supervision and guidance to the best of my knowledge.

**Guide**

*R. Chaudhary*  
Dr. Rubina Chaudhary

Professor

27.06.22



Date: June 13, 2022

**HASKONINGDHV CONSULTING PVT. LTD.**

Green Boulevard, Tower – B  
Fourth floor, Plot No. B - 9A, Sector – 62  
Noida 201301, India  
+91 (0) 120 4016100 Telephone  
+91 (0) 120 4260165 Fax  
info.india@rhdhv.com E-mail  
[www.royalhaskoningdhv.com](http://www.royalhaskoningdhv.com) Internet

**To Whomsoever It May Concern**

This is to certify that **Mr. Aaditya Sharma** student of **M. Tech. – School of Energy and Environmental studies (DAVV), Indore** has undergone an internship with HaskoningDHV Consulting Pvt Ltd, in our **Advisory Group - Water Technology & Resilience, India** from **Jan 10, 2022 to June 13, 2022**.

During his internship period, he got working exposure for submission of technical deliverables for the **consultancy contract on the Project “Consultancy Services for Developing Hydrometeorological Resilient Action Plans (HmRAP) in Selected Urban Areas in India” between Project Management Unit, NDMA of the National Cyclone Risk Mitigation Project II (NCRMP-II) and Haskoning DHV Consulting Pvt. Ltd.**

Objective of the project is to develop Hydro-meteorological Resilient Action Plans (HmRAP) both for existing challenges and arising from future change in urban scenario and climate, based on an internationally recommended and nationally adaptable framework for understanding and improving urban resilience, for six selected coastal cities.

During his internship period, we found him to be hardworking and sincere. We wish him success for his future.

**For HaskoningDHV Consulting Private Limited**  
**A Company of Royal HaskoningDHV**



**Saloni Sharma**  
**Country Manager-HR, India**

HaskoningDHV Consulting Pvt. Ltd.  
Registered office: Office No. 204, 2<sup>nd</sup> Floor, RS Tower, Plot No. B 358A,  
New No. 1267, New Ashok Nagar, Delhi – 110096  
CIN: U93000DL1997PTC089958



**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES DEVI AHILYA  
VISHWAVIDYALAYA INDORE (M.P)-452001**



**A MAJOR PROJECT**

**ON**

**“Greenhouse gas reduction from improved agricultural land  
management”**

Submitted in the Partial Fulfilment of the award of Degree of

**MASTER OF TECHNOLOGY**

**IN**

**ENERGY MANAGEMENT**

**2020-22**

**SUBMITTED BY**

**Apoorva Singh**

**(20EN7A438)**

**Supervisor**

**Dr. R.N. Singh**

**(Professor and Head)**

**SEES, DAVV, Indore**

**Co-Supervisor**

**Dr. Mohammad Moonis**

**(Senior Manager Operations)**

**EKI Energy Services Ltd.**

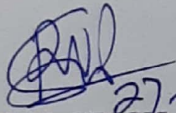


**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES DAVV,  
INDORE**



**CERTIFICATE**

This is to certify that Major Project “Greenhouse gas reduction from improved agricultural land management” is being submitted by Ms. Apoorva Singh for the partial fulfilment of the Award of the Degree of Master of Technology (Energy Management), Devi Ahilya Vishwavidyalaya Indore. She has completed this Major Project successfully under my guidance and fulfilled all requirements.

  
27-6-22  
Dr. R.N. SINGH

(Professor & Head)

SEES, DAVV

Indore

Date:

Ref: EKI\_SI/April/2022

Date: 20/04/2022

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Ms. Apoorva Singh student of Mtech (Energy Management), in DAVV Indore, has successfully completed 3 Months (from 20 January 2022 to 20 April 2022) internship in **Operation NBS Department** at EKI Energy Services Limited, Indore.

She has worked on a project titled "**Sustainable Agriculture Land Management by Amiha Agro Pvt. Ltd.(VCS Verra Project)**". During her internship, she has demonstrated her skills with self-motivation to learn new skills also her conduct was good. Her performance exceeded our expectations and she was able to complete the project on time.

We wish her all the best for future Endeavors!!

For EKI Energy Services Limited

  
**Authorized Signatory**

**Sonali Shaikh,**  
**Director & CFO**  
**(HR & Admin)**

Regd. Office - Enking Embassy,  
Plot 48, Scheme 78 Part 2, Vijay Nagar,  
Indore-452010, Madhya Pradesh, India  
Corp. Office - 903, B-1 9th Floor, NRK Business Park,  
Scheme 54, Indore - 452010, Madhya Pradesh, India

An ISO 9001:2015 certified organisation  
CIN - L74200MP2011PLC025904  
GSTIN - 23AACCE6986E1ZL  
UAM (MoMSME) - MP-23-0014187



**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES DEVI AHILYA  
VISHWAVIDYALAYA INDORE (M.P)-452001**



**A MAJOR PROJECT  
ON  
“Designing, installation, technical analysis & performance evaluation of  
solar PV power plant”**

Submitted in the Partial Fulfillment of the award of Degree of

**MASTER OF TECHNOLOGY  
IN  
ENERGY MANAGEMENT**

**2020-22  
SUBMITTED BY  
Ashish Kumar Choubey  
(20EN7A439)**

**Supervisor**

Dr. Rubina Chaudhary  
Professor  
SEES, DAVV Indore

**Co-Supervisor**

Mr. Piyush Patidar  
Assistant General Manager  
Shakti Pump India Ltd., Pithampur

# SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES

Devi Ahilya Vishwavidyalaya, Indore (M.P.) – 452017



## CERTIFICATE

This is to certify that the work in this thesis entitled “Designing, Installation, Technical analysis & Performance Evaluation of Solar PV Power Plant” submitted by Ashish Kumar Choubey (20EN7A439) in the partial fulfillment of the requirements of the prescribed curriculum for the Master of Technology in Energy Management, Session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore. The work was carried out by candidate under our guidance.

**Dr. Rubina Chaudhary**

**Supervisor**

**Professor**

**SEES, DAVV, Indore**

**Date:**

**Place: Indore**





SPIL/HR/30130008/E2/1567

Date-15.06.2022

## MAJOR PROJECT COMPLETION CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Ashish Choubey** student of M.Tech. (Energy Management), School of Energy and Environmental Studies, DAVV Indore (MP) has successfully completed major Project on "**Designing, Installation, Technical Analysis & Performance Evaluation of solar PV Power Plant**".

This internship/ Major project work was scheduled from **04.01.2022 to 06.05.2022**. During this period, he was assigned the study of various aspects of solar Photovoltaic system design, analysis.

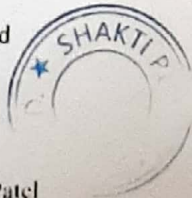
We wish him all the success in his future endeavours.

For. Shakti pumps (India) Ltd

Mr. Pratik Dhirendrakumar Patel

DGM - HR & Admin Department

15/06/2022



*Piyush Patidar*

Mr. Piyush Patidar

AGM - Solar  
(Training Mentor)

**SHAKTI PUMPS (INDIA) LIMITED**

CIN: L29120MP1995PLC009327, Regd. Office & Works: Plot No. 401, 402 & 413, Industrial Area, Sector - 3, Pithampur - 454774, Dist. Dhar (M.P.) INDIA.  
Tel: +91 7292 410500, Fax: +91 7292 410645, E-mail: info@shaktipumps.com, sales@shaktipumps.com. Web: www.shaktipumps.com

# MAJOR PROJECT REPORT

ON



## THE ENVIROMENTAL AUDIT IN INDUSTRIAL AREA /ESTATE MUZAFFARPUR BIHAR

Submitted in the partial fulfillment of the award of Degree of

**MASTER OF TECHNOLOGY**

IN

**ENERGY MANAGEMENT**

2020-22

**SUBMITTED BY  
AVINASH KUMAR**

**Supervisor**

Dr. Rubina Choudhary

Professor

EES, DAVV, Indore

**Co-Supervisor**

Mr. K. K. Sinha

Director

ENVIRONMENTAL ENGINEERING  
& CONSULTANCY SERVICES

GHAZIABAD-201012 (U.P.)

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES**

**(FACULTY OF ENGINEERING SCIENCES)**

**DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P.)-452017**



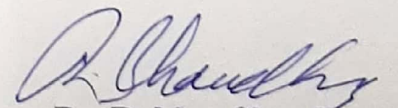
# SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES

Devi Ahilya Vishwavidyalaya, Indore (M.P.) – 452017



## CERTIFICATE

This is to certify that the work in this thesis entitled **THE ENVIROMENTAL AUDIT IN INDUSTRIAL AREA /ESTATE MUZAFFARPUR BIHAR** submitted by **Avinash Kumar (20EN7A440)** in the partial fulfillment of the requirements of the prescribed curriculum for Master of Technology in Energy Management, Session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore. The work carried out by candidate under our guidance's.

  
**Dr. Rubina Choudhary**

**Professor**

**SEES, DAVV, Indore**

**Date:**

**Place: Indore**

# Environmental Engineering & Consultancy Services

Date: June 27<sup>th</sup>, 2022

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Avinash Kumar student of M.Tech. (Energy Management) during the session 2020-22 from School of Energy & Environmental Studies (Faculty of Engineering Sciences), Devi Ahilya Vishwavidyalaya, Indore (MP)-452017 has undergone an internship with Environmental Engineering & Consultancy Services from January 10<sup>th</sup>, 2022 to June 25<sup>th</sup>, 2022.

During his internship period, he worked with the expert team for conduction of Environmental Audit work in the Industrial Area/Estate of Bela Muzaffarpur, Bihar under the GIZ project for the capacity development of officials of Bihar State Pollution Control Board.

The objective of the project is to minimization of solid & liquid wastes as well as reduction in energy consumption and to meet the Environmental Compliances stipulated by the Bihar State Pollution Control Board.

During his internship period, we found him to be hardworking and sincere. He developed good relationship with the member units of the industrial area and able to get the data & information. He developed skill in conducting process study, quantification & characterization of wastes, development of measures to prevent & control of the pollution.

We wish him success for his bright career.

*Krishna Kumar Sinha.*

(Dr Krishna Kumar Sinha)  
Director.

Office Address : 17-B/515, Vasundhara, Ghaziabad, U.P. 201 012  
Mob.: 9910993075, 9868946075, E-mail : kks.eecs@gmail.com



**BUILDING DAYLIGHT PERFORMANCE  
SIMULATION AND FEASIBILITY STUDY FOR GREEN  
BUILDING COMPLIANCE**

**A  
MAJOR PROJECT REPORT**

*Submitted by*  
**ALI ASGAR AKKADWALA**  
**(20EN7A450)**

*Under the guidance of*  
**Dr. R N SINGH**

*of*

**MASTER OF TECHNOLOGY  
IN  
ENERGY MANAGEMENT**



**At**

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES,  
DEVIAHILYA VISHWAVIDYALAYA, INODRE (M.P)-  
452001**

**JUNE 2022**



**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES,  
DEVIAHILYA VISHWAVIDYALAYA, INODRE (M.P.)-  
452001**

**JUNE 2022**

I hereby declare that this Major Project report entitled “**BUILDING DAYLIGHT PERFORMANCE SIMULATION AND FEASIBILITY STUDY FOR GREEN BUILDING COMPLIANCE**” is compilation of Major Project report under the overall guidance of **Dr. R N SINGH** (Professor & Head) Department of Energy and Environmental Studies, DAVV, Indore (M.P.).

I further declare that this is my own work, which is framed with the help of journals, research papers, books, and mentor’s experience and cognizance.

**ALI ASGAR AKKADWALA**

**M.Tech-(Energy Management),**

**Semester – IV**

**20E7A450**

**SEES, DAVV**



# CERTIFICATE



**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES DEVI  
AHILYAVISHWAVIDYALAYA, INODRE (M.P)-452001**

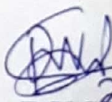
**JUNE 2022**

This is to certify that the project entitled "BUILDING DAYLIGHT PERFORMANCE SIMULATION AND FEASIBILITY STUDY FOR GREEN BUILDING COMPLIANCE" is being submitted by ALI ASGAR AKKADWALA for the partial fulfilment of the award of the degree of Master of Technology (Energy Management) from Devi Ahilya Vishwavidyalaya, Indore. He has completed this project successfully under my guidance and full filled all requirements.

Place-

Indore Date-

20/06/2022

  
29.6.22  
Dr. R N SINGH

**Professor & Head**

**Department of**

**SEES, DAVV,**

**Indore (M.P)**

A  
MAJOR PROJECT REPORT  
ON  
DESIGNING, INSTALLATION AND TECHNICAL ANALYSIS OF  
GRID-CONNECTED 140KWP SOLAR ROOF-TOP SOLAR  
PHOTOVOLTAIC SYSTEM



Submitted in the partial fulfillment of the award of Degree of  
**MASTER OF TECHNOLOGY**

IN  
**ENERGY MANAGEMENT**

2020-2022

**SUBMITTED BY**

DARSHAN KUMAR SHARMA

**Guided by**

**Dr. R. N. Singh**

Professor & Head

SEES, DAVV, Indore

**Co-Guided by**

**Mr. Piyush Patidar**

Asst. General Manager-Solar

Shakti Pumps India Ltd.

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES**  
**DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P.)-452001**

**JUNE 2022**



SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES  
DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P.)-452001

JUNE 2022



## CERTIFICATE

This is to certify that the work in this thesis entitled "**Designing, Installation and Technical Analysis of Grid-Connected 140.0kWp Solar Roof Top**" submitted by **Darshan Kumar Sharma (20EN7A441)** in the partial fulfillment of the requirements of the prescribed curriculum for Master of Technology in Energy Management, Session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore. The work carried out by candidate under our guidance's.

Place- Indore

Date-

  
Dr. R. N. SINGH 29-6-22

Professor & Head

SEES, DAVV, Indore (M.P.)



SPIL/HR/30130007/E2/1566

Date-15.06.2022

## MAJOR PROJECT COMPLETION CERTIFICATE

### TO WHOM IT MAY CONCERN

This is to certify that **Mr. Darshan Kumar Sharma** student of M.Tech. (Energy Management), School of Energy and Environmental Studies, DAVV Indore (MP) has successfully completed major Project on "**Designing, Installation, Technical Analysis & Performance Evaluation of solar PV Power Plant**".

This internship/ Major project work was scheduled from **04.01.2022 to 07.06.2022**. During this period, he was assigned the study of various aspects of solar Photovoltaic system design, analysis. He has also contributed to Shadow analysis work for various under-development SPV Module Mounting Structures including fixed as well as Auto-tracker based.

We wish him all the success in his future endeavours.

For, Shakti pumps (India) Ltd

*Pratik Patel*  
3651

Mr. Pratik Dhirendrakumar Patel

DGM – HR & Admin Department

15/6/2022



*Piyush Patidar*

Mr. Piyush Patidar

AGM – Solar  
(Training Mentor)

**SHAKTI PUMPS (INDIA) LIMITED**

L29120MP1995PLC009327. Regd. Office & Works: Plot No. 401, 402 & 413, Industrial Area, Sector - 3, Pithampur - 454774, Dist. Dhar (M.P.) INDIA.  
Tel.: +91 7292 410500, Fax: +91 7292 410645, E-mail: info@shaktipumps.com, sales@shaktipumps.com, Web: www.shaktipumps.com



A  
MAJOR PROJECT REPORT  
ON

"TO DESIGN AND INSTALLATION OF INDUSTRIAL STP  
& ETP"



Submitted in the partial fulfillment of the award of Degree of

MASTER OF TECHNOLOGY  
IN  
ENERGY MANAGEMENT  
2020-2022  
SUBMITTED BY  
DEEPANKR SINGH

**Guided By**  
**Dr. Rubina Chaudhary**  
Professor  
Department of SEE  
DAVV, Indore (M.P)

**Co – Guided By**  
**Mr. Pradeep Nimonkar**  
Chief Operating Officer  
Pristine Environmental Associates  
Pvt. Ltd.  
Indore, M.P.

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES**  
**DEVI AHILYA VISHWAVIDYALAYA, INODRE (M.P)-452001**

**JUNE 2022**

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES  
DEVI AHILYA VISHWAVIDYALAYA, INODRE (M.P)-452001**

**JUNE 2022**



**CERTIFICATE**

This is to certify that the Work in this thesis entitled **“To Design and Installation of Industrial STP & ETP”** submitted by **Deepanker Singh** in the partial fulfillment of the award of the degree of Master of Technology (Energy Management), session (2020-2022), from Devi Ahilya Vishwavidyalaya, Indore. He has completed this thesis successfully and full filled all requirements.

Place- Indore

Date- 27/6/2022

*R. Chauhan*  
**Dr. RUBINA CHAUDHARY**

Professor

Department of SEES

DAVV, Indore (M.P)



**Date:-22.06.2022**

**TO WHOM IT MAY CONCERN**

This is to certify that **Mr. Deepanker Singh**, a Student of School of Energy & Environmental Studies Indore(DAVV)has successfully completed 5 Month (From the date of 14<sup>th</sup> Jan 2022 to 14<sup>th</sup> June 2022) of internship program at **Pristine Environmental Associates Pvt Ltd**.

He has successfully completed internship on the topic "Compliance Management & Waste Water Management (Design & Installation)" under the guidance of **Mr Pradeep Nimonkar- COO**. During the period of his internship program with us, he was found punctual, hardworking and inquisitive.

We hereby certify his work satisfactory to the best of our knowledge.

We wish him every success in Career & life.

For- **Pristine Environmental Associates Pvt Ltd**



HR Department



**“CONDITION BASED MONITORING &  
MANTAINANCE OF POWER SUPPLY INSTALLATION  
OF INDIAN RAILWAY”**

**MAJOR PROJECT**

SUBMITTED TO SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES  
TOWARDS PARTIAL FULFILMENT OF THE DEGREE OF

**MASTER OF TECHNOLOGY**

(ENERGY MANAGEMENT)

2020-22



SUBMITTED TO  
**DR. R. N. SINGH**

SUBMITTED BY  
**HEMANT PAREEK(20EN7A 444)**

SUPERVISED BY  
**MR. MAHENDRA SAMOTA**  
(PROJECT MANAGER AT EN. EN. ELECTRICALS PVT LTD)

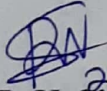
**School of Energy & Environmental Studies**  
Devi Ahilya Vishwavidyalaya, Takshashila Campus, Khandwa  
Road, Indore-452 001(M.P)  
Session 2020-22



## CERTIFICATE



This is to certify that Major Project “**Condition Based Monitoring & Maintenance Of Power Supply Installation Of Indian Railway**” is being submitted by Mr. Hemant Pareek for the partial fulfilment of the Award of the Degree of Master of Technology in Energy Management, School of Energy and environmental studies, Devi Ahilya Vishwa Vidyalaya, Indore. He has completed this Major Project successfully under my guidance and full filled all requirements.

  
27-6-22  
**Dr. R. N. Singh**

School of Energy and Environmental Studies,

Devi Ahilya Vishwa Vidyalaya, Indore

Date: 24/06/2022



**EN EN ELECTRICAL ENGINEERS (P) Ltd.**

(ELECTRICAL & CIVIL CONTRACTORS)

CIN: U31100AP1997PTC026106

REF: NN/ATP/2022-23/108

Date: 15.06.2022

TO WHOMSOEVER IT MAY CONCERN

**INTERNSHIP COMPLETION CERTIFICATE**

IT IS TO CERTIFY THAT MR. HEMANT PAREEK, HAS SUCCESSFULLY COMPLETED HIS INTERNSHIP FROM EN EN ELECTRICAL ENGINEERS PVT LTD (ANANTPUR) FROM 07/01/2022 TO 15/06/2022.

WE FOUND HIM SINCERE, HARDWORKING & OBEIDENT. HE WORKED AS TESTING ENGINEER DURING HIS TENURE. WE WISH HIM BEST FOR HIS FUTURE ENDUVERE.

FOR EN EN ELECTRICAL ENGINEERS (P) LTD.,



MANAGING DIRECTOR.

11-1-474-1, ARAVIND NAGAR, ANANTHAPURAMU - 515001  
Mail: enenelectricalbhopal@gmail.com.



**MAJOR PROJECT REPORT**

**ON**



**Project Management of Energy Efficiency  
Intervention in Bihar Cluster by SIDBI**

Submitted in the partial fulfillment of the award of Degree of

**MASTER OF TECHNOLOGY**

**IN**

**ENERGY MANAGEMENT**

**2020-22**

**SUBMITTED BY**

**HRISHABH MISHRA**

**Supervisor**

Dr. R.N. Singh

Head of Department

School of Energy & Environmental Studies

DAVV, Indore

**Co-Supervisor**

Mr. Rajiv Kumar

General Manager

Green Climate and Energy Efficiency Centre

Small Industries Development Bank of India., Delhi

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES**

**(FACULTY OF ENGINEERING SCIENCES)**

**DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P.)-452017**

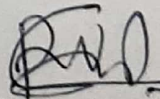
# SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES

Devi Ahilya Vishwavidyalaya, Indore (M.P.) – 452017



## CERTIFICATE

This is to certify that the work in this thesis entitled “**Project Management of Project Management of Energy Efficiency Intervention in Bihar Cluster by SIDBI**” submitted by **Hrishabh Mishra (20EN7A445)** in the partial fulfilment of the requirements of the prescribed curriculum for Master of Technology in Energy Management, Session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore. The work carried out by candidate under our guidance’s.

  
2-7-22

Dr. R.N. Singh

Head of Department

SEES, DAVV, Indore

ate:

lace: Indore





Reference No - L002.26 98 23

Date: June 27th, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Hrishabh Mishra, student of M.Tech (Energy Management) during the session 2020-22 from School of Energy & Environmental Studies (Faculty of Engineering Sciences), Devi Ahilya Vishwavidyalaya, Indore (MP)-452017 has undergone an internship with Green Climate & Energy Efficiency Centre, SIDBI from February 22, 2022 to June 30, 2022 and will continue till August 20, 2022.

During his internship period, he is working on some of the SIDBI's projects including Energy Efficiency intervention in Bihar clusters, End to End Energy Efficiency (4E) Scheme, Green Financing Scheme and some other projects. The candidate is working on technical and administrative aspects of these projects.

During his internship period, we found him to be hardworking and sincere, he developed good relationship with the team. We wish him success for his bright career.

Yours Faithfully,

(Rajiv Kumar)

General Manger



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A  
MAJOR PROJECT  
ON

“Sustainable Agricultural Improvement Practices and Carbon Credit Development”



*Submitted in partial fulfilment of requirement for award of the degree of*  
**MASTERS OF TECHNOLOGY IN ENERGY MANAGEMENT**

**SUBMITTED BY**  
HIMANSHU SACHAN (20EN7A453)

**GUIDED BY**  
DR. R.N. SINGH  
(Professor and Head, SEES)

**CO-GUIDED BY**  
ABHISHEK KUMAR SHRIVASTAVA  
(Head, ENEN Green Pvt. Ltd.)

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES**  
**DEVI AHILYA VISHWA VIDYALAYA,**  
**INDORE - 452001 (M.P.), INDIA**  
(2020-2022)



## CERTIFICATE

I hereby declare that the project work entitled "**Sustainable Agricultural Improvement Practices and Carbon Credit Development**" submitted to the SEES, DAVV, is a record of an original work done by HIMANSHU SACHAN under the guidance of Dr. R.N. Singh, Professor & Head, School of Energy and Environmental Studies, DAVV, Indore, co-guidance of Abhishek Kumar, Head, ENEN Green Services Pvt Ltd, Faridabad, Haryana. This project work is submitted in the partial fulfilment of the requirements for the award of the degree of Master of Technology in Energy Management. The results reported by Himanshu Sachan (20EN7A453) is genuine and the script of this thesis has been written by the candidate. The thesis is therefore being recommended for acceptance.

Date: -----

  
Dr. R. N. Singh 29.6.22

HOD & Professor

(Advisor)

School of Energy & Environmental Studies



# ENEN Green Services Private Limited

Letter No.: ENEN/LT/2022/06-1

Date: 20/06/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Himanshu Sachan, student of Master of Technology (Energy Management) (20EN7A453) of SEES DAVV, Indore, Madhya Pradesh has undergone "Internship Training" in the ENEN Green Service Private Limited, New Delhi for a period from 10<sup>th</sup> January 2022 to 20<sup>th</sup> June 2022 and has developed Project Design Document on "Sustainable Agricultural Improvement Practices in Punjab".

During his internship tenure, we found him to be sincere and hardworking.

We wish him for an exquisite career and future eminence.

Pulak Mishra  
Head of Operations



A  
Major Project Report  
On  
**Detailed Analysis of 50 kW (AC) Solar PV Power Plant for J College  
of Pharmacy and Research, Palgarh  
At Maharashtra**



Submitted in the partial fulfillment of the Award of Degree of  
**Master of Technology**  
In  
**Energy Management**  
Batch 2020-2022  
Submitted By  
**Priyanka Panda**

Guided By  
**Dr. Rubina Chaudhary**  
Professor  
SEES DAVV Indore

Co-Guided By  
Er. Shraddha Chauhan  
Senior Technical Engineer  
Solar Secure Solutions Limited  
Kanpur, U.P.

**School of Energy & Environmental Studies**

**Devi Ahilya Vishwavidyalaya, Indore**

**(M.P.) – 452017 June - 2022**

SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES

DEVI AHILYA VISHWAVIDYALAYA,

INDORE (M.P.)-452017



**CERTIFICATE**

This is to certify that the work in this project entitled "Detailed Analysis of 50 kW (AC) Solar PV Power Plant for J College of Pharmacy and Research, Palgarh at Maharashtra" submitted by PRIYANKA PANDA (20EN7A447) in partial fulfilment of the requirements of the prescribed curriculum for Master of Technology in Energy Management, Session 2020 -2022, in School of Energy and Environmental Studies, DAVV, Indore. The work was carried out by candidate under our guidance.

Date 27.06.22  
Place: Indore

*R. Chaudhary*  
Dr. Rubina Chaudhary  
Professor  
SEES, D.A.V.V. Indore  
27.06.2022





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# **WORK FROM HOME SOLAR INTERNSHIP CERTIFICATE OF COMPLETION**

This is to certify that

*Priyanka Panda*

.....;

has completed his/her internship of 06 Months from Dec 27th ,2021 to June 17th,2022. The candidate has successfully completed all the tasks given to him/her. His/Her performance has been marked satisfactory during the internship period:

**SOLAR-SECURE  
MSME (Govt of India)  
Registration No.  
UAN: UDYAM-UP-43-0012205**

*Axaygar*

Authorized signatory

Ashish Singh

Proprietor (SolarSecure),

Certified assessor of SSGJ(Govt. of India)



**Major Project Report On  
Market Based Climate Change Mitigation: Renewable Energy**



Submitted in the partial fulfillment for the award of degree of

**MASTER OF TECHNOLOGY**

**IN**

**ENERGY MANAGEMENT**

2020-2022

**SUBMITTED BY**

**VIBHA RAMESH**

Guided By:

Dr. Rubina Chaudhary

Professor

School of Energy and Environmental Studies

Devi Ahilya Vishwavidyalaya

Indore

Co-Guided By:

Mr. Saroj Sahoo

Deputy General Manager

Operations, Climate Change

EKI Energy Services Ltd.

Indore

**SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES**

**(FACULTY OF ENGINEERING SCIENCES)**

**DEVI AHILIYA VISHWAVIDYALAYA, INDORE (M.P)**

**JUNE 2022**



SCHOOL OF ENERGY AND ENVIRONMENTAL STUDIES  
DEVI AHILIYA VISHWAVIDYALAYA  
INDORE (M.P)-452017



**CERTIFICATE**

This is to Certify that the work in this project entitled "**Market Based Climate Change Mitigation Through Renewable Energy Projects**" is a bonafide work carried out by **Vibha Ramesh(20EN7A448)** in partial fulfilment of the requirements of the prescribed curriculum for Masters of Technology in Energy Management, session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore. It is an authentic work carried out by her under my supervision and guidance to the best of my knowledge.

**Guide**

*R. Chaudhary*

Dr. Rubina Chaudhary

Professor 27.06.22

Ref: EK1\_SI/June/2022

Date: 10/06/2022

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Ms. Vibha Ramesh student of MTech (Energy Management), School of Energy And Environmental Studies Indore, has successfully completed 5 Months (from 10 Jan 2022 to 10 June 2022) internship in **Operation Climate Change** at EKI Energy Services Limited, Indore.

She has worked on a project titled "**Basic Understanding & Implementation on Market Based Climate Change Mitigation through Renewable Energy Projects**". During her internship, she has demonstrated her skills with self-motivation to learn new skills also her conduct was good. Her performance exceeded our expectations and she was able to complete the project on time.

We wish her all the best for future Endeavours!!  
For EKI Energy Services Limited

  
Authorized Signatory  
Sona [Signature]  
Director & CFO  
(HR & Admin)

Regd. Office - Enking Embassy,  
Plot 48, Scheme 78 Part 2, Vijay Nagar,  
Indore-452010, Madhya Pradesh, India  
Corp. Office - 903, B-1 9th Floor, NRK Business Park,  
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UAM (MoMSME) - MP-23-0014187



**A  
Major Project Report  
On**

**“Detailed Energy Audit at Chemical Industry”**



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

**MASTER OF TECHNOLOGY  
IN  
ENERGY MANAGEMENT  
(2020-2022)**

**SUBMITTED BY  
VRITTANSH SRIVASTAVA**

**Guided By,  
Dr. Rubina Chaudhary,  
Professor,  
SEES DAVV,  
Indore, M.P.**

**Co-Guided By,  
Paraman Radhakrishnan,  
Director,  
Devki Energy Consultancy Pvt. Ltd.,  
Vadodara, Gujarat**

**SCHOOL OF ENERGY & ENVIRONMENTAL STUDIES  
(FACULTY OF ENGINEERING SCIENCE)  
DEVI AHILYA VISHWAVIDYALAYA,  
INDORE (M.P.) – 452017  
June - 2022**

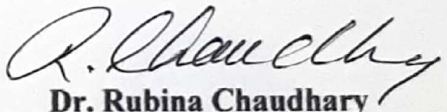
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**(FACULTY OF ENGINEERING SCIENCE)**  
**DEVI AHILYA VISHWAVIDYALAYA,**  
**INDORE (M.P.)-452017**



**CERTIFICATE**

This is to certify that the work in this thesis entitled “Detailed Energy Audit of Chemical Industry, Gujarat” submitted by **VRITTANSH SRIVASTAVA (20EN7A449)** in partial fulfillment of the requirements of the prescribed curriculum for Master of Technology in Energy Management, Session 2020-2022, in School of Energy and Environmental Studies, DAVV, Indore, is an authentic work carried out by the candidate under my supervision and guidance. To the best of my knowledge, the matter embodied in the thesis is his bona fide work.

**Date: June 2021**  
**Place: Indore**

  
**Dr. Rubina Chaudhary**  
**27.06.22 Professor**  
**SEES, D.A.V.V. Indore**





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projects@devkienergy.com

www.devkienergy.com

### To Whomsoever It May Concern

This is to certify that **Mr. Vrittansh Srivastava**, student of M. tech (Energy Management) from "School of Energy and Environmental Studies", Devi Ahilya Vishwavidyalaya, Indore (MP) has successfully completed his project work for his M. tech thesis at **Devki Energy Consultancy Pvt. Ltd., Vadodara, Gujarat**, during the period from 10<sup>th</sup> January 2022 to 16<sup>th</sup> June 2022.

He has been given good exposure to the subject of Industrial Energy Audits and has developed a good grasp of the subject matter.

He possesses good analytical skills and is diligent in his work.

We wish him success in his future endeavor.

Place: Vadodara  
Date: 16 June 2022

R. Paraman  
Director

