

# Environment and Social Monitoring Report

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March 2017

## IND: Clean Energy Finance Investment Program (Tranche 1)

Prepared by

Indian Renewable Energy Development Agency for the Asian Development Bank

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## ENVIRONMENTAL& SOCIAL MONITORING REPORT

(Attachment 9 & 10 of ESMS for ADB LoC)

Name of Organization	Indian Renewable Energy Development Agency		
Completed by(name):	Ruchika Drall		
Position in organization:	Asst. Environment Officer	Date:	26 May, 2017
Reportingperiod	From: Apr 2016	To: Mar 2017	

### A. SubprojectNameandSummaryInformation

Name	Location	Capacity	Reporting Period	Stage	Key Developments/ Changes
Azure Clean Energy Private Limited (2089)	Vill. Nandiya Kalan & Hardhani Village, Baori Tehsils, Jodhpur District, Rajasthan	40 MW	Apr 2016 to Mar, 2017	Commissioned on April 2015. The plant has been in smooth operations during the monitoring period.	No major changes only regular O&M is going on.
Chattel Construction Pvt. Ltd.(2188)	Vill. Kathada, Ahmedgadh&Savda, Surendranagar District, Gujarat	25 MW	Apr 2016 to Mar, 2017	Commissioned on 10 <sup>th</sup> Jan, 2013	No major changes only regular O&M is going on.
Hiraco Renewable Energy Pvt. Ltd (2189)	Vill. Bopadar, Taluk Ranavav, Dist. Porbandar, Gujarat	20 MW	Apr 2016 to Mar, 2017	Commissioned on 18 <sup>th</sup> April, 2012	No major changes only regular O&M is going on.

### B. Relevant Environmental Permits or Compliance Certificates

Name	Environmental Category	Status of Environmental Permits or Mitigation Measures if required	Other Standards/ Certificates
Azure Clean Energy Private Limited (2089)	B	<p>Even though project has been put under white category, the conditions of CTE such as water usage limit and ground water recharging are still being met.</p> <p>Closed storage has been constructed at site for storing the broken panels if any.</p> <p>The transformer top up oil is stored in the area with RCC lining so as to avoid any seepage into the ground from accidental spill.</p>	Azure group has got ISO 9001: 2008 and ISO 14001: 2004 on 30 Nov, 2016

Name	Environmental Category	Status of Environmental Permits or Mitigation Measures if required	Other Standards/ Certificates
		Dry cleaning is preferred for modules water conservation. Wet cleaning is done occasionally.	
Chattel Construction Pvt. Ltd.(2188)	B	<p>Project had received CTE and CTO from Pollution Control Board with validity till 2<sup>nd</sup> Jan, 2018.</p> <p>However, since Mar, 2016, no environmental clearances are required for white category projects.</p> <p>Water is arranged through private tankers. In order to conserve water, developer has opted for mopping of panels through wet micro fibers for periodic cleaning of solar PV panels instead of hydrant and sprinklernetwork, which require comparatively more water.</p>	None
Hiraco Renewable Energy Pvt. Ltd (2189)	B	<p>Project had received CTE and CTO from Pollution Control Board.</p> <p>However, since Mar, 2016, no environmental clearances are required for white category projects.</p> <p>For water, there is one borewell in the plant for which approval has been taken with validity till 2018. In order to conserve water, developer has opted for mopping of panels through wet micro fibers for periodic cleaning of solar PV panels instead of hydrant and sprinklernetwork, which require comparatively more water.</p>	None

### C. Occupational and Community Health and Safety

Name	Training Programs or Health & Safety events/ activities	Incidents, details and management thereof
Azure Clean Energy Private Limited (2089)	<p>The company also has its own HSE Management System</p> <p>Emergency Management System training was conducted on 12 Sept, 2016</p>	No incidents were observed during the monitoring period.

Name	Training Programs or Health & Safety events/ activities	Incidents, details and management thereof
	Mock Drill and Firefighting training was conducted on 22 Nov, 2016	
Chattel Construction Pvt. Ltd.(2188)	The Hindustan group has EHS Manual at the corporate level, the same is followed at all the project sites. Every month telecon is organized by the EHS Manager with the site incharge and EHS coordinator, to ensure implementation of EHS practices and get progress updates.	No incidents were observed during the monitoring period.
Hiraco Renewable Energy Pvt. Ltd (2189)	The Hindustan group has EHS Manual at the corporate level, the same is followed at all the project sites. Every month telecon is organized by the EHS Manager with the site incharge and EHS coordinator, to ensure implementation of EHS practices and get progress updates.	No incidents were observed during the monitoring period.

#### D. Environmental Management Capacity

Name	No. of Staff, Qualification & Experience	Trainings or Capacity Assessments
Azure Clean Energy Private Limited (2089)	The SHES (Safety, Health, environment & Social) department is headed by Mr. Manoj shah (DGM) who has 18 yrs of experience with Post graduation in Environmental Science, Industrial Safety and Disaster Management. The site safety incharge report to him on weekly basis.	Induction training is conducted for all the new entrants. These are then followed up by refresher trainings on a semi-annual basis at site as well as corporate office.  HSEMS training workshop was conducted on site in Nov, 2016.
Chattel Construction Pvt. Ltd.(2188)	The EHS department of Hindustan group is headed by Manager who reports to the head of operations department. He has MBA degree in environmental management with 12 years of work experience. At the project site the site incharge and EHS coordinator are responsible for managing and reporting EHS issues on weekly basis.	At least 2 man-hours per person per month of Health & Safety training is given to each person.
Hiraco Renewable Energy Pvt. Ltd (2189)	The EHS department of Hindustan group is headed by Manager who reports to the head of operations department. He has MBA degree in environmental management with 12 years of work experience. At the project site the site incharge and EHS coordinator are responsible for managing and reporting EHS issues on weekly basis.	At least 2 man-hours per person per month of Health & Safety training is given to each person.

## E. Land Procurement

Name	Method of Land Procurement	Status of Land Procurement	Status of Compensation Payment
Azure Clean Energy Private Limited (2089)	Project is developed on 140 acres of Government land  For the transmission line lease agreement signed with private owners.	Developer has got complete possession of the allotted land  Transmission work is also complete.	Not required  Lease amount has been paid.
Chattel Construction Pvt. Ltd.(2188)	Project is developed on 216 acres of private land, procured from 42 owners on willing seller willing buyer basis	Land purchase is complete and developer has got possession	Payment to the land owners were made till Jan, 2012, no pending issues
Hiraco Renewable Energy Pvt. Ltd (2189)	Project is developed on 118 acres of private land, procured on willing seller willing buyer basis	Land purchase is complete and developer has got possession	Payment to the land owners have been made, no pending issues

## F. Involuntary Resettlement

Name	Category	Resettlement Requirements	Status of Resettlement Action Plan
Azure Clean Energy Private Limited (2089)	C	No private land acquisition involved	Not required
Chattel Construction Pvt. Ltd.(2188)	C	The private land procured was devoid of any form of temporary or permanent habitation	Not required
Hiraco Renewable Energy Pvt. Ltd (2189)	C	The private land procured was devoid of any form of temporary or permanent habitation	Not required

## G. Indigenous People Issues

Name	Category	Impact on Indigenous Population	Mitigation Measures Requirements	Status of Indigenous Peoples Plan
Azure Clean Energy Private Limited (2089)	C	No indigenous people are present in the project area	Not required	Not required
Chattel Construction Pvt. Ltd.(2188)	C	No indigenous people are present in the project area	Not required	Not required

Name	Category	Impact on Indigenous Population	Mitigation Measures Requirements	Status of Indigenous Peoples Plan
Hiraco Renewable Energy Pvt. Ltd (2189)	C	No indigenous people are present in the project area	Not required	Not required

## H. Stakeholder Consultation

Name	Information Disclosure and Consultations	Approach for addressing Concerns
Azure Clean Energy Private Limited (2089)	Exhaustive public consultations were conducted during the project preparation stage, ESIA report was disclosed to the community. The proceedings of the consultation were recorded.	The major concerns raised by the community was of unemployment and lack of economic opportunities in the region.  These concerns were addressed by giving employment to locals for security, cleaning, few technical staff and using services of locals in water procurement.
Chattel Construction Pvt. Ltd.(2188)	Stakeholder consultation were organized during the construction stage of the project. Regular interaction with the community is maintained by the administration at the site.	No concerns were raised by the community against the project. Only normal questions were asked.
Hiraco Renewable Energy Pvt. Ltd (2189)	Stakeholder consultation were organized during the construction stage of the project. Regular interaction with the community is maintained by the administration at the site.	No concerns were raised by the community against the project. Only normal questions were asked.

## I. Grievance Redress Mechanism

Name	Date of Establishment & Description	Grievances Reported & Status of Resolution
Azure Clean Energy Private Limited (2089)	The group has a common Grievance Redressal Mechanism, which was disclosed and activated at the time of start of the construction in 2014.  The refresher training for the redressal mechanism was given to all the employees on 25 Oct, 2016	The company has a proper Community Engagement Plan. No grievances were registered during the monitoring period.
Chattel Construction Pvt. Ltd.(2188)	The site incharge and EHS coordinator organize weekly grievance handling meetings at the site for internal and external grievances. The	No major grievances were reported during the monitoring period.

Name	Date of Establishment & Description	Grievances Reported & Status of Resolution
	proceedings of these meeting are reported to the EHS manager at the corporate level.	
Hiraco Renewable Energy Pvt. Ltd (2189)	The site incharge and EHS coordinator organize weekly grievance handling meetings at the site for internal and external grievances. The proceedings of these meeting are reported to the EHS manager at the corporate level.	No major grievances were reported during the monitoring period.

#### J. Other Information and Feedback

Name	
Azure Clean Energy Private Limited (2089)	Azure has constructed 4bore well and community hall for villagers, community bathroom for male and female with drinking water facility. They have also provided 45 solar street lights, 100 stools & 100 desk for primary school at Nadiakalan.
Chattel Construction Pvt. Ltd.(2188)	The developer encourages and facilitates student's visits to the project site for educational purposes and training on solar power technology.
Hiraco Renewable Energy Pvt. Ltd (2189)	The developer encourages and facilitates student's visits to the project site for educational purposes and training on solar power technology.

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## ENVIRONMENTAL AND SOCIAL PERFORMANCE REPORT

(Attachment 11 of ESMS for ADB LoC)

Name of Organization	Indian Renewable Energy Development Agency		
Completed by (name):	Ruchika Drall		
Position in organization:	Asst. Environment Officer	Date:	26 May, 2017
Reporting period	From: Apr 2016	To: Mar 2017	

### A. Portfolio Information for ADB line of credit

<b>Report Covering Period:</b>	
<b>From:</b>	<b>To:</b>
Apr 2016	Mar 2017

Name of Subproject	Tenor of loan (months)	Value of exposure (US\$ mn)	Sub sector	Safeguard category			Any outstanding Environmental and IR and IP issues during reporting period and actions taken to address the issues
				Env	IR	IP	
Azure Clean Energy Pvt. Ltd. (2089)	144 Months	13.20 (ADB Financing)	Solar	B	C	C	No outstanding issues, normal operations and maintenance going on.
Chattel Construction Pvt. Ltd.(2188)	168 Months	22.10 (ADB Financing)	Solar	B	C	C	No outstanding issues, normal operations and maintenance going on.
Hiraco Renewable Energy Pvt. Ltd (2189)	168 Months	17.55 (ADB Financing)	Solar	B	C	C	No outstanding issues, normal operations and maintenance going on.

### B. Environmental and Social Management System (ESMS)

Policies & Processes	Yes/No	
Have there been any updates to the ESMS or policy and procedures adopted by your organization during the reporting period?	Yes	IREDA has adopted an Environmental and Social Management System (ESMS) applicable to all the projects funded by IREDA. It was approved by the Chairman & Managing Director (CMD) on 17 <sup>th</sup> Mar, 2017. The document is publically accessible through IREDA's website, in the ESMS section.
Has senior management signed off on the updated policy/procedure?	Yes	IREDA's ESMS was approved by the CMD on 17 <sup>th</sup> Mar, 2017.
Has your organization appointed staff tasked to implement the ESMS?	Yes	IREDA has Environmental & Social Safeguards Unit (ESSU) to implement the ESMS. The ESSU is



		headed by the Compliance Officer who is at the DGM level, he is supported by Asst. Environment Officer who has PG specialization in Energy and Environment with 8 yrs of work experience.
Please give details of any transactions rejected due to environmental and/or Social concerns.	No	None during the monitoring period
Please state any difficulties and/or Constraints related to the implementation of the ESMS.	Yes	Since, the solar and wind projects have been categorized in white category of projects; it has become difficult to get environmental and social compliance related information.
Please describe how you ensure that your subproject companies and their subprojects are operated in compliance with the national laws and regulations and applicable ADB's requirements.		Compliance to all the national laws and regulations is ensured during the project appraisal.
Please give details of any material social and environmental issues associated with clients during the reporting period in particular.	No	None during the monitoring period
In case the existing ESMS is not fully functional, what are the action plan being implemented by your organization?		The existing ESMS is fully functional.
<b>Capacity</b>	<b>Yes/No</b>	
Please provide the name and contact information of the Environmental Officer Or Coordinator who has the overall responsibility for the implementation of ESMS.		Ruchika Drall Asst. Environment Officer <a href="mailto:ruchikadrall@ireda.in">ruchikadrall@ireda.in</a> Attended a 3 day training on ADB safeguards at ASCI, Hyderabad.
Please provide current staffing of other Core ESMS persons in the organization involved with ESMS implementation.		The ESSU is headed by: Khekiho Yeptho Deputy General Manager
What was the budget allocated to the ESMS and its implementation during the year?		No separate budget for ESMS
<b>Monitoring</b>	<b>Yes/No</b>	
Do you receive environmental and Social monitoring reports from subproject companies that you finance?	Yes	The environmental and social monitoring report is obtained from developers as per the format given in attachment 9 and 10.
Do you check for ongoing compliance of your subproject companies with National regulation and any other requirements?		-do-
Please describe how you monitor the subproject company and their subproject's social and environmental performance.		-do-
Please provide details of any accidents/ litigation/complaints/regulatory notices and	No	None during the monitoring period.

fines: Any incidents of non-compliance with the applicable Environmental and Social Requirements Covenants/ conditionalities imposed by the Fund Manager to the subproject company as a result of any non-compliance		
<b>Reporting</b>	<i>Yes/No</i>	
Is there an internal process to report on social and environmental issues to Senior management?	Yes	Any information/update/progress from the ESSU goes till the CMD.
Do you prepare any social and Environmental reports: For other multilateral agencies Other stakeholders E&S reporting in the Report Sustainability reports	Yes	Project specific reporting is done as per the requirement of other international lenders.

### C. Subprojects Using ADB Funds

Please provide information about all new subprojects using ADB funds approved during this reporting period.

Name of Subproject Company:	Chattel Construction Pvt. Ltd.(2188)
Subproject location:	Vill. Kathada, Ahmedgadh&Savda, Surendranagar District, Gujarat
Sub sector:	Solar
Value of exposure (US\$ mn):	22.10 (ADB Financing)
Safeguard category:	Environment: B Involuntary Resettlement: C Indigenous Peoples: C
Were any environmental and social due diligence undertaken and by your organization?	The E&S due diligence was conducted by ADB consultants through document review, meeting with the subproject developer and site visit between 27-28 Aug, 2016.
Any environmental assessment report (including environmental management plan), involuntary resettlement plan, or indigenous peoples plan, or audit reports reviewed by your organization?	Following Documents were reviewed: - Social Safeguards Audit Report - Social & Environmental Management Plan
What were the main environmental, involuntary resettlement and indigenous peoples issues associated with this subproject that were identified through due diligence conducted by your organization, and how were the issues dealt with (i.e., outcome of due diligence)?	No issues identified during the due diligence.
Did you discuss with the subproject the applicable environmental and social safeguard requirements and their	Yes, discussed with the project developer during the site visit

implementation?	
For category A subprojects, were safeguards related documents such as EIA, RP and IPP, or audit reports made publicly available, in addition to posting on ADB's website?	Not applicable
Were any conditions or covenants related to environmental and social issues made along with the investment?	As per the loan agreement, the borrowers are required to provide all the environmental and social related information and documents to IREDA as and when asked for.
Does the subproject comply with applicable government requirements?	Yes
Does the subproject comply with applicable ADB safeguard requirements?	Yes

Name of Subproject Company:	Hiraco Renewable Energy Pvt. Ltd (2189)
Subproject location:	Vill. Bopadar, Taluk Ranavav, Dist. Porbandar, Gujarat
Sub sector:	Solar
Value of exposure (US\$ mn):	17.55 (ADB Financing)
Safeguard category:	Environment: B Involuntary Resettlement: C Indigenous Peoples: C
Were any environmental and social due diligence undertaken and by your organization?	The E&S due diligence was conducted by ADB consultants through document review, meeting with the subproject developer and site visit between 10-11 September, 2016.
Any environmental assessment report (including environmental management plan), involuntary resettlement plan, or indigenous peoples plan, or audit reports reviewed by your organization?	Social Safeguards Audit Report was reviewed.
What were the main environmental, involuntary resettlement and indigenous peoples issues associated with this subproject that were identified through due diligence conducted by your organization, and how were the issues dealt with (i.e., outcome of due diligence)?	No issues identified during the due diligence.
Did you discuss with the subproject the applicable environmental and social safeguard requirements and their implementation?	Yes, discussed with the project developer during the site visit
For category A subprojects, were safeguards related documents such as EIA, RP and IPP, or audit reports made publicly available, in addition to posting on ADB's website?	Not applicable
Were any conditions or covenants related to environmental and social issues made along with the investment?	As per the loan agreement, the borrowers are required to provide all the environmental and social related information and documents to IREDA as and when asked for.
Does the subproject comply with applicable government	Yes

requirements?	
Does the subproject comply with applicable ADB safeguard requirements?	Yes

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