

Salaon Neutrality Report 2021



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Want to know more please scan the QR



NAVITAS SOLAR

Is proud to announce that we are

CARBON NEUTRAL

COP26 outcomes for India:





India to have net zero emissions





India's non-fossil energy capacity will become 500 GW.



India will reduce its total carbon emissions by 1B tons.



India's railway network to have net zero emissions. What is Carbon **Neutrality?**

Carbon neutrality is a state of net-zero carbon dioxide emissions. This can be achieved by balancing emissions of carbon dioxide with its removal (often through carbon offsetting) or by eliminating emissions from society (the transition to the "post-carbon economy"). The term is used in the context of carbon dioxide-releasing processes associated with transportation, energy production, agriculture, and industry.



COP26 (Conference of the Parties)

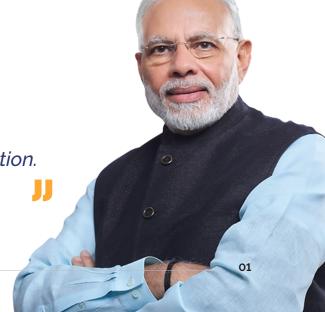
COP is a conference on climate change that is organised by the UN annually. COP26 is the 26th and the most recent summit held in Glasgow, UK on Nov 1-2, 2022, a year later than planned due to delays caused by the COVID-19 pandemic. The summit was jointly hosted by the UK and Italy and was attended by the countries that signed the United Nations Framework Convention on Climate Change (UNFCCC) - a treaty that came into force in 1994.

Navitas Solars believes in what the Indian Prime Minister Mr. Narenda Modi said at the COP26 summit,



Instead of mindless consumption, we need mindful and deliberate utilisation.

By following the same principles and becoming a Carbon Neutral Company, Navitas Solar is supporting the COP26 outcomes for India.





UNFCCC Certificate



Date: 06 April 2022 Reference: VC/0374/2022

VOLUNTARY CANCELLATION CERTIFICATE

Presented to:

CDM Project 0329: Babanpur, Killa and Sahoke Mini Hydroelectric Projects

Reason for cancellation:

Navitas Solar is buying carbon credits for offsetting their company's emission to become carbon neutral for the year 2021



Number and type of units cancelled

Start serial number: IN-5-196904728-2-2-0-329 End serial number: IN-5-196905133-2-2-0-329

406 CERs

Equivalent to 406 tonne(s) of CO2

The certificate is issued in accordance with the procedure for voluntary cancellation in the CDM Registry. The reason for cancellation included in this certificate is provided by the cancellar.

 To reduce carbon emissions, protect biodiversity, and bring real benefits to our local communities; we have offset our emissions and Navitas Solar is obliged to unveil the Voluntary Cancellation Certificate by United Nations Framework Convention for Climate Change (UNFCCC).



Declaration Certificate

+91 731 4050174 business@infisolutions.or 214-215 Milinda Manor Opp. Next Treasure Island Mall



Declaration Statement

Navitas Green Solutions Pvt. Ltd. has appointed Infinite Solutions Infinite Environmental Solutions LLP with the task to carry out the assessment of GHG emissions, define a methodology to be adopted, calculation approach, implementing monitoring procedures, as well as selection of assumptions and emission factors.

Key Procedures Followed:

Infinite Solutions undertook the following procedures over the subject matter: Reviewed the documents relating to plant's emission sources, monitoring procedures, calibration, storage of data and frequency of monitoring and confirmed the same during the actual visits at the site.

To understand the level of management awareness and oversight of sustainability performance: Interviewed staff responsible for managing data processes and data management systems at corporate level; Reviewed disaggregated data reported by review of entire data to assess whether the data has been collected, consolidated, and reported accurately; and tested the completeness of the data and whether it has been collected, consolidated, and reported accurately at plant level.

Infinite Solutions believes that the evidence obtained is sufficient and appropriate to provide a basis for our limited calculations.

Conclusion:

It can be confirmed based on the performed assessment that the calculations meet the requirements of the ISO 14064-1:2018 standard as well as of the GHG Protocol, which is the basis of the assessment. The emissions levels are summarized below for the period of January to December 2021. The company has offset an equivalent amount of CO2 emissions by purchase of carbon credits thereby has achieved Carbon Neutrality for the period "

GHG Emissions from Sources	tCO2eq
Direct GHG Emissions (Scope 1)	107.62
Indirect GHG Emissions (Scope 2)	297.76
Other indirect Emissions (Scope 3)	-
Total tCO2eq	405.38
Offset Retired*	406

CDM- 0329
Link- https://cdm.unfccc.int/Projects/DB/TUEV-SUED1142616865.86/view

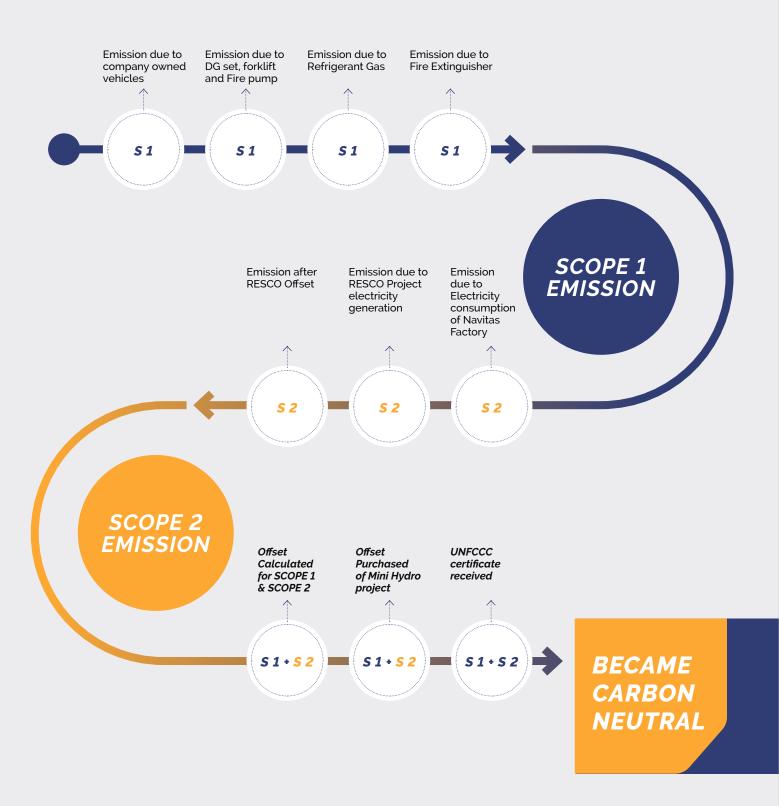


Mr. Jimmy Sah Chief Operating Officer Infinite Environmental Solutions LLP Date:- 6th April 2022 Place:- Indore

- Navitas Green Solutions
 Pvt. Ltd. has appointed
 Infinite Environmental
 Solutions LLP as a
 consultant in the
 journey of becoming
 Carbon Neutral.
- We are obliged to unveil the declaration statement for the same.



Roadmap to become Carbon Neutral





Executive Summary

Navitas Solar has bifurcated its emissions into 3 categories as SCOPE 1, SCOPE 2 and SCOPE 3. All the emissions incurred in the company premises related to SCOPE 1, 2 and 3 are monitored and emissions are calculated respectively for the calendar year 2021.

- SCOPE 1 includes, emissions due to company owned vehicles, emissions related to diesel consumption by DG sets, fire pump and forklift, emissions due to refrigerant gas usage, emissions due to fire extinguisher usage.
- SCOPE 2 includes emissions due to consumption of purchased electricity.
- We wish to offset SCOPE 3 soon, therefore have not included it in the carbon footprint calculation yet.

Navitas Solar collaborated with Infinite Solutions as a "Carbon Neutrality Partner" for the emissions estimation, as well as for offset of emissions. The details of the scope for emissions calculation, the methodology adopted, calculation process and the assumptions considered are described in the report.

BASE YEAR- 2021

PHYSICAL BOUNDARY

The boundary consists of the physical boundary of the company at Hojiwala Industrial Estate.

CATEGORY	EMISSION (tCo ₂ eq)
SCOPE 1: Emissions due to company owned vehicl es, DG sets, fire pump and forklift, refrigerant gas, fire extinguisher	107.62
SCOPE 2: Electricity consumption per year of Navitas factory	1,157.50
Total Navitas Emission	107.62 + 1,157.50 = 1,265.12
SCOPE 2: Offset taken from RESCO Projects	859.74
SCOPE 2: Final Electricity consumption after offset	1,157.50 - 859.74 = 297.76
Net Emission of Navitas factory	1,265.12 - 859.74 = 405.38
Offset taken from Mini Hydro project to become Carbon Neutral	406

Therefore, to become a Carbon Neutral company, 406 CERs (Certified Emission Reductions) needs to be purchased as an offset.

For Scope 1 calculations, we have calculated emissions occurred directly in the company premises. In order to go green in the truest sense, we have installed a rooftop solar plant of 273 kW as per our space availability, and we have offset our electricity consumption units with the units generated from 273 KW rooftop solar plant.

We have offset our emission of purchased electricity through our 9 RESCO projects located at different sites in Delhi, thereafter calculating the net difference units as emission for *SCOPE 2*.

Accordingly, our emissions for SCOPE 1 and 2 stands at 406 tons of $\mathrm{CO_2}$ equivalent.



Introduction to the Company







Navitas Solar aims to become a respectable leader in the solar industry, known for its excellent quality solar modules that are reliable and long-lasting. The Company strives to provide best solutions for sustainable solar electric power to its clients. Navitas Solar specialises in manufacturing of high efficiency monocrystalline and







polycrystalline solar modules, ranging from 5 Watts to 600 Watts per panel. The Company also has its own EVA manufacturing plant, which works as backward integration for its solar module production. Currently it has a capacity of 750 MW, which will be extended to 1.75 GW by 2022. With this new expansion, the Company will be able to produce solar modules up to 600 Watts.

The Company is keen on building a sustainable organisation, working towards achieving global clean energy through practical solutions.

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NAVITAS SOLAR

Pledges to achieve Net Zero by 2030



500 MW

Of total installed capacity in solar module production



Team strength



1,300

Serving 1,300+ customers across India



Engaged

In government, semi-government and private projects



Advanced

Most advanced production line in India



Top 10

Among the top 10 manufacturers of solar module in India, as featured by JMK Research & Analytics



273 KW

Increased rooftop solar plant capacity from 203 KW to 273 KW in the year 2021



Leadership Team



Vineet Mittal
DIRECTOR - FINANCE AND
STRATEGY

He is a Chartered Accountant, Company Secretary and Cost Accountant by qualification, who has been All India Rank Holder at Company Secretary and Cost Accountancy examinations. His strength lies in finance, networking and business development, and he has been engaged in strategic financial planning, sales and developing relationships for the Company.



Sunay Shah
DIRECTOR - PROJECTS

He holds a Bachelors' degree in Electrical Engineering from PVG COET, Pune along with holding an MBA degree from S. P. Jain, Mumbai. He plays a key role in project acquisition, development and execution at Navitas Solar, and has actively contributed to the sales strategies for the Company.



Ankit Singhania

DIRECTOR - SALES AND
PROCUREMENT

He holds a graduate degree in Economics from
St. Xavier's College, Mumbai, and also an MBA degree in Marketing from IIM Ranchi. His exposure to international markets enables him to oversee supply chain management for the Company on a worldwide scale. He plays a vital role in strategic sourcing and is responsible for developing strong relations with the suppliers and vendors of the Company.



Aditya Singhania

DIRECTOR - ENGINEERING

He is a Civil Engineer from Sardar Vallabhbhai National Institute of Technology, Surat, and has over 8 years of rich experience in civil construction projects. He is actively involved in the development of new products as well as in the management of operations at the plant.



Saurabh Aggarwal
HEAD - TAXATION AND
LOGISTICS

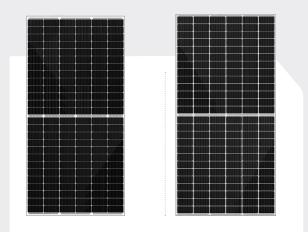
Mr. Saurabh is a Chartered Accountant with rich experience in steel sector. He also has a brief experience of textile industry. He has been instrumental in leading the material and logistics management for Navitas Solar and handles all the taxation and legal matters of the company.



Our Products and Services

Mono PERC Half-cut Modules

NAVITAS BONITO



Bonito Pro

- 144 | 156 Cell Series
- 10 BB Modules
- NSM 530 Watts to 600 Watts

Bonito Max

- 144 | 156 Cell Series
- 9 BB Modules
- NSM 435 Watts to 500 Watts

Multi Crystalline **Modules**

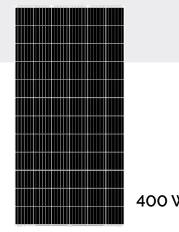
NAVITAS NAVISOL



300 Watts to 345 Watts

Mono PERC Modules

NAVITAS NAVISOL



400 Watts

Solar Services

NAVITAS SOLAR EPC SERVICES



111 Kwp rooftop solar at MSETCL, Pune



356.25 Kwp at Citizen Textile, Surat



300 KWP at Western Metal Industries, Pune

Three Decades of Versatile Experience, Dedicated Highly Experienced Team, Backward & Forward Integrated



Community and Sustainability Endeavours

Navitas Solar in its few years of existence has achieved great success in sustainability, be it through its various initiatives or through its transparent reporting practices. The Company's aim is to be a champion of sustainable goals in India through example.









CLIMATE NEUTRAL NOW

Navitas has achieved a Bronze level in Climate Reporting under the 'Climate Neutral Now' initiative of the United Nations Framework Convention on Climate Change (UNFCCC) for the year 2020.

CLIMATE NEUTRAL NOW

Navitas has achieved a Silver level in Climate Reporting under the 'Climate Neutral Now' initiative of the United Nations Framework Convention on Climate Change (UNFCCC) for the year 2021.

SUSTAINABILITY AWARD

Navitas won an award for sustainability in the 'Annual MSME Sustainability Awards' organised by the Bengal Chamber of Commerce and Industry(BCC&i) in 2021-22.



TREE PLANTATION DRIVE

Navitas Solar is a part of the Pulwama Vann project that is engaged in building a dense Miyawaki forest with 40,000 trees. This project is being executed in conjunction with Forest Creators, at the Kalai village in the Umbergaon district of Gujarat. The project is being implemented to commemorate the 40 Indian soldiers who became martyrs in the Pulwama Attack. For every soldier 1,000 trees are being planted. 40 different species of native trees have been selected for the plantation drive, and so far **5,000 trees** have already been planted by Navitas Solar.





JYOTI INITIATIVE

Under this initiative, we approach different schools and colleges and deliver a lecture on "Sustainability-A Path for the Future" to spread awareness about environment, sustainability, carbon neutrality in the young students. Our aim is to sensitise the younger generation, which may help them to become a responsible citizen utilising the resources of mother earth in a conscious way. Navitas Solar has launched JYOTI initiative as a drive of giving back to the society. The slogan of the JYOTI initiative is "Prajwalito **Gyanmayah Pradeepah"** which means lit the lamp of knowledge. We have touched upon various SDGs and aware the students about the same. This kind of lecture satisfies SDGs like 4. Quality Education, 7. Affordable and Clean energy. To let the students know how the solar industry works, Navitas Solar has arranged frequent visits of students. Visit may give the students a good exposure of the industry. This kind of visit satisfies the following SDGs: 4. Quality Education, 7. Affordable and Clean energy. Navitas Solar has signed MOUs with academic universities to bridge the gap between industry and academics. This kind of MOU satisfies the SDG like Partnerships for the goals. We are humbled to announce that till now we have sensitized 1,000+ students through this initiative.

HELPING ACHIEVE SDG GOALS















Community Initiatives Undertaken



Awareness Campaigns

1,000 students

Lectures delivered on "Sustainability- a Path for the Future" in schools and colleges, 1,000+ students are sensitized



MOU with Academics

MOUs signed with Academic colleges to bridge the gap between industry and academics.



Industrial Exposure

Arranged Industrial Visits for students



Tribal Education & Skill Development

Collaborated with Ekal Vidhyalaya, Anil Naik Technical Training Centre(ANTTC) & Round Table Foundation



5,000 trees

Planted 5,000 trees in association with Forest Creators



Infinite Solutions -The Assessor/Auditor

Navitas Solar partnered with Infinite Solutions to carry out the assessment of their GHG emissions. The scope of work included defining the methodology and calculation approach, as well selecting the assumptions for the assessment. Infinite solutions was also tasked with providing offsets to make the event carbon neutral.



ABOUT INFINITE SOLUTIONS

Infinite Solutions is a leading Carbon Trading and Climate Change Consultancy based in India, with offices in the UK, Canada, Kenya and Turkey. They provide end-to-end services in the carbon and sustainability sectors, with know-how in all carbon mechanisms accepted worldwide.

It is an ISO 9001:2008 certified company that engages in ESG/sustainability reporting, forestry and social transformation projects, while also helping organisations capitalise on additional revenue from the environmental attributes associated with various national and international schemes.



Their services under Carbon Management Services include,			
Carbon Credit Project Development (CDM/VCS/GS/GCC, etc)	GHG Accounting (ISO 14064) / Carbon Footprint Mapping	Carbon Offsets / Carbon Neutrality	Sustainability Reporting
CDP Reporting	Life Cycle Analysis (LCA)	Trading of Carbon Credits	Please visit their website for further information infisolutions.org



Scope of Emissions

The boundaries and scope have been defined in line with ISO 14064 guidelines, and SCOPE 1, SCOPE 2 and SCOPE 3 (partially) have been considered separately.

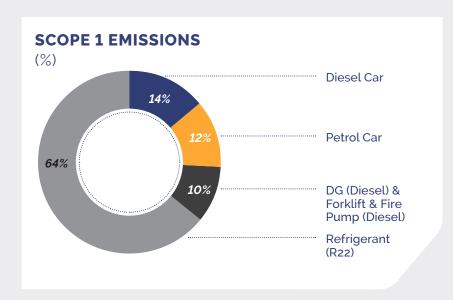
The boundary along with emission sources corresponding to scopes are as follows;

GHG EMISSIONS FROM SCOPE 1

Scope 1 refers to the emissions within the organisational boundary

- Diesel is used in DG set, forklift and fire pump at the company site.
 Emissions from the diesel used by the DG set, forklifts and fire pumps are calculated. The DG set is used in case of emergencies only.
- Company owns a total of 5 cars, including Lodgy and Endeavour which are diesel cars and Tiguan, Brezza and Honda City which are petrol cars. Emissions from these company owned cars are monitored and calculated.
- Emissions of the refrigerant gas (R22) from refrigerator, AC and water cooler are monitored and calculated
- Emissions due to CO₂ type fire extinguishers are also monitored and estimated.

No source of emissions have been excluded



GHG EMISSIONS FROM SCOPE 2

Scope 2 includes purchased utility services such as electricity, and the electricity used in the Company premises for production and office usage is covered in it. The average electricity consumption of the Company is around 27,500 kwh per month.

No source of emissions has been excluded.

GHG EMISSIONS FROM SCOPE 3

Scope 3 refers to other emissions which are indirectly attributed to the company.

Scope 3 is currently not included in the final calculation of carbon neutrality, but it will be incorporated soon.



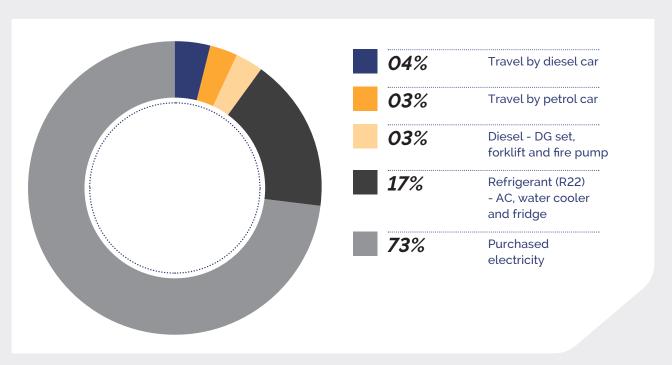
Reported GHG Emissions

HELPING ACHIEVE SDG GOALS

SOURCES	EMISSION ACTIVITY	EMISSIONS tCo₂eq	SCOPE WISE EMISSIONS	% EMISSIONS
TOTAL SCOPE 1 EMISSIONS	Travel by diesel car	15.12	107.62	26.54
	Travel by petrol car	12.68		
	Diesel - DG set, forklift and fire pump	10.82		
	Refrigerant (R22) - AC, water cooler and fridge	68.96		
	CO ₂ fire extinguisher	0.04		
TOTAL SCOPE 2 EMISSIONS	Purchased electricity	297.76	297.76	73.45
TOTAL EMISSIONS		405.38	405.38	100.00

EMISSION SOURCES AND ITS CONTRIBUTION

(IN %)





SCOPE WISE CALCULATIONS

Scope 1 Emissions

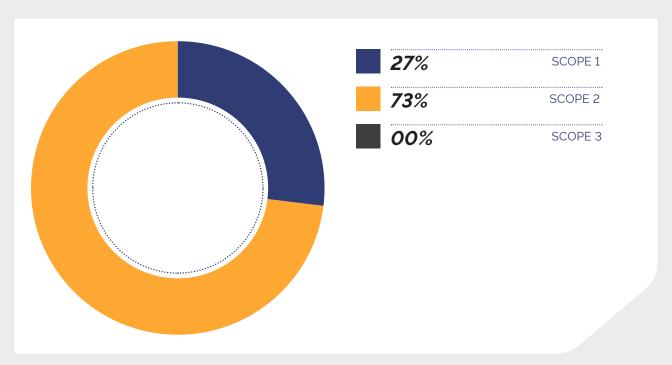
CATEGORY	TOTAL CONSUMPTION PER YEAR (LITRE OR KG)
Diesel used by car	5,750.07
Petrol used by car	5,709.505
Diesel used by DG set, forklift and fire pump	4114.38
Refrigerant (R22)	38.1
Fire extinguisher	36

Scope 2 Emissions

CATEGORY	TOTAL CONSUM- PTION OF UNITS PER YEAR	REMARKS
Electricity consumption	14,65,192	Navitas factory's purchased electricity consumption
Electricity offsets	10,88,279	RESCO Projects in Delhi, considered as offsets
Electricity difference	3,76,913	Net difference

SCOPE WISE EMISSIONS

(IN %)







Summary of GHG Emissions





GHG EMISSIONS FROM SOURCES	tCo ₂ eq
Direct GHG Emissions (Scope 1)	107.62
Indirect GHG Emissions (Scope 2)	297.76
Other indirect Emissions (Scope 3)	-
TOTAL tCo ₂ eq	405.38~406

^{*} The final value has been rounded up as per conservative approach.

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IPGCL Project Details for Offset

Navitas Solar has RESCO projects of 1.4 MW at 9 different sites in Delhi. RESCO projects are a zero-investment model in which the consumer pays only for the electricity generated, while the solar plant is owned by the RESCO developer. RESCO units generated are already compensated in the electricity bill of Navitas Solar.





SVB Vijay Enclave



Sarvodaya Vidhalaya Vijay Enclave

SITE	CAPACITY (KWp)
CVS	140
GBSSS Sangam Vihar	132.995
Rohini Prison	355.1
SBV Vijay Enclave	140.365
SKV Fatehpur Beri	140.7
SCV Harinagar	132.995
SKV Mangolpuri	140.7
SVFU Pithampura	121.94
SKV Ghumanhera	100.5
TOTAL	1.4 MW



SCV Harinagar



GHG Emission Offset Project

A carbon offset is a reduction in emissions of carbon dioxide or greenhouse gases made in order to compensate for/or to offset an emission made elsewhere. Offsets are measured in tonnes of carbon dioxideequivalent (CO₂e). One ton of carbon offset represents the reduction or removal of one ton of carbon dioxide or its equivalent in other greenhouse gases. Another way to reduce emissions and to pursue carbon neutrality is to offset emissions made by one sector by reducing them somewhere else. This can be done through investment in renewable energy, energy efficiency or other clean, low-carbon technologies.

Offsets have been purchased and retired to compensate for the emissions. The project from which Navitas Solar's carbon footprint would be offset is described below:





PROJECT TITLE	PROJECT ID	VINTAGE	STANDARD	PROJECT LINK
BABANPUR Killa and Sahoke Mini Hydroelectric Projects, India	329	CP2	CDM	cdm.unfccc.int/Projects/DB/ TUEVSUED1142616865.86/view

The emissions of Navitas Solar have been offset by the CDM Project, making the Company Carbon Neutral.

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Navitas Solar's Offset Project

CDM Project 0329

BABANPUR, KILLA AND SAHOKE MINI HYDROELECTRIC PROJECTS

Three mini Hydroelectric Projects (MHP) aggregating to 3.75 MW at Babanpur, Killa and Sahoke on the Kotla Branch Canal, District Sangrur, Punjab, India have been set up. Mini Hydroelectric Project at Babanpur (1 MW) was commissioned in July 2004, Killa (1.75 MW) was commissioned in November 2005 and Sahoke (1 MW) was commissioned in October 2006. The plants are operating successfully.

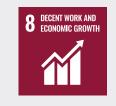
The purpose of the project activity is to generate electricity by utilising the flowing water from the existing canal system as a renewable energy resource to meet the ever increasing demand of energy in the region. The development of the project activity contemplates the production of clean hydroelectric power that will contribute to reducing CO_2 emissions, which would have occurred otherwise, in absence of these projects.

HELPING ACHIEVE SDG GOALS











These three plants are of low head, canal drop based mini hydroelectric projects. The projects are canal based renewable hydroelectric generating plants, which include forebay, intake, power house, draft tube, turbine and tailrace. The component plants do not involve any type of displacement, rehabilitation or relocation.

The plants are generating electricity by converting the potential of the kinetic energy in the canal water. The renewable electricity thus produced is fed into the Punjab State Electricity Board Grid. 1 MW (500 kW X 2) hydroelectric power plant at Babanpur, 1.75 MW (875 kW X 2) hydroelectric power plant at Killa and 1 MW (1,000 kW X 1) hydroelectric power plant at Sahoke of this project activity generate electricity and sell it to the State utility i.e., Punjab State Electricity Board. By undertaking the CDM Project we have successfully reduced dependence on electricity generated from thermal stations, thereby contributing to the reduction of greenhouse gas emission.



References

- ISO 14064-1: 2006, Greenhouse Gases –
 Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals
- CDM CO₂ Baseline Database www.cea.nic.in/tpeandce.html
- envfor.nic.in/sites/default/files/Low%20Carbon%20Lifestyles_0.pdf page31, last accessed on June 5, 2018
- www.ghgprotocol.org/calculation-ves/all-tools
- DEFRA
 www.gov.uk/government/collections/government-conversionfactors-for-companyreporting
- www.ipcc-nggip.iges.or.jp/public/2006gl/index.html
- unfccc.int/2860.php
- www.wbcsd.org/home.aspx
- www.wri.org





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