



Verification and certification report form for GS project activities

(Version 01.0)

VERIFICATION AND CERTIFICATION REPORT

Title of the project activity	Enercon Wind Farm (Hindustan) Ltd in Rajasthan
Reference number of the project activity	GS 2483 (CDM 1168)
Version number of the verification and certification report	01
Completion date of the verification and certification report	12/01/2018
Monitoring period number and duration of this monitoring period	01/06/2016 to 31/08/2017 (Both days inclusive)
Version number of monitoring report to which this report applies	02
Crediting period of the project activity corresponding to this monitoring period	01/07/2012 to 14/03/2020
Project participant(s)	Wind World (India) Limited
Host Party	India
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	Sectoral Scope 1 - Energy industries (renewable/ non-renewable sources) Methodology: ACM0002 Version 06 Title: "Consolidated methodology for grid-connected electricity generation from renewable sources"
Estimated GHG emission reductions or net anthropogenic GHG removals for this monitoring period in the registered PDD	126,516 tCO ₂ e
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	63,492 tCO ₂ e
Name of DOE	Earthood Services Private Limited
Name, position and signature of the approver of the verification and certification report	Dr.Kaviraj Singh Managing Director

SECTION A. Executive summary

The project activity involves electricity generation by wind electric convertors and supplying the generated electricity to the NEWNE Grid. The project being a renewable energy generation activity, leads to reduction in fossil fuel dominated electricity generation. The project activity results in reductions of greenhouse gas (GHG) emissions that are real, measurable, and verifiable and also plays beneficial role in the mitigation of climate change.

The project activity consists of 75 WECs (0.8 MW capacity each), making the total installed capacity to be 60 MW in Jaisalmer district in Rajasthan, India. The WECs are of Enercon (E-48) make. Enercon India Limited is the supplier of WECs and the O&M contractor for the project activity. The WECs have been commissioned between 26/11/2006 and 25/12/2006. The same was verified against the commissioning certificates/10/.

All 75 WECs are fully functional and the assessment team verified this during the site visit. The assessment team confirms that the total emission reductions achieved under this monitoring period 01/06/2016 – 31/08/2017 (including both days) is 63,492 tCO₂e.

This verification is an independent and objective review for the additional Gold Standard (GS) requirement, for the two separate and subsequent monitoring periods for the project activity “Enercon Wind Farm (Hindustan) Ltd in Rajasthan” (GS-2483 & UN 1168), This verification report doesn't include the verification of the GHG parameters but only review the additional requirements for GS labelling the already issued CER. The current monitoring period covers the period from 01/06/2016 to 31/08/2017 and carbon credits for the said period has been submitted to CDM EB and currently in the process of issuance of carbon credit.

The emission reductions which are being verified for the period 01/06/2016 to 31/08/2017, in this report, will only be deemed final after the successful issuance of the same period and emissions from the CDM EB.

The verification report addresses the implementation and operation of the GS PA and tests the data and assertions set out in the monitoring report based on the following:

- (i) The registered GS/CDM PDD and Passport
- (ii) The approved methodology mention in the PDD and passport
- (iii) UNFCCC criteria referred to in the Kyoto Protocol criteria and the CDM modalities and procedures as agreed in the Bonn Agreement and the Marrakech Accords
- (iv) The latest Gold Standard (GS) tool kit
- (v) CDM Validation and Verification Standard (VVS)
- (vi) CDM Project Standard (PS) and Project Cycle Procedure (PCP)
- (vii) Relevant decisions, guidance and clarifications of the CMP and CDM Executive Board and any other information and references relevant to the project activity's reported emission reductions

The verification has considered both quantitative and qualitative aspects on stated/reported emission reductions. The monitoring report (all versions) and corresponding supporting documentation was assessed in accordance with the rules defined by UNFCCC, as appropriate to the PA. The verification is not meant to provide any consulting or recommendations to the PP/others. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the monitoring activities.

The verification process is conducted as per internal CDM Quality Manual, which includes the following steps;

- a) Contract with PP and appointment of verification team and technical review team (refer Section B.1 and B.2 of this report)
- b) Completeness check of Monitoring Report
- c) Desk review (refer Section C.1 of this report) of Monitoring Report and corresponding ER sheet by verification team and planning of onsite audit (including sampling approach (refer Section C.4 of this report) to be applied)
- d) On site audit (refer Section C.2 of this report) (physical implementation and interview with relevant stakeholders) by verification team
- e) Follow up activities e.g., interviews
- f) Reporting and closure of findings (CARs/CLs/FARs) and preparation of draft verification report (refer Section C.5 of this report)
- g) Independent technical review (refer Section D of this report) of the draft verification report and final/revised documentation (e.g., Monitoring Report, corresponding ER sheet and evidences)
- h) Reporting and closure of TR comments/findings (refer Section C.5 of this report) (CARs/CLs/FARs) and final approval for the decision made (refer Section E and F of this report).

- i) Issuance of final verification report to contracted PP (or authorized representatives) and submission of request for issuance, as appropriate.

Based on the outcome of the verification process of the registered PA “Enercon Wind Farm (Hindustan) Ltd in Rajasthan” for the monitoring period 01/06/2016 to 31/08/2017, we confirm that the implementation of referenced registered PA is complying with applicable GS and CDM rules and regulations as stated in the Monitoring Report (final) version 02, dated 15/12/2017. Earthood Services Private Limited is able to certify that the emission reductions from the registered GS PA (2483) “Enercon Wind Farm (Hindustan) Ltd in Rajasthan” in ‘India’ during the period 01/06/2016 to 31/08/2017(including both days) amount to 63,492 tCO₂e. Therefore, this is being submitted for request for issuance, as per GS and UNFCCC procedures as applicable.

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader and Local Expert	EI	Soni	Ravi Kant	Central office	Y	Y	Y	Y
2.	Verifier	EI	Soni	Ravi Kant	Central office	Y	Y	Y	Y
3	Meth Expert and Technical Expert	EI	Soni	Ravi Kant	Central office	Y	Y	Y	Y
4	Trainee		Not applicable						

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Mahawar	Abhishek	Central office
2.	Approver	IR	Singh	Kaviraj	Central office

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Not applicable because no GHG parameters are required to be verified	NA	NA	NA

C.2. Consideration of materiality in conducting the verification

>> not applicable

SECTION D. Means of verification**D.1. Desk review**

The verification is performed primarily as a desk review of the documents submitted at various stages of assessments. The review is performed by assessment team using dedicated protocols (checklists). The assessment team cross checks the information provided in the documents (MR) and information from sources other than those used, if available, and also conducts independent background investigations. Earthood conducted a desk review as under;

- a) A review of the data and information presented to verify their completeness
- b) A review of the monitoring plan (as described in PDD and passport), the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures
- c) A review of calculations and assumptions made in determining the GHG data and emission reductions;
- d) An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions

The list of documents reviewed during the verification is provided under appendix 3 of this report.

D.2. On-site inspection

Duration of on-site inspection: 14/11/2017				
No.	Activity performed on-site	Site location	Date	Team member
1.	An assessment of the implementation of sustainability monitoring plan and operation of the registered project activity as per the registered passport; A review of information flows for generating, aggregating and reporting the monitoring parameters; Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the Passport; A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources; An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters. Interview and feedback of the relevant stakeholders about the PA.	Jaisalmer	14/11/2017	Ravi Kant Soni

D.3. Interviews with project participants

No.	Interviewee			Date	Subject
	Last name	First name	Affiliation		
1.	Yadav	Vlkash	Wind World (India) Limited (WWIL)	14/11/2017	Monitoring of sustainable development parameters
2.	Kumar	Jetendra	WWIL	14/11/2017	Monitoring of sustainable development parameters
3.	Purohit	Manoj	WWIL	14/11/2017	Monitoring of sustainable development parameters
4.	Patel	Chenaram	WWIL	14/11/2017	Monitoring of sustainable development parameters

D.4. Interviews with local stakeholders

Earthood as a part of validation procedure conducted a comprehensive interaction with stakeholders. It was done during the site visit on 14/11/2017. It included interaction with the local villagers and representatives of PP. Earthood team have interviewed the local stakeholders and they were questioned for various topics as summarized below;

- Effect of project on their livelihood and income
- Any problem related to wind turbine installation in nearby areas
- Does the noise generated by wind turbines disturbs any of their activity or comfort
- Are they happy with the benefits and development as CSR activity of the PP
- General feedback about wind farms
- Do they know about the grievance and feedback back register/mechanism?
- Any concerns or feedback; Positive (P) and Negative (N)

No.	Name of Stakeholder	Address	Feedback (Positive/Negative/Concerns)
1.	Denaram	Local villager	Positive
2.	Bhikha Ram	Local villager	Positive
3.	Ashunath Goswami	Local villager	Positive
4.	Narendra Kumar	Local villager	Positive
5.	Jai Prakash	Local villager	Positive
6.	Bhopal Singh	Local villager	Positive
7.	Ramesh Kumar	Local villager	Positive
8.	Ram Pratap	Local villager	Positive
9.	Madan Lal	Local villager	Positive
10.	Manish Kaswa	Local villager	Positive

D.5. Sampling approach

>>Not applicable as complete setoff data is verified.

D.6. Clarification requests, corrective action requests and forward action requests raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	-	-	-
Compliance of the project implementation with the registered PDD	-	-	-
Post-registration changes	-	-	-
Compliance of the sustainability monitoring plan with the registered Passport	-	CAR #2	-

Compliance of the Grievance Mechanism with the registered Passport	-	CAR #3	-
Compliance of monitoring activities with the registered monitoring plan	-	-	-
Compliance with the calibration frequency requirements for measuring instruments	-	-	-
Assessment of data and calculation of emission reductions or net removals	-	CAR #4	-
Others (missing information/inconsistency))	CL #1	-	-
Total	1	3	-

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	There is no specific template available for GS monitoring report. Hence CDM-MR-FORM version 06.0 is used which was the appropriate form and the latest version available at the time of verification. All the sections of the form were filled as per the guidelines and gave all the relevant details.
Findings	No finding was raised
Conclusion	The monitoring report is found to be complying with the monitoring report form

E.2. Remaining forward action requests from validation and/or previous verification

>>This is third verification. No FAR request from validation

E.3. Compliance of the project implementation with the registered project design document

Means of verification	The project activity replaces the energy which is being generated mainly by fossil fuel based power generation plants connected to grid and therefore contributes to sustainable development. The project activity consists of 75 WECs (0.8 MW capacity each), making the total installed capacity to be 60 MW in Jaisalmer district in Rajasthan, India. The WECs are of Enercon (E-48) make. Enercon India Limited is the supplier of WECs and the O&M contractor for the project activity. The WECs have been commissioned between 26/11/2006 and 25/12/2006. The same was verified against the commissioning certificates/10/. . The WTGs have been in operation during the current monitoring period in compliance with the description provided in the GS Passport. The project implementation, with reference to GS passport, was checked on site to confirm the following: • The monitoring system including the measurement of parameters, data collection and archiving was also implemented and operated inline to the GS passport/1/. • The emission reduction was achieved in compliance with applied methodology, GS passport. • The project contributes to the sustainable development which includes, but not limited to, enhancement of local economy, creating employment and many other benefits to the rural population.
Findings	No issues identified and hence finding was not raised for this section
Conclusion	• In view of the information's verified during the site visit, the verification team is able to confirm that all physical features (technology, project equipment, and monitoring and metering equipment) of the registered GS project activity are in place and that the project participants have operated the project activity as per the GS Passport. • No information with regard to data and variables was identified that may surpass the estimated quantity of ERs in the GS Passport. • The emission reductions achieved during the current monitoring period are 63,492 tCO₂e within the estimated quantity (126,516 tCO₂e) in the GS Passport for the comparable period.

E.4. Post-registration changes**E.4.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline**

>>There are no temporary deviations from registered monitoring plan or applied methodology. It was verified and confirmed from the GS Passport; the applied methodology and the on-site verification.

E.4.2. Corrections

>> Not applicable

E.4.3. Changes to the start date of the crediting period

>>Not applicable

E.4.4. Inclusion of a monitoring plan to a registered project activity

>>Not applicable

E.4.5. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

>> Not applicable

E.4.6. Changes to the project design of a registered project activity

>>No changes to the project design identified during the verification

E.4.7. Types of changes specific to afforestation and reforestation project activities

>> Not applicable

E.5. Compliance of monitoring activities with the registered monitoring plan

Means of verification	Compliance of the monitoring activities related to parameters used in the emission reduction calculations were already verified during the site visit. The monitoring plan outlined in the revised approved PDD is in accordance with the applied methodology and correctly applied by the registered CDM project activity. During the site visit the verification team has verified the sustainability monitoring plan and found to be in compliance with the registered passport.
Findings	No issues identified in section hence finding was not raised.
Conclusion	The monitoring plan outlined in the GS Passport is in accordance with the applied methodology /08/ and correctly applied by the project activity.

E.5.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	Data and parameters fixed ex-ante are already verified during the CDM verification /19/, hence no further verification is required.
Findings	No finding was raised.
Conclusion	The scope of work in the current verification is limited to the labelling of already verified and issued CERs.Hence no further assessment is required.

E.5.2. Data and parameters monitored (Carbon Verification)

The verification of monitoring parameters are in accordance with the monitoring plan described in the registered PDD; the emission reductions (ER) achieved during the period from 01/06/2016 to 31/08/2017 are currently under issuance at UNFCCC /19/.

E.5.3. Data and parameters monitored (Sustainability Verification)**E.5.3.1: Quality of Employment**

Means of verification	
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	Criteria/Requirements	
	Measuring /Reading /Recording frequency	It is sustainable development parameter. Quality of employment generated by the project activity is monitored. Project participant conducts various activities on regular basis for improving the skills and thereby quality of employment of its employees. Various indicators of quality of employment viz. quality job creation, working conditions, health care facilities, skill build-up through workshops and trainings, putting safeguard in place and living standard of the plant staff are monitored as and when such activities are organised/12,15,16/.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	The measuring and recording frequency is in line with the monitoring plan of registered passport. The project passport requires the quality of employment to be monitored on annual basis. The assessment team confirms that the monitoring of quality of employment with reference to various parameters viz. training, occupational health, safety of employees and working environment is being done on annual basis /12,15,16,17/.
	How were the values in the monitoring report verified?	The following training programmes in order to enhance the safety awareness, operational skills and occupational health management have been organised during the current monitoring period/12/; i. Safety and First Aid training at Sipla site office, Jaisalmer, on 07/03/2016. ii. SIQA Refresher Training Module at Jaisalmer site office, on 19/08/2016.
	If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data has been cross checked with the quantitative information about the quality of employment which includes the records of HR, training, health care facilities etc. are maintained /9,12/.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Counting of the number of trainings and respective attendees is done by a training attendance sheet which states the programme name, venue, faculty, date and timing, attendee details (employee code, name, designation and department). Each training attendance sheet has a unique form number. Numbers of jobs created has been categorized and records are maintained accordingly. Records of any activity related to the quality of employment is maintained by HR.
Findings	No finding was raised	
Conclusion	The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

E.5.3.2: Access to affordable and clean energy services

Means of verification	Criteria/Requirements	
	Measuring /Reading /Recording frequency	Electricity generation from the wind power plant is monitored annually.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes the measuring and recording frequency is in line with the monitoring plan of registered passport.

	(Yes / No)	
	How were the values in the monitoring report verified?	During the current monitoring period, total of 72,656.125 MWh was supplied to the grid using wind energy /13/. The value has been verified during the verification of CER issuance and verified from the project webpage, found to be okay /13/.
	If applicable, has the reported data been cross-checked with other available data?	This aspect is already verified for the current monitoring period/19/
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	This aspect is already verified for the current monitoring period /19/.
Findings	No finding was raised	
Conclusion	The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

E.5.3.3: Livelihood of the poor

Means of verification	Criteria/Requirements	
	Measuring /Reading /Recording frequency	It's a sustainable development parameter. Total number of local villagers employed for project for their livelihood is monitored by the project proponent.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Total number of job created for the local population is monitored on annual basis or at least once in monitoring period. The HR department monitors and maintains the up to date records of total number of job created /09/. The monitoring frequency is in line with the passport /01/.
	How were the values in the monitoring report verified?	Total number of job created by the project is 104 which includes technical WWIL staff (35), security guards (59) and contractual labor (10). This is verified from the HR records that all local guards belongs to the local areas/09/. Also, most of the staff of WWIL is from the local areas however it does have some senior personal from outside. The local contracts were also found from the local nearby areas. The assessment team has interviewed the guards and observed that almost all of the personnel were unemployed before taking up the job of security guards with the project developer. Therefore, the assessment team is in opinion that the project activity contributes to the livelihood of the poor.
	If applicable, has the reported data been cross-checked with other available data?	The reported data has been cross checked with the HR records maintained by the project proponent and interviewing the local stakeholders during the site visit.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	The HR department monitors and maintains the up to date records of total number of job created, necessary QA/QC processes in place.
Findings	No finding was raised.	
Conclusion	The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

E.5.3.4: Human and institutional capacity

Means of verification	Criteria/Requirements	
	Measuring /Reading /Recording frequency	It's a sustainable development parameter which monitors the number of villagers directly or indirectly benefited by the CSR activity initiatives, referring to the project, undertaken by the project proponent. This parameter is monitored on annual basis.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	The number of local villagers, directly and indirectly benefited by the project activity, is monitored annually which is found in line to the frequency set in passport /01/.
	How were the values in the monitoring report verified?	Project proponent has initiated the number of CSR programmes pertaining to capacity building, health, education etc. The main CSR activities/11/ verified are as below; - As part of its endeavour to introduce healthcare awareness and contemporary health care services, fully equipped mobile medical van is launched on 24/09/2016 by organizational group in collaboration with CSR consulting partner SoulAce with ground level NGO partner (NUS-Nari Uthan Sasthan). Mobile healthcare medical van is operational across nearby 10 villages of project site(Jaisalmer district). The villagers are Barna & Khuri, Kita & Pithodai Ki Dhani, Korwa, Kotri, Pithla, Senag, Ugawa and Sipla, which will be covered for interventions where the basic access to health services is lacking. - In order to provide access of safe drinking water, in collaboration with CSR consulting partner SoulAce with local NGO(NUS-Nari Uthan Sasthan),RO systems have been installed in 12 government schools at Bhu and Sipla sites. During the site visit the assessment team has verified the following information's pertaining to each initiative as mentioned above: - Medical health van was operational and qualified medical team comprised of one MBBS doctor, Nurse, pharmacist. Medical staff and representatives of NGO were interviewed and it is confirmed that NGO having access to deserving villages which are cut off from regular health services. The health clinic is pre-scheduled with dedicated day and time for each village such that it can cover total 9 villages in Jaisalmer district. Mobile healthcare unit covers the vicinity of 20-50 kms from its centre and will visit 2-3 villages a day on a regular basis. Services being provided to villagers are of high quality, free of cost and at their doorstep. Every week the mobile health van is running in the villages and providing necessary health care facilities including referral services to the door steps of the villagers and awareness camp in their villages. - Availability of safe potable water is a major problem in majority of rural areas in Rajasthan. The assessment team has visited the concerned schools and confirmed that thousands of School Children have been benefited with the RO System installed. It is one of the greatest gifts one could donate to a community.

		The verification team is in opinion that estimation of the exact number of stakeholders (local villagers, students) who have been benefited by these initiatives is very difficult. However, taking note of the type of CSR activities initiated and observation of the stakeholder's interviews and time duration of monitoring period, it can be concluded that the number estimated for the beneficiaries in the MR with reference to each initiative, is reasonable and conservative. It is also important to note that the social initiatives take care of long term and broad impacts.
	If applicable, has the reported data been cross-checked with other available data?	The parameter was verified using documented evidences/11/ - Quarterly CSR reports (August 2016 to March 2017) - MIS reports (Sept 2016 to March 2017) - include number of health clinics conducted. - Request letter regarding RO installation, from Principal Government higher secondary school Kita village, district –Jaisalmer. - Receiving and Feedback letter from Principal Government higher secondary school, Kita village district -Jaisalmer - Receiving and Feedback letter from Principal Government higher secondary school, Damodara village district – Jaisalmer. - Interviews of schools staff. - Local villager's interview and on-site observation. - Photographs relevant to particular activity,
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes during the site visit it is assured that the project proponent has appropriately maintained the records for the CSR activities, hence it can be confirmed that the QA/QC process is in place.
Findings	CAR #2 was raised and resolved.	
Conclusion	The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

E.5.3.5: Quantitative employment and income generation

Means of verification	Criteria/Requirements	
	Measuring /Reading /Recording frequency	This is a sustainable development parameter to monitor the total number of employment opportunities created. Total number of job created for the local population is monitored on annual basis or at least once in monitoring period.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The monitoring frequency is in line with the passport /01/.
	How were the values in the monitoring report verified?	Total number of job created by the project is 104 which include technical WWIL staff, security guards and Labours. This is verified

		from the HR records that all local guards belongs to the local areas/9/. Also, most of the staff of WWIL is from the local areas however it does have some senior personal from outside. The local contracts were also found from the local nearby areas. The assessment team has interviewed the guards and observed that almost all of the personnel were unemployed before taking up the job of security guards with the project developer. Therefore, the assessment team is in opinion that the project activity contributes to the livelihood of the poor. In addition to the direct jobs created, quite a few indirect jobs were created by the project activity like frequent visits to the project site by various stakeholders of the project (project developers, technicians, auditors, vendors and suppliers) gives rise to a demand for various support services in the local area. This results in increased livelihood options and income generation for the local population and estimation of such number is a bit difficult task.
	If applicable, has the reported data been cross-checked with other available data?	The reported data has been cross checked with the HR records maintained by the project proponent and interviewing the local stakeholders during the site visit.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	The HR department monitors and maintains the up to date records of total number of job created, necessary QA/QC processes in place.
Findings	No finding was raised.	
Conclusion	The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

E.5.4. Implementation of sampling plan

Means of verification	Not applicable
Findings	Not applicable
Conclusion	Not applicable

E.5.5. Complaints received as a part of grievance mechanism

Means of verification	The verification team has checked the grievance register maintained at respective site office and confirmed that no formal complaints were received during the current monitoring period. However as per the internal organization policy, interactions with stakeholders(villagers) done by responsible personnel and common queries received from local villagers:		
	Comments/Suggestions	Action taken by PP	Means of verification
	Local people from Akal and Kita Village requested to arrange RO water facilities in the government schools.	Organizational group who is responsible to implement such facilities has installed RO water units in 12 schools.	Local NGO were interviewed. Also the assessment team physically visited the schools and interviewed the staff/11/.
	Local people from Pithala and Kita Village requested to arrange primary healthcare facilities.	Organizational group who is responsible to implement such facilities has assured to arrange the facilities in near future.	Representatives of consulting partner and local NGO were interviewed. Also the mobile health van is already launched in the nearby villages/11/.

	Local people from Kita Village appreciated the steps taken by PP regarding RO water system in schools and healthcare services provided to villagers. Local people also requested to implement such facilities in nearby villages.	RO water systems are already installed in 12 schools in the nearby villages. Also the implementing entity is planning to extend such facilities in the requested villages in near future.	Feedback letters from school principal reviewed/11/ and interactions with school staff were done during the site visit.
	Based on the information's recorded in the complaint register and interactions done with local villagers/NGO representative, it can be confirmed that the queries/suggestions received from stakeholders is sufficiently responded by the authorized personnel responsible for effective implementation of grievance mechanism.		
Findings	CAR #3 was raised and resolved.		
Conclusion	Based on the complaint register verified and interviews of local villagers during the site visit, the verification team able to conclude that: - The grievance mechanism implemented is in place - Complaints received from local villagers are consistently recorded, however no formal complaints received during the current monitoring period. - All the concerns raised are satisfactorily addressed by the project participant		

E.6. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	The requirements have already been verified during CDM verification and issuance of CERs for the current monitoring period is awaited/19/.
Findings	Not applicable
Conclusion	No further verification is required in this regard.

E.7. Assessment of data and calculation of emission reductions or net removals

E.7.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	The assessment team has verified the verification report for the period 01/06/2016 to 31/08/2017 the amount of CERs issued were 63,492 tCO ₂ /19/.
Findings	No finding was raised
Conclusion	The verification team confirms that a) The complete data was available and is duly reported; b) Appropriate methods and formulae for calculating baseline GHG emissions or baseline net GHG removals were followed; c) Appropriate emission factors and other reference values were correctly applied.

E.7.2. Calculation of project GHG emissions or actual net GHG removals by sinks

Means of verification	The requirements have already been verified during CDM verification and issuance of CERs for the current monitoring period is awaited/19/.
Findings	Not applicable
Conclusion	No further verification is required in this regard.

E.7.3. Calculation of leakage GHG emissions

Means of verification	The requirements have already been verified during CDM verification and issuance of CERs for the current monitoring period is awaited/19/.
Findings	Not applicable
Conclusion	No further verification is required in this regard.

E.7.4. Summary of calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	The requirements have already been verified during CDM verification and issuance of CERs for the current monitoring period is awaited EB/19/.
Findings	CAR #4 was raised and resolved.
Conclusion	No further verification is required

E.7.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	Not applicable
Findings	Not applicable
Conclusion	Not applicable

E.7.6. Remarks on difference from estimated value in registered PDD

Means of verification	Not applicable
Findings	Not applicable
Conclusion	Not applicable

E.7.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	As verified from the verification report and UNFCCC project webpage, that CERs for the period from 01/03/2016 to 31/08/2017 are already verified and request for issuance has been submitted to UNFCCC.
Findings	Not applicable
Conclusion	Earthood confirms that the monitoring system with reference to GS sustainable development parameters is in place for already verified emission reductions from the CDM project activity (GS2483 and UN 1168) "Enercon Wind Farm (Hindustan) Ltd in Rajasthan" in India for the monitoring period 01/06/2016 – 31/08/2017 which amount to 63,492 tonnes of CO ₂ .

SECTION F. Internal quality control

A draft verification report prepared by assessment team is reviewed by an independent Technical Review team (one or more members) to confirm if the internal procedures established and implemented by Earthood were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable Gold Standard and CDM requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the validation team. The report approved by Quality Manager is endorsed by Managing Director, who is overall responsible to ensure quality, before final release. The further details of applicable procedures and responsibilities about Earthood Quality Management System (QMS) are available on its website (www.earthood.in)

SECTION G. Verification opinion

Earthood Services Private Limited (Earthood), contracted by Wind World (India) Limited, has performed the independent verification of the emission reductions for the GS Project "Enercon Wind Farm (Hindustan) Ltd in Rajasthan" in "India" for the monitoring period 01/06/2016 to 31/08/2017 as reported in the Monitoring Report, Version 02, dated 15/12/2017.

The 'Wind World (India) Limited' is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity. Earthood commenced the verification against the baseline and monitoring methodology "Consolidated baseline methodology for grid connected electricity generation from renewable sources", Version 06 the monitoring plan contained in the GS PDD, Version 2, dated 20/08/2014, GS Passport Version 03 dated 23/09/2014 and Monitoring Report Version 02 dated 15/12/2017.

ESPL's verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. ESPL planned and performed the verification by obtaining evidence and other information and explanations that ESPL considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

The verification activities were conducted in accordance with ESPL's CDM Quality Manual System as per the steps indicated under Section A of this report.

As a result, it is confirmed that the emission reductions from the GS PA (1168) "Enercon Wind Farm (Hindustan) Ltd in Rajasthan" are correctly reported in the Monitoring Report (final) Version 02 dated 15/12/2017 and corresponding ER sheet for the monitoring period 01/06/2016 to 31/08/2017(including both days) amounted as 63,492 tCO₂e. Therefore, this will be submitted as part of request for issuance as per CDM PCP for PAs Version 01.0 &GS tool kit 2.2.

Note:

ESPL would like to confirm that amount of CERs for the period from 01/06/2016 to 31/08/2017 are verified as 63,492 tCO₂e and request for issuance for this period has been submitted to UNFCCC which is currently under process. In case if any issues raised by UNFCCC during the process that may impact on amount of CERs verified, shall be addressed in this report.

SECTION H. Certification statement

ESPL's verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. ESPL planned and performed the verification by obtaining evidence and other information and explanations that ESPL considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the project activity are fairly stated in the Monitoring Report (final) Version 02 dated 15/12/2017. ESPL, based on outcome of verification activities, certifies in writing that, during the monitoring period 01/06/2016–31/08/2017(including both days), the registered GS PA "Enercon Wind Farm (Hindustan) Ltd in Rajasthan" in the registered GS PA achieved the verified amount of 63,492 tCO₂e reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the PA.

The verified amount of emission reductions is stated below as per each vintage covered under the current monitoring period.

Emission Reductions (Amount) in this monitoring period		
Year	Duration	Emission reduction
2016	01/06/2016 to 31/12/2016	31,831 tCO ₂ e
2017	01/01/2017 to 31/08/2017	31,661 tCO ₂ e
Total	Nil	63,492 tCO ₂ e

Appendix 1. Abbreviations

Abbreviations	Full texts
ABT	Availability Based Tariff
DISCOM	Distribution Company
EIL	Enercon (India) Limited
EPC	Engineering and Procurement Contractor
ESIA	Environmental and Social Impact Assessment
GOI	Government of India
GS	Gold Standard
JMR	Joint Meter Reading
JVVNL	Jaipur VidyutVitrans Nigam Limited
LCS	Local Controller System
MGR	Monthly Generation Reports
NEWNE	North East West North-East
O&M	Operation and Maintenance
PPA	Power Purchase Agreement
QA/QC	Quality Assurance/Quality Control
RERC	Rajasthan Electricity Regulatory Commission
RMP	Revision in Monitoring Plan
RPTCL	Rajasthan Power Transport Company Limited
RRVNL	Rajasthan Rajya Vidyut Prasaran Nigam Limited
SFR	Stakeholder Feedback Round
WTG	Wind Turbine Generator
WWIL	Wind World India Limited

Appendix 2. Competence of team members and technical reviewers

Competence Statement	
Name	Ravi Kant Soni

Country	India		
Education	B. Tech. (Mechanical Engineering) M. Tech. (Energy Management)		
Experience	7 Years		
Field	Energy and Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-I.C., ACM0002		
Local Expert	YES(India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert (1.2)	YES		
Reviewed by	Abhishek Mahawar	Date	09/09/2016
Approved by	Kaviraj Singh	Date	09/09/2016

Appendix 3. Documents reviewed or referenced

N o.	Author	Title	References to the document	Provider
1	PP	GS Passport	Version 03, dated 23/09/2014	Other
		GS PDD	Version 02, dated 20/08/2014	
2	DNV	GS Validation Report,	Version 03, dated 29/09/2014	Other
3	PP	ER spread sheet (initial)	Version 01, dated 15/12/2017	PP
4	PP	Monitoring Report	Version 1 dated 10/10/2017	PP
5	PP	Monitoring Report (final)	Version 02 dated 15/12/2017	PP
6	PP	ER spread sheet (final)	Version 01, Dated 15/12/2017	PP
7	ESPL	On site verification activities including physical inspection and interviews of the personnel	Dated 14/11/2017	Other
8	UNFC CC	Methodology ACM0002	Version 06	Other
9	PP	HR records for various parameters viz. total number of employees, type of employment, quality of employment etc.	-	PP
10	State utility	Commissioning certificates for all the WTGs	-	Other
11	PP	i. Quarterly CSR reports (August 2016 to March 2017)	-	PP
		ii. MIS reports (Sept 2016 to March 2017)- include		

		number of health clinics conducted. iii. Interviews of schools staff iv. Local villagers interview and on-site observation v. Photographs relevant to particular activity,		
12	PP	Training records (Attendance and photographs) i. Safety and First Aid Training at Salkha site office on 07/03/2016 ii. SIQA Refresher Training Module in Jaisalmer on 19/08/2016	-	PP
13	UNFC CC	UNFCCC website Project 1168: Enercon Wind Farm (Hindustan) Ltd in Rajasthan, (https://cdm.unfccc.int/Projects/DB/SGS-UKL1181742063.57/view)	-	Other
14	GS	GS project webpage https://mer.markit.com/br-reg/public/project.jsp?project_id=103000000005180	-	Other
15	PP	Records of Safety system and procedures implemented on site	-	PP
16	PP	Records of health care and first aid facilities for employees available on/off site	-	PP
17	PP	Policy, procedure and records for occupational safety	-	PP
18	Others	CSR and Sustainability Report, Rajasthan	February 2017	PP
19	ESPL	CDM verification report: For the period: 01/06/2016 to 31/08/2017 (Ref: https://cdm.unfccc.int/Projects/DB/SGS-UKL1181742063.57/iProcess/ESPL1508135102.61/view)	-	Other

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verification

FAR ID	Xx	Section no.	-	Date: DD/MM/YYYY
Description of FAR				
No FAR remaining from validation				
Project participant response				Date: DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
DOE assessment				Date: DD/MM/YYYY
NA				

Table 2. CL from this verification

CL ID	01	Section no.	A	Date : 25/11/2017
Description of CL				

1. Please clarify why GS registration date of the project activity is not mentioned at page 1 of the MR. 2. Type of post registration changes described under section B.2.3 and B.2.4 of the MR are inconsistent with the PRC validation report. 3. As per the calibration details provided (in section C of MR) for the secondary backup meter installed at Bhu substation, it is noted calibration of the meter was not conducted as per the frequency mentioned in the registered PDD. Please clarify how it is ensured that meter was working satisfactorily during the current monitoring period. 4. Section D.2 MR: Source of data mentioned for the parameter EGy is inconsistent with the approved PDD.	
Project participant response	Date : 15/12/2017
1. PP has revised GS MR to report the project registration date with GS at page 1 of the MR. 2. PP has revised Section B.2.3 and B.2.4 of the MR as per the latest PRC validation report and reported that "there is no permanent change has happened in this monitoring period. However there was a permanent change to the registered monitoring plan (PRC-1168-002) which was approved by UNFCCC on 21/03/2014." 3. PP has revised MR Section C to report the details of meter calibration & replacement in line with the meter calibration certificate and also provided the elaborative explanation for better understanding. Furthermore, PP would like to clarify that there is no delay in Main Meter & Back meter calibration for this monitoring period. PP has revised MR section D.2 & Section C to provide the correct & consistent information regarding the meter calibration & replacement. 4. PP has revised MR Section D.2 to report the "Source of data" for the parameter EGy in line with the approved PDD.	
Documentation provided by project participant	
MR version 2 ER Version 1 Meter Calibration Certificate	
DOE assessment	Date: 31/12/2017
1. The PP has mentioned GS registration date of the project at page 1 of the revised MR, found satisfactory. 2. Information's regarding the post registration changes described under section B.2.3 and B.2.4 of the MR are updated, found correct and consistent with the PRC validation report. 3. The assessment team has verified the monthly JMRs that mention the identification of meters whose data used to prepare monthly break up sheets and confirmed that data recorded through main meter (Billing meter at Akal substation) only is used in the current monitoring period. It is to be noted that the meter installed at WWIL substation (220 kV Bhu) is used as secondary backup meter, hence calibration of this meter has no impact on the claimed GHG emission reductions, consequently delay in the calibration for this meter is not considered. 4. Source of data for the parameter EGy is corrected in section D.2 of the revised MR.	
CL #1 is closed.	

Table 3. CAR from this verification

CAR ID	02	Section no.	E.5.3	Date : 25/11/2017
Description of CAR				
Section D.4 _Indicator :Human and Institutional capacity-				
It is not clear how many schools/villages are covered under the initiatives undertaken by the PP in the form of health care facilities (Medical van and RO water), to facilitate better access to health and education for the local public .Please submit the relevant evidences.				
Project participant response				Date : 15/12/2017
PP has revised MR Section D.4 to report the details of number of schools & number of villages covered where initiatives under indicator "Human and institutional capacity" has been undertaken. Also, submitting the letter received from the respective schools conveying their gratitude towards the initiative of PP.				
Documentation provided by project participant				
MR Version 2 Letter from School				
DOE assessment				Date: 31/12/2017
Mobile healthcare medical van is operational across nearby 10 villages of project site (Jaisalmer district) and RO systems have been installed in 12 government schools at Bhu and Sipla sites. This information is updated in section D.4 of the MR and found consistent with the CSR report.				
CAR #2 is closed.				

CAR ID	03	Section no.	E.5.5	Date	25/11/2017
Description of CAR					
MR section D.4 (Grievance Mechanism): Please discuss the comments received from local villagers and submit the evidences regarding the objections/suggestions recorded as a part of grievance mechanism.					
Project participant response					Date
PP has revised MR section D.4 to discuss few comments received from local stakeholder & provided the snapshot of the grievance register under Annex B. of the MR.					15/12/2017
Documentation provided by project participant					
MR Version 2 Grievance/Suggestion Register Snap shot.					
DOE assessment					Date
The comments/suggestions received from local villagers as part of Grievance mechanism are included in section D.4 of the revised MR, found satisfactory. CAR #3 is closed.					31/12/2017

CAR ID	04	Section no.	E.6	Date	25/11/2017
Description of CAR					
1. Please submit the ER calculation sheet for the current monitoring period. 2. Please submit monthly generation reports issued by O&M contractor for the current monitoring period. 3. Actual emission reductions achieved during the current monitoring period are substantially lower as compared to the estimated ERs in the registered PDD for comparable period. Kindly clarify the reason for the same.					
Project participant response					Date
1. PP is submitting the ER calculation sheet herewith the responses. 2. PP is submitting the monthly generation reports issued by O&M contractor for the current monitoring period herewith the responses. 3. PP would like to clarify that there is decrease of 49.82% in the expected and annual actual emission reductions during the current monitoring period is identified. The decrease in the total emission reduction achieved during the current monitoring period is due to the lower wind availability during this monitoring period that lead to the lower PLF as compared to the PLF considered in the registered PDD (22%). PP has explicitly reported the same in MR section E.6 for better understanding.					15/12/2017
Documentation provided by project participant					
1. ER Sheet version 1 2. Monthly generation reports					
DOE assessment					Date
ER calculation sheet is checked and data reported in the sheet is verified with the source documents (JMRs, Breakup sheets and MGRs) is found consistent. Actual emission reductions achieved in the current monitoring period are 49.82% lower as compared to the estimated ERs in the registered PDD. This is largely due to low plant load factor achieved during the current monitoring period. It is to be noted that PLF is completely governed by the availability of wind, which is natural phenomenon and it is beyond the control of PP, hence the variation in the ERs is accepted. CAR #4 is closed.					31/12/2017

Table 4. FAR from this verification

FAR ID	Xx	Section No.		Date	DD/MM/YYYY
Description of FAR					
No FAR raised in this verification					
Project participant response					Date
NA					DD/MM/YYYY
Documentation provided by project participant					
NA					
DOE assessment					Date
NA					DD/MM/YYYY

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
01.0	23March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: project activities, verifying and certifying		