MONITORING REPORT

CARBON OFFSET UNIT (CoU) PROJECT

Title: 6.25MW Bundled Small Scale Wind Power Project by Jay International.

Version 2.0

PCN Date 06/02/2025

1st CoU Issuance Period: 30/03/2016 to 31/12/2024 (08 years, 09 months)

1st Monitored Period: 30/03/2016 to 31/12/2024 (08 years, 09 months)

Monitoring Report (MR)
CARBON OFFSET UNIT (CoU) PROJECT

Monitoring Report	
Title of the project activity	6.25MW Bundled Small Scale Wind Power Project by Jay International.
UCR Project Registration Number	488
Version	2.0
Completion date of the MR	06/02/2025
Monitoring period number and duration of this monitoring period	Monitored Period: 01 01 Monitored Duration: 30/03/2016 to 31/12/2024 (08 years, 09 months)
Project participants	Jay International (Project Proponent) Yojan Solutions (Aggregator)
Host Party	INDIA
Applied methodologies and standardized baselines	Type I (Renewable Energy Projects) UNFCCC Methodology Category AMS I.D.: "Grid connected renewable electricity generation" Version 18.0 Standardized Methodology: Not Applicable UCR Protocol Standard Baseline EF
Sectoral scopes	01 Energy industries(Renewable/Non-Renewable Sources)
Estimated amount of GHG emission reductions for this monitoring period in the registered PCN	**2016**: **1289** CoUs (**1289** tCO_2eq)
	2017: **6242** CoUs (**6242** tCO_2eq)
	2018: **7252** CoUs (**7252** tCO_2eq)
	2019: **7016** CoUs (**7016** tCO_2eq)
	2020: **4979** CoUs (**4979** tCO_2eq)
	2021: **5278** CoUs (**5278** tCO_2eq)
	2022: **5788** CoUs (**5788** tCO_2eq)
	2023: **6099** CoUs (**6099** tCO_2eq)
	2024: 4146 CoUs (**4146** tCO_2eq)
Total:	**48089 CoUs (48089 tCO_2eq)**

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SECTION A. DESCRIPTION OF PROJECT ACTIVITY

A.1. Purpose and general description of project activity >>

a) Purpose of the project activity and the measures taken for GHG emission reductions >>

The **6.25 MW Bundled Wind Power Project**, developed by **Jay International**, is situated in District: Jamnagar, Taluka: Kalawad, Village: Galpadar, in the state of Gujarat (India). This renewable energy initiative involves the installation and operation of multiple Wind Turbine Generators (WTGs), with a combined installed capacity of 6.25 MW. These WTGs, manufactured and supplied by leading wind energy technology providers, contribute to the generation of clean and sustainable power, reducing dependency on conventional energy sources.

Purpose of the Project

The project aims to generate renewable energy through wind power, replacing electricity that would otherwise be produced by fossil fuel-based power plants connected to the grid. By displacing the use of fossil fuels, the project helps reduce greenhouse gas (GHG) emissions, playing a significant role in climate change mitigation efforts.

The electricity generated is transmitted to the NEWNE grid under a Power Purchase Agreement with the Gujarat Energy Development Agency (GEDA), Government of Gujarat. The project contributes to reducing CO2 emissions, supporting the transition to cleaner energy sources.

b) Brief description of the installed technology and equipment>>

The proposed project activity involves the installation and operation of Wind Turbine Generators (WTGs) by Pioneer Wincon in Gujarat, India, with a total installed capacity of 6.25 MW. The project is in compliance with the applicable provisions of the UCR project standard for describing implemented registered project activities. The following details summarize the implementation status:

1. **Technical Implementation:**

- Installed WTGs: The project has successfully installed 8 WTGs of 750 kW capacity each and 1 WTG of 250 kW capacity.
- Turbine Specifications: The WTGs are state-of-the-art, featuring direct-driven horizontal axis technology, advanced braking systems, and variable rotor speed configurations.
- Connection to CMS: All WTGs are connected to a Central Monitoring Station (CMS) via a high-speed WLAN modem or fiber optic cable for real-time monitoring and control.
- SCADA Integration: The Supervisory Control & Data Acquisition (SCADA) system is operational, providing graphical turbine data, power curve analytics, and long-term data storage.

2. **Operational Status:**

The WTGs have been commissioned and are fully operational. Real-time performance metrics, generation reports, and turbine diagnostics confirm the project activity's effective operation.

Safety Protocols: Each turbine has overspeed protection, high wind shutdown mechanisms, and automatic braking systems to ensure reliable operation under variable wind conditions.

3. **Compliance and Baseline Scenario:**

Lifetime Expectancy: The WTGs are designed for a 20-year operational lifespan, as per the manufacturer's specifications.

Baseline Emissions: The baseline scenario assumes electricity generation from the fossil fuel-based Indian national grid (NEWNE). The project displaces this grid electricity with clean, renewable wind power, contributing to significant greenhouse gas (GHG) emission reductions.

4. **Monitoring and Reporting:**

The implemented SCADA system ensures the collection of accurate and verifiable data on electricity generation and turbine performance. This supports compliance with monitoring requirements under the UCR project standard.

Daily generation reports and performance diagnostics are available, ensuring transparency and reliability in emissions reduction reporting.

5. **Contribution to Sustainable Development:**

The project promotes renewable energy use, reduces dependency on fossil fuels, and contributes to the local economy by creating jobs during construction and operation phases.

It aligns with India's goals for renewable energy expansion and carbon emissions mitigation under international climate agreements.

The project has been successfully implemented and is operating in compliance with the UCR project standard.

c) Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods, etc.)>>

The project has been presented as a bundled initiative by the Project Proponent (PP) in collaboration with other entities, as detailed in the table below. Additional information regarding this collaboration is provided in Annexure 2.
The proposed project activity of 6.25 MW was implemented as a bundled small-scale wind energy initiative, with commissioning dates ranging from February 2016 to March 2017. The details of the Wind Turbine Generators in Jamnagar district are provided below:

UCR Project ID: 488
Start Date of Crediting Period: 30/03/2016

No.	Project	WTG ID	Date of Commissioning	Installed Capacity (KW)
1	Arpit Industries	PWPL/750/15-16/3785	31/03/2016	750
2	H.P International Corporation	PWPL/750/16-17/4318	10/03/2017	750
3	Jay International	PWPL/250/15-16/3790	31/03/2016	250
4	Jay Jalaram Extrusions	PWPL/750/16-17/4320	10/03/2017	750
5	Rupam Impex	PWPL/750/16-17/4316	27/02/2017	750
6	Rupam Overseas	PWPL/750/15-16/3789	30/03/2016	750
7	Rupam Products	PWPL/750/16-17/4315	10/02/2017	750
8	SNK Energy	PWPL/750/16-17/4319	10/03/2017	750
9	Windson Energy	PWPL/750/16-17/4317	27/02/2017	750

d) Total GHG emission reductions achieved or net anthropogenic GHG removals by sinks achieved in this monitoring period>>

The total GHG emission reductions achieved in this monitoring period is as follows:

Summary of the Project Activity and ERs Generated for the Monitoring Period	
Start date of this Monitoring Period	30/03/2016
Carbon credits claimed up to	31/12/2024
Total ERs generated (tCO_{2eq})	**48089 tCO_2eq**
Leakage	0 tCO_2eq

e) Baseline Scenario>>

As per the approved consolidated methodology AMS-I.D. Version 18, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

"The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise, been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid".

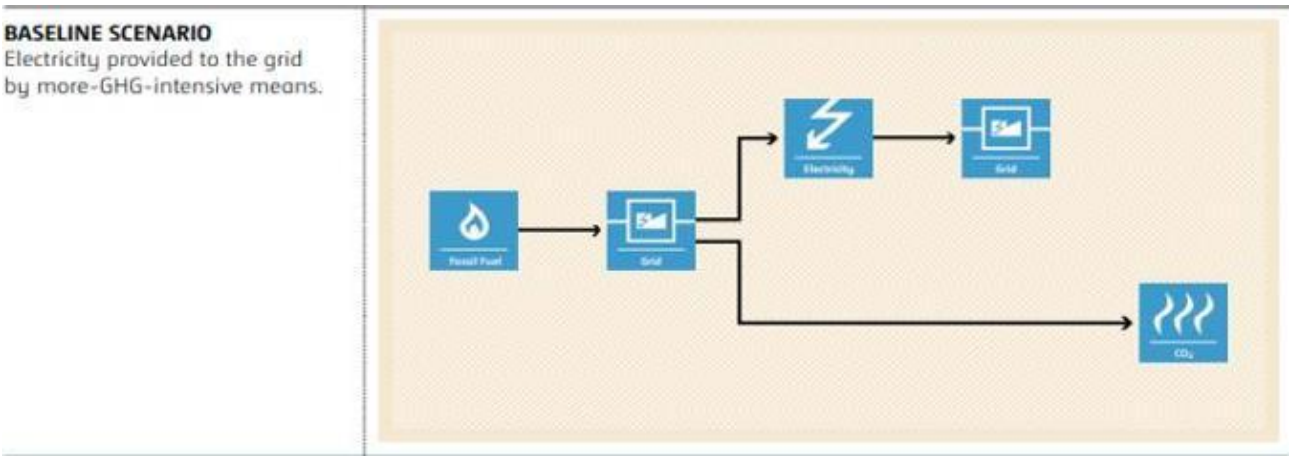


Figure 1 Baseline Scenario

A.2. Location of project activity>>

Country:	India
State:	Gujarat
District:	Jamnagar
Taluka:	Kalawad
Village:	Galpadar
Pin code:	361006

No.	Project	Latitude	Longitude
1	Arpit Industries	22.194017	70.224172
2	H.P International Corporation	22.222331	70.208844
3	Jay International	22.199208	70.233225
4	Jay Jalaram Extrusions	22.218560	70.211450
5	Rupam Impex	22.232533	70.232788
6	Rupam Overseas	22.192177	70.233314
7	Rupam Products	22.202970	70.234996
8	SNK Energy	22.223358	70.207446
9	Windson Energy	22.231791	70.2297

The project site is located in Kalawad Taluka, a village in the Gadhada of the Jamnagar District in Gujarat, India. It is situated approximately 52 km from Botad city and is easily accessible via National Highway 47. The site is well-connected by roads and is close to the 66/11 kV GETCO substation in the region, which is around 0.35 km away from the project location.

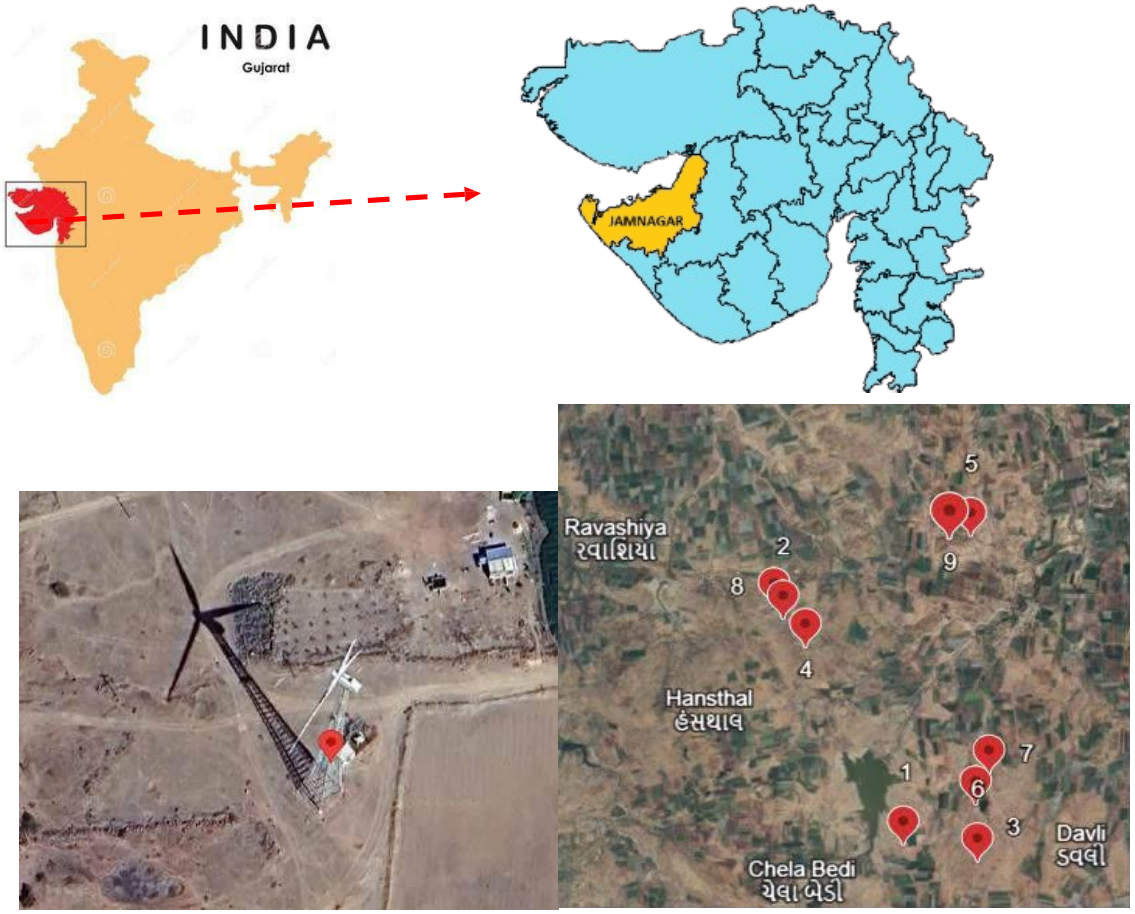


Figure-2- Location of the project activity (courtesy: Google images and www.mapofindia.com)

A.3. Parties and project participants >>

Party (Host)	Participants
INDIA	**Yojan Solutions (Aggregator)** **UCR ID: 577644419** UCR Contact: Naimishraval@yojan.in Contact Person: Dipti Raval Email: projects@yojan.in **Jay International (Project Owner)** Address Plot No 464, GIDC, Shankar Teri Udhyognagar, Jamnagar – 361004 Gujarat (India)

A.4. References to methodologies and standardized baselines >

The project activity is approved under the positive list of approved activities under the UCR CoU Standard

Sectoral Scope	01, Energy industries (Renewable/Non-renewable sources)
Type	I - Renewable Energy Projects
Scale	Small Scale
Category	AMS-I.D. (Title: "Grid connected renewable electricity generation", version 18)

Illustration of respective situations under which each of the methodology ("AMS-I.D.: Grid connected renewable electricity generation", "AMS-I.F.: Renewable electricity generation for captive use and mini-grid" and "AMS-I.A.: Electricity generation by the user") applies is included in Table 2 below.

Table 2. Applicability of AMS-I.D, AMS-I.F and AMS-I.A based on project types

	Project type	AMS-I.A	AMS-I.D	AMS-I.F
1	Project supplies electricity to a national/regional grid		√	
2	Project displaces grid electricity consumption (e.g. grid import) and/or captive fossil fuel electricity generation at the user end (excess electricity may be supplied to a grid)			√
3	Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling)		√	
4	Project supplies electricity to a mini grid[5] system where in the baseline all generators use exclusively fuel oil and/or diesel fuel			√
5	Project supplies electricity to household users (included in the project boundary) located in off grid areas	√		

A.5. Crediting period of project activity >>

Duration of crediting period: 30/03/2016 to 31/12/2024 (both dates inclusive)
Length of the crediting period corresponding to this monitoring period: 08 years, 09 months

A.6. Contact information of responsible persons/entities >>

Particular	Details
Name	Vedant Raval
Designation	BDE
Company	Yojan Solutions Pvt. Ltd.
Address	405, Kanha Capital Behind B.N. Chambers R C Dutt Road, Alkapuri Vadodara 390007 Gujarat, India
Email	info@yojan.in /projects@yojan.in

SECTION B. IMPLEMENTATION OF PROJECT ACTIVITY

B.1. Description of implemented registered project activity>>

a) Provide information on the implementation status of the project activity during this monitoring period in accordance with UCR PCN>>

Proposed Project: 6.25 MW Wind Power Generation in Gujarat

The proposed wind power project involves the installation and operation of Wind Turbine Generators (WTGs) manufactured and supplied by Pioneer Wincon. The total installed capacity of the project is 6.25 MW, located in the state of Gujarat, India. The project comprises:

- **8 WTGs of 750 kW each**
- **1 WTG of 250 kW**

Technical Specifications

750 kW WTG (8 Units)

Parameter	Specification
Turbine Model	Pioneer Wincon 750/57
Rated Power	750 kW per turbine
Rotor Diameter	57.0 m
Hub Height	73 m
Turbine Type	Direct driven, horizontal axis with variable rotor speed
Pitch System	Independent pitch for each blade
Cut-in Wind Speed	4.0 m/s
Rated Wind Speed	10.7 m/s
Cut-out Wind Speed	25.0 m/s
Extreme Wind Speed	>52.5 m/s
Rated Rotational Speed	25.2 RPM
Rotor Orientation	Upwind
Number of Blades	3
Blade Material	Fiberglass-reinforced polyester
Output Voltage	690 V
Frequency	50 Hz
Tower Type	Tubular lattice (Hot-dip galvanized steel)
Tower Height	73 m

250 kW WTG (1 Unit)

Parameter	Specification
Turbine Model	Pioneer Wincon P250/29.6
Rated Power	250 kW
Rotor Diameter	29.6 m
Hub Height	50 m
Turbine Type	Direct driven, horizontal axis with stall regulation
Pitch System	Pivotable blade tip aerodynamic braking
Cut-in Wind Speed	3.5 m/s
Rated Wind Speed	15.0 m/s
Cut-out Wind Speed	25.0 m/s
Extreme Wind Speed	>52.5 m/s
Rated Rotational Speed	38.5 RPM
Rotor Orientation	Upwind
Number of Blades	3
Blade Material	Fiberglass-reinforced polyester
Output Voltage	415 V
Frequency	50 Hz
Tower Type	Lattice structure (Hot-dip galvanized steel)
Tower Height	50 m

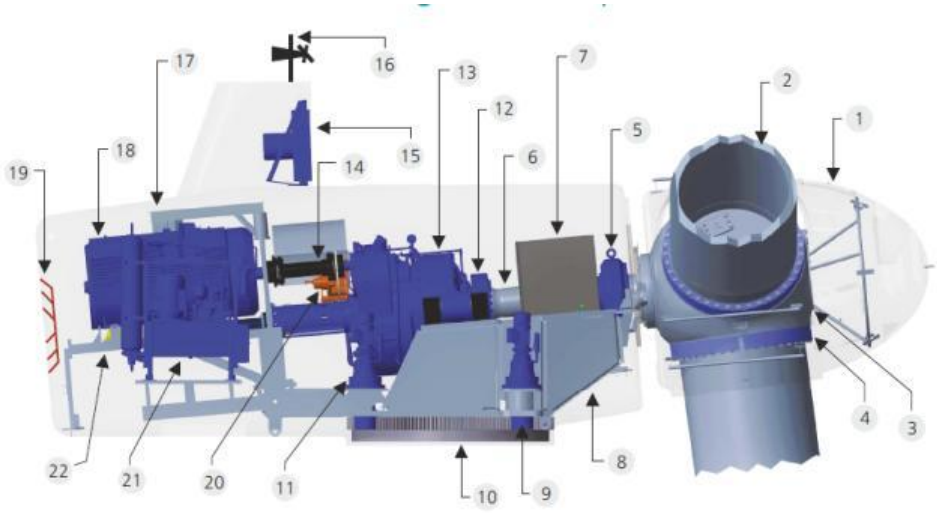
Detailed information regarding the status of implementation and the start date of operation for each member of the bundled project is provided in Appendix-3 of this document. Please see the below table for each entities WTG ID;

No.	Windmill Owner	WTG ID
1	Arpit Industries	PWPL/750/15-16/3785
2	H. P. International Corporation	PWPL/750/16-17/4318
3	Jay International	PWPL/250/15-16/3790
4	Jay Jalaram Extrusions	PWPL/750/16-17/4320
5	Rupam Impex	PWPL/750/16-17/4316
6	Rupam Overseas	PWPL/750/15-16/3789
7	Rupam Products	PWPL/750/16-17/4315
8	SNK Energy	PWPL/750/16-17/4319
9	Windson Energy	PWPL/750/16-17/4317

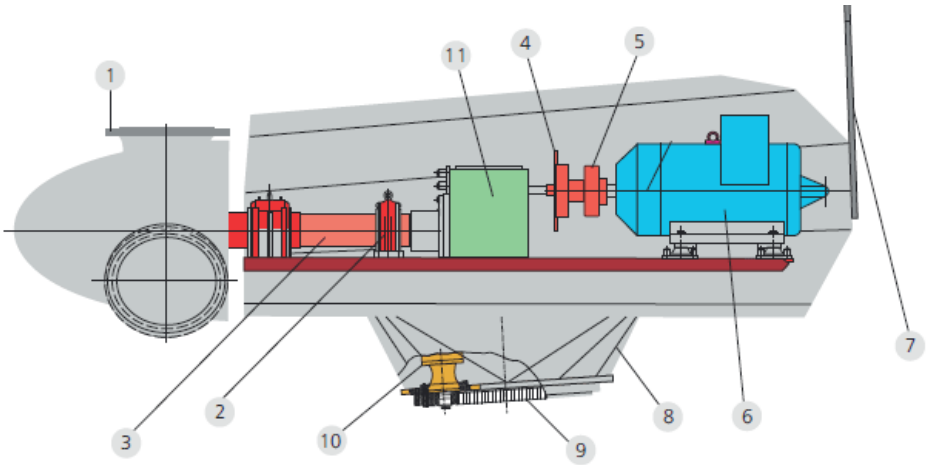
b) For the description of the installed technology, technical process and equipment, include diagrams, where appropriate>>

The installed wind turbine system comprises 8 WTGs of 750 kW and 1 WTG of 250 kW, totalling a capacity of 6.25 MW. The turbines, featuring a rotor diameter of 29.6 meters and a hub height of 50 meters, use advanced stall regulation and aerodynamic braking for efficient and reliable energy generation.

Pioneer Wincon, the supplier, is ISO 9001:2008 certified, with approvals from MNRE and C-WET, ensuring adherence to high-quality standards. The 750/250 kW turbines are certified under IEC standards by Det Norske Veritas (DNV), a globally recognized body. Real-time monitoring and safety systems, supported by SCADA, ensure seamless operation and integration into the grid.



1. Nose cone
2. Blade
3. Hub
4. Blade Bearing
5. Bearing Housing
6. Main Shaft
7. Top Panel
8. Bottom Frame
9. Yaw Pinion
10. Yaw Flange
11. Yaw Motor
12. Shrink Disc
13. Gear Box
14. CD Coupling
15. Gear Box Cooler
16. Anemometer & Windvane
17. Material Lifting Crane
18. Generator
19. Rear Louver
20. Mechanical Brake Unit
21. Hydraulic Power Unit
22. Generator Console



1. Hub
2. Bearing Housing
3. Main Shaft
4. Brake Disc
5. Flexible Coupling
6. Generator
7. Wind Vane
   Anemometer
8. Bottom Frame
9. Slew Ring
10. Yaw Motor
11. Gear Box

B.2 Do no harm or Impact test of the project activity>>

This project is a Greenfield activity where grid power is the baseline. Indian grid system has been predominantly dependent on power from fossil fuel powered plants. The renewable power generation is gradually contributing to the share of clean & green power in the grid, however, grid emission factor is still on higher side which defines grid as distinct baseline.

The Government of India has stipulated following indicators for sustainable development in the interim approval guidelines for such projects which are contributing to GHG mitigations. The Ministry of Environment, Forests & Climate Change, has stipulated economic, social, environment and technological well-being as the four indicators of sustainable development. It has been envisaged that the project shall contribute to

sustainable development using the following ways:

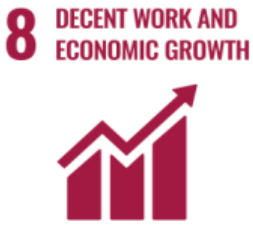
Social well-being: The project would help in generating direct and indirect employment benefits accruing out of ancillary units for manufacturing towers for erection of the Wind Turbine Generator (WTG) and for maintenance during operation of the project activity. It will lead to development of infrastructure around the project area in terms of improved road network etc. and will also directly contribute to the development of renewable infrastructure in the region.

Economic well-being: The project is a clean technology investment decided based on carbon revenue support, which signifies flows of clean energy investments into the host country. The project activity requires temporary and permanent, skilled and semi-skilled manpower at the project location; this will create additional employment opportunities in the region. The generated electricity will be utilised for captive consumption, thereby reducing the demand from the grid. In addition, improvement in infrastructure will provide new opportunities for industries and economic activities to be setup in the area. Apart from getting better employment opportunities, the local people will get better prices for their land, thereby resulting in overall economic development.

Technological well-being: The project activity employs state of art technology which has high power generation potential with optimised utilization of land. The successful operation of project activity would lead to promotion of this technology and would further push R&D efforts by technology providers to develop more efficient and better machinery in future. Hence, the project leads to technological well-being.

Environmental well-being: The project activity will generate power using zero emissions wind based power generation facility which helps to reduce GHG emissions and specific pollutants like SOx, NOx, and SPM associated with the conventional thermal power generation facilities. The project utilizes wind energy for generating electricity which is a clean source of energy. The project activity will not generate any air pollution, water pollution or solid waste to the environment which otherwise would have been generated through fossil fuels. Thus, the project causes no negative impact on the surrounding environment contributing to environmental well-being.

The project activity contributes to the following SDGs;

SDG Goals	Description
GOAL 7 	The project activity has generated **54815.83 MWh** of clean energy, which with increased shared will increase the affordability at a cheaper rate to end user. The project activity will utilize Wind energy (renewal resource) to generate power. The project activity will increase the share of renewable resource-based electricity in global mix of energy consumption.
GOAL 8 	Decent work and economic growth. The project activity generates additional employment for skilled and unskilled, also the project situated in a remote area will provide employment opportunities to unskilled people from villages. Training on various aspects including safety, operational issues, and developing skill sets will also be provided to employees.
GOAL 13 	This 6.25 MW wind power project meets the SDG 13 goal by saving fossil fuel and producing clean energy. This project has avoided **48089** tons of CO_2 emissions during this monitoring period. SDG 13 on clean energy is closely related and complementary. In a greenfield project, electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants. Thereby the project activity reduces the dependence on fossil fuel-based generation units and as there are no associated emissions with this project it contributes to the reduction of greenhouse gases (GHG) emissions.

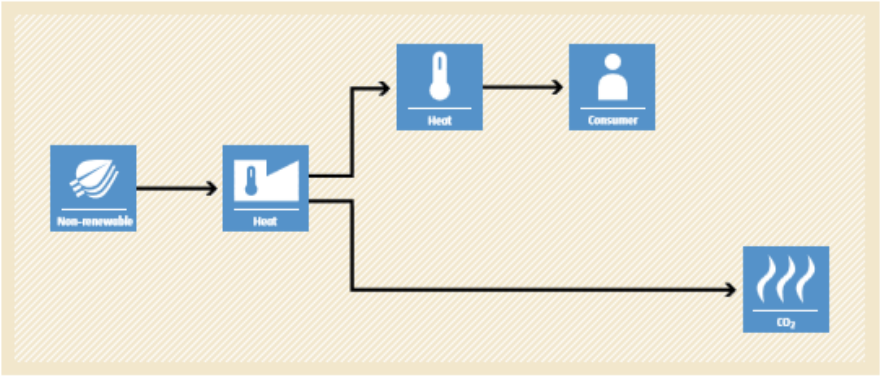
B.3. Baseline Emissions>>

The baseline scenario identified at the MR stage of the project activity is:

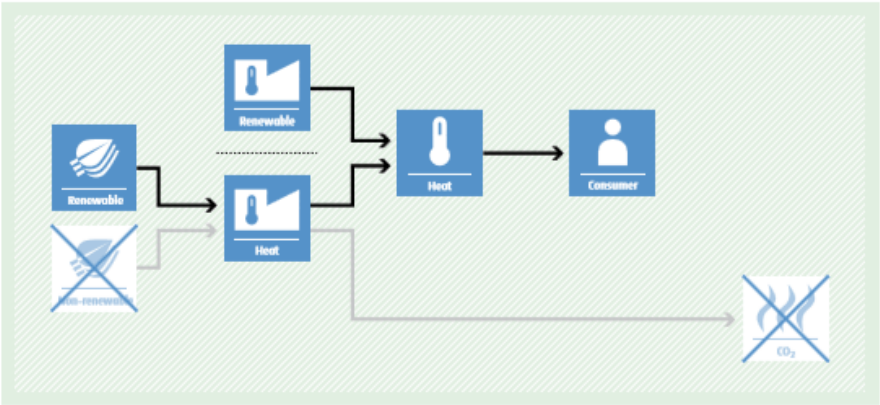
In the absence of the project activity, the equivalent amount of electricity would have been imported from the grid (which is connected to the unified Indian Grid system (NEWNE Grid)), which is carbon intensive due to being predominantly sourced from fossil fuel-based power plants. Hence, the baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario.

Schematic diagram showing the baseline scenario:

BASELINE SCENARIO
Thermal energy would be produced by more-GHG-intensive means based on the use of non-renewable biomass.



PROJECT SCENARIO
Use of renewable energy technologies for thermal energy generation, displacing non-renewable biomass use.



Thus, this project activity was a voluntary investment that replaced an equivalent amount of electricity from the Indian grid. The project proponent was not bound to incur this investment as it was not mandatory by national and sectoral policies. Thus, the continued operation of the project activity would continue to replace fossil fuel-based power plants and fight against the impacts of climate change. The PP hopes that revenues from the carbon credits generated will help repay the loans and help in the continued maintenance of this project activity.

B.4. Debundling>>

This project activity is not a de-bundled component of a larger project activity. Similarly, each of the bundle members is also not a de-bundled component of any larger project activity

SECTION C. APPLICATION OF METHODOLOGIES AND STANDARDIZED BASELINES

C.1. References to methodologies and standardized baselines >>

Sectoral scope: 01, Energy industries (Renewable/Non-renewable sources)
Type: I-Renewable Energy Projects
Category: AMS. I.D. (Title: “Grid connected renewable electricity generation”, version 18)

C.2. Applicability of methodologies and standardized baselines >

The project activity involves the generation of grid-connected electricity from the construction and operation of a new wind power-based project. The project has an **installed capacity of 6.25 MW**, qualifying it as a small-scale project activity under **Type-I of the Small-Scale Methodology (AMS-I.D., version 18)**.

The project status corresponds to the AMS-I.D. methodology, version 18, for renewable electricity generation.
The applicability of the methodology is discussed below.

Applicability Criterion	Project Case
1. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: (a) Supplying electricity to a national or a regional grid; or (b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	The project activity is a Renewable Energy Project i.e., a wind power project which falls under applicability criteria option 1 (a). i.e., Supplying electricity to a national or a regional grid
2. This methodology is applicable to project activities that: (a) Install a Greenfield plant; (b) Involve a capacity addition in (an) existing plant(s); (c) Involve a retrofit of (an) existing plant(s); (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s).	The option (a) of applicability criteria 2 is applicable as project is a Greenfield plant /unit. Hence the project activity meets the given applicability criterion.
3. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology: (a) The project activity is implemented in existing reservoir, with no change in the volume of the reservoir; or (b) The project activity is implemented in existing reservoir, where the volume of the reservoir(s) is increased and the power density as per definitions given in the project emissions section, is greater than 4 W/m^2. (c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m^2	The project activity involves installation of Wind Turbine Generators (WTGs); hence, this criterion is not applicable.
4. If the new unit has both renewable and non-renewable components (e.g., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	The proposed project is 6.25 MW Wind power project, i.e., only component is renewable power project below 15MW, thus the criterion is not applicable to this project activity.
5. Combined heat and power (co-generation) systems are not eligible under this category.	The project is wind power project and thus the criterion is not applicable to this project activity.
6. In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the	The proposed project is 6.25 MW Wind power project, i.e., only component is renewable power project below 15MW, thus the criterion is not applicable to this project activity.

project should be lower than 15 MW and should be physically distinct from the existing units.	
7. In the case of retrofit, rehabilitation or replacement, to qualify as a small-scale project, the total output of the retrofitted, rehabilitated or replacement power plant/unit shall not exceed the limit of 15 MW.	The proposed project is 6.25 MW Wind power project, i.e., only component is renewable power project below 15MW, thus the criterion is not applicable to this project activity.
8. In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid, then the baseline for the electricity component shall be in accordance with procedure prescribed under this methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as "AMS-I.C.: Thermal energy production with or without electricity" shall be explored.	The proposed project is 6.25 MW Wind power project, i.e., only component is renewable power project below 15MW, thus the criterion is not applicable to this project activity.
9. In case biomass is sourced from dedicated plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.	Not biomass is involved, the project is only a wind power project and thus the criterion is not applicable to this project activity

C.3 Applicability of double counting emission reductions >>

There is no double accounting of emission reductions in the project activity due to the following reasons:
• Project is uniquely identifiable based on its location coordinates.
• Project has dedicated commissioning certificate and connection point.
• Project is associated with energy meters which are dedicated to the consumption point for project developer.

C.4. Project boundary, sources and greenhouse gases (GHGs)>>

As per applicable methodology AMS-I.D. Version 18, "The spatial extent of the project boundary includes the project power plant, and all power plants connected physically to the electricity system" Thus, the project boundary includes the Wind Turbine Generator and the Indian grid system.

Sources		Gas	Included?	Justification/Explanation
Baseline	Grid Connected Electricity generation	CO_2	Yes	Main emission source
		CH4	No	Minor emission source
		N_2O	No	Minor emission source
		Other	No	No other GHG emissions were emitted from the project
Project	Greenfield Electric Power project Activity	CO_2	No	No CO_2 emissions are emitted from the project
		CH_4	No	Project activity does not emit CH_4
		N_2O	No	Project activity does not emit N_2O
		Other	No	No other emissions are emitted from the project

C.5. Establishment and description of baseline scenario (UCR Protocol) >>

As per the approved consolidated methodology AMS-I.D. Version 18, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

"The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid".

The project activity involves setting up of a new WTGs to harness the wind energy and use it for Selling Purpose i.e., the Indian grid system through Power purchase agreement. In the absence of the project activity, the equivalent amount of power would have been generated by the operation of grid-connected fossil fuel-based power plants and by the addition of new fossil fuel-based generation sources into the grid. The power produced from other conventional sources which are predominantly fossil fuel-based. Hence, the baseline for the project activity is the equivalent amount of power produced at the Indian grid.

The "grid emission factor" refers to the CO_2 emission factor (tCO_2/MWh) associated with each unit of electricity supplied by an electricity system. The UCR recommends an emission factor of **0.9 tCO_2/MWh** as a fairly conservative estimate for Indian projects that have not been previously verified under any GHG program for the **vintage years 2013–2023**.

For the **2024 vintage year**, a grid emission factor of **0.757 tCO_2/MWh** has been considered. The combined margin emission factor calculated from the CEA database in India results in higher emissions than the default value. Hence, the same emission factor has been used to calculate the emission reduction under a conservative approach.

C.5.1 Net GHG Emission Reductions and Removals:

Thus,

$$ERy = BEy – PEy – LEy$$

Where:
ERy = Emission reductions in year y (tCO_2/y)
BEy = Baseline Emissions in year y (tCO_2/y)
PEy = Project emissions in year y (tCO_2/y)
LEy = Leakage emissions in year y (tCO_2/y)

Baseline emissions

Baseline emissions include only CO_2 emissions from electricity generation in power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid- connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

$$BEy = EG\ BL,yl \times EF,\ CO2,\ GRID,\ y$$

BEy : Baseline emissions in year y (t CO_2)

$EG_{BL,yl}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)

$EF_{,\ CO2,\ GRID,\ y}$: UCR recommended emission factor of 0.9 tCO_2/MWh for the vintage years 2013–2023 has been considered.
(Reference: General Project Eligibility Criteria and Guidance, UCR Standard, page 4)

For the 2024 vintage year, a grid emission factor of 0.757 tCO_2/MWh has been considered

Project Emissions
As per AMS-I.D. version-18, only emission associated with the fossil fuel combustion, emission from operation of geo-thermal power plants due to release of non-condensable gases, emission from water reservoir of Hydro should be accounted for the project emission.

Since the project activity is a **wind power project**, project emission for renewable energy plant is nil.
Thus, PEy=0.

Leakage Emission

As per paragraph 22 of AMS-I.D. version-18, 'If the energy generating equipment is transferred from another activity, leakage is to be considered.' In the project activity, there is no transfer of energy generating equipment and therefore the leakage from the project activity is considered as zero

Hence, LE=0

The actual emission reduction achieved during the first CoU period (i.e., period for this monitoring report) is calculated in detail in separate spreadsheet Appendix 3. The same is provided as attachment below for

Reference. Overall emission reduction achieved by the proposed bundled project activity for this monitoring period (30/03/2016 to 31/12/2024) is demonstrated below (vintage wise breakup is given in Appendix 2):

Hence Net GHG emission reduction ERy = BEy – PEy – LEy

= 42853– 0 – 0
= 42853 tCO2e (i.e., CoUs)

C.6. Prior History>>

The project activity is a small-scale wind project, and this project was never applied under any other GHG mechanism prior to this registration with UCR. Also, the capacity or the total project as a whole has not been applied for any other environmental crediting or certification mechanism. Hence project will not cause double accounting of carbon credits (i.e., COUs)

C.7. Monitoring period number and duration>>

Monitored Period: 01

01 Monitored Duration: 30/03/2016 to 31/12/2024 (08 years, 09 months)

C.8. Changes to start date of crediting period >>

There is no change in the start date of crediting period, as prescribe under the UCR PCN. The project activity is being submitted at UCR for its first-issuance

C.9. Permanent changes from PCN monitoring plan, applied methodology or applied standardized baseline >>

Not applicable.

C.10. Monitoring plan>>

Data and Parameters available (ex-ante values):

Data/Parameter	UCR recommended emission factor
Data unit	tCO_2 /MWh
Description	A "grid emission factor" refers to a CO_2 emission factor (tCO_2/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO_2/MWh for the 2016 - 2024 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.
Source of data	https://a23e347601d72166dcd6 16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rack cdn.com//Documents/UCRStandardAug2022upda tedVer5_030822005728911983.pdf
Value(s) applied	0.9
Measurement methods and procedures	-
Monitoring frequency	Ex-ante fixed parameter
Purpose of data	For the calculation of the Emission Factor of the grid
Additional Comment	The combined margin emission factor as per CEA database (current version, Year 2023) results into higher emission factor. Hence for 2013-2023 vintage UCR default emission factor remains conservative.

Data/Parameter	UCR recommended emission factor
Data unit	tCO_2 /MWh
Description	A "grid emission factor" refers to a CO_2 emission factor (tCO_2 /MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends a grid emission factor of 0.757 tCO_2/MWh for the 2024 vintage year as a fairly conservative estimate for Indian projects not previously verified under any GHG program.
Source of data	https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf
Value(s) applied	0.757
Measurement methods and procedures	-
Monitoring frequency	Ex-ante fixed parameter
Purpose of data	For the calculation of the Emission Factor of the grid

Data and Parameters to be monitored (ex-post monitoring values):

Data / Parameter:	EGPJ, facility, y
Data unit:	MWh
Description:	Total electricity produced by the project activity
Source of data:	Electricity Generation data though monitoring system
Measurement procedures (if any):	Data Type: Measured Monitoring equipment: Energy Meters and inverter data are used for monitoring
	Recording Frequency: Continuous monitoring and Monthly recording from Energy Meters, Summarized Annually Archiving Policy: Paper & Electronic Calibration frequency: 5 years (as per CEA provision) For example, the difference between the measured quantities of the grid export and the import will be considered as net export: EGPJ,y = EGExport - EGImport
Monitoring frequency:	Monthly
Value applied:	**54815.83 MWh**
QA/QC procedures:	Calibration of the Main meters will be carried out once in five (5) years as per National Standards (as per the provision of CEA, India) and faulty meters will be duly replaced immediately as per the provision of power purchase agreement.
Purpose of data:	The Data/Parameter is required to calculate the baseline emission.
Any comment:	Data will be archived electronically for a period of 36 months beyond the end of crediting period.

Annexure 1

GEDA
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GUJARAT ENERGY DEVELOPMENT AGENCY
A Government of Gujarat Organisation

Ref: GEDA/PWF/PEPL-AI/16-17/ 037 Date: 7th April 2016

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Arpit Industries, having registered office at Plot no. 5, Arya Estate, Haria College Road, Behind Over Bridge Jamnagar – 361 006, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 750 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.750 MW

Sr. No.	Details of site of installation			Revenue Survey No	Date of Commissioning	WTG ID number
	Name of Village	Taluka	District			
1	Galpadar	Kalawad	Jamnagar	72/p-1	31.03.2016	PW/750/15-16/3785

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm:

Sr. no.	WTG ID No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PW/750/15-16/3785	31.03.2016	14.00	14.15	5	32	27

For Gujarat Energy Development Agency

(S. B. Patil)
Dy. Director

4th Floor, Block No. 11-12, Udyogbhavan,
Sector-11, Gandhinagar - 382 017. India.
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

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GUJARAT ENERGY DEVELOPMENT AGENCY
A Government of Gujarat Organisation

Ref: GEDA/PWF/PEPL-HPIC/17-18/ 012 Date:-6/4/2017

CERTIFICATE OF COMMISSIONING

This is to certify that **M/s H. P. International Corporation.**, having registered office at B-9, GIDC, Shankar Tekri, Udhyognagar, Jamnagar. – 361 004, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 750 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.750 MW
Site of installation : Government Waste Land, Survey. no. 136 of Village Beraja, Ta. Kalawad, Dist. Jamnagar.
WTG ID number : PWPL/750/16-17/4318

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm

Sr. no.	WTG No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PWPL/750/16-17/4318	10.03.2017	19:40	20:20	8	64	56
						Total :→	56

For Gujarat Energy Development Agency

(S. B. Patil)
Dy. Director

Enclosed: - Annexure 1 Copy of approved micrositing drawing

4th Floor, Block No. 11-12, Udyogbhavan,
Sector-11, Gandhinagar-382017. India.
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

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ગુજરાત ઊર્જા વિકાસ એજન્સી
GUJARAT ENERGY DEVELOPMENT AGENCY
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Ref: GEDA/PWF/PEPL-JJ/16-17/ 236 Date: 7th April, 2016

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Jay International having registered office at Plot no. 1/2/464, Shankar tekri, Udhyog nagar, Jamnagar. – 361 004, Gujarat, have commissioned 0.250 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 250 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.250 MW

Sr. No.	Details of site of installation			Revenue Survey No	Date of Commissioning	WTG ID number
	Name of Village	Taluka	District			
1	Galpadar	Kalawad	Jamnagar	63/p-1	31.03.2016	PW/250/15-16/3790

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm:

Sr. no.	WTG ID No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PW/250/15-16/3790	31.03.2016	19.30	19.45	3	26	23

For Gujarat Energy Development Agency

(S. B. Patil)
Dy. Director

બીજો માળ, બ્લોક નં. ૧૧ થી ૧૨, ઉદ્યોગભવન
સેક્ટર-૧૧, ગાંધીનગર - ૩૮૨ ૦૧૭.
4th Floor, Block No. 11-12, Udyogbhavan,
Sector-11, Gandhinagar - 382 017. India.
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

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GUJARAT ENERGY DEVELOPMENT AGENCY
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Ref:- GEDA/PWF/PEPL-JJE/17-18/221 Date:-6/4/2017

CERTIFICATE OF COMMISSIONING

This is to certify that **M/s Jay Jalaram Extrusions.**, having registered office at Plot no. 457,GIDC,Shanker Tekri, Udhyognagar, Jamnagar. – 361 004, Gujarat, have commissioned 0.750MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below:

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)

Capacity of each Wind Turbine Generator : 750 kW

No of Wind Turbine Generator(s) : 1 (One)

Total capacity of the Windfarm : 0.750 MW

Site of installation : Government Waste Land, Survey. no. 136 of Village Beraja, Ta. Kalawad,Dist. Jamnagar.

WTG ID number : PWPL/750/16-17/4320

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm

Sr. no.	WTG No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PWPL/750/16-17/4320	10.03.2017	19:25	20:05	16	75	59
						Total :→	**59**

For Gujarat Energy Development Agency

S. B. Patil
Dy. Director

Enclosed: - Annexure 1 Copy of approved micrositing drawing

બીજો માળ, બ્લોક નં. ૧૧ થી ૧૨, ઉદ્યોગભવન
સેક્ટર-૧૧, ગાંધીનગર - ૩૮૨ ૦૧૭.
4th Floor, Block No. 11-12, Udyogbhavan,
Sector-11, Gandhinagar-382017. India.
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

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GUJARAT ENERGY DEVELOPMENT AGENCY
A Government of Gujarat Organisation

GEDA/PWF/PEPL-RP/16-17/ 1344 15-3-2017

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Rupam Impex, having its registered office at B-8, GIDC, Shankar Tekri, Udhyognagar, Jamnagar. – 361 004, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 750 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.750 MW

Sr. No.	Details of site of installation			Survey No	Date of Commissioning	WTG ID number
	Name of Village	Taluka	District			
1	Banga	Kalawad	Jamnagar	686	27.02.2017	PWPL/750/16-17/4316

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm:

Sr. no.	WTG ID No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PWPL/750/16-17/4316	27.02.2017	18:15	19:15	06	150	144

For Gujarat Energy Development Agency

S. B. Patil
Deputy Director

4th Floor, Block No. 11-12, Udhyogbhavan,
Sector-11, Gandhinagar-382017. India.
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

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GUJARAT ENERGY DEVELOPMENT AGENCY

Ref: GEDA/PWF/PEPL-RO/16-17/ 942 Date: 7th April, 2016

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Rupam Overseas, having registered office at Plot no. 7 & 8, GIDC-I, Shankar Tekri, Udhyognagar, Jamnagar. – 361 006, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 750 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.750 MW

Sr. No.	Details of site of installation			Revenue Survey No	Date of Commissioning	WTG ID number
	Name of Village	Taluka	District			
1	Galpadar	Kalawad	Jamnagar	63/p-1	30.03.2016	PW/750/15-16/3789

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

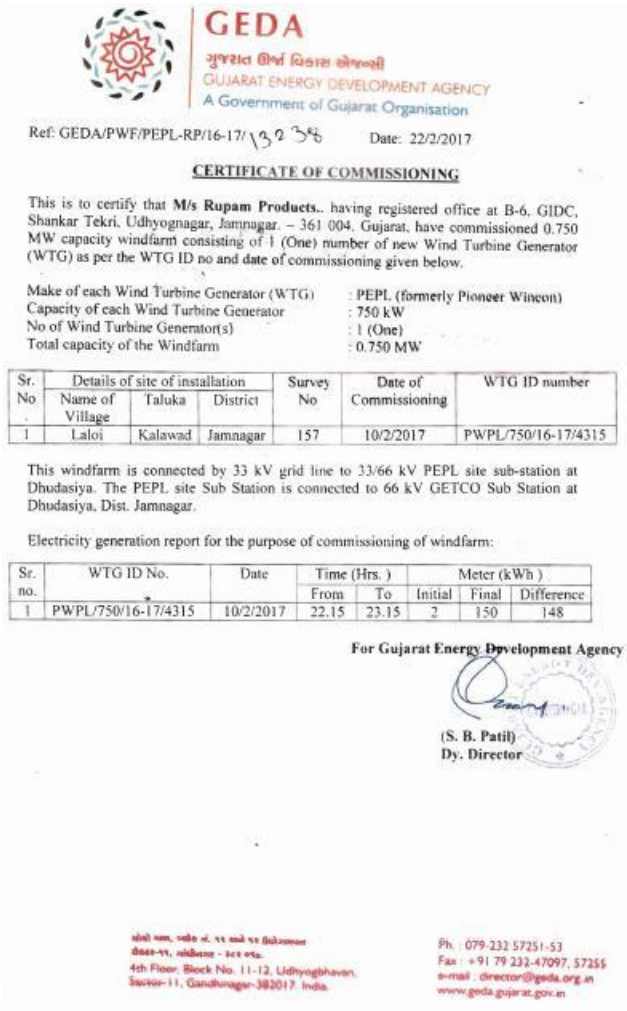
Electricity generation report for the purpose of commissioning of windfarm:

Sr. no.	WTG ID No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PW/750/15-16/3789	30.03.2016	22.50	23.10	1	18	17

For Gujarat Energy Development Agency

(S. B. Patil)
Dy. Director

4th Floor, Block No. 11-12, Udyogbhavan,
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in



GEDA

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GUJARAT ENERGY DEVELOPMENT AGENCY

A Government of Gujarat Organisation

Ref: GEDA/PWF/PEPL-RP/16-17/1326 Date: 22/2/2017

CERTIFICATE OF COMMISSIONING

This is to certify that **M/s Rupam Products.**, having registered office at B-6, GIDC, Shankar Tekri, Udhyognagar, Jamnagar. – 361 004, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 750 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.750 MW

Sr. No	Details of site of installation			Survey No	Date of Commissioning	WTG ID number
	Name of Village	Taluka	District			
1	Laloi	Kalawad	Jamnagar	157	10/2/2017	PWPL/750/16-17/4315

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm:

Sr. no.	WTG ID No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PWPL/750/16-17/4315	10/2/2017	22.15	23.15	2	150	148

For Gujarat Energy Development Agency

(S. B. Patil)
Dy. Director

4th Floor, Block No. 11-12, Udhyogbhavan, Sector-11, Gandhinagar-382017. India.

Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

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GUJARAT ENERGY DEVELOPMENT AGENCY

A Government of Gujarat Organisation

Ref:- GEDA/PWF/PEPL-SNKE/17-18/ 020 Date:-6/4/2017

CERTIFICATE OF COMMISSIONING

This is to certify that **M/s SNK Energy.**, having registered office at 501-Lake View Apartment, Near Digvijay Plot Police Chowky, Jamnagar. – 361 005, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)

Capacity of each Wind Turbine Generator : 750 kW

No of Wind Turbine Generator(s) : 1 (One)

Total capacity of the Windfarm : 0.750 MW

Site of installation : Government Waste Land, Survey. no. 136 of Village Beraja, Ta. Kalawad, Dist. Jamnagar.

WTG ID number : PWPL/750/16-17/4319

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm

Sr. no.	WTG No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PWPL/750/16-17/4319	10.03.2017	19:55	20:35	7	65	58
						Total :→	58

For Gujarat Energy Development Agency

(S. B. Patil)
Dy. Director

Enclosed: - Annexure I Copy of approved micrositing drawing

4th Floor, Block No. 11-12, Udhyogbhavan, Sector-11, Gandhinagar-382017. India.

Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

GEDA
ગુજરાત ઊર્જા વિકાસ એજન્સી
GUJARAT ENERGY DEVELOPMENT AGENCY
A Government of Gujarat Organisation

GEDA/PWF/PEPL-RI/16-17/ 13493 15-3-2017

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Windson Energy, having its registered office at Plot no.5, Arya Estate, Haria College Road, Behind Over Bridge, Jamnagar. – 361 006, Gujarat, have commissioned 0.750 MW capacity windfarm consisting of 1 (One) number of new Wind Turbine Generator (WTG) as per the WTG ID no and date of commissioning given below.

Make of each Wind Turbine Generator (WTG) : PEPL (formerly Pioneer Wincon)
Capacity of each Wind Turbine Generator : 750 kW
No of Wind Turbine Generator(s) : 1 (One)
Total capacity of the Windfarm : 0.750 MW

Sr. No.	Details of site of installation			Survey No	Date of Commissioning	WTG ID number
	Name of Village	Taluka	District			
1	Banga	Kalawad	Jamnagar	686	27.02.2017	PWPL/750/16-17/4317

This windfarm is connected by 33 kV grid line to 33/66 kV PEPL site sub-station at Dhudasiya. The PEPL site Sub Station is connected to 66 kV GETCO Sub Station at Dhudasiya, Dist. Jamnagar.

Electricity generation report for the purpose of commissioning of windfarm:

Sr. no.	WTG ID No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	PWPL/750/16-17/4317	27.02.2017	18:30	19:30	03	180	177

For Gujarat Energy Development Agency

S. B. Patil
Deputy Director

4th Floor, Block No. 11-12, Udhyogbhavan,
Sector-11, Gandhinagar-382017, India.
Ph. : 079-232 57251-53
Fax : +91 79 232-47097, 57255
e-mail : director@geda.org.in
www.geda.gujarat.gov.in

Annexure 2 Self declaration

JAY INTERNATIONAL
Manufacturer of Brass Components

Date: 19 November 2024

To Whom It May Concern,

We, **Jay International**, located at Plot No. 464, G.I.D.C, Shankar TekriUdhyognagar, Jamnagar - 361004 Gujarat (India), hereby declare and affirm that we have the authority to act on behalf of the windmill owners listed below. We are authorized to submit the following windmills for the purposes of carbon credit project.

The windmills and their respective owners are as follows:

Windmill Owner	WTG ID
H. P. International Corporation	PWPL/750/16-17/4318
Rupam Impex	PWPL/750/16-17/4316
Rupam Overseas	PWPL/750/15-16/3789
Rupam Products	PWPL/750/16-17/4315
SNK Energy	PWPL/750/16-17/4319
Windson Energy	PWPL/750/16-17/4317
Jay Jalaram Extrusions	PWPL/750/16-17/4320
Jay International	PWPL/250/15-16/3790
Arpit Industries	PWPL/750/15-16/3785

We confirm that all necessary permissions have been obtained, and we are fully authorized to proceed with the submission for the carbon credit project on behalf of each owner listed.

Regards,

Mr. Paresh Vadhar

Managing Director

Jay International

Plot No. 464, G.I.D.C. Shankar Tekri, Udyognagar, JAMNAGAR - 361 004 (Gujarat-INDIA)
Phone : +91-288-2560693 / 2560565 | E-mail : sales@jaybrass.in | www.jaybrass.in

Annexure 3

Total MW generated per year (in MW)										
Project	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**TOTAL**
Arpit Industries	697.286	893.314	822.037	778.645	518.758	535.203	636.548	685.829	566.929	5567.62
H.P International Corporation	0	785.49	968.862	952.303	693.305	723.719	794.947	846.713	736.952	5765.339
Jay International	186.612	263.352	266.887	212.099	125.582	173.401	193.63	204.417	183.761	1625.98
Jay Jalaram Extrusions	0	799.942	1089.978	1014.966	774.354	842.854	890.101	932.089	698.907	6344.284
Rupam Impex	0	705.459	1078.939	1060.941	760.948	736.913	839.793	875.404	684.676	6058.397
Rupam Overseas	562.68	910.552	849.646	881.175	627.201	652.169	671.087	756.233	621.53	5910.743
Rupam Products	0	878.274	1012.786	959.09	714.825	758.941	819.908	853.405	652.321	5997.229
SNK Energy	0	807.975	998.413	967.85	691.648	737.585	813.059	837.2	687.356	5853.73
Windson Energy	0	948.542	1030.451	1032.813	682.911	759.157	831.323	852.816	722.059	6138.013
TOTAL	1446.578	6992.9	8117.999	7859.882	5589.532	5919.942	6490.396	6844.106	5554.491	54815.83

Total CO2 Emission Year										
Project	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**TOTAL**
Arpit Industries	623	799	733	695	459	477	566	611	423	4963
H.P International Corporation	0	701	867	851	615	646	711	756	551	5147
Jay International	164	232	234	183	107	150	168	177	132	1415
Jay Jalaram Extrusions	0	714	976	908	692	753	796	832	523	5671
Rupam Impex	0	630	963	948	680	657	751	781	512	5410
Rupam Overseas	502	814	760	786	561	582	596	674	466	5275
Rupam Products	0	783	906	858	637	679	732	761	485	5356
SNK Energy	0	720	891	864	619	658	725	746	514	5223
Windson Energy	0	849	922	923	609	676	743	761	540	5483
TOTAL	1289	6242	7252	7016	4979	5278	5788	6099	4146	48089