



K.R.S. THREE IN THAILAND



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Project Title	K.R.S. THREE IN THAILAND
Version	03
Report ID	T3MR-03
Date of Issue	14-November-2022
Project ID	VCS 2000
Monitoring Period	01-January-2021 to 31-July-2022
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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The proposed project activity involves the installation of Wind Turbine Generators (WTG) in Nakhon Ratchasima & Chaiyaphum Province of Thailand (T3 Wind farm). The project is developed by KRS Three Co., Ltd, Thailand. KRS Three Co., Ltd is a subsidiary of Wind Energy Holding Co., Ltd.

The purpose of the project activity is to generate clean electricity with utilization of wind energy. The project consists of 30 numbers of Vestas Wind Turbine Generators (WTGs) of 3.0 MW capacities each. The project WTGs are installed in the Wangyaithong sub district of Thepharak district Nakhonratchasima Province and Watabak sub-district of Thepsathit District, Chaiyaphum Province in Thailand.

All the WTGs of the project activity were commissioned on 28-September-2018. The WTGs are operational continuously since commissioning without any major outages.

The electricity generated by the project is exported to the Thailand National grid. The project activity will therefore displace an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. Since wind power is Greenhouse Gas (GHG) emissions free, the power generated will prevent the anthropogenic gas emissions generated by fossil fuel based thermal power stations comprising coal, natural gas, diesel, and bunker oil.

There was no activity at the site prior to implementation of the project activity. Hence the scenario existing prior to the project activity is same as baseline scenario which is continual use of highly carbon intensive electricity in the regional grid.

The estimation of GHG reductions by this project is limited to carbon dioxide (CO₂) only. Thus, the project activity leads to an emission reduction of 157,065 tCO₂ per year or 1,570,65 tCO₂ for the chosen crediting period of 10 years.

The current monitoring period chosen is from 01-January-2021 to 31-July-2022 (inclusive of first & last date) and the GHG emission reductions calculated are 210,275 tCO₂

1.2 Sectoral Scope and Project Type

Sectoral Scope : 01- Energy Industries (Renewable/Non-Renewable Sources)

Project Type: Type I

Methodology: ACM0002: Grid-connected electricity generation from renewable sources, version 19.0

The project is not a grouped project.

1.3 Project Proponent

Organization name	KRS Three Co., Ltd
Contact person	Phattarapol Pongwattanaivid
Title	Manager
Address	25 th Floor, Capital Tower, All Seasons Place, 87/1, Wireless road, Lumpini, Patumwan, Bangkok 10330, Thailand
Telephone	+66(0) 2106 8000
Email	phattarapol@windenergyholding.com

1.4 Other Entities Involved in the Project

Organization name	Kosher Climate India Private Limited
Role in the Project	Authorized Representative
Contact person	Vamsi Krishna
Title	Global Business Head
Address	Zee Plaza, No.1678, Ground Floor, 27th Main Road, Sector 2, HSR Layout, Bengaluru, Karnataka 560102, India
Telephone	+91-99453 43475
Email	vamsi@kosherclimate.com , narendra@kosherclimate.com

1.5 Project Start Date

The start date for this project is 28-September-2018. This is the date of commissioning of the project.

1.6 Project Crediting Period

1st Crediting period: 28-September-2018 to 27-September-2028

Length of 1st Crediting period: 10 years

The project activity adopts renewable crediting period of 10 years period which can be renewed for maximum 2 times

1.7 Project Location

The project activity is located is located in Nakhon Ratchasima & Chaiyaphum provinces of Thailand. The geo-coordinates of the project location are as follows:

S. No	WTG ID	Latitude (°N)	Longitude (°E)	Sub-District	District
1	T3-031	15.381459	101.4626	Watabak	Thepsathit
2	T3-020	15.372797	101.411996	Watabak	Thepsathit
3	T3-012	15.368321	101.434792	Watabak	Thepsathit
4	T3-037	15.373341	101.468469	Watabak	Thepsathit
5	T3-011	15.373136	101.429921	Watabak	Thepsathit
6	T3-017	15.384796	101.458714	Watabak	Thepsathit
7	T3-018	15.373187	101.443091	Watabak	Thepsathit
8	T3-019	15.372085	101.415197	Watabak	Thepsathit
9	T3-016	15.364177	101.447695	Watabak	Thepsathit
10	T3-007	15.352554	101.409221	Watabak	Thepsathit
11	T3-008	15.348231	101.41216	Watabak	Thepsathit
12	T3-010	15.341907	101.413	Watabak	Thepsathit
13	T3-015	15.364294	101.416721	Watabak	Thepsathit
14	T3-030	15.337373	101.412985	Watabak	Thepsathit
15	T3-036	15.372392	101.471674	Watabak	Thepsathit
16	T3-204	15.365215	101.483707	Wangyaithong	Thepharak
17	T3-033	15.375762	101.452253	Watabak	Thepsathit
18	T3-028	15.369202	101.448433	Watabak	Thepsathit
19	T3-034	15.372392	101.45398	Watabak	Thepsathit
20	T3-101	15.370838	101.481761	Wangyaithong	Thepharak
21	T3-048	15.379852	101.488002	Watabak	Thepsathit
22	T3-003	15.370077	101.418291	Watabak	Thepsathit
23	T3-203	15.362435	101.486476	Wangyaithong	Thepharak
24	T3-042	15.383581	101.488102	Watabak	Thepsathit
25	T3-113	15.386927	101.509905	Wangyaithong	Thepharak
26	T3-110	15.382289	101.522165	Wangyaithong	Thepharak
27	T3-111	15.380134	101.524931	Wangyaithong	Thepharak
28	T3-026	15.363554	101.42822	Watabak	Thepsathit
29	T3-025	15.359799	101.427362	Watabak	Thepsathit
30	T3-023	15.355796	101.413494	Watabak	Thepsathit



ACM0002 draws upon the following tools which have been used in the PD:

- Methodological Tool: Tool to calculate the emission factor for an electricity system - Version 7.0, EB 100, Annex 6².

² http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf/history_view

- Methodological Tool: Tool for the demonstration and assessment of additionality - Version 07.0.0, EB 70 Annex 8³.

1.9 Participation under other GHG Programs

The project is not registered under any other GHG programs.

1.10 Other Forms of Credit

The GHG emission reductions from the project activity are included in any emissions trading program or any other mechanism that includes GHG allowance trading

The project has not sought or received another form of GHG-related environmental credit, including renewable energy certificates, during this monitoring period

1.11 Sustainable Development Contributions

The project supplies clean electricity from the wind power plant to the Thailand National Grid hence displacing the electricity generated from grid connected fossil fuel power plants and thereby avoiding the equivalent Carbon dioxide which is a greenhouse gas. In the absence of the project activity, there won't be any avoidance of carbon dioxide.

During the construction and operation and maintenance of the wind power plant, it created many direct and indirect new job opportunities mostly to the local people in the project region. In the absence of the project activity, there would be no new jobs created in the project area.

As a part of regional development efforts associated with the project, during the crucial times of COVID-19 outbreak, where the people around the project region are lacking the minimum need of essentials K.R.S. Three Co., Ltd has funded and supported the free Covid-19 screening check points and distributed the Covid-19 Fabric facemasks, Sanitizers, Food and Drinking water to the local community. This is funded from the revenue generated from the operation of the project activity. In the absence of project activity, there would be no revenue generated from the project and hence the activity would have not occurred in the absence of the project activity.

As a part of regional development efforts associated with the project, K.R.S. Three Co., Ltd has supported many education, cultural, sports & infra structure related needs for children and schools. As a part of regional development efforts associated with the project, K.R.S. Three Co., Ltd has supported the environmental preservation activities through funding the tree plantation activities undertaken in the Park district. These are funded from the revenue generated from the operation of the project activity. . In the absence of project activity, there would be no revenue generated from the project and hence the activity would have not occurred in the absence of the project activity.

³ <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-01-v7.0.0.pdf>

Table 1: Sustainable Development Contributions

Row number	SDG Target	SDG Indicator	Net Impact on SDG Indicator	Current Project Contributions	Contributions Over Project Lifetime
Sequential row number	SDG Target number	Number and text of SDG indicator or, if no official SDG indicator is applicable, user-defined indicator	Indicate the project's contribution to the SDG Indicator (implemented activities to increase or decrease)	Brief description of the quantifiable impact of the project's activities related to the SDG indicator, during the monitoring period.	Brief description of the cumulative quantifiable impact of the project's activities related to the SDG indicator, over the project lifetime.
04	4.3	4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	Implemented activities to increase	The PP supported the following educational & training related activities during the monitoring period: Supported the many school children apart from their formal education to participate and get trained on vocational education activities (Non formal) education such as organic sustainable farming, livestock growing, etc. Support Thepsatit School Organic Farm Project to train students in organic farming. (50% is funded from this project). Total 80 students benefited from this activity. Based on the percentage of contribution, about 40 students benefited from this project contribution. Total 15,000 Baht is spent in the above activities during the reporting period. These activities will help in increasing the participation rate of youth and adults in formal and non-formal education and training. Thus, the project contributes to SDG indicator 4.3.1 The supporting documents are provided in Appendix II.	Total 5 Schools and 237 students are benefitted from this activity since commissioning till this monitoring period. Total of about 258,800 Baht is spent in education related activities since commissioning of the project.

05	7.2	7.2.1 Renewable energy share in the total final energy consumption	Implemented activities to increase	About 369,424 MWh renewable electricity has supplied to Thailand National grid during the reported period that helps to increase the renewable energy share in the energy mix. Refer section 4.2 below for monitoring details.	Since commissioning, about 946,637 MWh renewable electricity has supplied to Thailand National grid till this monitoring that helps to increase the renewable energy share in the energy mix.
06	8.5	8.5.2 Unemployment rate, by sex, age and persons with disabilities	Implemented activities to increase	No new employment has been created during the current monitoring period.	The project has created about 14 permanent jobs since commissioning
07	11.4	11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government(national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)	Implemented activities to increase	PP supported renovation of Thepharak Justice Office. About 15,000 Bhat is spent for this activity in which 33% was contributed from this project ie, 5000 Bhat is spent from this project. The supporting document is provided in Appendix II below.	About 10,000 Baht is sponsored for the support of cultural and natural heritage sites since commissioning.

08	13.0	13.0 Tonnes of greenhouse gas emissions avoided or removed	Implemented activities to increase	By supplying 369,424 MWh clean electricity to national grid, the project avoided release of 210,275 tCO ₂ in to the atmosphere during the reporting period and contributed to the sustainable development goal 13. Refer section 5 below for emission reduction calculation.	Prevented the release of 542,808 tCO ₂ into the atmosphere since its commissioning.
09	15.3	Proportion of land that is degraded over total land area	Implemented activities to increase	No incremental activates undertaken during the monitoring period.	Total 20 hectares of degraded land is environmentally restored by planting tree samplings since commissioning till this monitoring period

2 SAFEGUARDS

2.1 No Net Harm

The project is a wind power generation project. There were no harm identified from the project and hence no mitigations measures are applicable.

2.2 Local Stakeholder Consultation

The stakeholder consultation meeting took place at the site office on 2nd September 2019. Invitation notices were put up in the local government offices at least a week in advance of the consultations. In the introductory speech, the representatives of developer welcomed the gathering and informed the stakeholders about the project activity; project's associated benefits with respect to CO₂ emission reductions and explained the purpose of conducting the stakeholder meeting in order to gather the views and comments of the local stakeholders on the project activity. Subsequent to the introductory speech, comments were received from the stakeholders.

No negative feedback was received from any of the stakeholders. All of them supported the initiative and appreciated the project proponent for carrying out such an activity in the region. Hence no comments warranting action from the project proponent were received

On-going communication with local stakeholders:

PP has a mechanism to receive feedbacks/grievances from local stakeholder continuously. PP has kept the grievance register/forms at the site office which is easily accessible to local public. Stakeholders can write their feedback or grievances in the register/forms. The site in-charge will take necessary action on the grievances. If any grievances are not resolved, the stakeholders can escalate the issue to the top management by writing email to kelly@windenergyholding.com.

No grievances received during the monitoring period.

2.3 AFOLU-Specific Safeguards

Not Applicable

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

All the WTGs of the project activity were commissioned on 28-September-2018. Since commissioning, all the WTGs are operational continuously without any major outages.

During the monitoring period, there is no major events occurred that may impact the GHG emission reductions or removals and monitoring

No other changes to the project such as change in project proponent or other entity happened during the monitoring period.

3.2 Deviations

2.1.1 Methodology Deviations

There is no methodology deviations applied during this monitoring period.

2.1.2 Project Description Deviations

There is no project description deviations applied during this monitoring period or in previous monitoring reports.

3.3 Grouped Projects

The project is not a grouped project

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	EF _{OM, y}
Data unit	tCO ₂ /MWh
Description	Operating margin CO ₂ emission factor of Thailand National Grid
Source of data	Report 'Thailand Grid Emission Factor for GHG Reduction Project/Activity' dated 28/09/2017 Published by Thailand Greenhouse Gas Management Organisation (Public Organisation)
Value applied	0.5719
Justification of choice of data or description of	Calculated in Report 'Thailand Grid Emission Factor for GHG Reduction Project/Activity' dated 28/09/2017 Published by Thailand Greenhouse

measurement methods and procedures applied	Gas Management Organisation (Public Organisation) in line with “Tool to calculate the emission factor for an electricity system”. The value used is calculated ex-ante as generation based weighted average of last three years of the operating margin provided in the Thailand Grid Emission Factor for GHG Reduction Project/Activity’ Weighted average $= \frac{\sum_{i=1 \text{ to } n} (\text{Net generation in operating margin in year } i * \text{Simple operating margin in year } i)}{\sum_{i=1 \text{ to } n} (\text{Net generation in operating margin of year } i)}$
Purpose of Data	Calculation of Baseline Emission
Comments	The operating margin emission factor is a 3-year generation-weighted average (2014, 2015 & 2016). The operating Margin is calculated ex ante and fixed during the crediting period

Data / Parameter	EF _{BM,y}
Data unit	tCO ₂ /MWh
Description	Build margin CO ₂ emission factor of Thailand National grid
Source of data	Report ‘Thailand Grid Emission Factor for GHG Reduction Project/Activity’ dated 28/09/2017 Published by Thailand Greenhouse Gas Management Organisation (Public Organisation)
Value applied	0.5609
Justification of choice of data or description of measurement methods and procedures applied	Calculated in Report ‘Thailand Grid Emission Factor for GHG Reduction Project/Activity’ dated 28/09/2017 Published by Thailand Greenhouse Gas Management Organisation (Public Organisation) in line with “Tool to calculate the emission factor for an electricity system”.
Purpose of Data	Calculation of Baseline Emission
Comments	The Build Margin would be calculated ex ante and fixed during the crediting period. For ex ante calculation the most recent data (2016) available has been used and the build margin is thus calculated.

Data / Parameter	EF _{grid,CM,y}
Data unit	tCO ₂ /MWh
Description	Combined margin CO ₂ emission factor of Thailand National grid
Source of data	Report ‘Thailand Grid Emission Factor for GHG Reduction Project/Activity’ dated 28/09/2017 Published by Thailand Greenhouse Gas Management Organisation (Public Organisation)
Value applied	0.5692

Justification of choice of data or description of measurement methods and procedures applied	The date has been considered in accordance to the Tool to calculate emission factor of an electricity system. The tool guides to take 75% weightage of EFgrid,OMsimple, & 25% weightage of EFgrid,BM,y.
Purpose of Data	Calculation of Baseline Emission
Comments	The combined margin would be calculated ex-ante and fixed for the entire crediting period

4.2 Data and Parameters Monitored

Data / Parameter	$EG_{\text{facility},y}^4$								
Data unit	MWh/year								
Description	Quantity of net electricity supplied by the project activity to the grid in the year y								
Source of data	Monthly Energy meter reading								
Description of measurement methods and procedures to be applied	Data Type: Measured & Calculated. Monitoring equipment: Energy meters of accuracy class 0.2s Archiving Policy: Paper & Electronic. Location of Energy Meter: EGAT Substation These meters are two-way meter through which export and import data will be continuously monitored. These data will be printed and recorded on a monthly basis. Additionally, two back up meters also installed. The Net electricity supplied to the grid by each wind project is estimated as below Net electricity = Export – Import								
Frequency of monitoring/recording	Measurement: Continuous Recording: Monthly								
Value monitored	369,424 MWh *After applying 0.2% error for the calibration delay period								
Monitoring equipment	Energy meters: <table border="1"> <tr> <td>Meter Number</td><td>Main: 51515177 Backup: 51515186</td></tr> <tr> <td>Accuracy</td><td>0.2s</td></tr> <tr> <td>Location</td><td>Si Khiu 3 Substation (EGAT)</td></tr> <tr> <td>Calibration Frequency</td><td>1 year</td></tr> </table>	Meter Number	Main: 51515177 Backup: 51515186	Accuracy	0.2s	Location	Si Khiu 3 Substation (EGAT)	Calibration Frequency	1 year
Meter Number	Main: 51515177 Backup: 51515186								
Accuracy	0.2s								
Location	Si Khiu 3 Substation (EGAT)								
Calibration Frequency	1 year								

⁴ Since the project activity is the installation of a Greenfield power plant, then: $EG_{PJ,y} = EG_{\text{facility},y}$

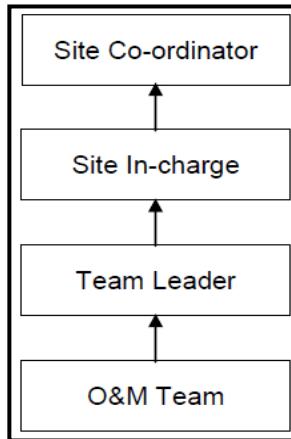
QA/QC procedures to be applied	The export reading has been crosschecked with the Invoice raised by the developer to EGAT																			
	The import reading shall be crosschecked with the invoice raised by EGAT to developer.																			
	The meter(s) shall be calibrated and maintained by the EGAT as per their own schedule, and this frequency of meter calibration is not within the control of the Project Proponent.																			
	The calibration details are given below:																			
	<table><tr><th>Details</th><th>Calibration dates</th><th>Calibration due date</th></tr><tr><td rowspan="3">Main Meter Mt No: 51515177</td><td>18/03/2020</td><td>17/03/2021</td></tr><tr><td>24/03/2021</td><td>23/03/2022</td></tr><tr><td>23/02/2022</td><td>22/02/2023</td></tr><tr><td rowspan="3">Backup meter Mr. No: 51515186</td><td>18/03/2020</td><td>17/03/2021</td></tr><tr><td>24/03/2021</td><td>23/03/2022</td></tr><tr><td>23/02/2022</td><td>22/02/2023</td></tr></table>			Details	Calibration dates	Calibration due date	Main Meter Mt No: 51515177	18/03/2020	17/03/2021	24/03/2021	23/03/2022	23/02/2022	22/02/2023	Backup meter Mr. No: 51515186	18/03/2020	17/03/2021	24/03/2021	23/03/2022	23/02/2022	22/02/2023
	Details	Calibration dates	Calibration due date																	
	Main Meter Mt No: 51515177	18/03/2020	17/03/2021																	
24/03/2021		23/03/2022																		
23/02/2022		22/02/2023																		
Backup meter Mr. No: 51515186	18/03/2020	17/03/2021																		
	24/03/2021	23/03/2022																		
	23/02/2022	22/02/2023																		
As per the above calibration date, the calibration is not valid for the period 18/03/2021 to 23/03/2021. Hence, March 2021 export & import reading are adjusted with maximum possible error as described below:																				
Adjusted Export = Recorded Export* (1-0.2%) Adjusted Import = Recorded Import *(1+0.2%)																				
Purpose of the data	Calculation of baseline emission																			
Calculation method	-																			
Comments	The data would be archived electronically and maintained for the entire crediting period plus two years.																			

4.3 Monitoring Plan

All the three wind projects in the bundle have entered into agreement with the respective WTG Suppliers for the operation and maintenance of WTGs. And the solar project has entered into agreement with the O&M contractor for the operation and maintenance of the project. O&M contractor will provide a monthly report, which includes generation data, major breakdown events and machine availability. Project manager is responsible for recording of monthly meter readings of export and import. Monthly power export and import data will be sent regularly to site in charge of each project separately.

Monitoring roles and responsibilities:

The data for the project is compiled by the O&M Contractor and subsequently stored by the PP, the reporting and data flows as per the below mentioned flow chart starting from Site O&M team which monitors day to day operational data and monthly recording. The reporting responsibilities for the project are described as below;



The Site In-charge will be responsible for carrying out internal auditing and QA/QC. All the values from generation record will be checked with JMR and invoices for consistency. In case there are any non-conformances identified. The Site In-charge will investigate the error and revise the record to correct it. In any case where values have slightest of variation in different records the most conservative value will be taken in the project monitoring report.

Personal Training:

The training for operating and maintaining the plant will be provided to the O&M team whenever there would be necessity or any technological up gradation.

Emergency preparedness:

In case Main meter or Check meter is found to be outside the acceptable limits of accuracy or faulty or not functioning properly, it will be repaired, recalibrated or replaced as soon as possible. In the event that the Main meter is not in service as a result of maintenance, repairs or testing, the Check meter will be used for readings

Data recording & archiving:

The project proponent shall maintain data both in electronic form and hard copies. The monitored data shall be archived till 2 years after the completion of crediting period.

Monitoring Process at project site:

Developer will monitor the quantity of electricity exported to the grid and imported to the project activity using the electricity meters installed in the solar power plant, which undertaken by EGAT. Both electricity meters will measure the amount of electricity continuously and record electronically. The O&M operator also manually record amount of the electricity import and export

meter to the grid from meters in the log book monthly. The monitoring reports will be checked and discussed periodically.

All monitored data will be stored for at least two years after the end of crediting period or the last issuance of CERs for this project activity, whichever occurs later.

Oversight and accountability:

The possibility of oversight is unlikely as the energy meter readings are recorded jointly by PP and EGAT which is the basis for the electricity billings. Also a backup meter is available to crosscheck any considerable difference in the energy reading.

Internal auditing and QA/QC:

No requirement of internal audit for the data monitored as the data is measured by the energy meter installed by EGAT (government authority) and the reading is recorded every month by jointly by PP & representative from EGAT. The main energy meter readings are verified against the reading of the backup meter to check any considerable variation. In case, considerable variation found, then either main meter reading or check meter reading whichever lower will be considered. The electricity readings recorded are used for electricity invoicing to EGAT. Hence, the data collected is of high accuracy and authorised by EGAT.

Handling Non-conformities:

Not applicable as the energy meter recording is done by EGAT and hence no internal audit will be carried out to verify the data.

Sampling approaches:

No sampling approach is used as all the monitoring parameter is monitored 100%.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

As per description earlier under this document:

$$BE_y = EG_{PJ,y} * EF_{grid,CM,y}$$

$EF_{grid,CM,y}$ is Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system” (tCO₂/MWh) (i.e, 0.5692 tCO₂/MWh).

and;

$$EG_{PJ,y} = EG_{\text{facility},y}$$

Net Electricity ($EG_{\text{facility},y}$) month wise data:

Month	Import (kWh)	Export (kWh)	Net Export (kWh)
Jan-21	2,87,20,230	80,400	2,86,39,830
Feb-21	1,75,91,650	66,000	1,75,25,650
Mar-21	1,47,67,366	54,108	1,47,13,258
Apr-21	1,04,59,720	88,800	1,03,70,920
May-21	1,16,64,660	1,18,800	1,15,45,860
Jun-21	2,74,77,590	-	2,74,77,590
Jul-21	2,74,64,190	38,400	2,74,25,790
Aug-21	1,89,68,830	97,200	1,88,71,630
Sep-21	85,57,350	1,58,400	83,98,950
Oct-21	1,52,03,710	1,05,600	1,50,98,110
Nov-21	2,98,64,920	76,800	2,97,88,120
Dec-21	3,92,26,530	21,600	3,92,04,930
Jan-22	1,54,20,690	1,32,000	1,52,88,690
Feb-22	2,00,71,360	1,08,000	1,99,63,360
Mar-22	93,71,690	1,59,600	92,12,090
Apr-22	1,98,33,070	62,400	1,97,70,670
May-22	2,24,01,650	34,800	2,23,66,850
Jun-22	1,72,87,330	39,600	1,72,47,730
Jul-22	1,65,64,450	50,400	1,65,14,050
Total	37,09,16,986	14,92,908	36,94,24,078

*0.2% error applied for the calibration delay

Calculations of baseline emissions:

Vintage	Net Electricity - $EG_{PJ,y}$ (MWh)	Grid Emission Factor- $EF_{\text{grid},CM,y}$ tCO ₂ /MWh	Baseline Emissions (tCO ₂) $EG_{PJ,y} \times EF_{\text{grid},CM,y}$
2021	249,061	0.5692	141,765
2022	120,363	0.5692	68,510
Total	369,424	0.5692	210,275

5.2 Project Emissions

The project activity involves in harnessing wind power. So, the emissions from the project are zero.

5.3 Leakage

No leakage emissions have been considered and hence the leakage emission is zero.

5.4 Net GHG Emission Reductions and Removals

As per the applied methodology, emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Where,

ER_y = Emission Reduction in tCO₂e/year

BE_y = Baseline emission in tCO₂/year

PE_y = Project emissions in tCO₂e/year

LE_y = Project Leakage emission in tCO₂e/year

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2021	141,765	0	0	141,765
2022	68,510	0	0	68,510
Total	210,275	0	0	210,275

APPENDIX I: COMPARISON OF ACTUAL ER WITH ESTIMATED ER

Description	Value	Unit
Estimated emission Reduction as per PDD	157,065	tCO ₂ e/year
Total days in the Monitoring period	577	days
Estimated ERs for this monitoring period	2,48,292	tCO ₂ e
Actual Emission Reduction	210,275	tCO ₂ e
Difference in Emission reduction	-15.31%	

The actual emission reduction is 15.31% is less than the estimated emission reduction. Hence no justification is required.

APPENDIX II: SUPPORTING DOCUMENTS FOR SDG BENEFITS

Thepsatit School Organic Farm Project



Appreciation letter for renovation of Justice Office:



ที่ ศยช.ต.หนองแขง/พิเศษ

ศูนย์ยุติธรรมชุมชนอำเภอเทพารักษ์
จังหวัดนครราชสีมา ๓๐๒๑๐

๔ สิงหาคม ๒๕๖๔

เรื่อง ขอบพระคุณการสนับสนุนงบประมาณ

เรียน ผู้จัดการบริษัท ทropicคอล วินด์ จำกัด

ตามที่ศูนย์ยุติธรรมชุมชนอำเภอเทพารักษ์ จังหวัดนครราชสีมา ได้รับการสนับสนุนงบประมาณในการดำเนินการปรับปรุงซ่อมแซมที่ทำการศูนย์ยุติธรรมชุมชนอำเภอเทพารักษ์ เพื่อใช้เป็นสถานที่รับเรื่องราวร้องทุกข์-ร้องเรียน ปกษาหารือเรื่องข้อกฎหมาย รวมถึงการขอคำแนะนำเรื่องต่างๆ ที่เกิดขึ้นกับพี่น้องประชาชน นั้น

ในการนี้ศูนย์ยุติธรรมชุมชนอำเภอเทพารักษ์ ขอขอบพระคุณทางบริษัทฯ ที่ให้ความสำคัญและสนับสนุนงบประมาณในการดำเนินการปรับปรุงซ่อมแซมที่ทำการศูนย์ยุติธรรมชุมชนอำเภอเทพารักษ์ จังหวัดนครราชสีมา เป็นจำนวนเงิน ๕,๐๐๐.- บาท (-ห้าพันบาทถ้วน-)

จึงเรียนมาเพื่อขอบพระคุณในการสนับสนุนงบประมาณในครั้งนี้

ขอแสดงความนับถือ

(นายเสกสรร วิวัฒน์สกุลรัตน์)

ประธานศูนย์ยุติธรรมชุมชนอำเภอเทพารักษ์/
รองประธานศูนย์ยุติธรรมชุมชนจังหวัดนครราชสีมา

โทร. ๐๘๙-๐๘๗๒๗๐๗