INVITATION FOR EXPRESSION OF INTEREST FOR EMPANELMENT OF TRAINING PARTNERS FOR IMPARTING TRAINING UNDER

VAYUMITRA SKILL DEVELOPMENT PROGRAMME (VSDP)

(FY. 2022-23 to 2023-24)

Sponsored by
Ministry of New and Renewable Energy
Government of India

नीवे NIWE
(ISO 9001:2015)

NATIONAL INSTITUTE OF WIND ENERGY
CHENNAI – 600 100

Text of Short Advertisement

National Institute of Wind Energy

(Formerly known as " Centre for Wind Energy Technology " under the Ministry of New and Renewable Energy), Government of India
Velachery - Tambaram Main Road
Pallikaranai, Chennai - 600 100
Phone / EPABX : +91 - 44 - 2246 3982/ 2246 3983 / 2246 3984
Fax : +91 - 44 - 2246 3980
Website : https://niwe.res.in

Subject: Expression of Interest (EOI) of Vayumitra Skill Development Programme for the Financial Year 2022-23 to 2023-24

Expression of Interest is hereby invited to empanel Training Partners (TP) to impart training under Vayumitra Skill Development Programme. The empanelment of TP may be considered for two years or beyond subject to the continuity of the program, based on satisfactory performance and mutual agreement.

The online portal for submitting the application will be activated on or before 10.08.2022 at the NIWE website (https://niwe.res.in). The completed application has to be printed and the signed original copy of the application along with relevant documents has to be sent to: Additional Director, F&A, National Institute of Wind Energy, Velachery – Tambaram Main Road, Pallikaranai, Chennai – 600 100 and the applications submitted through any other mode shall not be considered.

Any queries regarding EOI shall be mailed to vayumitra-skill@niwe.res.in NIWE reserves the right to modify, amend or cancel the EOI without specifying any reason thereof.

The last date of submission of online application shall be **24.08.2022** up to **05.30 PM**

This bears approval of the competent authority.

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(Dr. K. Balaraman)
Director General

TABLE OF CONTENTS

1. Introduction

National Institute of Wind Energy (NIWE) is an Autonomous Institute of Ministry of New and Renewable Energy (MNRE), Government of India to facilitate Research & Development (R&D), Testing, Certification and Skill Development activities in the areas of Wind energy technologies in the country. It is a premier institution with highly experienced professionals having expertise in all related disciplines of wind energy sector.

Under the skill development initiatives of the MNRE, NIWE is mandated as the nodal agency for implementation of "Vayumitra Skill Development Programme" (VSDP). NIWE is inviting Expression of Interest (EoI) for empanelment of Training Partners (TPs) for imparting training under VSDP.

2. About Vayumitra Skill Development Program (VSDP)

Government of India launched a Skill India initiative to empower the youth of the country with skill sets in various industrial sectors which make them more employable and more productive in their work environment. Skill development of the youth add not only to their personal growth, but also to the country's economic growth as well. In recent years, new industries have ventured into many sectors with innovative ideas. The Renewable Energy sector, especially Wind Energy has gained momentum and developing fast in the country as the entire world is in the race of reducing carbon emission. As of May 2022, India had 159949 MW of renewable energy installed capacity including large hydro and represents 40% of the overall energy installed capacity of the country (402817 MW). Further, apart from the exiting target of Government of India to achieve 175 GW of RE by 2022, Hon'ble Prime Minister of India, committed at the recently concluded United Nations COP26 Climate Change meet held in UK that India would achieve 500 GW non-fossil fuel capacity target by 2030 and would achieve net-zero carbon emission by 2070. To achieve this targets and to meet the demands, India needs a skilled work force which is currently unavailable to the expected level.

In order to give a thrust to the wind energy sector, Ministry of New and Renewable Energy (MNRE), Government of India has provided a sanction to National Institute of Wind Energy (NIWE) to conduct the Vayumitra Skill Development Programme (VSDP) for training 5734 trainees [(5010 participants i.e. 3660 no. Technicians + 1350 no. Site Supervisors in Wind Power Plant), 690 Trainers & 34 Assessors]. The Programme will be conducted in 192 batches (167+23+2); in eight (8) windy states (Rajasthan, Gujarat, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Madhya Pradesh) & Kerala during the year FY 2021-22 to 2023-24. The proposed VSDP is in line with the guidelines/norms prescribed by the Ministry of Skill Development and Entrepreneurship (MSDE), Government of India.

Vayumitra Skill Development Programme (VSDP) aims to create field level skilled work force catering to the needs of entire life cycle of Wind Power Project's in achieving the Governmental targets. The wind energy technology demands highly skilled technicians/engineers who has to work at elevated height going up to more than 150 meters with higher safety aspects as the personal has to work against heavy wind loads at heights. It involves, preventive, scheduled and breakdown maintenance of electrical and mechanical components, inspection of screws, bolts, rotor brake, yaw motor & brake, gearbox oil level & leaks, changing gear oil, generator bearing, inspect cooling air, hydraulic fluid level, ball valves, pressure, sensors etc., which are located in the nascelle which is at a height of 100/150m from the ground with the

modern wind turbines. Hence, VSDP is planned in such a way to couple theoretical knowledge along with practical aspects to participants by exposing them to wind farms and introducing quality trainers to train the participants.

As the sector prepares to scale up, hands-on-practical trainings will play an important role in streamlining operations and accelerating the pace of skilling the work force. The very objective of the VSDP is to identify both industrial and institutional experts as trainers to provide precise training to the participants by giving exposure to the field experience.

Also, VSDP aims to create a work force in the operation, maintenance, instrumentation, mechanical, site surveyor to maintain the wind power plant and also to produce training of trainers, assessors. This is the area in which a huge skilled manpower is required to achieve the set target. To create such a magnitude of work force, giving special emphasis for rural unemployed youth and women, VSDP targets to identify the Training Partners (TP) who will play a major role in this effort as the hands-on-practical, safety requirements, field challenges are sophisticated and complex in nature in dealing with wind power projects.

As part of the activities, VSDP offers a component of structured course fee for the identified training partner Institutes to enhance the infrastructure facilities, trainers, master trainers and for imparting qualitative, and hassle-free training to participants.

3. Scope of Expression of Interest:

In sequel to the mandate, NIWE is inviting response document in the form of Expression of Interest (EoI) for identifying the Training Partners (TP) located in and around the wind farms in windy states to conduct training programs as envisaged in the VSDP. The complete requirements are explained in the following paras to enable the interested and eligible institutions to respond on Pan India basis.

The identified/recognized Training Partners (TP) shall be training the participants according to the job roles in line with the approved three Qualifications Packs (QP) namely;

- O&M Electrical & Instrumentation Technician – Wind Power Plant (SGJ/Q1503)
- O&M Mechanical Technician – Wind Power Plant (SGJ/Q1502)
- Site Surveyor – Wind Power Plant (SGJ/Q1202)

The detailed QPs are provided in the **Annexure-1**.

No of Participants: 30 participants per batch.

The online portal for submitting the application will be activated on or before 10.08.2022 at the NIWE website (https://niwe.res.in). The completed application has to be printed and the signed original copy of the application along with relevant documents has to be sent to: Additional Director, F&A, National Institute of Wind Energy, Velachery – Tambaram Main Road, Pallikaranai, Chennai – 600 100 and the applications submitted through any other mode shall not be considered.

Any queries regarding EOI shall be mailed to vayumitra-skill@niwe.res.in NIWE reserves the right to modify, amend or cancel the EOI without specifying any reason thereof.

The last date for submission of the online application is 24.08.2022_up to 05:30 PM.

4. Eligibility Criteria

(All TPs must fulfil the following criteria so as to be considered for further evaluation as per technical scoring given below)

1. The institute / training partner for VSDP will be selected within the vicinity of existing wind farms and wind power potential locations. The institute will be selected based on multiple criteria, reputation, infrastructure, distance from the wind farms etc. Institution located nearby wind farms will be preferred for ease of practical training and 50 km radius will have higher advantage as part of the marking criteria.
2. All the TPs will be required to undergo the Centre accreditation and affiliation process as per the MSDE Guidelines for Accreditation & Affiliation. Training Partner shall have to pay the required fees which will be varying from time to time (Refer Website) upon selection to Skill Council for Green Jobs (SCGJ).
3. The TP must be an ITI / Polytechnic / Engineering College / University preferably Government owned / supported or Deemed to be University / Institution / Wind Energy industries with full-fledged training facilities to conduct the courses.
4. TP having training experience in the Energy / renewable energy / wind energy will be preferred.
5. TP selection will be based on the potential and installed capacity of wind in the states.
6. TP must conduct the training programs where facilities are available within the premises including hostel facilities for boys and girls separately, laboratory facilities of the identified TP institute and cannot be done at different locations or state.
7. TP must have 3 minimum faculties (at least one each) in Electrical, Mechanical, Civil, Instrumentation and Physics domain who will be trained through Training of Trainers (ToT) by NIWE for the selected TP institute. To support this, a CV with relevant documents of each faculty must be submitted. The 12 days ToT training will be conducted by NIWE at its Chennai or Kayathar campus and the training fee, accommodation and food will be taken care of by NIWE and to and fro travel cost from the institute to the training venue has to be taken care by the TPs.
8. TP must have at least one MoU with industries engaged in wind energy sector in the nearby places for practical / field training. In the event of not having any such tie-up or MoU arrangements, TP must submit an undertaking on a non-judicial stamp paper to the extent that such arrangements with industries would be done and the same will be submitted to NIWE before starting of the training, failing which the TP recognition will be withdrawn. Safety guidelines to be included in the MoU between TP and the industry in the wind energy sector.
9. TP must have well-equipped laboratory, classroom and Students Hostel facilities. A List of necessary equipment needed is given in **Annexure 2.** Photographs of all the facilities available for conducting the training must be sent along with the application. In the event of not having such facilities, TP must submit an undertaking on a non-judicial stamp paper to the extent that well-equipped laboratory, classroom and students hostel facilities with toilets would be made available either within the institute campus or outside the campus and the same will be submitted to NIWE along with proof like, purchase invoices, bills, photographs etc. with GPS coordinates, video clips etc., before start of the training, failing which the TP recognition will be withdrawn.

4.1 Process of Shortlisting the TPs

a) NIWE will form a committee duly approved by the competent authority to evaluate the response submitted by the TPs against this EoI. The decision of the committee will be final.
b) The Committee will evaluate the responses submitted by the TPs as per the technical response scoring criteria shown in the table.
c) NIWE reserves the right to decide the number of TPs to be selected from the merit list.
d) The shortlisted TP will be empaneled and notified after inspection of the Training Partner facilities by officials of NIWE / Skill Council for Green Jobs (SCGJ).

NATIONAL INSTITUTE OF WIND ENERGY				
Vayumitra Skill Development Programme				
Marking Criteria – 100 MARKS				
Sl. No.	**Evaluation Criteria / Weightage**	**Max. marks**	**Proof / Documents required**	**Please Tick appropriate box**
1.	**Training Centre infrastructure facility**			
a)	Training Centre including classroom, laboratory etc. i. Owned by the applicant *(20 marks)*	20	Ownership document	☐
	ii. Rented/leased (within the institute) *(10 marks)*		Valid rental / lease deed copy	☐
b)	Hostel with canteen facility i. Within the campus *(20 marks)*	20	• Geo-tag image of hostel clearly showing the Centre and hostel facilities with relevant documents.	☐
	ii. Outside the campus within the radius of 1km *(10 marks)*			☐
	Additional weightage will be given for separate hostel for Gents and Ladies			
c)	Availability of Laboratory in the stream of Electrical / Mechanical / Instrumentation/ Civil / Energy Laboratory and other related equipment. i. Within the campus *(10 marks)*	10	Photographs (at least two required with details of the equipment) as mentioned in **Point No.5 - "2.5 Infrastructure"**	☐
	ii. Outside the campus (within the radius of 1 km) (6 marks)			☐
2.	The institute must have Electrical and Mechanical Laboratory equipment along with wind energy facility either in campus or access to such facilities nearby (10 marks)	10	Photographs (at least two) and proper details to be provided in case the facilities are available outside the campus.	☐
3.	Distance of the Institution from the Windfarm - Less than 50 kms (20 marks)	20	Map showing the distance to be provided	☐
	Distance of the Institution from the Windfarm – 50 -100 kms (12 marks)			
	Distance of the Institution from the Windfarm - 100 and above kms (6 marks)			
4.	For three qualified internal faculty available in each stream (3 faculties x 3 streams) of Electrical / Mechanical / Civil - ***10 marks***	10	CV with experience of each faculty should be attached	☐
	For one qualified internal faculty available in each stream of Electrical / Mechanical / Civil - **6 *marks***			☐
5.	MoU with wind industries for practical / field on job training (10 marks) (above 5 MoUs)	10	Attach copies of MoU	☐
TOTAL		**100**		

4.2. Infrastructure and General Information

1. A Class room to accommodate 30 participants with basic teaching aids- white board, tables and chairs for adequate sitting arrangement with audio & video facility.
2. Hostel facility with well-ventilated rooms and proper bedding arrangement to accommodate 30 participants. Separate arrangements for boy and girl participants along with proper toilets should be available at the hostel premises.
3. Canteen facility with daily breakfast, lunch, dinner with two times tea and snacks for the participants. The dining area and food should be hygienic. Weekly menu should be fixed which includes local food dishes and seasonal green vegetables.
4. Availability of internet connectivity at the Institute, necessarily at IT / computer laboratory.
5. The institute must have Electrical and Mechanical Laboratory equipment along with wind energy facility either in the campus or access to such facility nearby for the practical/hands-on experience of the participants. (Annexure-4)
6. The institute should have apparatus for conducting Basic O&M of Electrical, Mechanical and Site Surveyor as per the course curriculum. Nearby Wind Farms Facility is a must (for which proof has to be submitted).
7. The documents with its supporting evidences should be properly uploaded on portal. The application with incomplete documents / information will be out-rightly rejected and no correspondence for that will be entertained.
8. Applications of joint venture / consortium in any form shall not be considered.
9. The subletting of training is not allowed and will attract the cancellation of empanelment of TP.
10. The TPs who are applying for multiple Training centres (TCs) within a state shall apply for one centre at one location / city and not exceeding more than 3 centres within the state/UT and also not more than 10 centres in total within the country.
11. The applicant has to deposit an online processing fee (non-refundable) of Rs.5000/- for submitting application for one center in a state/UT. The NIWE accounts details: RTGS_document-sb_account (niwe.res.in).
12. The empaneled TP has to submit the quarterly / yearly action plan with starting dates of the batches and details of participants in advance in the following format:
13. The TP shall advertise the training schedule allotted by NIWE to mobilize enough participants.
14. Candidates from rural background, unemployed youth, women and SC/ST shall be given due consideration during the selection process.
15. The activities like, physical exercise, Yoga etc. may be included as part of the programme.
16. Faculties having experience in teaching energy / renewable energy subjects may be selected for the training. The submission of necessary documentary proof must be ensured. The Industrial experts should be invited for dealing with the appropriate subjects for importing the practical knowledge.
17. Each program should have 30 participants. The assessment and certification will be done by SCGJ. NIWE will release the assessment fee directly to SCGJ.
18. Aaadhar Enabled Bio-matric System (AEBAS) and IP based camera system is mandatory at the training center. The payment shall be released based on AEBAS / Face Detector / GPS / Video clip attendance system only.
19. TP has to provide 2 set of uniform and Course Kit to each participant from the course fee head of the project cost.

20. TP's are requested to follow the COVID-19 protocols as declared by State / Central Government from time to time during the entire process of selecting the candidates.
21. The TP is solely responsible to ensure that they follow the safety guidelines during the training of candidates.
22. The batch shall be divided into multiple groups to focus attention for different components.

Sl. No	Duration	Name of Candidate	Parent's Name	Date of birth	Permanent Address, email id, mobile no.	Physically Handicapped (Yes/No)	Category (Gen/SC/ST/ OBC)	Aadhar No.	Mobile. No	No. of days attended / Total no of Days of training.	Grade	Photograph

a n c ials and Payment terms

The present funding breakup for VSDP are based on Ministry of Skill Development and Entrepreneurship (MSDE) norms and as per the sanction letter received from MNRE, however it may vary time to time as per notification received from MSDE / MNRE. The details of course fee and boarding & lodging sanctioned per participant is as below:

1. **The budget of O&M of Electrical & Instrumentation Technician and Mechanical Technician (8 weeks / 200 Hrs.) on Pan India basis is as follows: (Cost structure as per X category[#]):**

S.No	Particulars	Amount in Rs.	Unit Price in Rs.
1	*Course Fee for Institution *(Includes Awareness creation, mobilization of participants, Course Kit, conduct of training, hospitality, honorarium for faculties, overheads etc.)*	2,94,000.00	Rs.49/- per hour per participant for 200 hours for 30 participants
		12,780.00	Extra honorarium for Industrial Expert
2	[#]Hospitality (Boarding & Lodging) (as per Classification 'X'/'Y'/'Z')	5,06,250.00	Rs.375/- per day per participant for 30 participants for 45 days
3	Local Conveyance for 100 hours of lectures and practical sessions	80,000.00	Rs.800/- per hour for Industrial Expert
4	Study Tour - Bus / Train Travel charges from Training Institute to nearby windfarm venue and Local travel during the study visit	75,000.00	2,500/- per participant
	Total Amount Per batch	**9,68,030.00**	**Per batch**

2. **The budget of Site Surveyor (4 weeks /120 Hrs. each) Pan India basis is as follows:**

S. No	Particulars	Amount in Rs.	Unit Price in Rs.
1	*Course Fee for Institution *(Includes awareness creation, mobilization of participants, Course Kit, conduct of training, hospitality, honorarium for faculties, overheads etc.)*	1,76,400.00	Rs.49/- per hour per participant for 200 hours for 30 participants
		7,668.00	Extra honorarium for Industrial Expert
2	[#]Hospitality (Boarding & Lodging) (as per Classification 'X'/'Y'/'Z')	2,81,250.00	Rs.375/- per day per participant for 30 participants

			for 25 days
3	Local Conveyance for 60 hours of lectures and practical sessions	60,000.00	Rs.1000/- per session for Industrial Expert
4	Study Tour - Bus / Train Travel charges from Training Institute to nearby windfarm venue and Local travel during the study visit	60,000.00	2,000/- per participant
	Total Amount Per batch	**6,15,318.00**	**Per batch**

* Base cost of Rs.49/- per hour of training is taken as per the MSDE notification dated 1st January 2021.

#Boarding charges will be adjusted as per actual expenditure on city classification as per details provided in MSDE Gazette notification dated 1st January 2021 (**Annexure-3&4).**

5.1. Fund Flow Mechanism

- Each program should have 30 participants.
- The assessment and certification will be done by Skill Council for Green Jobs (SCGJ).
- Any revision of fee structure shall be based on MNRE approval, which shall be communicated accordingly, if any.
- The funds will be released in three instalments as per common norms of Ministry of Skill Development and Entrepreneurship (MSDE).
- Advance payment will be released for 1st Installment against bank guarantee.
- **The TP has to submit the following documents for each batch:**
  i. Utilization Certificate as per the GFR 12A
  ii. Statement of Expenditure
  iii. Audited statement
  iv. Attendance sheet – (Biometric / face-detector / GPS / Video clips etc.)
  v. Group photo
  vi. Assessment & Certification receipt
  vii. Feedback forms
  viii. Placement information
  ix. Certificates of successful participants
  x. Details of participants in the specified format (Aadhaar number of participants is mandatory)
  xi. Placement details guidelines; and
  xii. Any other information required by NIWE.

The schedule of release of payment will be based on MSDE Gazette notification dated 11th November, 2020. The funds will be released to the TPs as per the following schedule:

SI. No	Instalments	% of instalment (of batch)	Milestone
1.	1st	30%	On Training Commencement.
2.	2nd	40%	On completion of successful certification (Payment made for number of candidates certified after adjusting the advance payments)
3.	3rd	30%	On 70% verified employment (Continuous employment of 3 months-desk and field verified placement as per standard MSDE norms).

7. Assessment and Certification of Trainees

At the end of each training batch, assessment shall be done by the Assessors nominated by the Skill Council for Green Jobs (SCGJ), the Sector Skill Council for Green Jobs under MSDE, Government of India. The certificate will be issued by SCGJ to the qualified trainees.

8. Termination

The empanelment of the TP may be terminated at any point of time if any violation of norms is found during the implementation of the Vayumitra program at its centres and accordingly performance bank guarantee will be fort fitted.

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ONLINE APPLICATION FORM
Part A- Eligibility Criteria

A. ELIGIBILITY CONDITIONS

<table>
<tr><td>A.1</td><td>Title of the Project</td><td>Vayumitra Skill Development Programme</td></tr>
<tr><td>A.2</td><td>Name of Organisation</td><td></td></tr>
<tr><td>A.3</td><td>Address of the registered office and contact details of the Organisation</td><td>Address:
Phone:
Email:</td></tr>
<tr><td>A.4</td><td>Legal status of the Firm/ Organization</td><td>• (Attach proof of Certificate of Incorporation from the competent Authority)
• (Attach Copies of Local Tax Registration, TIN, PAN GST registration etc.)</td></tr>
<tr><td>A.5</td><td>Annual Turnover</td><td><table><tr><th>Sl. No.</th><th>FY Year</th><th>Annual Turnover (in rupees)</th><th>Upload Balance Sheet</th></tr><tr><td>1</td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td></tr><tr><td></td><td>Total</td><td></td><td></td></tr></table>Attach Audited Balance Sheet for last two years</td></tr>
<tr><td>A.6</td><td>SCGJ/NSDC Affiliation of Training Centres for wind training</td><td>Yes/No
(If yes, attach proof of Affiliation Certificate)</td></tr>
<tr><td>A.7</td><td>Details of Training Centres</td><td><table><tr><td>Name of TC</td><td>State</td><td>City</td><td>Full Address</td><td>Category of TC (Govt. Institution / Private Academic Institution/ Govt. Aided Centres (PMKK or similar scheme)</td><td>Ownership of infrastructure (owned/rent/lease)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>Attach proof of the Training Centres – MOU or Lease Agreements</td></tr>
<tr><td>A.8</td><td>Total Candidates in Renewable / Wind energy trained since incorporation</td><td><table><tr><th>S. No.</th><th>FY Year</th><th>Candidates Trained in Wind Energy</th><th>Attachment</th></tr><tr><td>1</td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td></td><td>Total</td><td></td><td></td></tr></table>(*Attach statement certified by a Chartered Accountant to have trained number of participants in Wind Energy Sector.)</td></tr>
<tr><td>A.9</td><td>Ownership of required infrastructure</td><td>(Classroom, workshop, hostel, small wind turbine owner by the institute or rent/lease)</td></tr>
</table>

PART – B

B. TECHNICAL CRITERIA

B.1 Past experience of the firm – Skill Development Training in Wind Energy

S. No.	FY Year	Candidates Trained	Name of Sector Skill Council
1			
2			
3			
	Total		

B.2 Affiliation of Training Centres by SCGJ/NSDC for Wind Training

S. No.	Name of TC	State	City	Complete Address	Upload Certificate	Upload Photos of classroom, lab, Hostel etc.,	Ownership of Training Centre (Owned/Lease)
1							
2							
3							
		Total					

Attach SCGJ/NSDC Affiliation Certificate

B.3 SCGJ Certified Trainers with relevant qualification and Experience -

S. No	Name of Trainer	SCGJ Certificate Number and issue date	Education/ Degree / Institution	Total Experience	No. of years of relevant experience in Industry	No. of years of relevant experience in Training

Attach SCGJ certificate

B.4 Training Projects undertaken with Central State Governments/ PSU in last 2 years

S. No.	Year	Name of the project	Source of Fund	Total Cost	Trades for training	Number of Trainees trained

Attach Work Orders/ Sanction Orders of the projects undertaken

B.5 MOU / Tie-up with Industries for industrial training (limit to 5)

List the name of organizations where placement linkages are established

Name of TC	Name of Industry	MOU/ Agreement Copy to be uploaded

Annexure - 1

Selected Qualification Pack

1. O&M Electrical & Instrumentation Technician - Wind Power Plant

(i) Brief Job Description: O&M Electrical & Instrumentation Technician – wind power plant is expected to inspect, diagnose, troubleshoot and repair electrical & instrumentation systems of wind power plant. S/he is expected to perform operation and maintenance of switchgear, transformer, O/H and U/G Lines, SCADA, communication system (Fibre Optics) and complying with all operational manuals, applicable codes/standards, and safety requirements

(ii) Personal Attributes: This job requires the individual to concentrate on the job at hand and complete it without any accidents so hence diligence and hardworking are desired attributes for individuals performing this role. S/he must also be medically fit to work on heights, demonstrate strong work ethics, an ability to communicate courteously with co-workers, and must be good with following instructions of the supervisor

NSQF level	O&M Electrical & Instrumentation Technician –Wind Power Plant **(Level 4)**
Qualification pack Code	SGJ/Q1503
Educational Qualifications	Class 12thwith science with 1year relevant work experience **or** ITI after class 10th (in Electrician /Mechanical/ Fitter/Welder/ and related trades) with 1 year of relevant work experience **or** Government recognised 3 years Diploma (in Electrical/ Mechanical/ Civil/Electronics & Communication / Control & Instrumentation)
Minimum Job Entry Age	18 years
Course Duration /Training hours	200
Learning Outcome	• Carry out operation and Maintenance of electrical and Instrumentation of Wind Power Plant • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others • O&M electrical & instrumentation technician – wind power plant is expected to inspect, diagnose, troubleshoot and repair electrical & instrumentation systems of wind power plant. S/he is expected to perform operation and maintenance of switchgear, transformer, O/H and U/G Lines, SCADA, communication system (Fiber Optics) and complying with all operational manuals, applicable codes/standards and safety requirements

Module 1	Introduction to Wind Power Sector
Duration: 12:00	**Duration: 00:00**
Theory	**Practical**
• Identify different types of wind technology and overview of wind energy sector in India • Understand key insights in the sector though various market research reports and magazines • Identify different types of wind power plant, its components and working principles. • Understand basics of electrical concepts like voltage, current, power, energy, etc. • Explain the benefits of wind energy over conventional sources of energy. • Describe the typical specifications, functioning, operating principle, maintenance requirements, warranties, and safe operating & handling procedures of different wind power plant components like blades, towers, motors, monitoring system and other components. • Identify various ways to optimize material, energy/electricity consumption across processes and follow specified process for waste disposal.	

Module 2	Carry out operation of electrical & instrumentation system of wind power plant
Duration:24:00	**Duration:40:00**
Theory	**Practical**
• Explain how to identify the design, drawings and specification of equipment for inspection. • Explain how to carry out scheduled & preventive inspections of electrical/instrumentation components & equipment. • Discuss how to verify and record the running parameters of WTG, transformer and switchgear with design document • Discuss how to identify the location the conduit, cables & other undergoing devices prior to performing maintenance work • Explain how to measure and record for performance parameters of transformer like input voltage/ output voltage, frequency, phase sequence, etc. • Explain how to maintain log of all performance parameters of switchgear • Explain to prepare report to be submitted to site in-charge/plant head for further action	• Demonstrate to select the relevant PPE to carry out a specific activity. • Demonstrate how to monitor the working efficiency of WTG and associated wind power plant equipment • Show how to check all the intersections & joints (termination) in the line and cable for faults like loose joint, short circuit, open circuit etc. • Demonstrate how to acquire required approvals and permit to work (PTW) from the concerned authority.

Module 3	Carry out maintenance of electrical & instrumentation system of power plant
Duration: 24:00	**Duration: 34:00**
Theory	**Practical**
• Explain to ensure that power supply is isolated prior to carrying out work. • Explain how to perform visual inspection of the electrical and instrumentation system and record any defects. • Discuss to arrange for tools and replacement equipment from the supervisor, if required. • Explain how to carry out repair or replacement of faulty equipment's/components of WTG, transformer, switchgear etc. as per standard operating procedures.	• Demonstrate how to select the appropriate PPE to carry out the specific activity. • Demonstrate how to acquire required approvals and permit to work (PTW) from the concerned authority. • Show how to measure and record all parameters of WTG and associated components like continuity, earthing resistance, etc. • Demonstrate how to report to the supervisor in case of any deviations from standard values
Module 4	**Perform basic health and safety practices at project site (Ground and Height)**
Duration: 18:00	**Duration: 30:00**
Theory	**Practical**
• Explain the importance of selecting the relevant protective clothing/equipment for specific tack and work. • Discuss about relevant documents and people responsible for health and safety at project site. • Identify possible causes of risk at project site and their mitigation measures. • Explain how to identify and follow warning signs on site. • Discuss how to establish safe working practices when working at heights, confined areas and trenches. • Identify methods of accident. Prevention in the work environment. • Discuss how to follow safe operating procedures for lifting, carrying and transporting heavy objects & tools. • Inspect the project site on a regular basis for any signs of spillage. • Ensure safe storage of flammable materials and machine lubricating oil. • Explain how to apply good housekeeping practices at all times by removal/disposal of waste products. • Explain how to promptly inform relevant authorities about any abnormal situation/behaviour of any equipment/ system. • Exhibit the use of various appropriate fire	• Demonstrate how to use appropriate personal protective equipment (PPE) while performing work. • Employ appropriate techniques while handling tools and equipment to ensure safety of self and others. • Demonstrate how to properly work while sitting or lifting heavy materials as per standards ergonomic principles to avoid injury. • Perform the steps to clean and disinfect material, tools, equipment and other supplies before starting work and after completing the job. • Demonstrate how to participate in emergency and evacuation drills to be able to take necessary action in case of accidents, fires and natural calamities. • Demonstrate correct techniques to move an injured person during an emergency. • Demonstrate how to use appropriate fire extinguishers for different types of fire at workplace. • Show how to provide first aid to a victim in case of exposed wounds, cuts, burns, choking, electric shock, poisoning, or any other situation such as a cardiac arrest.

extinguishers on different types of fires. • Identify rescue techniques applied during fire hazard. • Explain how to administer appropriate first aid to victims were required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc. • Discuss how to respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments. • Explain how to report the accident to the relevant authority in the prescribed format	• Demonstrate how to dispose hazardous waste as per organizational norms.
Module 5	**Effective and Efficient Working Practices**
Duration: 06:00	**Duration: 12:00**
Theory	**Practical**
• Describe the legislation, standards, policies, and procedures to be followed at the workplace within one's own scope of work. • Identify the different types of communication and the basic etiquette involving verbal and non-verbal communication. • Explain how to collect complete information and instructions from concerned authority/person. • Discuss the importance of communicating without any personal, gender, disability, caste, religion, colour, sexual orientation and culture biases. • Distinguish between different types of disabilities with their respective consideration and limitations. • Elaborate how to assist others in their tasks using positive attitude to maximize effectiveness and efficiency at work. • Describe the communication etiquette to be followed at workplace. • Explain the importance of listening actively while interacting with others at work. • Outline basic characteristics that define responsible and disciplined behaviour at the workplace. • Discuss the need to attain common grounds with clients, team members, and other working personnel to enable smooth efficient workflow while considering and respecting the opinions, creativity, values, beliefs and perspectives of others. • Elaborate the need of ensuring a friendly, co-operative environment that is conducive to employees' sense of belonging at workplace	• Demonstrate how to communicate verbal, non-verbal and written information timely, accurately and clearly using an inclusive language that is gender, disability and culturally sensitive. • Show how to interact using appropriate behaviour and gestures/body language, taking gender and disability into consideration to depict equal treatment for all clients, colleagues and co-workers. • Outline various methods to escalate and report grievances and issues to concerned authority as per organizational procedure to resolve them and avoid conflict. • Demonstrate how to collaborate with other and participate in group activities and tasks.

while understanding and appreciating the differences among team members.	
Theory Duration - (hh:mm) 84:00 **Practical Duration -** (hh:mm) 116:00 Grand Total Course Duration: **200 Hours, 0 Minutes** *(This syllabus/ curriculum has been approved by **Skill Council for Green Jobs)***	

2. O&M Mechanical Technician- Wind Power Plant

(i) Brief Job Description: The O&M Mechanical Technician – Wind Power Plant, carries out operation and maintenance of mechanical components of wind power plant, complying with all operational manuals, applicable codes, standards, and safety requirements

(ii) Personal Attributes: This job requires the individual to concentrate on the job at hand and complete it without any accidents so hence diligence and hardworking are desired attributes for individuals performing this role. S/he must also be medically fit to work on heights, demonstrate strong work ethics, an ability to communicate courteously with co-workers, and must be good with following instructions of the supervisor

NSQF level	4
Qualification pack code	SGJ/Q1502
Educational Qualifications	Class 12th with science with 1year relevant work experience **or** ITI after class 10th (in Electrician /Mechanical/ Fitter/Welder/ and related trades) with 1 year of relevant work experience **or** Government recognised 3 years Diploma (in Electrical/ Mechanical/ Civil/Electronics & Communication / Control & Instrumentation)
Minimum Job Entry Age	18 years
Course Duration / Training hours	200
Learning Outcome	• Carries out operation and maintenance of mechanical components of wind power plant, complying with all operational manuals, applicable codes, standards and safety requirements • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others

Module 1	**Introduction to Wind Power Sector**
Duration : 12:00	**Duration : 00:00**
Theory	**practical**
• Identify different types of wind technology and overview of wind energy sector in India • Understand key insights in the sector through various market research reports and magazines. • Identify different types of wind power plant, its components and working principles.	

• Understand basics of electrical concepts like voltage, current, power, energy, etc. • Explain the benefits of wind energy over conventional sources of energy. • Describe the typical specifications, functioning, operating principle, maintenance requirements, warranties, and safe operating & handling procedures of different wind power plant components like blades, towers, motors, monitoring system and other components. • Identify various ways to optimize material, energy/electricity consumption across processes and follow specified process for waste disposal.	
Module 2	**Carry out operation of Components of Wind Power Plant**
Duration : 24:00	**Duration : 40:00**
Theory	**practical**
• Identify the operation manuals of all mechanical components for inspection. • Explain how to prepare site and equipment for inspection. • Discuss how to carry out inspections of WTG, blade and associated mechanical components as per schedule. • Explain how to monitor working efficiency of WTG and associated components. • Explain to identify the location of the conduit, cables, pipes & other undergoing devices prior to performing maintenance work. • Explain to arrange for tools to carry out online testing of WTG and components. • Explain to measure and record real time parameters of WTG and associated components like vibration, torqueing, alignment etc. • Discuss to measure and record real time parameters of wind turbine blades and associated components like temperature, vibration, alignment, etc.	• Demonstrate how to select the appropriate PPE (Personal Protective Equipment) to carry out the specific activity • Demonstrate how to acquired approvals and permit to work (PTW) from the concerned authority. • Demonstrate if the equipment/machine is functioning normally before commencing work and rectify wherever required. • Show how to verify and record the operative parameters for all components as per design standards. • Demonstrate how to perform visual inspection of the surroundings and the mechanical components and record any defects. • Demonstrate how to maintain log of all system condition (parameters). • Show how to prepare report and submit to site in-charge/plant head for further action
Module 3	**Carry out maintenance of mechanical components of wind power plant**
Duration : 24:00	**Duration : 34:00**
Theory	**practical**
• Identify required approvals and permit to work (PTW) from the concerned authority. • Discuss to ensure that the system is shut down prior to carrying out work • Explain to carry out maintenance activities for mechanical components of WTG as per standard	• Demonstrate to select the appropriate PPE (Personal Protective Equipment) to carry out the specific activity • Demonstrate to perform visual inspection of the mechanical components of wind power plant and

operating procedures • Explain how to carry out testing of WTG and associated components on universal testing machine (UTM), compression testing machine (CTM). • Arrange for tools and replacement equipment from the supervisor if required • Explain the importance of performing repair or replacement of faulty mechanical components of wind power plant as per standard operating procedures • Explain how to conduct readiness test on post replacement of equipment	record any defects • Demonstrate to measure and record parameters post maintenance activities. • Demonstrate how to report to the supervisor in case of any deviations from standard values. • Demonstrate how to carry out repair or replacement of faulty mechanical components of wind power plant as per standard operating procedures.
Module 4	**Perform basic health and safety practices at project site (Ground and Height)**
Duration : 18:00	**Duration : 30:00**
Theory	**Practical**
• Explain the importance of selecting the relevant protective clothing/equipment for specific tasks and work. • Discuss about relevant documents and people responsible for health and safety at project site. • Identify possible causes of risk at project site and their mitigation measures. • Explain how to identify and follow warning signs on site. • Discuss how to establish safe working procedures at the project site. • Discuss how to ensure safe working practices when working at heights, confined areas and trenches. • Identify methods of accident. Prevention in the work environment. • Discuss how to apply good housekeeping practices at all times by removal/disposal of waste products. • Explain how to promptly inform relevant authorities about any abnormal situation/behaviour of any equipment/system. • Exhibit the use of various appropriate fire extinguishers on different types of fires. • Identify rescue techniques applied during fire hazard. • Explain how to administer appropriate first aid to victims were required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc. • Discuss how to respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments. • Explain how to report the accident to the relevant authority in the prescribed format.	• Demonstrate how to use appropriate Personal Protective Equipment (PPE) while performing work. • Employ appropriate techniques while handling tools and equipment to ensure safety of self and others. • Demonstrate how to properly work while sitting or lifting heavy materials as per standards ergonomic principles to avoid injury. • Perform the step to clean and disinfect material, tools, equipment and other supplies before starting work and after completing the job. • Demonstrate how to participate in emergency and evacuation drills to be able to take necessary action in case of accident, fires and natural calamities • Demonstrate correct techniques to move an injured person during an emergency. • Demonstrate how to use appropriate fire extinguishers for different types of fire at workplace. • Show how to provide first aid to a victim in case of exposed wound, cuts, burns, choking, electric shock, poisoning, or any other situation such as a cardiac arrest. • Demonstrate how to dispose hazardous waste as per organizational norms.

Module 5	**Effective and Efficient working practices**
Duration : 06:00	**Duration : 12:00**
Theory	**Practical**
• Describe the legislation, standards, policies, and procedures to be followed at the workplace within one's own scope of work. • Identify the different types of communication and the basic etiquette involving verbal and non-verbal communication. • Explain how to collect complete information and instructions from concerned authority/person. • Discuss the importance of communicating without any personal, gender, disability, caste, religion, colour, sexual orientation and culture biases. • Distinguish between different types of disabilities with their respective consideration and limitations. • Elaborate how to assist others in their tasks using a positive attitude to maximize effectiveness and efficiency at work. • Describe the communication etiquette to be followed at workplace. • Explain the importance of listening actively while interacting with others at work. • Outline basic characteristics that define responsible and disciplined behaviour at the workplace. • Discuss the need to attain common grounds with clients, team members, and other working personnel to enable smooth sufficient workflow while considering and respecting the opinions, creativity, values, beliefs and perspectives of others. • Elaborate the need of ensuring a friendly, co-operative environment that is conducive to employees' sense of belonging at workplace while understanding and appreciating the differences among team members.	• Demonstrate how to communicate verbal, non-verbal and written information timely, accurately and clearly using an inclusive language that is gender, disability and culturally sensitive. • Show how to interact using appropriate behaviour and gestures/body language, taking gender and disability into consideration to depict equal treatment for all clients, colleagues and co-workers. • Outline various methods to escalate and report grievances and issues to concerned to resolve them and avoid conflict. • Demonstrate how to collaborate with other and participate in group activities and tasks.
Theory Duration - (hh:mm) 84:00 **Practical Duration -** (hh:mm) 116:00 Grand Total Course Duration: **200 Hours, 0 Minutes** *(This syllabus/ curriculum has been approved by **Skill Council for Green Jobs**)*	

3. Site Surveyor-Wind Power Plant

(i) Brief Job Description: Site Surveyor - Wind Power Plant carries out site inspection, site assessment, checking site access, approach roads, grid availability for power evacuation, substation availability & its capacity and other relevant proximity of site.

(ii) Personal Attributes: This job requires the individual to survey the site for feasibility. Therefore, concentration and diligence are desired attributes for individuals performing this role. S/he must also be medically fit to work on heights, demonstrate strong work ethics, an ability to communicate courteously with co-workers, sub-ordinates and superiors.

NSQF level	6
Qualification pack code	SGJ/Q1202
Educational Qualifications	B.E. / B. Tech. (Electrical/ Mechanical/ Civil/ Electronics and Communication / Electrical and Electronics/ Control & Instrumentation)
Minimum Job Entry Age	21 years
Course Duration / Training hours	120
Learning Outcome	• Conduct Site survey for Wind power plant • Perform basic health and safety practices at project site • Work effectively with others • He / She is responsible to carry out site inspection, site assessment, checking site access, approach roads, grid availability for power evacuation, substation availability and its capacity and other relevant proximity of site

Module 1	**Introduction to Wind Power Sector Mapped to Bridge Module**
Duration: 12:00	**Duration: 00:00**
Theory	**Practical**
• Identify different types of Wind technology and overview of Wind energy sector in India • Understand key insights in the sector through various market research reports and magazines. • Identify different types of wind power plant, its components and working principles. • Understand basics of electrical concepts like voltage, current, power, energy, etc. • Explain the benefits of wind energy over conventional sources of energy. • Describe the typical specifications, functioning, operating principle, maintenance requirements, warranties, and safe operating & handling procedures of different Wind power plant components like Blades, towers, motors, monitoring system and other components. • Identify various ways to optimise material, energy/electricity consumption across processes and follow specified process for waste disposal.	

Module 2	**Conduct site survey for wind power plant Mapped to SGJ/N1204**
Duration:30:00	**Duration:30:00**
Theory	**Practical**
• Explain how to analyse project site conditions. • Explain how to collect data on local weather conditions such as temperature range, flooding (in case of onshore), wind speed, humidity, wind direction, pressure, rainfall and assess its impact on wind energy generation. • Explain how to assess the ground water availability and quality, load bearing capacities, pH levels and seismic risk. • Identify location for Power Curve test. • Discuss to ensure installation of meteorological mast (met mast) at site. • Discuss and analyse the wind data collected from met mast for estimating wind potential • Explain how to prepare a detailed survey plan of the land proposed for installation of wind power plant with elevations and topography with the help of software like Windographer, WASP, Wind Sim, Google Earth, Global Mapper. • Explain to calculate the exact land area of the proposed site where installation is to be commenced. • Discuss how to prepare contour map of proposed wind plant site. • Explain how to conduct field surveys and provide site ranking. • Identify position of WTG, substation, transmission line, transformers, etc. • Identify accessibility of the site i.e., its connectivity to various transport mechanisms including rail, road, connecting roads etc. • Discuss how to conduct route survey. • Identify soil type and its strength. • Explain state/central law of land leasing and purchase. • Discuss how to assess grid availability for power evacuation including nearest substation and transmission line capacity. • Identify the relevant grid authority. • Discuss how to check the feasibility of point of power evacuation. • Explain how to validate collected wind data from site.	• Analyse detailed site information. • Demonstrate how to analyse the daily, monthly and annual wind resource data of project site to evaluate the potential for wind energy generation. • Analyse the pre-site selection baseline data for project execution suitability. • Demonstrate how to verify the wind potential with other resources such as NREL/ATLAS. • Demonstrate how to prepare contour map of proposed wind plant site. • Demonstrate how to carry out route survey. • Demonstrate how to prepare detailed site survey report using GPS/DGPS and wind data analysis software. • Demonstrate how to assess grid availability for power evacuation including nearest substation and transmission line capacity. • Demonstrate how to ensure compliance with applicable environmental, waste management and disposal regulations.
Module 3	**Perform basic health and safety practices at project site (Ground and Height)Mapped to SGJ/N1201**

Duration: 10:00	Duration: 20:00
Theory	• **Practical**
• Explain the importance of selecting the relevant protective clothing/equipment for specific tasks and work. • Discuss about relevant documents and people responsible for health and safety at project site. • Identify possible causes of risk at project site and their mitigation measures. • Explain how to identify and follow warning signs on site. • Discuss how to establish safe working procedures at the project site. • Discuss how to ensure safe working practices when working at heights, confined areas and trenches. • Identify methods of accident. prevention in the work environment. • Discuss how to follow safe operating procedures for lifting, carrying and transporting heavy objects & tools. • Inspect the project site on a regular basis for any signs of spillage. • Ensure safe storage of flammable materials and machine lubricating oil. • Explain how to apply good housekeeping practices at all times by removal/disposal of waste products. • Explain how to promptly inform relevant authorities about any abnormal situation/behaviour of any equipment/system. • Exhibit the use of various appropriate fire extinguishers on different types of fires. • Identify rescue techniques applied during fire hazard. • Explain how to administer appropriate first aid to victims were required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc. • Discuss how to respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments. • Explain how to report the accident to the relevant authority in the prescribed format.	• Demonstrate how to use appropriate Personal Protective Equipment (PPE) while performing work. • Employ appropriate techniques while handling tools and equipment to ensure safety of self and others. • Demonstrate how to properly work while sitting or lifting heavy materials as per standards ergonomic principles to avoid injury. • Perform the steps to clean and disinfect material, tools, equipment and other supplies before starting work and after completing the job. • Demonstrate how to participate in emergency and evacuation drills to be able to take necessary action in case of accidents, fires and natural calamities • Demonstrate correct techniques to move an injured person during an emergency. • Demonstrate how to use appropriate fire extinguishers for different types of fire at workplace. • Show how to provide first aid to a victim in case of exposed wounds, cuts, burns, choking, electric shock, poisoning, or any other situation such as a cardiac arrest. • Demonstrate how to dispose hazardous waste as per organisational norms.
Module 4	**Effective and Efficient Working Practices Mapped to SGJ/N0120**
Duration: 06:00	**Duration: 12:00**
Theory	**Practical**
• Describe the legislation, standards, policies, and procedures to be followed at the workplace within one's own scope of work. • Identify the different types of communication and the basic etiquette involving verbal and non-verbal	• Demonstrate how to communicate verbal, non-verbal and written information timely, accurately and clearly using an inclusive language that is gender, disability and culturally sensitive.

communication. • Explain how to collect complete information and instructions from concerned authority/person. • Discuss the importance of communicating without any personal, gender, disability, caste, religion, colour, sexual orientation and culture biases. • Distinguish between different types of disabilities with their respective consideration and limitations. • Elaborate how to assist others in their tasks using a positive attitude to maximize effectiveness and efficiency at work. • Describe the communication etiquette to be followed at workplace. • Explain the importance of listening actively while interacting with others at work. • Outline basic characteristics that define responsible and disciplined behaviour at the workplace. • Discuss the need to attain common grounds with clients, team members, and other working personnel to enable smooth efficient workflow while considering and respecting the opinions, creativity, values, beliefs and perspectives of others. • Elaborate the need of ensuring a friendly, co-operative environment that is conducive to employees' sense of belonging at workplace while understanding and appreciating the differences among team members.	• Show how to interact using appropriate behaviour and gestures/body language, taking gender and disability into consideration to depict equal treatment for all clients, colleagues and co-workers. • Outline various methods to escalate and report grievances and issues to concerned authority as per organizational procedure to resolve them and avoid conflict. • Demonstrate how to collaborate with others and participate in group activities and tasks
Theory Duration - (hh:mm) 58:00 **Practical Duration -** (hh:mm) 62:00 Grand Total Course Duration: **120 Hours, 0 Minutes** *(This syllabus/ curriculum has been approved by **Skill Council for Green Jobs**)*	

Annexure - 2

Tools and Equipment

Sl. No.	Item
1.	Three Phase Circuits
2.	AC Motor
3.	DC Motor
4.	Transformer
5.	Synchronous Generator
6.	DC Generator
7.	D.C Machines
8.	Energy Meter
9.	Strain Gauge
10.	Single Phase Induction Motor
11.	Three Phase Induction Motor
12.	8085 Microprocessor

Sl. No.	Name of Tools & Instruments
1.	Tool kit
2.	Electrical Symbol and Accessories Charts
3.	Combination and Side cutting pliers
4.	Nose pliers, Wire stripper, Electrician knife, Cable cutter
5.	Hand crimping tools
6.	Hack saw frame with blade
7.	All size Screw driver
8.	Water level, Measuring tape
9.	Vanier caliper, Sprit level
10.	Centre punch, Standard wire gauge
11.	All size Flat files
12.	Drill m/c, cutting m/c, welding m/c
13.	All size of hammer, chisel
14.	Tong tester AC/DC, Multimeter, Megger, Hydro meter, Magnetic Flux Meter
15.	Soldering Iron & Flux, Earthing Rod
16.	Pry Bar, crow bar, Allen Keyes
17.	Pipe wrenches, Torque wrench

Sl. No.	Demo Equipment's in wind farms
1.	Gear Box
2.	Inverter
3.	Controller
4.	Current Transformer
5.	Potential Transformer
6.	Anemometer
7.	Wind Vane
8.	Temperature sensor
9.	Pressure sensor
10.	GPS (Global Positioning System)
11.	Data logger – Optional
12.	DC/AC Generator

Sl. No.	Safety & Protective Equipment
1.	Safety helmet
2.	Safety shoes
3.	Safety belt
4.	Nose mask
5.	Safety goggles
6.	Ear plug
7.	PVC hand glove
8.	Cotton hand glove
9.	Reflective jacket
10.	First aid kit
11.	Gum boots

Software Tools - Google Earth

Note: The Institute/ College shall have MoU with wind farm Manufacturer /Owners/ Developers/ O&M service providers having totally minimum 2 MW capacities Machines.

Annexure-3

[#]Categorization of Indian cities for Residential Training Costs is given below for reference:

S. No.	State	Cities classified as "X"	Cities classified as "Y"
1.	Andhra Pradesh		Vijayawada [Urban Agglomeration (UA)], Visakhapatnam (UA), Guntur
2.	Assam		Guwahati (UA)
3.	Bihar		Patna (UA)
4.	Chandigarh		Chandigarh
5.	Chhattisgarh		Durg- Bhilai Nagar (UA), Raipur (UA)
6.	Delhi	Delhi NCR (UA)	
7.	Gujarat		Ahmedabad (UA), Rajkot (UA), Jamnagar (UA), Vadodara
8.	Haryana		Faridabad
9.	J & K		Srinagar (UA), Jammu (UA)
10.	Jharkhand		Jamshedpur (UA), Dhanbad
11.	Karnataka	Bengaluru (UA)	Belgaum (UA), Hubli-Dharwar, Mangalore (UA)
12.	Kerala		Kozhikode (UA), Kochi (UA), Thiruvanthapuram (UA)
13.	Madhya Pradesh		Gwalior (UA), Indore (UA), Bhopal (UA), Jabalpur
14.	Maharashtra	Greater Mumbai (UA)	Amravati, Nagpur (UA), Aurangabad (UA), Nasik (UA), Bhiwandi (UA), Pune (UA), Solapur, Kolhapur (UA)
15.	Orissa		Cuttack (UA), Bhubaneswar (UA)
16.	Puducherry		Puducherry (UA)
17.	Punjab		Amritsar (UA), Jalandhar
18.	Rajasthan		Bikaner, Jaipur, Jodhpur (UA), Kota
19.	Tamil Nadu	Chennai	Salem (UA), Tiruppur (UA), Coimbatore (UA), Tiruchirapalli (UA), Madurai (UA),
20.	Telangana	Hyderabad (UA)	Warangal (UA)
21.	Uttar Pradesh		Moradabad, Meerut (UA), Ghaziabad, Aligarh, Agra (UA), Bareilly (UA), Lucknow (UA), Kanpur (UA)
22	Uttarakhand		Dehradun (UA)
23.	West Bengal	Kolkata (UA)	Asansol (UA)

All other cities/towns in various States /UTs which are not covered by classification as "X" or "Y" are classified as "Z".

Annexure-4

Gazette notification for Boarding and Lodging costs

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. NO. D. L.-33004/99

असाधारण

EXTRAORDINARY

भाग I—खण्ड 1

PART I—Section 1

प्राजधकार से प्रकाजित

PUBLISHED BY AUTHORITY

सं. 02] नई ददल्ली, मग

लिार, िनिरी 5, 2021/पौष 15, 1942

No. 02] NEW DELHI, TUESDAY, JANUARY 5, 2021/ PAUSHA 15, 1942

कौिल जिकास और उद्यमिलता मत्रालय अजधसचना

नई ददल्ली, 01 िनिरी, 2021

सं. एच-22011/2/2014-एसडीई(खण्ड IV)—भारत सरकार की कौिल जिकास स्ट्कीमों के जलए सामान्य मानदण्डों से संबंजधत ददनांक 15.07.2015 की अजधसूचना संख्या एच-22011/2/2014/एसडीई-I के खंड 4 द्वारा प्रदत्त िजियों के प्रयोग से इस प्रयोिन के जलए गठित सामान्य मानदण्ड सजमजत ने ददनांक 01.11.2020 की अजधसूचना संख्या एच-22011/2/2014/एसडीई-I की अनुसूची के अनुबंध -1 में आगे संिोधन करने के जलए जनम्नजलजखत पठरिततन दकए हैं नामत: -

िाएगा।

1. इन संिोधनों को कौिल जिकास स्ट्कीमों के जलए सामान्य मानदड

में पांचिां संिोधन, 2021 कहा

सिोधन:

(1) अनुबंध -1 की अनुसूची -1 के खंड 1 में जनम्नजलजखत उप-खंड 1.2िोडा गया ह: -

1.2 जिजभन्न सेक्टरों के जलए आधार लागत को 01.01.2021 से अनुसूची-I के खंड 1.1 में उजल्लजखत राजि के 5% की दर से बढाई गई ह,ै िो अगले 10 पैसे तक पूणाांदकत होगी।

जिजभन्न सेक्टरों के जलए मूल लागत ददनांक 01.01.2021 से जनम्नानुसारहोगी: -

(i) अनुसूची-II की श्रणी I में सूचीबद्ध रडोंे /सेक्टरों के जलए 49.00 रुपए प्रजत घंटा प्रजिक्षण।

45GI/2021 (1)

(ii) अनुसूची-II की श्रण

(iii) अनुसूची-II की श्रण

ी II में सूचीबद्ध रेडों/सेक्टरों के जलए 42.00 रुपए प्रजत घंटा प्रजिक्षण।

ी III में सूचीबद्ध रेडों/सेक्टरों के जलए 35.10 रुपए प्रजत घंटा प्रजिक्षण।

(2) ि ुटाि लागत के संबंध में अनुबंध-I की अनुसूची-I के खण्ड 1.2 के नीचे जनम्नजलजखत उप-खण्ड 1.3

और 1.4 ि ोडे ि ाएंगे: -

1.3 ि ुटाि की लागत ि ुटाि करने ि ाली एिेंसी को दी ि ाएगी। ि ुटाि की यह लागत प्रजिक्षण लागत का

जहस्ट्सा ह, और यदद यह प्रजिक्षण भागीदार से अलग दकसी एिेंसी को दी ि ाती है, तो प्रजिक्षण लागत समान राजि

के बराबर कम हो ि ाएगी।

1.4 ऐसे मामलों में ि हां प्रजिक्षण लक्ष्य 1,000 से अजधक ह,

ि ुटाि लागत 3%होगी और ि हां प्रजिक्षण

लक्ष्य 1,000 से कम ह, ि हा ाँ ि ुटाि लागत 4%होगी। यदद प्रजिक्षण भागीदार, ि ुटाई ि ाने ि ाली एिेंसी को बैच में

ली गई ि ास्ट्तजिक संख्याओं के जलए दी गई लंबी सूची को कम करने में सहायता करता है, तो प्रजिक्षण भागीदार इस

3% में से 1% या 4% ि ुटाने की लागत प्राप्त करने का हकदार होगा, ि ैसा भी मामला हो यानी, ि हां ि ुटाि लागत

3% है, ि हा ाँ ि ह ि ुटाि लागत का एक जतहाई प्राप्त करेगा और ि हां यह 4% है, ि हा ाँ ि ह ि ुटाि लागत का एक-

चौथाई प्राप्त करेगा। कु ल ि ुटाि लक्ष्य के एक जहस्ट्से को एक एिेंसी द्वारा और दस लागत दोनों एिेंजसयों के बीच आनुपाजतक रूप से साझा की ि ाएगी।

रे द्वारा भाग के मामले में, ि ुटाि

(3) अनुबंध-1 की अनुसूची-1 के खंड 3 के जलए, जनम्नजलजखत प्रजतस्ट्थाजपत दकया ि ाएगा:

3. िहरने और भोिन की लागत के जलये: (क) आिासीय प्रजिक्षण, और/या

(ख) उन सभी कौिल जिकास प्रजिक्षण कायतक्रमों के मामलों में िहां जिेष क्षेत्रों से आने िाले जिक्षाथी (िैसा दक अनुसूची-I के खंड 5.1 में पठरभाजषत दकया गया है) को इन जिेष क्षेत्रों के बाहर प्रजिजक्षत दकए िाते ह,ै और/या

(ग) दि में दकसी भी िगह प्रजिक्षण कायतक्रम, िहाँ मजहला प्रजिक्षार्थयों और ददव्ांग

व्जियों को जनकटतम प्रजिक्षण कें ✍ (या जिेष क्षेत्रों के मामले में 40 दकलोमीटर) पहचने के जलए अपने घरों से 80 दकलोमीटर से अजधक की यात्रा करनी पडती है और िो उनके जलए की गई व्िस्था के अंतगतत भोिन और िहरने की सुजिधा का लाभ उिाते ह।ै

मंत्रालय प्रजत प्रजिक्षाथी प्रजत ददन िहरने और भोिन की लागत की अजधकतमप्रजतपूर्थत जनम्नजलजखत ताजलका के अनुसार करेंगे:

एक्स श्रेणी के िहरों/नगरों में प्रजत प्रजिक्षाथी प्रजत ददन	375/- रुपए
िाई श्रेणी के िहरों/नगरों में प्रजत प्रजिक्षाथी प्रजत ददन	315/-रुपए
ज़ेड श्रेणी के िहरों/नगरों में प्रजत प्रजिक्षाथी प्रजत ददन	250/-रुपए
ग्रामीण क्षेत्र और अन्य क्षेत्र, जिन्हें नगर पाजलका/नगर क्षेत्र के रूप में अजधसूजचत नहक दकया गया ह।ै	220/-रुपए

(िहरों की श्रेजणयों की सूची अनुसूची-III पर दी गई ह)

िकील आलम, आर्थथक सलाहकार

MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP NOTIFICATION

New Delhi, the 1st January, 2021

No. H-22011/2/2014-SDE (Vol. IV): In exercise of the powers conferred by Clause 4 of the Notification No. H-22011/2/2014-SDE-I dated 15.07.2015 concerning Common Norms for Skill Development Schemes of the Government of India, the Common Norms Committee constituted for the purpose makes the following changes further to amend the Schedules of Annexure-1 of the Notification No. H-22011/2/2014-SDE (Vol.IV) dated 11.11.2020, namely:-

1. These amendments may be called Common Norms for Skill Development Schemes Fifth Amendment, 2021.

Amendments:

(1) The following sub-clause 1.2 is added to Clause 1 of SCHEDULE-I of Annexure-1:-

1.2 The base cost for different sectors is increased at 5%, rounded off to the next 10 paisa, of the amounts mentioned in Clause 1.1 of SCHEDULE-I with effect from 01.01.2021

The base cost for the different sectors will be as under with effect from 01.01.2021:-

(i) Rs. 49.00 per hour of training for trades/sectors listed in Category I of SCHEDULE-II.

(ii) Rs. 42.00 per hour of training for trades/sectors listed in Category II of SCHEDULE-II.

(iii) Rs. 35.10 per hour of training for trades/sectors listed in Category III of SCHEDULE-II.

(2) The following sub-clauses 1.3 and 1.4 shall be added below clause 1.2 of SCHEDULE-I of Annexure-1 regarding mobilization cost, namely:-

1.3 Cost of mobilization will be given to the agency undertaking mobilization activity. This mobilization cost is part of the training cost, and in case it is given to an agency different from the Training Partner, then the training cost would reduce by an equivalent amount.

1.4 In cases where training target is greater than 1,000, 3% will be the mobilization cost and where training target is less than 1,000, 4% will be the mobilization cost. If the Training Partner assists the mobilizing agency in reducing a long list given by the mobilization agency to the actual numbers taken in the batch, then the Training Partner will be entitled to receive 1% out of this 3% or 4% mobilization cost, as the case may be. That is, where the mobilization cost is 3%, it will receive one-third of the mobilization cost and where it is 4%, it will receive one-fourth of the mobilization cost. In case part of the total mobilization target is done by one agency and part by another, the mobilization cost would be shared proportionately between the two agencies.

(3) For clause 3 of SCHEDULE-I of Annexure-1, the following shall be substituted:

3. Boarding and Lodging Costs For:

(a) Residential training, and/or

(b) In respect of all skill development training programmes where trainees from Special Areas (as defined in clause 5.1 of SCHEDULE-I) are trained outside these Special Areas, and/or

(c) Training programmes, anywhere in the country where women trainees and Persons with Disabilities have to travel more than 80 kms from their homes to reach the nearest training centre (or 40 kms in case of Special Areas) and who are availing of boarding and lodging arrangements made for them.

Ministries will reimburse Boarding & Lodging Costs up to a maximum per trainee per day as per table below:

i.	X Category Cities/ Town per day per Trainee	Rs.375/-
ii.	Y Category Cities/Town per day per Trainee	Rs.315/-
iii.	Z Category Cities/Town per day per Trainee	Rs.250/-
iv.	Rural Areas and municipal/town area	any Area not notified as a Rs.220/-

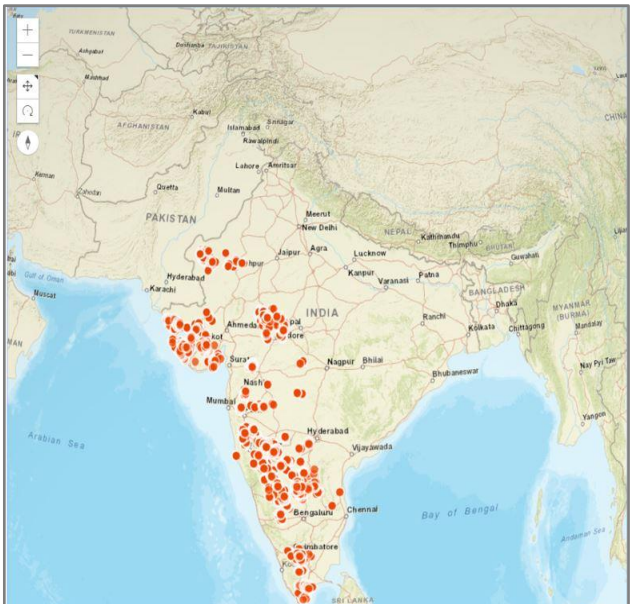
(The List of categories of cities is given at SCHEDULE-III)

SHAKIL ALAM, Economic Adviser

Annexure - 5

Prospective Training Partners (TP) – State wise:

Training Partners selection will be based on the potential and installed capacity of wind in the states. The wind farms in India are majorly established in eight (8) windy States & Kerala and they are spread across about 67 districts and their details are given below



Existing wind farms in India

Sl. No.	STATE	DISTRICTS
1	Andhra Pradesh (5)	Anantapur, Kurnool, Kadapa, Chittoor, Nellore,
2	Gujarat (12)	Kutch, Patan, Dwarka, Rajkot, Jamnagar, Amreli, Morbi, Botad, Bhavnagar, Porbandar, Surendranagar, Junagadh
3	Karnataka (15)	Belgaum, Bijapur, Vijayapura, Raichur, Davangere, Gadag, Yadgir, Chitradurga, Koppal, Bagalkot Hassan, Bellary, Shimoga, Tumkur, Gulbarga
4	Kerala (1)	Pallakkad
5	Maharashtra (12)	Ahmednagar, Amaravati, Aurangabad, Beed, Dhule, Kolhapur, Nandurbar, Nashik, Raigarh, Sangli, Satara, Sindhudurg
6	Madhya Pradesh (8)	Shajapur, Ujjain, Mandsaur, Dewas, Ratlam, Dhar, Betul, West Nimar
7	Rajasthan (4)	Jaisalmer, Pratapgarh, Barmer, Jodhpur
8	Tamil Nadu (9)	Coimbatore, Tiruppur, Tirunelveli, Kanyakumari, Theni, Dindugal, Tuticorin, Karur, Erode
9	Telangana (1)	Rangareddy