

Environmental and Social Monitoring Report

Annual Report
April 2020 - March 2021
August 2021

India: Avaada Solar Phase 2 Project

Prepared by AVAADA ENERGY PRIVATE LIMITED for Asian Development Bank.

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**ANNUAL ENVIRONMENTAL & SOCIAL MONITORING REPORT
(2020-2021)**

As per Schedule 10 – Shareholders Agreement

AVAADA ENERGY PRIVATE LIMITED



Annual Environmental & Social Monitoring Report
(2020-2021)

As per Schedule 10 – Shareholders Agreement

Name of Organization	Avaada Energy Private Limited		
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Position in organization:	Sr. General Manager EHS&S	Date:	31-08-2021

Report Covering Period:	
From:	To:
01 st April 2020	31 st March 2021

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List of Abbreviations

AAQ - Ambient Air Quality
ADB - Asian Development Bank
AESMR - Annual Environmental & Social Monitoring Report
ANL - Ambient Noise Level
BSS/CD - Business Support Services/Capacity Development
CAPA - Corrective and Preventive Action
CER - Carbon Emission Reduction
CGWB - Central Ground Water Board
CPCB - Central Pollution Control Board
CPR - Cardiopulmonary Resuscitation
CSR - Corporate Social Responsibility
DC - Direct Current
DCP - Dry Chemical Powder
DEG - Deutsche Investitions- und Entwicklungsgesellschaft
E&S - Environmental & Social
EHS - Environment Health & Safety
EHS&S - Environment Health Safety & Sustainability
EIA - Environmental Impact Assessment
EPC - Engineering Procurement Construction
ESDD - Environmental Safeguards Due Diligence
ESIA - Environmental & Social Impact Assessment
ESMP - Environmental & Social Management Plan
ESMS - Environmental & Social Management System
FFE - Fire Fighting Extinguisher
FY - Financial Year
GHG - Greenhouse Gas
GW - Ground Water
HIRA - Hazard Identification & Risk Assessment
HIV - Human Immuno Virus
HR - Human Resource

IFC - International Finance Corporation
INR - Indian Rupee
IP - Indigenous People
IPP - Indigenous People Plan
IR - Involuntary Resettlement
ISO - International Organisation for Standardisation
KGWA - Karnataka Ground Water Authority
KL - Kilo litre
LOTO - Lock out Tag out
LRP - Livelihood Restoration Plan
MOEF & CC - Ministry of Environment, Forest & Climate Change
MW - Mega Watt
N/A - Not Applicable
NDC - Nationally Determined Contribution
NGO – Non-Governmental Organisation
NOC - No Objection Certificate
O&M - Operation & Maintenance
OHS - Occupational Health & Safety
OSEP - Onsite Emergency Plan
PPE - Personal Protective Equipment
PTW - Permit to Work
PV - Photo voltaic
SCADA - Supervisory control and data acquisition
SHA - Shareholders Agreement
SOP - Standard Operating Procedure
SPCB - State Pollution Control Board
T CO2 - Tons of CO2
TBT - Tool Box Talk

1.0 INTRODUCTION

As per Shareholders Agreement signed between ADB, DEG, FMO, PROPARCO and AVAADA, it is required to prepare a comprehensive Annual Environment and Social Monitoring Report (AESMR) on the Environmental and Social (E&S) performance of Avaada's facilities and operations. This report has been prepared as per the ADB's approved and preferred format for E&S performance reporting which is also supplemented with relevant Annexures as appropriate to ensure all relevant information on project performance is reported.

2.0 BACKGROUND

Avaada Energy Private Limited (AVAADA) has set up requisite monitoring indicators as a part of Environment & Social Safe guards for the **Year 2020-2021** to track the Environmental and Social performance of Solar Power Projects in compliance with ADB/IFC requirements aligned with National Statutory requirements to assess implementation of agreed Environmental and Social Management System (ESMS).

2.1 Avaada Corporate Overview

Avaada, our name springs from this very promise. It is a promise to create a sustainable future by working for the benefit of the environment and all our communities. It is a promise that is energised by the sun and the wind.

At AVAADA, we believe in a world where there is abundance of energy generated from renewable sources. This is our dream & we are constantly striving to make this dream a reality.

Avaada is a coming together of ideas, technology and people to make our planet a cleaner & greener place.

We, at AVAADA, are working towards fulfilling the renewable energy requirements not just for India but the world. Our experience and expertise to deliver mega solar powered solutions both in terms of plant size and total installed capacity is our major advantage.

AVAADA is committed to deliver clean and sustainable energy for all. Over the years, it has cultivated the expertise in building and operating some of the largest solar and wind projects, across many states, in India. AVAADA is now on the way to innovate and create new paradigms and Clean-tech.

AVAADA has aggregated the portfolio of more than~2.0 GW capacities and the track-record vouches for delivering solar and wind power solutions in terms of technology, capacity, quality, execution speed and total cost of ownership. AVAADA's team is proficient in Engineering, Procurement and Construction (EPC) capabilities. Building complex solar and wind projects across diverse geographies is the speciality of AVAADA. The projects have been certified by international organizations. Creating opportunities for a better quality of life in local communities through rural electrification, skill development, jobs opportunities, healthcare and education are as much a priority for us as our business.

AVAADA has developed some of the world's largest and highly efficient grid-connected wind and solar power plants in India. With 2.0 GW capacities, AVAADA hold one of the largest solar energy portfolios in India. Our presence pan India as on 31st March 2021 is given in **Figure 1: Avaada's Sustainable Footprints Pan India**

AVAADA is a subsidiary of AVAADA Ventures Private Limited (AVPL) with investment from development financial institutions viz. Asian Development Bank (ADB), DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH, FMO - Nederlandse Financierings Maatschappij voor Ontwikkelingslanden N.V. and Proparco as well.

Avaada has so far commissioned **1012 MW (DC)** solar capacity and over **1177.5 MW (DC)** capacity is under construction /development and about **1206 MW (DC)** capacity in pipeline. Through our commissioned projects we have mitigated around **1.3 million tons of CO2 eq** during the FY 2020-2021 and around **3 million tons CO2 eq till date**.

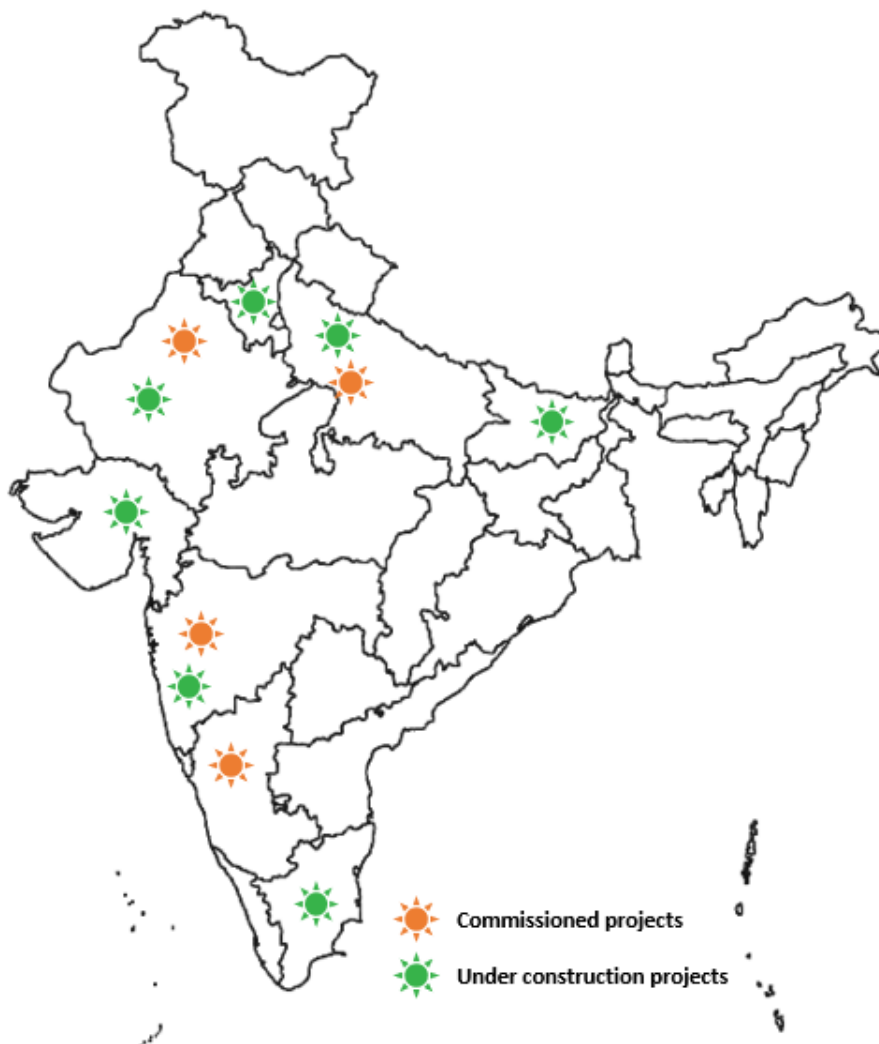


Figure 1: Avaada's Sustainable Footprints Pan India [Go Back](#)

2.2 Avaada Portfolio of Projects

Avaada plans to develop 11 GW of renewable energy power plants by 2025. The portfolio of projects under operation and maintenance, under construction and pipeline is given in **Table 1** below:

Table 1:Project Portfolio
(01st April 2020 - 31st March 2021)

S.No.	Project Name	Project Code & Capacity	Project Location	Commissioning Period
A Projects Under Operation & Maintenance				
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	Mar-18
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 Mwac)	Village: Varkute Malavari Taluk: Mann	Apr-18
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 Mwac)	District: Satara State: Maharashtra	Nov-20
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	Mar-18
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	Mar-18
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	Mar-18
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	Mar-18
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	Sep-18
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	Oct-18
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Feb-19
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada	Nov-19

Table 1:Project Portfolio
(01st April 2020 - 31st March 2021)

S.No.	Project Name	Project Code & Capacity	Project Location	Commissioning Period
			District: Tumkur State: Karnataka	
B	Projects Under Construction			
1.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	-
2.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	-
3.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	-
4.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	-
5.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	-
C	Projects Under Pipeline			
1.	AVAADA Sunrays Energy Pvt Ltd	ARJHNPL, 448 MWdc (320 MWac)	Village: Solanki ki Dhani Taluk: Kolayat District: Bikaner State: Rajasthan	-
2.	Avaada Sustainable RJ Project Private Limited	ARJHNPL, 420 MWdc (300 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	-
3.	Avaada RJHN Private Limited, Bikaner, Rajasthan	ARJHNPL, 336 MWdc (240 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	-

Table 1: Project Portfolio
(01st April 2020 - 31st March 2021)

S.No.	Project Name	Project Code & Capacity	Project Location	Commissioning Period
4.	Avaada BankaBihar Energy Pvt Ltd (FSPV)	ABBEPL, 2 MWdc (1.6 Mwac)	Village: Naka No.1 Sundarpur District: Darbhanga State: Bihar	-

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3.0 MANAGEMENT OF E&S PERFORMANCE REQUIREMENTS

The Environmental and Social Management System (ESMS) has been developed by Avaada Energy Private Limited (AVAADA) and approved by the Board as on **27th March, 2019** for the purpose of defining standards, protocols and procedures, institutional and implementation arrangements at the corporate and project level for managing environmental and social risks, performance requirements and opportunities associated with AVAADA's operations in the renewable energy sector; currently limited to solar energy projects.

The ESMS is benchmarked against internationally accepted standards like the International Financial Corporation (IFC) Performance Standards (PS), 2012 and the Asian Development Bank (ADB) Safeguard Policy Statement (SPS), 2009. AVAADA is committed to simultaneously fulfil the business objectives by remaining compliant to regulatory requirements while gaining trust and respect of local stakeholders by remaining sensitive towards the culture and society.

Environmental and Social Management Systems (ESMS) covers the Environmental, Social, Health, Safety & Sustainability (EHS&S) requirements of solar projects initiated or implemented by Avaada during the year 2020-2021 with the commitment to manage E&S risks from project activities as well as carrying out the business in a sustainable manner.

As per the Environmental and Social Action Plan under Shareholder Agreement, two additional E&S experts' literate in IFC Performance Standards & ADB SPS, have been hired to handle all EHS and social issues at operational sites. The updated organisational structure and accountability for Environmental and Social Management as well as existing project management systems in the reporting calendar year 2020-2021 is given in **Figure 2: EHS&S Organisational Structure**. The site level activities as per EHS procedures are duly maintained (evidences enclosed as per the suitability & requirement). Environmental/social risks, impacts, mitigations measures are duly addressed in ESIA study reports of respective projects. Internal audits are conducted at regular interval by competent EHS personnel, which are also evidenced. Training details including stakeholder engagement /consultation are suitably addressed in the report.

The implementation and monitoring of ESMS is being governed by an E&S Advisory committee at the corporate level which include members from respective investors as per SHA agreement and Avaada. The summary of E&S Advisory Committee Meetings held during the reporting period i.e. 01st April 2020 – 31st March 2021 is given in **Table 2** The agenda and minutes of E&S Advisory Committee quarterly meeting is attached as **Annexure 1**.

**Table 2: E&S Advisory Committee Meeting
(01st April 2020 - 31st March 2021)**

No.	Dates	Participants	Agenda shared on Date	MoM shared on Date
1	24 th April 2020	ADB: Aida Khalil Gomez, Abhishek Singh DEG: Meike Goetze FMO: Albert van Leeuwen, Marta Juhasz PROPARCO: MICHELET Chloée, DUMAS Agathe AVAADA: Harishankar Soni, Murtuza Kakuji, Sumit Sharma, Raji George, Sayed Tauheed Ahmad & Jigyasa Singh	15 th April 2020	28 th April 2020
2	19 th August 2020	DEG: Meike Goetze FMO: Albert van Leeuwen, Marta Juhasz PROPARCO: MICHELET Chloée AVAADA: Murtuza Kakuji, Harishankar Soni, Sayed Tauheed Ahmad & Jigyasa Singh	05 th August 2020	21 st August 2020
3	14 th December 2020	ADB: Aida Khalil Gomez, Richard Sherrington and Grachelle Talicuran DEG: Meike Goetze FMO: Albert van Leeuwen, Marta Juhasz AVAADA: Harishankar Soni, Sayed Tauheed Ahmad & Jigyasa Singh	08 th December 2020	16 th December 2020

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4.0 SUMMARY OF KEY E&S ASPECTS DURING THE REPORTING PERIOD

This section aims to identify the key E&S progress/activities/incidents during the reporting period i.e. 01st April 2020 to 31st March 2021. The information for all existing projects in construction or operation, and pipeline phase is given in **Table 3**.

It is reflected in the **Table 3** that all the Solar Power Projects have been assigned **Category B** for Environmental aspects whereas for Social aspect, some of the projects have been categorised as **Category B** and some as **Category C**. Although, few projects were categorised as Category B for social aspects, none of the projects involved any involuntary resettlement including physical/economic displacement of any stakeholder. Hence, no resettlement and restoration (R&R) or livelihood restoration plan (LRP) has been triggered. However, all the projects are being considered under an **overall category B** and accordingly, site specific environmental and social management plans (ESMPs) are being prepared as an outcome of detailed ESIA studies and implemented at respective sites. The E&S screening checklists have been attached as **Annexure 3**

The rationale for categorisation of projects is as follows:

- i. Anticipated Environmental and Social impacts of the project during the construction phase.
- ii. There is no involuntary resettlement and physical/economic displacement involved. Thus, most of the impacts are limited to the project sites and their immediate vicinity which have been managed through site specific Environmental & Social Management Plans (ESMPs). The project wise ESMP implementation status is attached as **Annexure 4**.

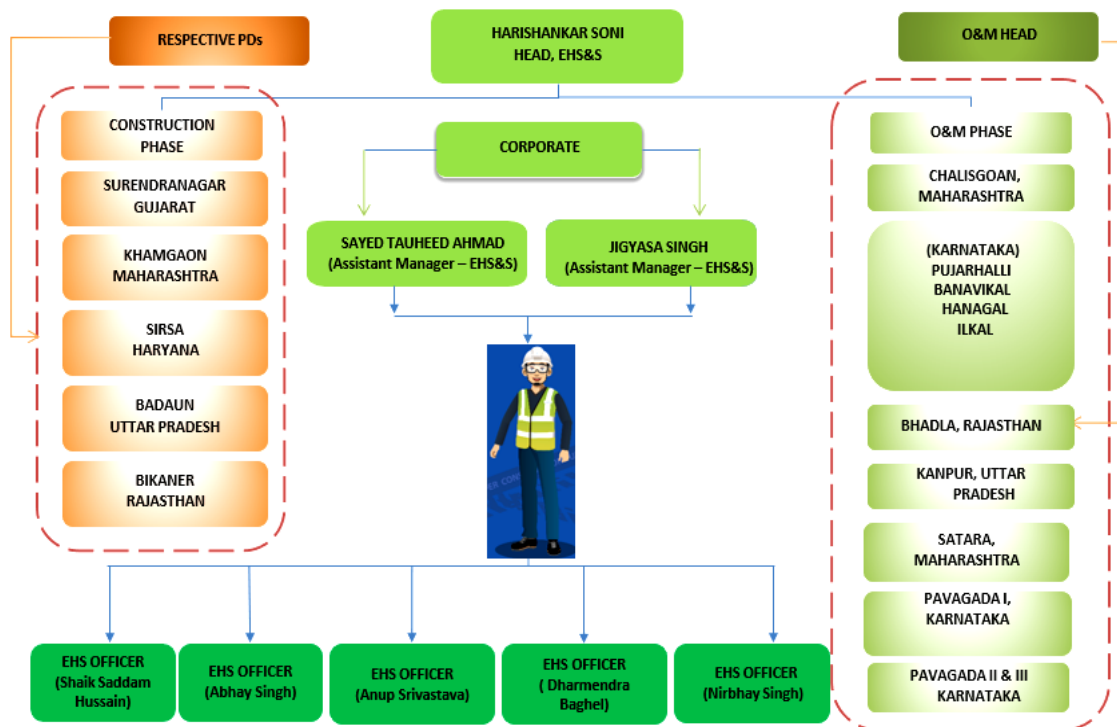
The Effectiveness of ESMP implementation is assessed on the basis of:

- a. E&S Audits
 - b. Site Visits
 - c. ESMP status updates received from the sites on as and when required basis
- iii. Since development of solar power projects is occurring in large numbers in the last decade and therefore several such projects are located across India. A solar power project can therefore not be considered an unprecedented activity.
- iv. Solar Project is a non-polluting source of energy and thus is not likely to lead to any adverse impacts on the baseline environment during the operation phase.

4.1 Brief details of new projects (in India)

The list and brief details of pipeline projects is given in **Table 4** below. The filled-in E&S Screening Checklist for the projects with identified project locations is attached as **Annexure 3**.

A consultant has been hired under Business Support Services/Capacity Development (BSS/CD) program as per SHA agreement during FY 2019-2020, the scope of work also included Environmental and Social Due Diligence (ESDD) of two projects. The Environmental and Social Due Diligence audit scheduled in FY 2019-2020, got postponed due to sudden outbreak of COVID 19 and imposition of Nationwide Lockdown. The ESDD for one of the projects was conducted in October 2020, further details mentioned section 5.0 of this report. The scope of work for consultant hired under BSS/CD program is attached as **Annexure 5**.



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Figure 2: EHS&S Organisational Structure

Table 3: Project Summary

S.No	Sub-projects			Project Phase ^a /Activities	Project Category (A/B/C)			ESMP Completed (Yes, No or N/A)	Environment Permit Granted (Yes/No/NA)	Effectiveness of ESMP (Good/Poor/Needs Improvement)	Issues ^b
	Project Name	Project Code & Capacity	Project Location		Environment	IR	IP				
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	Operation & Maintenance	B	B	C	Yes Under implementation	NOT APPLICABLE The Solar Photovoltaic Power Projects are not covered under the ambit of EIA Notification, 2006. Hence, it does not require preparation of Environmental Impact Assessment Report and pursuing Environmental Clearance from MoEF&CC. Solar PV project is categorized as white category as per guidelines on Categorization of Industries issued by MOEF & CC on 29th February, 2016 and subsequent Circular/Notification vide no. B-29012/ESS (CPA)/2015-16 issued by CPCB on 7th March, 2016 which states that "There shall be no necessity of obtaining the Consent to Establish/Operate" for White category of industries. Intimation to concerned SPCB / PCC shall suffice. The intimation letters submitted to the respective SPCBs are attached as Annexure	Good	Till date we have not encountered with any of the issues related to non-compliance of any National/local Statutory requirements. Since, the Solar Photovoltaic Power Projects are not covered under the ambit of EIA Notification, 2006. Hence, it does not require preparation of Environmental Impact Assessment Report and pursuing Environmental Clearance from MoEF&CC. Solar PV project is categorized as white category as per guidelines on Categorization of Industries issued by MOEF & CC on 29th February, 2016 and subsequent Circular/Notification vide no. B-29012/ESS (CPA)/2015-16 issued by CPCB on 7th March, 2016 which states that "There shall be no necessity of obtaining the Consent to Establish/Operate" for White category of industries. Intimation to
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	Operation & Maintenance	B	B	C	Yes Under implementation		Good	
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)									
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	Operation & Maintenance	B	C	C	Yes Under implementation		Good	
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	Operation & Maintenance	B	C	C	Yes Under implementation		Good	
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	Operation & Maintenance	B	C	C	Yes Under implementation		Good	
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	Operation & Maintenance	B	C	C	Yes Under implementation		Good	
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	Operation & Maintenance	B	C	C	Yes Under implementation		Good	
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	Operation & Maintenance	B	C	C	Yes Under implementation	Good		

Table 3: Project Summary

S.No	Sub-projects			Project Phase ^a /Activities	Project Category (A/B/C)			ESMP Completed (Yes, No or N/A)	Environment Permit Granted (Yes/No/NA)	Effectiveness of ESMP (Good/Poor/Needs Improvement)	Issues ^b
	Project Name	Project Code & Capacity	Project Location		Environment	IR	IP				
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Operation & Maintenance	B	B	C	Yes Under implementation	2	Good	concerned SPCB / PCC shall suffice. The intimation letters submitted to the respective SPCBs are attached as Annexure 2 However, we always keep ourselves updated on any changes in National/Local Statutory Norms which can be addressed accordingly for compliance requirements triggered, if any
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Operation & Maintenance	B	B	C	Yes Under implementation		Good	
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	Under Construction	B	C	C	Yes Under implementation		Good	
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	Under Construction	B	C	C	Yes Under implementation		Good	
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	Under Construction	B	C	C	Yes Under implementation		Good	
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	Under Construction	B	C	C	Yes Under implementation		Good	
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Under Construction	B	C	C	Yes Under implementation		Good	
16.	AVAADA Sunrays Energy Pvt Ltd	ARJHNPL, 448 MWdc (320 MWac)	Village: Solanki ki Dhani Taluk: Kolayat District: Bikaner State: Rajasthan	Under Pipeline	B	C	C	Not Applicable at this stage		-	

Table 3: Project Summary

S.No	Sub-projects			Project Phase ^a /Activities	Project Category (A/B/C)			ESMP Completed (Yes, No or N/A)	Environment Permit Granted (Yes/No/NA)	Effectiveness of ESMP (Good/Poor/Needs Improvement)	Issues ^b
	Project Name	Project Code & Capacity	Project Location		Environment	IR	IP				
17.	Avaada Sustainable RJ Project Private Limited	ARJHNPL, 420 MWdc (300 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Under Pipeline	B	C	C	Not Applicable at this stage	-	-	
18.	Avaada RJHN Private Limited, Bikaner, Rajasthan	ARJHNPL, 336 MWdc (240 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Under Pipeline	B	C	C	Not Applicable at this stage	-	-	-
19.	Avaada BankaBihar Energy Pvt Ltd (FSPV)	ABBEPL, 2 MWdc (1.6 Mwac)	Village: Naka No.1 Sundarpur District: Darbhanga State: Bihar	Under Pipeline	B	C	C	Not Applicable at this stage	-	-	

Note (a) Sub-project will be one of the following: (a) under preparation or appraisal; (b) appraised; or (c) implementation

Note (b) Issues: accidents, litigation, complaints, or fines to be listed.

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Table 4: List of New Projects and/or Projects under Pipeline

S.No	Sub-projects			Project Phase ^a /Activities	Tentative Land Required (in acre)	Status of E&S Screening
	Project Name	Project Code & Capacity	Project Location			
1.	AVAADA Sunrays Energy Pvt Ltd	ARJHNPL, 448 MWdc (320 MWac)	Village: Solanki ki Dhani Taluk: Kolayat District: Bikaner State: Rajasthan	Under Pipeline	1600*	E&S Screening Checklist attached as Annexure 3
2.	Avaada Sustainable RJ Project Private Limited	ARJHNPL, 420 MWdc (300 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Under Pipeline	1200*	E&S Screening Checklist attached as Annexure 3
3.	Avaada RJHN Private Limited, Bikaner, Rajasthan	ARJHNPL, 336 MWdc (240 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Under Pipeline	1060*	E&S Screening Checklist attached as Annexure 3
4.	Avaada BankaBihar Energy Pvt Ltd (FSPV)	ABBEPL, 2 MWdc (1.6 Mwac)	Village: Naka No.1 Sundarpur District: Darbhanga State: Bihar	Under Pipeline	-	To be conducted
Note *	<i>Total land (in acres) may change at the time of 100% land purchase</i>					

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4.2 Brief Details of Projects under Construction

The list and brief details of projects under construction is given in **Table 5**. The summary extracted from respective ESIA's is attached as **Annexure 6**

Table 5: List of Projects under Construction

S.No	Sub-projects			ESIA Status
	Project Name	Project Code & Capacity	Project Location	
1.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	ESIA Completed
2.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	ESIA Completed
3.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	ESIA Completed
4.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	ESIA Completed
5.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	ESIA Completed

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5.0 ENVIRONMENTAL & SOCIAL (E&S) AUDITS & ENVIRONMENTAL & SOCIAL DUE DILIGENCE (ESDD)

5.1 Status of E&S Audits of Projects under construction

The list and brief details on progress of projects already being implemented/under construction is given in **Table 6**. The internal E&S audits for all the projects under implementation/construction is conducted annually for commissioned projects and after one month of start of construction activities for project under construction by competent EHS personnel of Avaada. Whereas the third party is appointed to conduct external E&S audit after one month of start of construction activities for project under construction. The internal/external E&S audit reports alongwith the compliance status of audit findings for construction sites are attached as **Annexure 7**

5.2 Status of ESDD under BSS/CD Program

Under the BSS/CD program, the consultant (M/s Arcadis) was required to conduct ESDD of two new projects. Accordingly, considering the COVID situation in the country and status of new projects. The ESDD of 300 MW Solar PV Project in Surendranagar, Gujarat was conducted in October 2020. Based on compliance and gap assessment with respect to ESMS. Arcadis proposed an Environmental and Social Action Plan (ESAP) that was used by Avaada as a tool to ensure that the key gaps/risks are timely dealt with in an appropriate manner. The ESAP status has been Annexed in **Annexure 7**.

5.3 Status of E&S Audits of Projects Commissioned

The list and brief detail on status of E&S Audits of projects under operation and maintenance is given in **Table 7**. The internal E&S audits for all the commissioned projects is conducted annually by competent EHS personnel of Avaada. The internal E&S audit reports alongwith the CAP status are attached as **Annexure 7**.

Table 6: Status of E&S Audits of Project under Construction Phase							
S.No	Sub-projects			Project Phase ^a /Activities	E&S Audit (Internal/Audit)	Date of Audit	Audit Findings* Opportunity for Improvement
	Project Name	Project Code & Capacity	Project Location				
1	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	Under Construction	Internal* & External	05-06 Jan 2021 & 18-01-2021	Audit reports attached as Annexure 7
2	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	Under Construction	Internal* & External	15-16 Jan 2021 & 28-01-2021	Audit reports attached as Annexure 7
3	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	Under Construction	External	05-12-2020	Audit report attached as Annexure 7
4	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	Under Construction	External	13-14 Oct 2020	Audit report attached as Annexure 7
5	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Under Construction	Internal*	17-19 Feb 2021	Audit report attached as Annexure 7

Note (*) External Audit findings will supersede the Internal Audit findings

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Table 7: Status of E&S Audits of Projects under O&M							
S.No	Sub-projects			Project Phase ^a /Activities	E&S Audit (Internal/Audit)	Date of Audit	Audit Findings (Opportunity for Improvement)
	Project Name	Project Code & Capacity	Project Location				
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	Operation & Maintenance	Internal	11-02-2021	Audit report alongwith the CAP status is attached as Annexure 7
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	Operation & Maintenance	Internal	18-02-2021	Audit report alongwith the CAP status is attached as Annexure 7
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)					
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakuluru District: Chitradurga State: Karnataka	Operation & Maintenance	Internal	14-01-2021	Audit report alongwith the CAP status is attached as Annexure 7
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	Operation & Maintenance	Internal	17-01-2021	Audit report alongwith the CAP status is attached as Annexure 7
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	Operation & Maintenance	Internal	16-01-2021	Audit report alongwith the CAP status is attached as Annexure 7
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	Operation & Maintenance	Internal	15-01-2021	Audit report alongwith the CAP status is attached as Annexure 7
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	Operation & Maintenance	Internal	15-03-2021	Audit report alongwith the CAP status is attached as Annexure 7
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap	Operation & Maintenance	Internal	20-02-2021	Audit report alongwith the CAP status is attached as Annexure 7

Table 7: Status of E&S Audits of Projects under O&M							
S.No	Sub-projects			Project Phase ^a /Activities	E&S Audit (Internal/Audit)	Date of Audit	Audit Findings (Opportunity for Improvement)
	Project Name	Project Code & Capacity	Project Location				
			District: Phalodi State: Rajasthan				
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Operation & Maintenance	Internal	13-01-2021	Audit report alongwith the CAP status is attached as Annexure 7
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Operation & Maintenance	Internal	12-01-2021	Audit report alongwith the CAP status is attached as Annexure 7

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6.0 CHANGES TO MANAGEMENT PROCEDURES INSTIGATED BECAUSE OF PROJECT CHANGES OR COMPLETION.

There may be some minor changes in the Environmental & Social Management System as an outcome of BSS CD program. Since, under BSS/CD program as per SHA agreement, M/s Arcadis has been jointly appointed by DEG-FMO & Avaada for reviewing and updating ESMS wherever required. The scope of work for BSS/CD program, finalised by DEG-FMO is attached as **Annexure 5**. Apart from above, we have not changed any management procedures in the reporting period.

6.1 COVID 19 Infection Prevention & Control Strategies

Sudden outbreak of COVID 19 pandemic brought the entire world to almost a standstill position. Our pace of project activities was also affected. However, to ensure that the transmission of Covid-19 is reduced and the business operations can be accomplished during pandemic period in a healthy & sustainable manner, an integrated COVID 19 IPC protocol was developed to provide the rationale and scientific basis for the use of standard operation procedures (SOP). This protocol was prepared with the assistance of EPOS Health Management (Germany), an advisory consultant to DEG.

The protocols are based on the following guiding principles:

- Protection of personnel
- Business protection & continuity
- Guidance from Central Government, State Government & WHO
- Implementing Best Practices for safety and prevention
- Create Standard Operating Procedures (SOPs) to ensure preventive measures are executed in a systematic way
- Promote Covid-19 preventive measures, like physical distancing, handwashing, sneezing and coughing etiquette, etc., in the workplace
- Promote the same measures in travel to and from workplace and during interaction with suppliers and those in distribution chain
- Provide an action plan in the event of persons feeling unwell with Covid-19-like symptoms in workplace

The COVID 19 infection prevention & control protocol is attached as **Annexure 24** alongwith the glimpse of its implementation at all sites and offices.

6.2 Significant Events & Issues

There have been no significant issues in any of the existing facilities during 01st April 2020 to 31st March 2021. However, events related to occupational health and safety have been captured and summarised under section 'Health and Safety Monitoring Data'.

6.3 Matters of Breach or Non-compliance of Environmental standard or specification

Till date we have not encountered with any of the issues related to breach of non-compliance of any National/local Statutory requirements or specification. All documents related to labour welfare compliances like minimum wages, PF etc are properly maintained at respective sites.

Moreover, since the Solar Photovoltaic Power Projects are not covered under the ambit of EIA Notification, 2006. Hence, it does not require preparation of Environmental Impact Assessment

Report and pursuing Environmental Clearance from MoEF&CC. Whereas, Avaada as a conscious corporate, goes beyond compliances to conduct ESIA study for all its projects.

Solar PV project is categorized as white category as per guidelines on Categorization of Industries issued by MOEF & CC on 29th February, 2016 and subsequent Circular/Notification vide no. B-29012/ESS (CPA)/2015-16 issued by CPCB on 7th March, 2016 which states that “There shall be no necessity of obtaining the Consent to Establish/Operate” for White category of industries. Intimation to concerned SPCB / PCC shall suffice. The copy of intimation letter sent to respective PCBs is attached as **Annexure 2**.

6.4 Reporting/monitoring requirements imposed by local regulatory authorities

Solar PV projects, owing to its status of white category and a non-polluting sector, there are no such E&S reporting/monitoring requirements imposed by local authorities.

6.5 Ongoing public consultation and disclosure, liaison with non-governmental organizations (NGOs), civil society or public relations efforts (e.g. establishment of a web page)

Currently, we are not undertaking any public consultation, liaison etc with non-governmental organization, civil society, or public relations efforts etc due to COVID 19 outbreak.

6.6 Ongoing social or community development initiatives, programs, or dialogue

Avaada initiative for community development or social good during FY 2020-2021 are indicated in **Annexure 8**. The summary of initiatives is tabulated in **Table 8: Summary of Community Development Initiatives – FY 2020-2021** As a conscious corporate, we also are doing our bit to assist the Government in easing off its fight with the present COVID19 scenario. Apart from all other CSR initiatives, our bit of COVID19 initiatives are mentioned in **Annexure 8**

Table 8: Summary of Community Development Initiatives – FY 2020-2021			
S.No.	Initiative Pillar	Beneficiary Location	Total Beneficiaries
1.	Education	Uttar Pradesh, Maharashtra, Rajasthan, Gujarat	2921
2.	Empowerment	Uttar Pradesh, Maharashtra, Rajasthan, Gujarat	314
3.	Healthcare	Maharashtra, New Delhi, Gujarat, Rajasthan, Uttar Pradesh, Haryana	8252
4.	Environment	Gujarat	Plantation at community level
5.	Electrification	Uttar Pradesh, Gujarat	2898
6.	Rural Infrastructure	Gujarat	5000

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6.7 Community Development Outlay for reporting period

Community Development Outlay for 2020-2021 is given in **Table 9**

Table 9: Community Development Outlay

(CSR Obligation, Proposed CSR Budget and Broad Plan of the Company and its Subsidiaries for Financial Year 2020-21)

Sr No	Cost Centre	CSR Obligation (2% of average net profits of last three years) (in INR)	Proposed CSR Obligation (in INR)	Portfolio Wise CSR Budget Plan under Avaada Foundation						Total Budget (in INR)
				Education (in INR)	Empowerment (in INR)	Preventive Health Care (in INR)	Environment (in INR)	Rural Electrification (in INR)	Support Cost (in INR)	
1.	Avaada Energy Private Limited (EPC)	42,67,119	50,00,000	20,00,000	18,00,000	500,000	100,000	500,000	100,000	1,42,67,119
2.	Avaada Solar Farms Private Limited	5,17,355	5,50,000	200,000	50,000	100,000	100,000	50,000	50,000	16,17,355
3.	Avaada Sustainable Energy Pvt Ltd	12,01,396	12,50,000	300,000	250,000	300,000	200,000	100,000	100,000	37,01,396
4.	Solarsys Non-Conventional Energy Pvt Ltd	22,30,523	23,00,000	900,000	400,000	500,000	300,000	100,000	100,000	68,30,523
5.	Avaada Non-Conventional Energy Pvt Ltd	10,31,907	11,00,000	400,000	200,000	200,000	150,000	50,000	100,000	32,31,907
6.	Avaada Solarise Energy Pvt Ltd (EPC)	10,12,614	11,00,000	300,000	200,000	300,000	150,000	50,000	100,000	32,12,614
7.	Avaada Ventures Private Limited	15,76,408	16,00,000	400,000	400,000	400,000	200,000	100,000	100,000	47,76,408
8.	Avaada Clean Projects Private Limited	3,79,264	4,50,000	75,000	75,000	100,000	100,000	50,000	50,000	12,79,264
9.	Total	1,22,16,586	1,33,50,000	45,75,000	33,75,000	24,00,000	13,00,000	10,00,000	700,000	3,89,16,586

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7.0 Awards and recognition for Avaada

	<p>Greentech Energy Conservation Award 2021 Avaada Energy Pvt Ltd have been conferred with prestigious “Greentech Energy Conservation Award 2021”. The award recognizes our best initiatives for Energy Conservation. The award was felicitated by Janab Farukh Abdullah, Ex Chief Minister, J&K</p>
	<p>Global Water Conservation Award 2021 Avaada Energy Pvt Ltd has been conferred with prestigious "Global Water Conservation Award" In GOLD Category. The award was conferred by Energy and Environment Foundation held on the sidelines of 5th World Water Summit 2021 and 12th World Renewable Energy Technology Congress 2021</p> <p>The award is recognizing and honoring Avaada's outstanding contribution towards conservation and protection of natural resources.</p>
	<p>Global Safety Award 2021 Avaada Energy has been conferred with prestigious "Global Safety Award" In PLATINUM Category. The award was conferred by Energy and Environment Foundation held on the sidelines of 5th World Water Summit 2021 and 12th World Renewable Energy Technology Congress 2021</p> <p>This award demonstrates Avaada's commitment towards Health & Safety of employees across the organization through its diligent reporting & monitoring system</p>
	<p>Times Ascent Global Best Employer Award 2021 in Best HR Strategy in Line with Business We have been working to provide a congenial working environment for enhancing the quality of collaborative outcomes for its employees. Avaada Energy has been conferred with Best HR Strategy in Line with Business prestigious award</p>
	<p>Times Ascent Global Best Employer Award 2021 in Dream Company to Work for We have been working to provide a congenial working environment for enhancing the quality of collaborative outcomes for its employees. Avaada Energy has been conferred with Dream Company to Work for awards</p>

	<p>CII-ITC Sustainability Awards-2020</p> <p>Our efforts in Environmental Management and CSR have been duly recognized by CII-ITC Sustainability Awards-2020 and we have been declared winners in both the domains ie:</p> <ul style="list-style-type: none"> i. Commendation for Significant Achievement in Environment Management ii. Excellence in Corporate Social Responsibility <p>The awards were felicitated by Honorable Anurag Singh Thakur, Minister of State for Corporate Affairs and Finance</p>
	<p>Greentech Sustainability Award 2020</p> <p>Avaada Energy have been conferred with prestigious “Greentech Sustainability Award 2020”. The award recognizes our best initiatives for Environment Management.</p>
	<p>Greentech Safety Award 2020</p> <p>Avaada Energy have been conferred with prestigious “Greentech Safety Award 2020”. The award recognizes our best initiatives for Environment Health & Safety Management at sites.</p>
	<p>ICC-TERI : Green Urja Award 2020 – ranked “Second” in “IPP - Project development – Solar” Category</p> <p>Avaada Energy has been conferred with “Green Urja Award 2020” and ranked “2nd in IPP Solar Energy project development” category. The award is the testimony of our impeccable execution track record in project development and EPC capabilities.</p>
	<p>UP Best Employer Brand Award 2021</p> <p>We're honoured to win the "UP Best Employer Brand Award 2021" - "Diversity Impact award for Equal Opportunities for Women" by World Academy of HR Professionals in collaboration with World HRD Congress</p>

	<p>UP Best Employer Brand Award 2021 in Diversity Impact Award for Equal Opportunity for Women</p> <p>Avaada Energy has been recognized as “UP Best Employer Brand Awards 2021 - Diversity Impact award for Equal Opportunities for Women” by World HRD Congress. The Award recognizes our best practices that give women to an equal opportunity to learn & grow, including mentoring, executive succession planning, and leadership development training</p>
	<p>AsiaOne Young Asian Entrepreneurs 2019-20 Award – Mrs. Sindoor Mittal</p> <p>Mrs. Sindoor Mittal - Vice Chairperson, Avaada was conferred with AsiaOne Young Asian Entrepreneurs 2019-20 Award. Sindoor has been a vanguard of Women Empowerment, she believes that India can accelerate its growth through encouraging greater economic participation by women</p>
	<p>Greentech Safety Award 2019</p> <p>Avaada Energy have been conferred with prestigious “Greentech Safety Award 2019” in Renewable Energy category. The award recognizes our best practices in health & safety management at workplace. The award was felicitated by Hon’ble Shri Dipak Misra, Chief Justice of India (retd.)</p>

7.1 Other standards and/or certificates (e.g. ISO 14000 Environmental Management Systems and Standards)

Avaada has adopted Environmental and Social Management System (ESMS) as per IFC-Performance Standards, ADB Safeguard Policy Statement and other best national and international practices. In addition to the IFC PS & ADB SPS requirements, upto an extent ESMS also considers applicable clauses/elements and documentation control procedure of ISO 14001 Environmental Management System Standard and ISO 45001 Occupational Health and Safety (OHS) Management System Standard. However, Avaada has also initiated the process implementation of integrated management system for getting certified as per ISO 9001, ISO 14001 and ISO 45001. We have also initiated the process of sustainability reporting as per Global Reporting Initiative (GRI) Standards ‘in-accordance’ Core criteria, BRR guidelines and IFC Performance Standards.

8.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM (ESMS)

Policies & Processes	Yes/No	Remarks
Confirm if ESMS is being fully implemented in your current operations?	YES	ESMS is being fully implemented in all our current operations
What are the main challenges to meet host country's safeguard requirements?	NO	Solar power is a white category non-polluting industry hence it does not face any challenges in meeting National Safeguard requirements. Apart from this, Avaada has a very comprehensive ESMS manual including Corporate Policies like CSR Policy, EHS&S Policy, HRM Policy and Land Procurement Policy which ensures sustainable investments in projects.
What are the main challenges to meet ADB's requirement for ESMS establishment and implementation?	No	As such we have never faced any challenge in meeting ADB's requirement for ESMS establishment and implementation. The continuous support of ADB's and other DFIs E&S experts have been a great source of guidance in meeting challenges, if any.
Please describe how you ensure that your contractors and sub-contractors carry out their operations in compliance with the national laws and regulations and applicable ADB's environmental and social requirements.	YES	Compliance of Statutory & Policy Environmental & Social requirement for Contractors is a part of agreement with contractors. The contractors and sub-contractors compliance with the national laws and regulations and applicable ADB's environmental and social requirements are ensured with the help of pre-designed ESMS tools (EHS monthly reporting system) which are efficiently implemented, supervised and monitored at respective sites by trained EHS officers. Statutory & Policy Environmental & Social requirement for Contractors (which is also a part of ESMS) approved by ADB is attached as Annexure 9
Please give details of any material social and environmental issues	No	No such issues reported
Is there a need to update or revise the current ESMS to address present operations? If yes, what elements (policies, procedure, capacity, and reporting) of the ESMS are required to be updated/revise?	No	The ESMS was first prepared by Avaada dated 11 th September 2017 and then as desired by DFIs, it was reviewed and updated by M/s EVI in February 2019 and further approved by board on 27 th March 2019. Now under BSS/CD program as per SHA agreement, the ESMS has been again reviewed and updated by M/s Arcadis who has been jointly appointed by DEG, FMO & Avaada for this assignment. The updated ESMS has been shared with DFIs on 23 rd April 2020

Policies & Processes	Yes/No	Remarks
Capacity	Yes/No	
How many staff members are designated in the implementation of the ESMS? Please provide names/position titles.	YES	Total 18 Staff members are designated in implementation of the ESMS. The list of designated staff for ESMS implementation is given in Table 10
Do the staff members assigned to implement the ESMS perform other job functions/responsibilities? If yes, please enumerate other job functions/responsibilities.	YES	For Projects under O&M phase, the respective site in-charge is designated as EHS officer after suitable training being imparted to him by trained EHS officer
Are there external environment and social consultant/s assisting you to deal with ESMS implementation issues ?	Yes	ESIA studies and construction phase external E&S audits are being conducted by external consultants. Apart from this, M/s Arcadis has been jointly appointed by DEG, FMO & Avaada under BSS/CD program as per SHA agreement to assist Avaada in ESMS implementation The scope of services under BSS/CD program is attached as Annexure 5
What was the budget allocated to the ESMS and its implementation during the year?	YES	The budget allocated to the ESMS and its implementation during the year 2020 -2021 is given in Table 11
Policies & Processes	Yes/No	Remarks
Please describe the training and capacity building initiatives on ESMS implementation (to your staff, contractors, and sub-contractors)	YES	All EHS related trainings are imparted at respective sites as per training calendar and all training records like training imparted attendance sheet, and photographs are maintained at site level. Refer Annexure 10 . We have dedicated and qualified EHS officers at sites who are well versed and conversant with the EHS aspects for construction phase. Capacity enhancement of the EHS officers is also undertaken time to time through trainings provided by Corporate EHS Team. The summary of Training provided to EHS Officers is given in Table 12: Summary of Training to EHS Officers (FY 2020-2021) Table 12: Summary of Training to EHS Officers (FY 2020-2021) For projects under O&M phase, the respective site in-charge itself is designated as EHS officer after suitable training imparted to him by trained EHS officer. The glimpse of training and capacity building initiative across Avaada is given in Figure 3: Glimpse of EHS&S Trainings across Avaada Sites
Monitoring	Yes/No	

Policies & Processes	Yes/No	Remarks
Do you receive environmental and social monitoring reports from your Contractors/subcontractors for their subprojects?		<p>EHS officer is deputed at site for day to day supervision, monitoring and reporting of E&S requirements as per ESMS.</p> <p>Compliance of E&S requirements is a part of contractors' agreement (Annexure G of ESMS)</p> <p>Contractors' submit the EHS Plan before team mobilization (refer Annexure 11)</p> <p>As a part of daily/monthly EHS documentation & reporting, the EHS officer maintains the following documents: Incident/ accident reporting, PPE Inventory & Issuance, FFE Inventory, Tool box talk, Fire Mock drill, Water consumption report, First aid maintenance format, Safe Man-hours reporting etc.</p> <p>Further, environmental monitoring is carried out by external agency once during construction phase. The environmental monitoring reports for projects under construction phase during 2020-2021 is attached as Annexure 12.</p>
Do you check for ongoing compliance of subprojects with national regulation and any other requirements?	Yes	<p>Ongoing compliance of subprojects with national regulation and any other requirements is checked quarterly through site specific Register of Regulations (RoRs). The site wise status of RoRs is attached as Annexure 25.</p> <p>We also always keep ourselves updated on any changes in National/Local Statutory Norms which can be addressed accordingly for non-compliances triggered, if any</p> <p>However, the Solar Photovoltaic Power Projects are not covered under the ambit of EIA Notification, 2006. Hence, it does not require preparation of Environmental Impact Assessment Report and pursuing Environmental Clearance from MoEF&CC.</p> <p>Solar PV project is categorized as white category as per guidelines on Categorization of Industries issued by MOEF & CC on 29th February, 2016 and subsequent Circular/Notification vide no. B-29012/ESS (CPA)/2015-16 issued by CPCB on 7th March, 2016 which states that "There shall be no necessity of obtaining the Consent to Establish/Operate" for White category of industries. Intimation to concerned SPCB / PCC shall suffice. For intimation letters refer Annexure 2</p> <p>Timely internal/external E&S Audits are also conducted to ensure compliance of projects with</p>

Policies & Processes	Yes/No	Remarks
		National and local regulations, if any. The internal/external audit reports are attached as Annexure 7
Please describe how you monitor compliance to ADB social protection requirements and core labour standards, in your operations – including your Contractors and sub-contractors.		ESMS implementation at our respective sites ensures the compliance of social protection requirements as per ADB SPS and IFC PS guidelines. Annexure G of ESMS (Statutory and Policy E&S requirement for contractors) is part of Contractors’ agreement wherein contractor agrees to abide by all the existing laws of all the statutory authorities and bodies including labour standards and fulfil Avaada’s E&S requirements as per ESMS
Please provide details of any accidents/litigation/complaints/regulatory notices and fines: Any incidents of non-compliance with the applicable Environmental and Social Requirements.	NONE	
Reporting	Yes/No	
Do you regularly receive environmental and social monitoring reports from your Contractors?	N/A	Statutory & Policy Environmental & Social requirement for Contractors (Annexure G of ESMS) is part of Contractors’ agreement wherein contractor agrees to abide by all the existing laws of all the statutory authorities and bodies and fulfil Avaada’s E&S requirements as per the Statutory & Policy Environmental & Social requirement for Contractors EHS officer is deputed at site for day to day supervision, monitoring and reporting of E&S requirements as per ESMS. As a part of daily/monthly EHS documentation & reporting, the EHS officer maintains the following documents: Incident/ accident reporting, PPE Inventory & Issuance, FFE Inventory, Tool box talk, Fire Mock drill, Water consumption report, First aid maintenance format, Safe Man-hours reporting etc.
Do you have an external monitoring reports covering environmental and social issues?	YES	The project wise E&S audit report is attached as Annexure 7



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Figure 3: Glimpse of EHS&S Trainings across Avaada Sites

Table 10: List of Designated Staff for ESMS Implementation

Table 10: List of Designated Staff for ESMS Implementation					
S.No	Name of Staff - Corporate Level			Position Title	
1.	Harishankar Soni			General Manager - EHS&S	
2.	Sayed Tauheed Ahmad			Assistant Manager - EHS&S	
3.	Jigyasa Singh			Assistant Manager - EHS&S	
4.	Murtuza Kakuji			Assistant Vice President – Business Excellence & CSR	
5.	Manish Pandey			Manager - CSR	
6.	Deepak Jena			Deputy Manager – CSR	
S.No	ASSET LEVEL			Name of Staff	Position Title
	Project Name	Project Code & Capacity	Project Location		
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	Saurabh Tyagi	EHS Officer*
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann	Jayesh Yadav	EHS Officer*

Table 10: List of Designated Staff for ESMS Implementation

Table 10: List of Designated Staff for ESMS Implementation					
			District: Satara State: Maharashtra	Yamuna Yadav	
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana		
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	Basavaraj Pujari	EHS Officer*
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	Saravanan V	EHS Officer*
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	Surya Prakash	EHS Officer*
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	Goutham Reddy	EHS Officer*

Table 10: List of Designated Staff for ESMS Implementation

Table 10: List of Designated Staff for ESMS Implementation					
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	Subham Mondal	EHS Officer*
8.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	Joginder Pal & Vikas Kaushik	EHS Officer*
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Nalluri Bhargava	EHS Officer*
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Venkat Rama Reddy & Lakshum Naidu	EHS Officer*
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	Abhay Singh	EHS Officer
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj	Nirbhay Singh	EHS Officer

Table 10: List of Designated Staff for ESMS Implementation

Table 10: List of Designated Staff for ESMS Implementation					
			District: Badaun State: Uttar Pradesh		
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	Dharmendra Baghel	EHS Officer
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	Saddam Hussain	EHS Officer
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Anup Srivastava	EHS Officer
Note (*)	For projects under O&M phase, the respective site in-charge itself is designated as EHS officer after suitable training imparted to them by trained EHS officer.				

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Table 11: ESMS Budget Allocated & Expenditure

S.No	Sub-projects			ESMS Budget (Allocated - INR in Lakhs)	ESMS Budget (Expenditure - INR in Lakhs)
	Project Name	Project Code & Capacity	Project Location		
A	Project under Operation Phase				
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	1.50	1.20
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	1.80	1.10
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana		
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakumuru District: Chitradurga State: Karnataka	1.25	1.05
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	1.30	1.10
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	1.00	0.85
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	1.00	0.95
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur	0.75	0.70

Table 11: ESMS Budget Allocated & Expenditure

S.No	Sub-projects			ESMS Budget (Allocated - INR in Lakhs)	ESMS Budget (Expenditure - INR in Lakhs)
	Project Name	Project Code & Capacity	Project Location		
			State: Uttar Pradesh		
8.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	1.00	0.95
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	1.50	1.10
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASoIEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	1.50	1.10
B	Project under Construction Phase				
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	27.13	5.68
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	26.91	5.68
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	41.43	27.92
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	73.66	50.21

Table 11: ESMS Budget Allocated & Expenditure

S.No	Sub-projects			ESMS Budget (Allocated - INR in Lakhs)	ESMS Budget (Expenditure - INR in Lakhs)
	Project Name	Project Code & Capacity	Project Location		
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	109.88	60.56
16.	Business Support Services/Capacity Development Program – including ESMS review, Updation and implementation			EUR 23,685	UER 9500

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S.No.	Date	Topic	Trainer	Trainees
1.	07-11-2020	Safety in Scaffolding and Working at Heights	Sayed Tauheed Ahmad	All EHS Officers
2.	12-11-2020	Material Handling Safety	Sayed Tauheed Ahmad	All EHS Officers
3.	28-11-2020	Fire Fighting - Fire Fighting for First Responders - Fire Prevention and protection Fire Safety & Rescue Techniques	Sayed Tauheed Ahmad	All EHS Officers
4.	05-12-2020	First Aid	Sayed Tauheed Ahmad	All EHS Officers
5.	12-12-2020	Work Permit System	Sayed Tauheed Ahmad	All EHS Officers
6.	19-12-2020	Electrical Safety During Use of Temporary Electrical Installations	Sayed Tauheed Ahmad	All EHS Officers
7.	09-12-2021	BOCW Act Chapter VI (Section 28-37)	Sayed Tauheed Ahmad	All EHS Officers

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9.0 ENVIRONMENTAL & SOCIAL MONITORING DATA

This section covers the environmental and social monitoring data of projects under construction/operation for the year 2020-2021

9.1 Resources and Energy Consumption

The project-wise details of resources and energy consumption is given in **Table 13**

Table 13: Resources & Energy Consumption

S.No	Sub-projects			Resources		
	Project Name	Project Code & Capacity	Project Location	Electricity Direct (MWh/annum)	Petrol (P)/Diesel (D)* (Litres/annum)	Total Water Consumption (KL)
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	784.39	1788 (P)	11129
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	864.11	1830 (P)	3199
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana			
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakumuru District: Chitradurga State: Karnataka	268.20	658 (P)	185
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	695.60	2008 (D)	437
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	280.45	230 (P)	195
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	298.8	1200 (P)	1393

Table 13: Resources & Energy Consumption

S.No	Sub-projects			Resources		
	Project Name	Project Code & Capacity	Project Location	Electricity Direct (MWh/annum)	Petrol (P)/Diesel (D)* (Litres/annum)	Total Water Consumption (KL)
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State:Uttar Pradesh	0.20	141.87 (P)	1644
8.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	1012.51	3448 (D)	10103
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	1005.43	3903.7 (D)	13080
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	11042.4	7490.3 (D)	7622
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	-	15203 (D)	6546
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	-	12321 (D)	1415
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	-	12850 (D)	1890

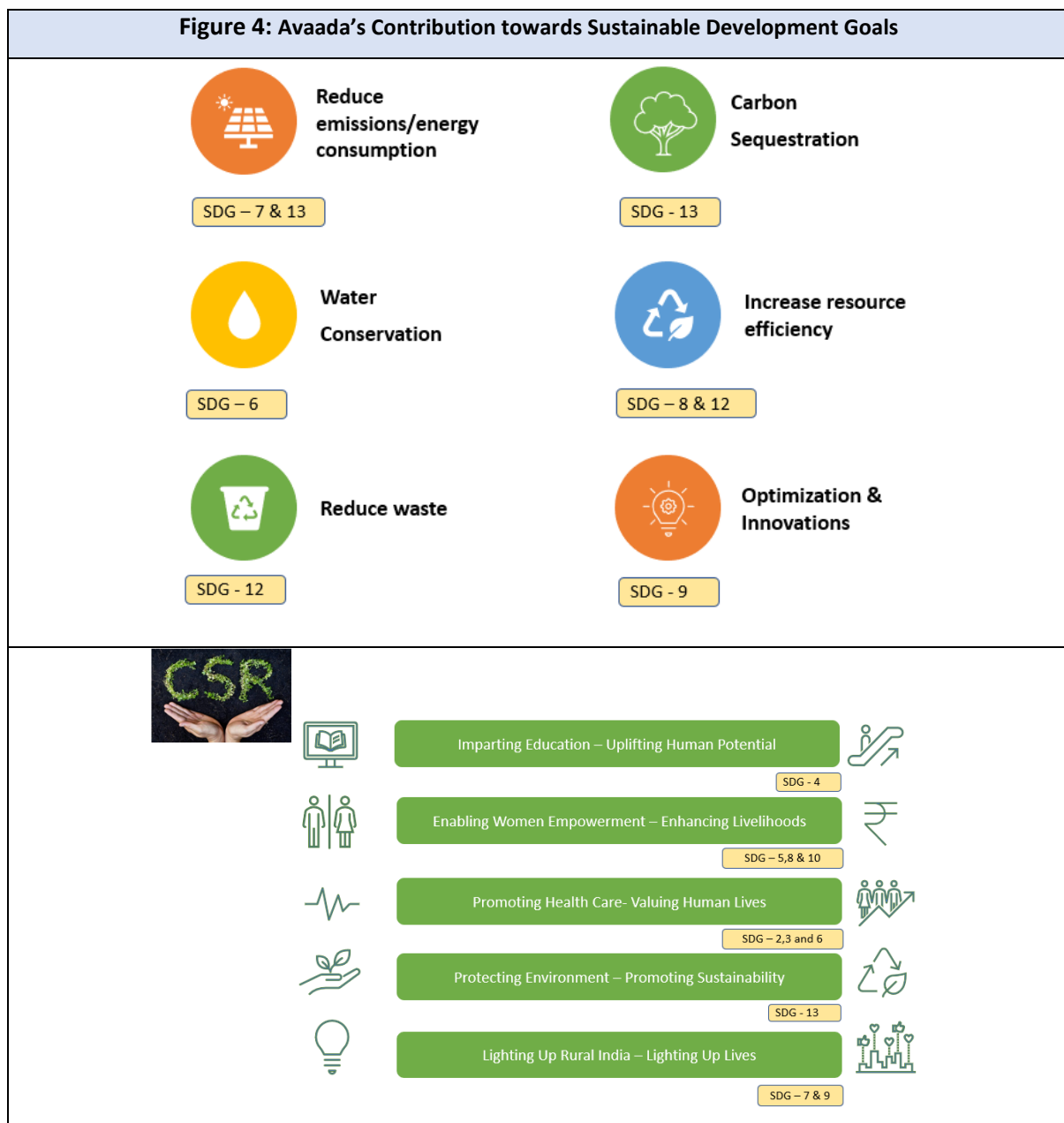
Table 13: Resources & Energy Consumption

S.No	Sub-projects			Resources		
	Project Name	Project Code & Capacity	Project Location	Electricity Direct (MWh/annum)	Petrol (P)/Diesel (D)* (Litre/annum)	Total Water Consumption (KL)
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat		52106 (D)	1991
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan		277268.31 (D)	1084
Note (*)	<i>Petrol/Diesel consumption is inclusive of vehicle used for commuting from guest house to site and DG sets for office uses during construction phase whereas in O&M phase it is used only in vehicles for commuting purposes.</i>					

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10.0 INITIATIVES/MEASURES TAKEN BY AVAADA WHICH CONTRIBUTES TOWARDS SUSTAINABLE DEVELOPMENT

Resource conservation & optimization has always been pinnacle thought of our organization. we ensure sustainability in all aspects like **water conservation, energy efficiency/conservation, clean air** etc through our various initiatives. Avaada's contribution towards sustainable development goals (UNSDGs) is given in indicated in **Figure 4**: Avaada's Contribution towards Sustainable Development Goals.



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Sustainability being our core philosophy, Avaada leads the way in generation of non-emitting sources of energy that provide low-cost electricity and help reduce carbon emissions. With a **100% clean energy portfolio**, Avaada comprises the complete solution of reducing GHG emissions.

Initiative taken by Avaada which contribute towards sustainable development are:

10.1 Avoidance of CO₂ emission by setting up of Solar PV plants across India

Unlike fossil fuel-based power plants, Solar Power plants do not emit GHGs rather it avoid GHG emission. Till date, we have **AVOIDED** more than 3 million ton CO₂ eq emission and with our target of achieving 11 GW by 2025, we will be avoiding more than 24 million ton CO₂ eq per annum.

10.2 Energy Conservation

a. Module Cleaning by Robotic system

Solar Power plant do not require water in the electricity generation process. However, during operation phase water is required for cleaning of solar module to maintain its efficiency. As a conscious corporate house, Avaada has adopted dry robotic cleaning system instead of wet cleaning of solar module. **This system also helped us to save many thousands of litres of diesel/year which was earlier consumed in sprinklers for wet cleaning of modules.**

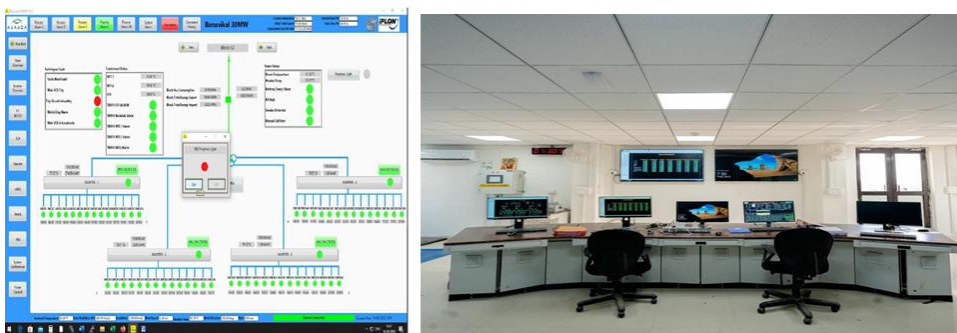
b. Aux Power Consumption Management

We chose to use an automatic model which is developed for reducing the wastage of electricity in using the auxiliaries such as inverter fan, peripheral lighting etc. The system is capable of controlling lights and fans in a room depending upon various parameters such as radiation level and room temperature. All these parameters are measured through various sensors and the controlling is done by micro-controller. **This model consumes very low power and helps in saving a significant amount of energy.**

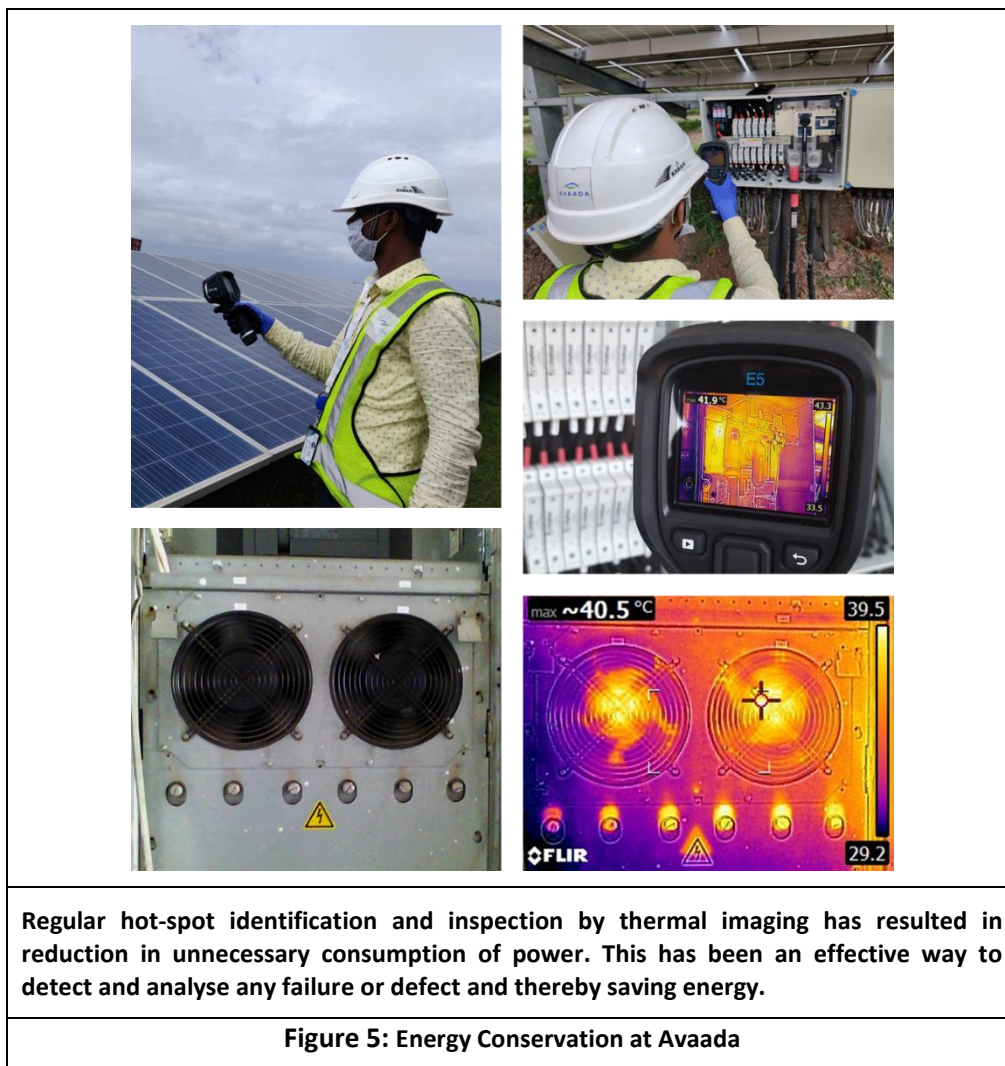
c. Reactive power compensation from inverter to support grid to stabilize voltage.



Robotic Dry-Cleaning System at Avaada Sites



Control of Periphery lighting configured in SCADA, which help in use of aux power in consumption efficiently, resulted in reduction of power consumption by 3-5%. Using grid support function of inverter and putting additionally PPC is resulting in low aux consumption as well as reduction in equipment failure and more grid stability



10.3 Water Conservation/Management

We strongly believe in water conservation/resource management

For conservation/management of one of the most precious resource of Earth ie water, we have taken measures like:

- i. Storm water drainage system connected to rainwater harvesting structures
- ii. Rainwater Harvesting Ponds
- iii. Recharge Shafts
- v. Roof top rainwater harvesting
- vi. Robotic Dry-Cleaning System - As a water conservation measure, Avaada has designed project layouts which are cost effective for dry cleaning systems and accordingly adopted continuous long table type designing which is compatible with robotic dry-cleaning system.

As a water conservation measure, we have developed and implemented Rainwater Harvesting structures integrated with drainage plan at our respective project site. A sample drainage drawing with RWH location is attached as **Annexure 13**

Rainwater harvesting (RWH) structure forms an integral part of Avaada’s project planning & design. RWH structure, is designed based on rainfall, run off coefficient & recharge potential of the area. Rainwater Harvesting structure feasibility vary from site to site, depending on the existing GW table. In areas with shallow GW table, RWH structure is neither feasible & nor recommended. Photographs of existing rainwater harvesting structures with drainage system is given in **Figure 6**.

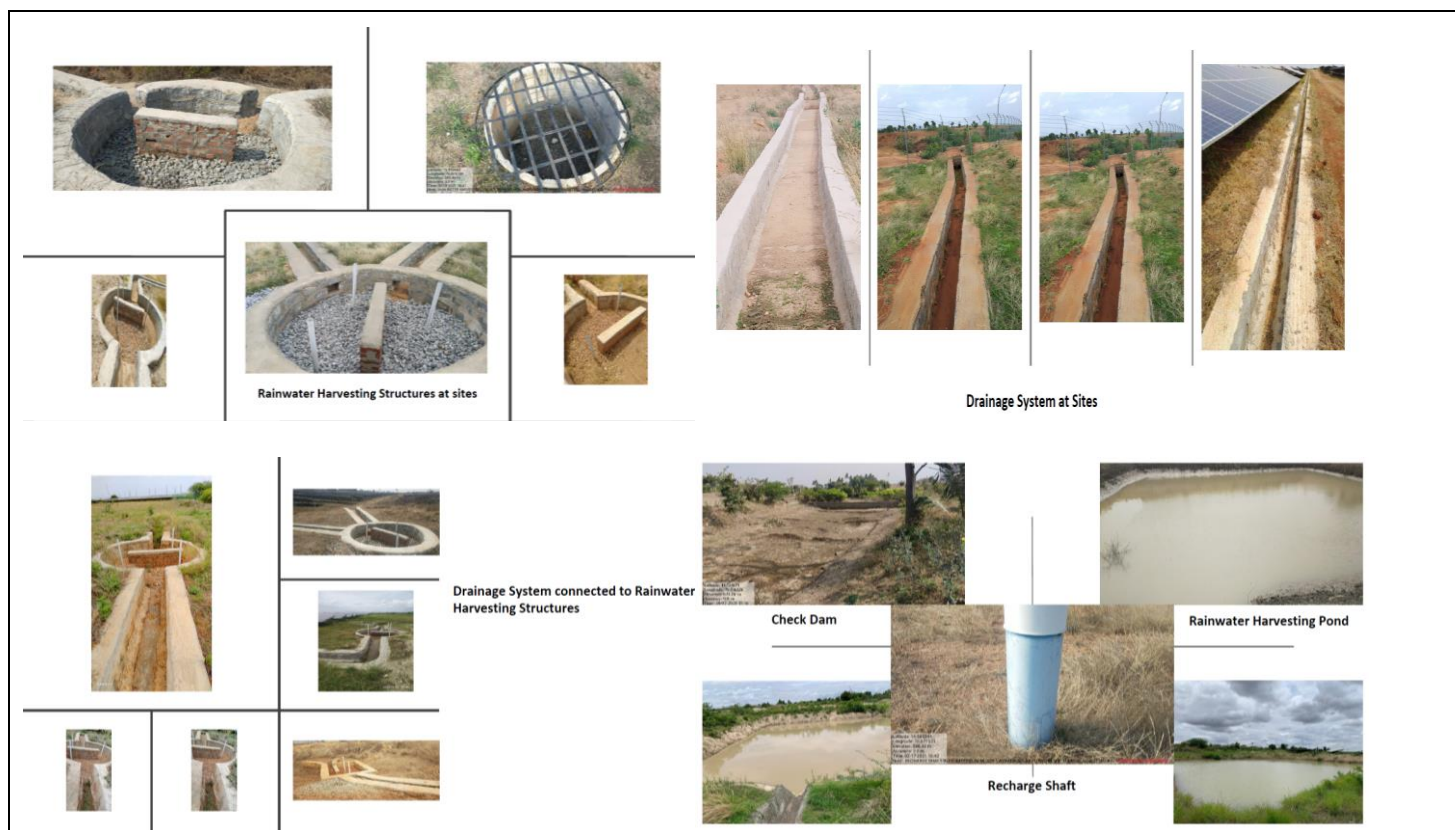


Figure 6: Storm water Drainage System & Rainwater Harvesting Structure & Storage Pond at Avaada sites

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The summary of rainwater harvesting initiative as a water conservation measure at respective sites is given in **Table 14**.

Table 14: Summary of Water Conservation Measures at Project Sites (01st April 2020 - 31st March 2021)						
S.No.	Project Name	Project Code & Capacity (MW)	Project Location	Type of Structure	Total No. of Structure	Recharge Potential per Day/Total Storage (cum)
1.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	RWH	2	580 cum/day

**Table 14: Summary of Water Conservation Measures at Project Sites
(01st April 2020 - 31st March 2021)**

S.No.	Project Name	Project Code & Capacity (MW)	Project Location	Type of Structure	Total No. of Structure	Recharge Potential per Day/Total Storage (cum)
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana			
2.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	Pond	2	640 cum
3.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	RWH & Pond	1 & 5	290 cum/day & 1600 cum
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	RWH	2	580 cum/day
5.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	RWH	2	580 cum/day
6.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	RWH	1	290 cum/day
7.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	RWH	2	580 cum/day
8.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada	RWH	3	870 cum/day

**Table 14: Summary of Water Conservation Measures at Project Sites
(01st April 2020 - 31st March 2021)**

S.No.	Project Name	Project Code & Capacity (MW)	Project Location	Type of Structure	Total No. of Structure	Recharge Potential per Day/Total Storage (cum)
			District: Tumkur State: Karnataka			
9.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	RWH & Pond	1 & 3	290 cum/day & 960 cum

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Further, Avaada has started designing project layouts which are cost effective for dry cleaning systems and accordingly adopted continuous long table type designing which is compatible with robotic dry-cleaning system. Consequently, all Pipeline projects will have 100% dry cleaning facility (robotic cleaning). The status of robotic dry-cleaning system installed at sites is given in **Table 15**:

Table 15: Status of Robotic Dry-Cleaning System at Sites

S.No.	Project Name	Project Code & Capacity	Project Location	Robot Micro Fibre Brush	Robot with Fine Microfiber Dust Wipers
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	8	-
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	36	-
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana		

3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	8	-
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	16	6
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	6	-
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	6	-
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	-	-
8.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	14	6
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	30	-
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II&III, Karnataka	ASolEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	20 & 155	-



Robotic Dry-Cleaning System Installed at Sites

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10.4 Green Belt Development

Planting trees is one of the biggest and cost-effective measures for taking CO₂ out of the atmosphere to tackle the climate crisis. Plantation is an ongoing exercise across all the project sites. Though, it has a limitation of space owing to its shadow effect on solar panels. Viewing this scientific reason there is a common practice in India as well as abroad to avoid any bushy, tall trees near solar module structure and auxiliaries. However, as a best practice, Avaada has taken initiative of green belt development comprising of herbs, shrubs, and trees (wherever feasible) at project sites and suitable plant species/green cover near plant boundary. While selecting the plant species for the green belt development, the following points are taken into consideration:

- Should be less water demanding
- Should be a reasonable fast growing
- Should have economic /medicinal Value
- Should be preferably of native origin

Species to be selected should fulfil the following specific requirements of the areas:

- Availability of seed/sapling/plant material;
- Tolerance to specific conditions or alternatively wide adaptability to eco-physiological conditions;
- Capacity to endure water stress and climatic extremes after initial establishment;
- Differences in height, growth habits and bole shapes;
- Pleasing appearance.
- Improving waste lands.

As on 31st March 2020, Avaada has planted more than 28000 plants across all its project sites and around 21,000 plants at community level. Summary of plantation initiatives is given in **Table 16: Summary of Greenbelt Development Initiatives at Project Sites** (Till date). Since, the barren land parcels are generally utilised for setting up of Solar PV Plants, the plantation activities at such sites, indicated towards reclamation of lands and thereby also contributing to combat climate change. Out of all the plantation carried out, most of the plants are **Neem tree (*Azadirachta indica*)**. Considering the age of plant to be around 2-3 years, the **carbon sequestration potential is around 10 Kg C/tree/year**. Carbon sequestration potential increases with the age of the plant.

10.5 Land optimisation

Earlier, **around 4-5 acres/MW of land was required for setting up of Solar PV plant**. But, now with more improvised designing of plant layouts and opting for higher capacity modules, **the land requirement has been reduced to less than 3 acres/MW**. This is one the best and most needed initiative towards conservation of natural resources and ultimately mitigating climate change.

**Table 16: Summary of Greenbelt Development Initiatives at Project Sites
(Till date)**

S.No.	Project Name	Project Code & Capacity (MWdc)	Project Location	No. of Plantations	Type of Plants/Trees
A	COMMISSIONED PROJECTS				
1	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	327	Kaner (<i>Cascabela thevetia</i>) Guava (<i>Psidium guajava</i>) Mango (<i>Mangifera indica</i>)
	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	250	Morpankhi (<i>Platyclusus orientalis</i>) Asopalav (<i>Pollyalthia longifolia</i>) Coconut (<i>Cocos nucifera</i>)
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)			
2	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	308	Aswagandha (<i>Withania somnifera</i>) Banana (<i>Musa acuminata</i>) Neem (<i>Azadirachta indica</i>)
3	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	200	Almond (<i>Prunus dulcis</i>) Rose Flower (<i>Rosa damascene</i>) Mogra Flower (<i>Jasminum sambac</i>)

**Table 16: Summary of Greenbelt Development Initiatives at Project Sites
(Till date)**

S.No.	Project Name	Project Code & Capacity (MWdc)	Project Location	No. of Plantations	Type of Plants/Trees
4	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	122	Godambi (<i>Anacardium occidentale</i>) Lemon (<i>Citrus limon</i>) Watermelon (<i>Citrullus lanatus</i>)
5	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	155	Curry Leaves (<i>Murraya koenigii</i>) Papaya (<i>Carica papaya</i>) Black berry (<i>Rubus fruticosus</i>)
6	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	32	Custard apple (<i>Annona reticulata</i>) Silver (<i>Phoenix sylvestris</i>)
7	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	262	Sapota (<i>Manilkara zapota</i>) Bamboo (<i>Bambusoideae</i>) Chilli (<i>Capsicum frutescens</i>)
8	M/s Avaada Solar Energy Private Limited, Pavagada -, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	16000	Groundnuts (<i>Arachis hypogaea</i>) Jasmine (<i>Jasminum</i>) Seed Banana (<i>Musa balbisiana</i>)

**Table 16: Summary of Greenbelt Development Initiatives at Project Sites
(Till date)**

S.No.	Project Name	Project Code & Capacity (MWac)	Project Location	No. of Plantations	Type of Plants/Trees
9	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	320	Teak wood (<i>Tectona grandis</i>) Drumstick (<i>Moringa oleifera</i>) Sugar apple (<i>Annona squamosa</i>) Jack Fruits (<i>Artocarpus heterophyllus</i>) Almond Trees (<i>Prunus dulcis</i>)
B	Project Under Construction				Amla Trees (<i>Phyllanthus emblica</i>)
11	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	55	Jamun Fruit (<i>Syzygium cumini</i>) Rain Tree (<i>Samanea saman</i>)
12	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	10000	Yellow oleander (<i>Cascabela thevetia</i>) Sheesham (<i>Dalbergia sisso</i>) Tamarind (<i>Tamarindus indica</i>) Fragrant manjack (<i>Cordia dichotoma</i>)
	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	50	Peanut (<i>Arachis hypogaea</i>) Ashoka (<i>Saraca asoca</i>) Banyan (<i>Ficus benghalensis</i>)

**Table 16: Summary of Greenbelt Development Initiatives at Project Sites
(Till date)**

S.No.	Project Name	Project Code & Capacity (MWdc)	Project Location	No. of Plantations	Type of Plants/Trees
	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	20	
13	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	2100	
TOTAL				28,312	

Glimpse of Plantations at Sites



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10.6 Ambient Air Quality (AAQ)

The one-time construction phase AAQ monitoring was conducted at the baseline locations to have a comparative view of ambient air quality levels with respect to the Central Pollution Control Board (CPCB)/State Pollution Control Board (SPCB) norms.

The project wise summary of monitoring results alongwith the comparative histogram is given in **Figure 7: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 100 MW Khamgaon, Maharashtra**, **Figure 8: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 50 MW, Sirsa, Haryana**, **Figure 9: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 300 MW, Surendranagar, Gujarat**, **Figure 10: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 350 MW, Bikaner, Rajasthan** and **Figure 11: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 50 MW, Badaun, Uttar Pradesh**. The environmental monitoring reports are attached as **Annexure 12**.

The baseline quality of the ambient air serves as an index for assessing the pollution load and the assimilative capacity of any region and forms an important tool for planning project activities in the area. A detailed assessment of the baseline air quality was undertaken for the purpose mentioned above. Accordingly, air quality during construction phase was also monitored to check the effectiveness of the preventive measures.

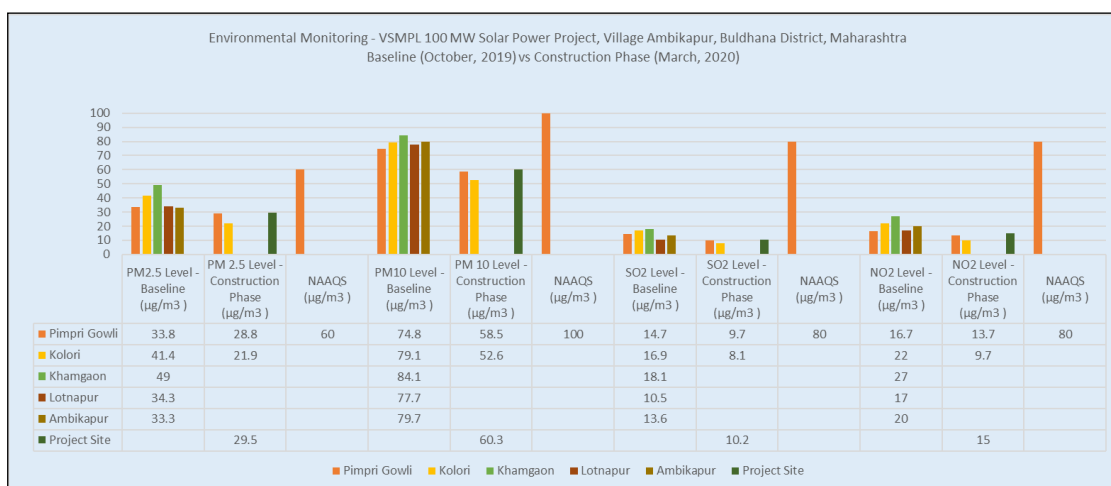


Figure 7: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 100 MW Khamgaon, Maharashtra

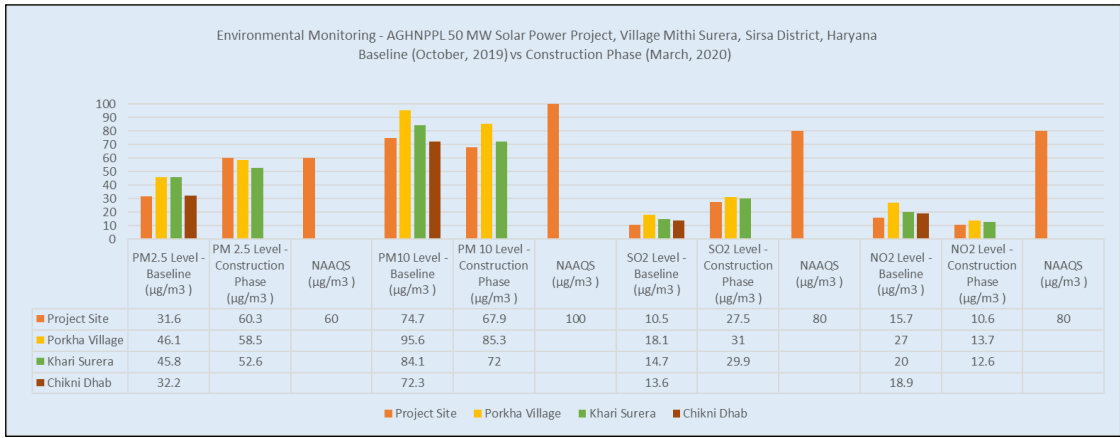


Figure 8: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 50 MW, Sirsa, Haryana

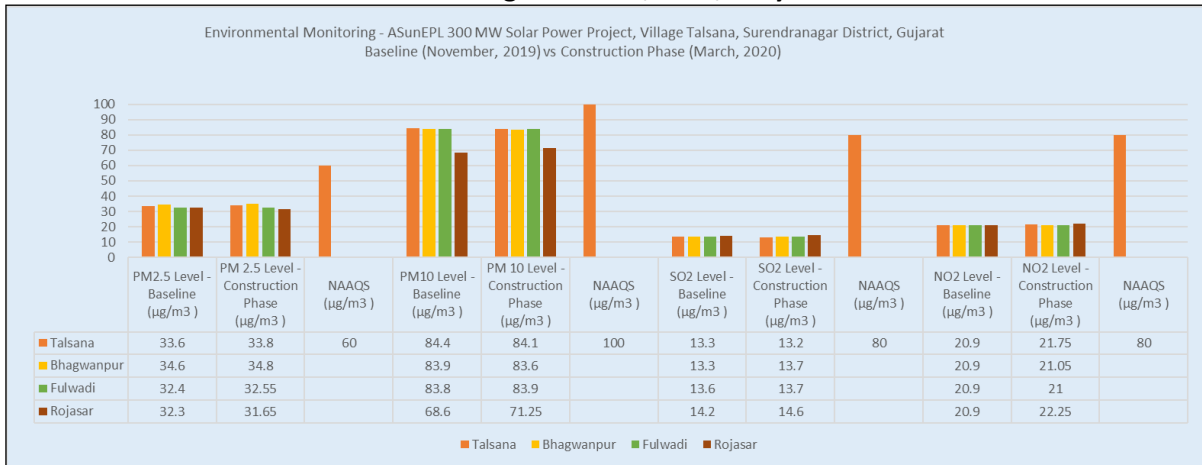


Figure 9: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 300 MW, Surendranagar, Gujarat

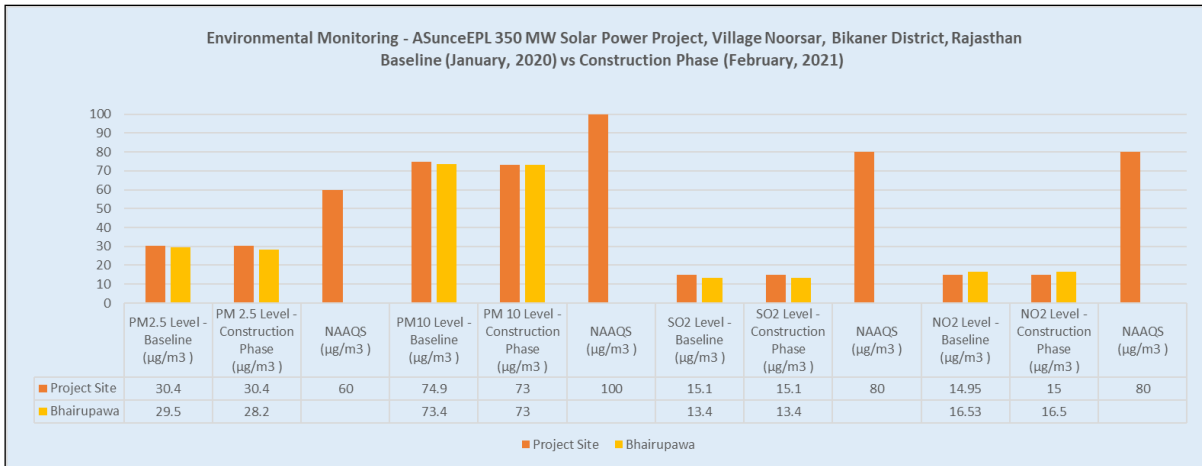
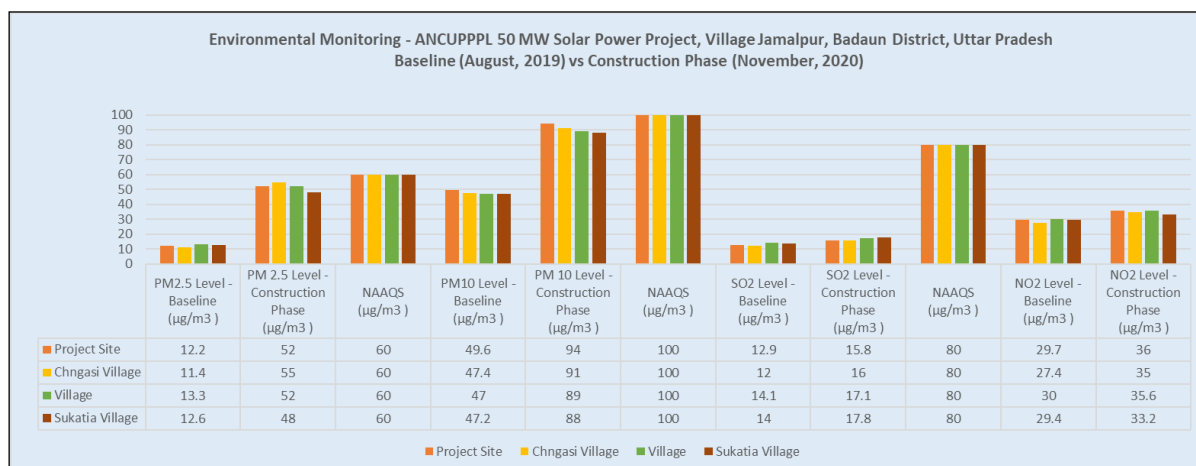


Figure 10: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 350 MW, Bikaner, Rajasthan



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Figure 11: Histogram showing AAQ levels during baseline monitoring and construction phase monitoring at 50 MW, Badaun, Uttar Pradesh

A comparative analysis was made as given in **Figures 7-11** and it was observed that none of the monitored locations exhibited the air quality monitoring levels more than the permissible limits as per Central Pollution Control Board (CPCB) norms. In fact, there were few instances where levels were found to be even lower than the baseline values. This may be attributed to the efficient implementation of ESMP upto some extent and to the large rural expanse of the project locations in many cases

10.7 Ambient Noise Level (ANL)

The construction phase ANL monitoring was conducted at the baseline locations to have a comparative view of ANL levels with respect to the CPCB/SPCB norms and WB-EHS guidelines. The noise level monitoring reports are attached as **Annexure 12**. The project wise summary of monitoring results alongwith the comparative histogram is given in **Figure 12: Histogram showing Ambient Noise levels during baseline monitoring and construction phase monitoring at 100 MW Khamgaon, Maharashtra, Figure 13: Histogram showing Ambient Noise levels during baseline monitoring and construction phase monitoring at 50 MW, Sirsa, Haryana, Figure 14: Histogram showing Ambient Noise Level during baseline monitoring and construction phase monitoring at 300 MW, Surendranagar, Gujarat, Figure 15: Histogram showing Ambient Noise Level during baseline monitoring and construction phase monitoring at 350 MW, Bikaner, Rajasthan and Figure 16: Histogram showing Ambient Noise Level during baseline monitoring and construction phase monitoring at 50 MW, Badaun, Uttar Pradesh**. The noise levels recorded during construction phase monitoring were compared with the noise levels during baseline monitoring. It was observed that the noise levels at all the monitoring locations were within the regulatory levels as per CPCB and WB-EHS Guidelines. This may be attributed to the efficient implementation of ESMP upto some extent and to the large rural expanse of the project locations in many cases.

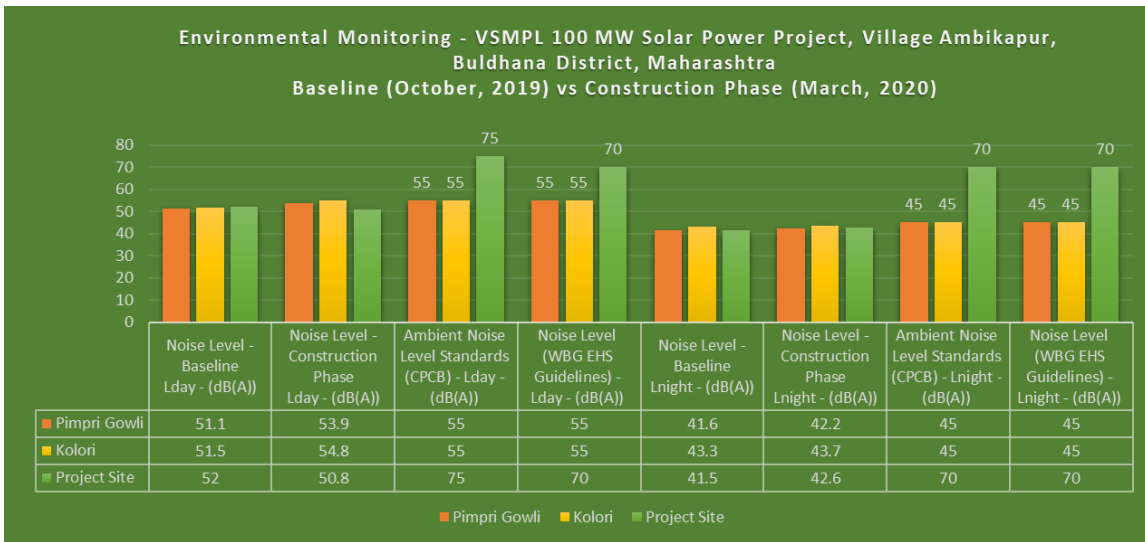


Figure 12: Histogram showing Ambient Noise levels during baseline monitoring and construction phase monitoring at 100 MW Khamgaon, Maharashtra

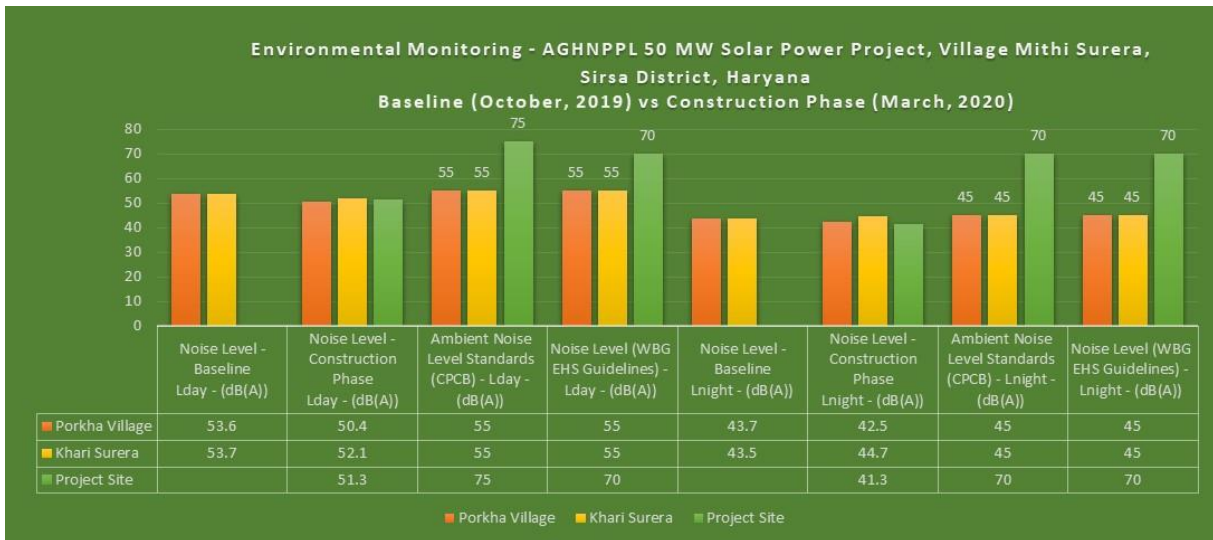


Figure 13: Histogram showing Ambient Noise levels during baseline monitoring and construction phase monitoring at 50 MW, Sirsa, Haryana

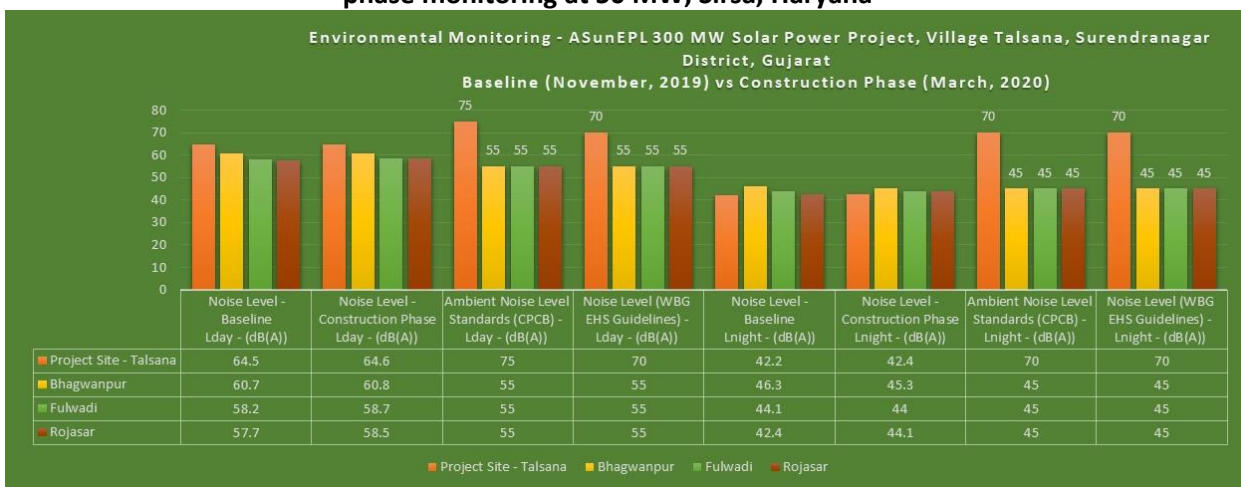


Figure 14: Histogram showing Ambient Noise Level during baseline monitoring and construction phase monitoring at 300 MW, Surendranagar, Gujarat

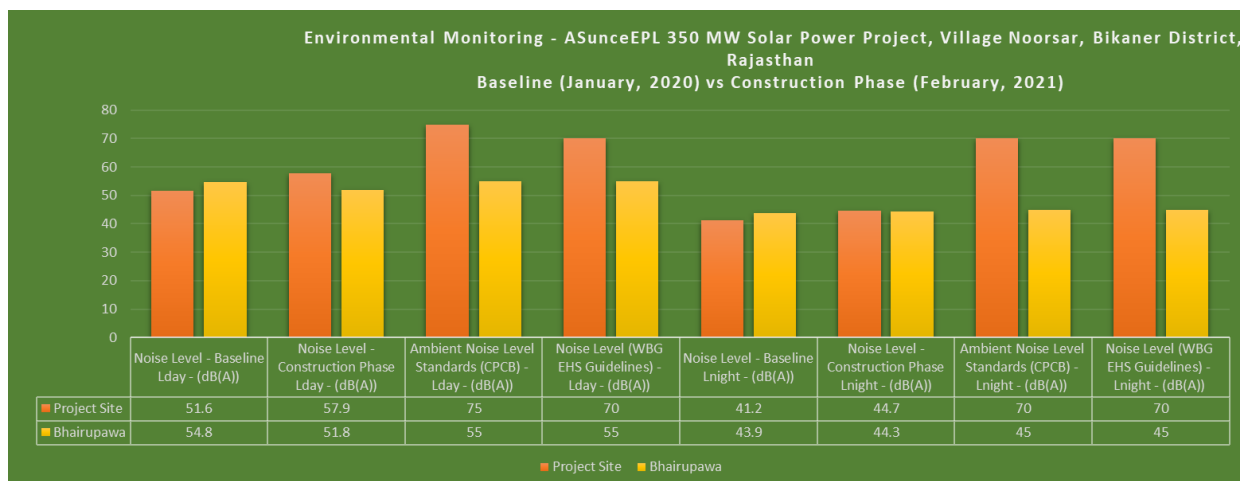
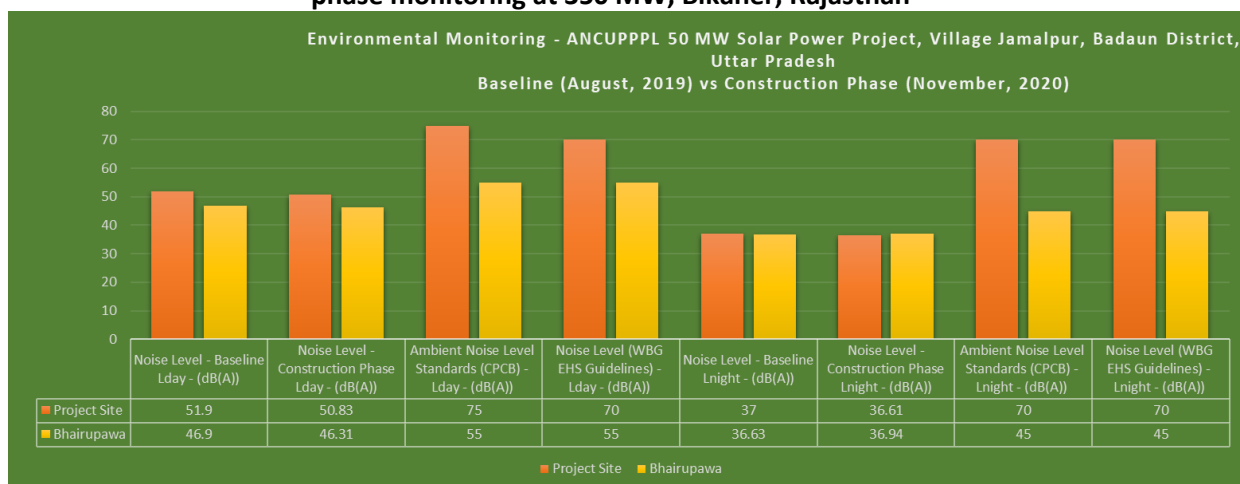


Figure 15: Histogram showing Ambient Noise Level during baseline monitoring and construction phase monitoring at 350 MW, Bikaner, Rajasthan



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Figure 16: Histogram showing Ambient Noise Level during baseline monitoring and construction phase monitoring at 50 MW, Badaun, Uttar Pradesh

10.8 Liquid Effluent Discharges

There is no such effluent generated from project sites. The only waste generated is from Kitchen and toilets, which is disposed through septic tank followed by soak pit. Few photographs of wastewater disposal facility at site is given in **Figure 17**



Figure 17: Sample Photographs of Septic Tank at Site

10.9 Soil

Solar PV project does not involve generation of any kind of hazardous waste from its process or activities. Hence, no impact on soil quality is anticipated. However, to re-assure, the soil quality monitoring during construction phase was also conducted at few locations. Soil quality monitoring results during construction phase did not show any major deviation from the baseline values which confirms that there is no impact on quality of soil due the project activities. The Soil Quality Monitoring Results are attached as **Annexure 12**

10.10 Corrective Actions

No corrective action required, since none of the environmental quality parameters exceeded the permissible limits upto the extent which warrants any corrective actions.

10.11 Waste & Hazardous Substances Management

Solar PV plant does not involve generation of any kind of Hazardous Waste from its process or activities. The only major solid waste generated from the plant is the damaged/broken solar modules.

In India, there are no guidelines for disposal or recovery/ part recovery for solar panels by Government of India till date. However, damaged Solar Modules are being kept in isolated closed and covered area (Photographs attached in ESMP implementation status as **Annexure 4**) and whenever new notification will come from Government of India we will act/dispose accordingly.

Other solid waste and scrap materials like cable parts and carton box are stored in designated area and sold to the local vendor as and when required. Also, efforts are made to make purposeful utilisation of waste wherever possible. Few photographs of waste utilisation is depicted in **Figure 18**: Some photographs showing re-use of wastes at Construction & O&M sites as:

The project wise summary of damaged solar modules is given in **Table 17**





**Figure 18: Some photographs showing re-use of wastes at Construction & O&M sites as:
a. Stand for water tank b. Storage Box c. Rack for spare materials d. Resting place**

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Table 17: Summary of Broken/Defunct Solar Modules at Sites

S.No	Sub-projects			Damaged/Defunct Solar Modules		
	Project Name	Project Code & Capacity	Project Location	Quantities Generated	Method of Storage	Method of Disposal
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	438	Open yard, Covered with tarpaulin	In India, there are no guidelines for disposal or recovery/ part recovery for solar panels by Government of India till date. However, damaged Solar Modules are being kept in isolated closed and covered area and whenever new notification will come from Government of India we will act/dispose accordingly.
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	1400	Open area covered with tarpaulin	
3.	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)				
4.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	11	Steel Container	
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	64	Steel Container	

Table 17: Summary of Broken/Defunct Solar Modules at Sites

S.No	Sub-projects			Damaged/Defunct Solar Modules		
	Project Name	Project Code & Capacity	Project Location	Quantities Generated	Method of Storage	Method of Disposal
6.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	25	Steel Container	
7.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	80	Open yard, Covered with tarpaulin	
8.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	20	Open yard, Covered with tarpaulin	
9.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	12	Covered with Tarpaulin	
10.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	151	Steel Container	

Table 17: Summary of Broken/Defunct Solar Modules at Sites						
S.No	Sub-projects			Damaged/Defunct Solar Modules		
	Project Name	Project Code & Capacity	Project Location	Quantities Generated	Method of Storage	Method of Disposal
11.	M/s Avaada Solarise Energy Private Limited, Pavagada -II&III, Karnataka	ASolEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	20	Steel Container	
Total				2221		

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10.12 Greenhouse Gases

A Solar PV power plant generates electricity by using solar radiation which is the nonconventional source of energy. Hence, emission of any greenhouse gases (GHG) is avoided. Rather, carbon dioxide emissions are avoided through the installation of solar PV project. Summary of estimated CO₂ Emissions Avoided by each project is given in **Table 18**. We have avoided total **1.28 million ton CO₂ eq** in the year 2020-2021.

Table 18: Summary of Carbon Emission Reduction

S.No	Sub-projects			Power Generation in MWh	Grid Emission Factor (tonnes/MWh)	CER in tCO ₂
	Project Name	Project Code & Capacity	Project Location			
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	159299.076	0.947	150856.3
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	102935.78	0.947	97480.2
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)				
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	59702.40	0.947	56538.2
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	118756	0.947	112461.9
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	59709.6	0.947	56545
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	59212	0.947	56074
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	9937.7	0.947	9411

Table 18: Summary of Carbon Emission Reduction

S.No	Sub-projects			Power Generation in MWh	Grid Emission Factor (tonnes/MWh)	CER in tCO ₂
	Project Name	Project Code & Capacity	Project Location			
8.	M/s Clean Sustainable Energy Private Limited, Bhadla-I, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	237075.58	0.947	224511
9.	M/s Avaada Solar Energy Private Limited, Pavagada - I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	329837.08	0.947	312356
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II&III, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	218221.83	0.947	206656.1
TOTAL				1354687		1282889

10.13 Biodiversity

Avaada recognise the relationship between biodiversity and business sustainability. The Company thus aims to minimise any negative impact on biodiversity and Ecosystem Services.

Further, Avaada as a conscious Corporate, through ESIA study, identifies measures to avoid, minimize, or mitigate potentially adverse impacts and risks and, as a last resort, wherever required, Site-specific management plans are prepared, if triggered. Moreover, irrespective of the impact, the project sites are fenced to avoid human wildlife conflict, risk of electrocution of animals and the risk of these animals damaging solar panels. Further, night-time movement of vehicles during construction phase is restricted to avoid any direct interaction with wild animals.

During the reporting year, we did not execute any operation/project which falls in eco-sensitive zones notified around wildlife sanctuary, national park and world heritage sites declared under applicable regulations or international treaties ratified by India. Hence, we did not create any significant impact due to our projects and associated auxiliaries. Based on Environmental and Social Impact studies and surveys carried out for our projects, there are no significant impacts on biodiversity due to our operations.

11.0 HEALTH & SAFETY MONITORING DATA

11.1 Occupational Health & Safety

Avaada strongly believes that safety comes first and strives to provide safe workplace for all. Due emphasis is placed on appropriate planning and control including audits, inspections, and management review in ensuring that safety system is functioning effectively.

In general, 80% incidents are attributed to human failures. Keeping this in mind, Avaada has taken various measures to address incidents due to human error. To systematically manage safety at Avaada, we have a well-defined EHS Policy & list of EHS obligations. The EHS policy and EHS

obligations is displayed at all prominent places across all Project sites. This policy mandates all employees to maintain a safe and healthy workplace and develop a culture of safety.

The status of occupational, health and safety incidents at projects for the reporting period i.e. 1st April 2020 to 31st March 2021 is given in **Table 19** below:

**Table 19: Summary of Incident Reporting
(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			No. of Incidents		Total Time Lost	Total loss of Workdays	Total Safe-Manhours*	Remarks
	Project Name	Project Code & Capacity	Project Location	No. of Accidents	Near Misses				
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	Nil	15	Nil	Nil	111560	The Details of Incident reporting alongwith CAPA is given in Annexure 14
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	Nil	18	Nil	Nil	1317956	The Details of Incident reporting alongwith CAPA is given in Annexure 14
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)							
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakumuru District: Chitradurga State: Karnataka	Nil	18	Nil	Nil	168201	The Details of Incident reporting alongwith CAPA is given in Annexure 14
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	Nil	18	Nil	Nil	92472	The Details of Incident reporting alongwith CAPA is given in Annexure 14
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal,	SNCEPL, 45 MWdc (30	Village: Hulikunte Taluk: Kudilgi	Nil	12	Nil	Nil	116566	The Details of Incident reporting alongwith CAPA is given in

	Karnataka	MWac)	District: Bellary State: Karnataka						Annexure 14
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	Nil	16	Nil	Nil	56322	The Details of Incident reporting alongwith CAPA is given in Annexure 14
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	Nil	4	Nil	Nil	53760	The Details of Incident reporting alongwith CAPA is given in Annexure 14
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	Nil	16	Nil	Nil	301192	The Details of Incident reporting alongwith CAPA is given in Annexure 14
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Nil	21	Nil	Nil	312904	The Details of Incident reporting alongwith CAPA is given in Annexure 14
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Nil	16	Nil	Nil	281152	The Details of Incident reporting alongwith CAPA is given in Annexure 14
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	Nil	31	Nil	Nil	276280	The Details of Incident reporting alongwith CAPA is given in Annexure 14

12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	Nil	27	Nil	Nil	293680	The Details of Incident reporting alongwith CAPA is given in Annexure 14
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	Nil	27	Nil	Nil	430816	The Details of Incident reporting alongwith CAPA is given in Annexure 14
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	Nil	33	Nil	Nil	751400	The Details of Incident reporting alongwith CAPA is given in Annexure 14
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	Nil	24	Nil	Nil	915992	The Details of Incident reporting alongwith CAPA is given in Annexure 14
Total				Nil	296	Nil	Nil	5480253	
Note * - (till date for O&M projects & for FY 20-21 for Construction Projects)									

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It can be seen from the **Table 19** that total no. of incidents of near misses reported at respective sites are 296 with no case of accident and total safe manhours achieved till date 5.48 million. Zero accidents and achieving more than 5 million of Safe man hours till date shall be attributed to intensive training, mock drills, audit, and regular inspections. The site wise safe manhours report is attached as **Annexure 15**

Intensive trainings on EHS aspects is imparted as per training calendar. Safety requirements have been drilled down to the level of contractors' employees and made a part of all contracts (refer **Annexure 9** – Statutory and Policy E&S Requirements for Contractors). Compliance to mandatory / job specific PPEs, issuance of PTW (a sample PTW is attached is **Annexure 16**) and TBT is a pre-requisite before starting any activity and there is a very high level of compliance in this regard. Continual training on various EHS aspects like First Aid, PPE, TBT, Fire safety etc have played a major role in creating / enhancing Safety awareness. Mock Drills at regular intervals, Safety E-learning (virtual training started since March 2020), are some of the best practices followed across Avaada. The summary of trainings imparted at respective sites is given in **Table 20**. During the year 2020-2021, majorly 14 type of trainings have been imparted covering different E&S aspects like safety induction training, PPE, Health & Hygiene, First Aid etc. The cumulative frequency of all the trainings provided is around 224. Considering the minimum average time dedicated for each training, total 285 hours of training have been imparted across all the project sites. The site wise training imparted details alongwith attendance sheets and photographs is attached as **Annexure 10**.

At AVAADA we foster a culture and environment where we put health, safety, and wellbeing first, and we are continually looking at ways in which we can strengthen our existing processes and training programs. With the motive, we at Avaada celebrated The National Safety Day/Week campaign every year from 04th March to 10th March to spread the awareness among the employees and workers at asset level on how to get prevented from the accidents by exhibiting widespread safety awareness programs. During whole week campaign celebration, varieties of specific activities were displayed to the workers as per the safety requirement to fulfil the following objectives:

- To achieve participation of all staff, employees & workers at different levels
- To promote use of participative approach by involving staff, employees & workers in SHE activities.
- To promote development of need-based activities, self-compliance with statutory requirements and professional SHE management systems at our project sites
- To remind staff, employees & workers and others concerned of their responsibility in making the workplace safer.
- To aware staffs and workers about safety including the various health and environmental movements
- Serve the society with preventive culture and scientific state of mind by organizing a safety approach.

During Safety Week (4 March to 10 March, 2021) and in addition to our normal safety procedures, a series of small initiatives including Flag hoisting, safety speech, Safety slogan competition, Fire Mock drill, On Site Emergency training, Saplings plantation, quiz competitions, safety awards distribution, banner exhibition and daily employee safety trainings were conducted to raise the awareness of health and safety issues during the campaign with an overall objective to strengthen EHS culture in workplace and integrate the same with work culture. The glimpse of celebration at all sites is attached as **Annexure 17**.

Table 20: Summary of Training Imparted

(01st April 2020 - 31st March 2021)

S.No.	Training Imparted	Total No. of Attendees*															Total No. of Attendees*	Frequency of Training	Duration of Training	Total Hours of Training
		FSPL, 108 MWdc (80MWac), Chalisgaon, Maharashtra	AEPL/ASMHPL, 130 MWdc (100 MWac), Satara, Maharashtra	ASEPL, 40.5 MWdc (30 Mwac), Hangal, Karnataka	SNCEPL, 81 MWdc (60MWac), Ilkal, Karnataka	SNCEPL, 45 MWdc (30 MWac), Banavikal, Karnataka	ANCEPL, 40.5 MWdc (30 MWac), Pujarahalli, Karnataka	ACEPL, 7 MWdc (5 Mwac), Kanpur, UP	CSEPL, 140 MWdc (100 MWac), Bhadla I, Rajasthan	ASEPL, 210 MWdc (150 MWac), Pavagada I, Karnataka	ASolePL, 210 MWdc (150 MWac), Pavagada II, Karnataka	AGHNPPL, 65 MWdc (50 MWac), Sirsa, Haryana	ANCUPPPL, 72.5 MWdc (50 MWac), Badaun, UP	VSMPL, 130 MWdc (100 MWac), Khamgaon, Maharashtra	ASEPL, 420 MWdc (300MWac), Surendranagar, Gujarat	ASEPL, 490 MWdc (350 MWac), Bikaner (Phase I), Rajasthan			(Average in Hours)	
1.	COVID 19 - Preventive Measures	117	65	157	196	132	198	86	171	157	463	277	76	113	177	236	2621	24	0.17	4.08
2.	EHS Awareness Program & Obligations	72	42	60	159	79	60	49	175	79	187	109	31	63	202	264	1631	16	2	32
3.	ESMS: - Associated Polices, Implementation , monitoring & reporting - Applicable legislative Framework - Roles & Responsibilities of onsite EHS&S representative - Reporting & Monitoring -E&S related risks & Mitigations in O&M Plants	165	108	108	152	101	118	68	240	211	336	145	89	131	152	130	2254	40	4	160
4.	ESMP Implementation & RoR update -Waste Management	130	95	100	127	93	114	37	222	167	255	27	22	26	38	25	1478	20	2	40
5.	Safety induction training PPE Health, Hygiene & First Aid, First Box	84	81	130	127	97	122	77	96	108	244	208	100	98	238	486	2290	24	0.5	12

Table 20: Summary of Training Imparted

(01st April 2020 - 31st March 2021)

S.No.	Training Imparted	Total No. of Attendees*															Total No. of Attendees*	Frequency of Training	Duration of Training	Total Hours of Training
		FSPL, 108 MWdc (80MWac), Chalisgaon, Maharashtra	AEPL/ASMHPL, 130 MWdc (100 MWac), Satara, Maharashtra	ASEPL, 40.5 MWdc (30 Mwac), Hangal, Karnataka	SNCEPL, 81 MWdc (60MWac), Ilkal, Karnataka	SNCEPL, 45 MWdc (30 MWac), Banavikal, Karnataka	ANCEPL, 40.5 MWdc (30 MWac), Pujarahalli, Karnataka	ACEPL, 7 MWdc (5 Mwac), Kanpur, UP	CSEPL, 140 MWdc (100 MWac), Bhadla I, Rajasthan	ASEPL, 210 MWdc (150 MWac), Pavagada I, Karnataka	ASolePL, 210 MWdc (150 MWac), Pavagada II, Karnataka	AGHNPPL, 65 MWdc (50 MWac), Sirsa, Haryana	ANCUPPPL, 72.5 MWdc (50 MWac), Badaun, UP	VSMPL, 130 MWdc (100 MWac), Khamgaon, Maharashtra	ASEPL, 420 MWdc (300MWac), Surendranagar, Gujarat	ASEPL, 490 MWdc (350 MWac), Bikaner (Phase I), Rajasthan			(Average in Hours)	
6.	On site Emergency Plan - Electrical Safety & Mock drill - Fire Safety & Mock drill - Snake bite safety training	159	129	216	196	353	243	132	278	179	402	298	232	149	180	608	3754	36	0.5	18
7.	TOOL BOOX TALK	104	96	156	152	89	219	68	133	102	167	815	97	68	184	5840	8290	24	0.25	6
8.	Traffic safety - in and around Project - Security Staff Training	16	18	28	23	15	17	24	36	22	37	39	7	26	77	53	438	4	0.25	1
9.	PTW & LOTO Safety	95	54	48	62	70	48	56	178	123	211	-	-	-	-	-	945	12	0.25	3
10.	Miscellaneous Trainings Grass Cutting Safety Module Cleaning Housekeeping	78	79	112	87	105	72	51	140	131	186	49	72	27	102	186	1477	12	0.25	3
11.	Accident Incident/Near Miss Reporting training	21	20	39	38	12	53	20	43	37	48	-	-	-	-	-	331	3	0.25	0.75
12.	Material Handling Training	-	-	-	-	-	-	-	-	-	-	46	92	39	146	196	519	3	0.25	0.75
13.	Work at height	-	-	-	-	-	-	-	-	-	-	46	36	24	70	216	392	3	0.5	1.5

11.2 Emergency Response Plan

The probability of inevitable residual risk, arising out of operations, capable of causing emergencies cannot be ruled out no matter how well a process is being controlled or safeguarded by instruments and process safety procedures. Such emergencies could be the result of malfunction, ignorance, non-observance of operating instructions or be the consequence of acts outside the control of people.

Hence the need to prepare an ON-SITE EMERGENCY PLAN (OSEP) for dealing with accidents and natural calamities which may still occur and are likely to affect health, safety, life, property, and environment at respective sites. An OSEP mitigates the effects of a major accident/emergency when these effects are contained within the boundary of the site.

OSEP is guideline for employees, workers, contractors, sub-contractors, visitors etc., informing about prompt rescue operations, medical treatment, coordination, and communication among various internal & external members.

Avaada has prepared a site-specific Emergency Management Plan for implementation at the project site in the event of an emergency situation so that the loss of life and damage to the properties and natural resources are minimized. This plan outlines a series of emergency actions that will be executed by Avaada and its contractors to ensure preparedness and response to emergency situations throughout the life cycle of the project.

The overall objective of an OSEP is for what to do and what not during an emergency. The following aspects are included in emergency preparedness plan:-

- To assess what dangers could arise to people on and offsite as a result of these foreseeable emergencies and what the effects could it pose on the environment.
- To contain and control incidents.
- To assess the risk involved, and to mitigate the same by pre-planned remedial and rescue measures using, when necessary, the combined resources of the organization concerned and the public emergency services.
- The training of the individual personnel with duties under the plans will be to familiarizing on site personnel with their roles, their equipment, and the details of the plans.
- Specific needs of each particular site for dealing with those emergencies which it is for seen may arise.

The Onsite Emergency Plan for respective sites alongwith the documentary evidences of mock drills conducted is attached **Annexure 18**. The summary of mock drills conducted during the reporting period is given in **Table 21**. It can be seen from the Table 21 that total 198 mock drills @ 2 hours/mock drill has been conducted at respective sites covering almost all the emergency response procedures.

Table 21: Summary of Mock Drills

S.no.	Project Name	Project Code	No. of Mock Drills					Total
			Fire Safety	Electrical Safety	Snakebite Safety	CPR Mock drill	Heat Stroke Mock drill	
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	4	4	4	2	-	14
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	4	4	4	2	-	14
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)						
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	4	5	4	3	-	16
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	8	4	4	3	-	19
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	8	8	9	2		27
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	6	5	1	1	-	13
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	4	3	2	1	-	10
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	3	3	3	2		11
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	5	5	4	5	-	19
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II, Karnataka	ASolePL, 210 MWdc (150 MWac)	4	4	4	2		14
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPPL, 65 MWdc (50 MWac)	2	2	3	1	2	10
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	2	1	1	1	1	6

13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	2	1	2	1	2	8
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	2	1	1	3	1	8
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	2	2	2	2	1	9
		TOTAL	60	52	48	31	7	198

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11.3 Community Health & Safety

There is no significant impact on community health and safety due the Solar PV project activities since the impacts due to project operation is limited to the project boundary itself .

11.4 Employee Workplace Monitoring

Employee workplace monitoring is not applicable in our case since all our construction activities are spread across the project site and none of the construction or operation phase activities happen to occur within a confined space or a close room. Our site office set ups are at a sufficient distance from major zones of activities. Moreover, the construction phase environmental monitoring results depict that all the air quality parameters were within the permissible limits as per the CPCB norms.

11.5 Fire Safety Monitoring

Avaada OSEP has a well-defined procedure for any kind of Fire emergency with adequate preparedness measures in place at respective sites. The emergency measures include the following:

- i. Installation of FFEs at Fire sensitive locations at site
- ii. Intensive training program
- iii. Fire Emergency Mock drill
- iv. Internal & External Audit
- v. FFE maintenance reporting

As per IS 2190:2010 (Indian Standard for Selection, Installation & Maintenance of First Aid- Fire Extinguishers – CODE OF PRACTICE, 4th revision):

- Annexure F, Clause 12.2.1 – The life of any extinguisher is minimum upto 10 years.

All the FFEs are newly installed at our sites and regularly refilled on as and when required basis and inspected on the monthly basis for the following aspects:

- ✓ Rust and corrosion
- ✓ Instruction label on the front side
- ✓ Wall fixing brackets must be securely mounted.
- ✓ Every extinguisher must have a safety pin, clip, or cap
- ✓ Location in designated place
- ✓ No obstruction to access or visibility
- ✓ Fullness determined by weighing or lifting
- ✓ Examination for obvious physical damage, corrosion, leakage, or clogged nozzle
- ✓ Pressure gauge reading or indicator in the operable range or position

On the basis of physical inspections, the summary status of fire safety monitoring at respective sites is given in **Table 22**. The details of FFE maintenance reporting of respective sites is given in **Annexure 19**.

12.0 EMPLOYMENT & LABOUR

During the reporting period i.e. 01st April 2020 to 31st March 2021, Avaada has not changed Human Resources (HR) policies, procedures or working conditions. The site workforce details are given in **Table 23**

Table 22: FFE Monitoring Status**(as on 31st March 2021)**

S.No	Sub-projects			Type & No. of FFEs			Frequency of Inspection	Observed Deficiency (as on 31 st March)	Corrective Action
	Project Name	Project Code & Capacity	Project Location	DCP	MF	CO2			
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	38	2	34	Monthly	NONE	Not Applicable Since all the installed FFEs are regularly inspected for physical fitness on monthly basis and only FFEs refilled/replaced are the ones that have been used for Fire Mock Drills/ Fire Safety Trainings. Apart from this the site personnel are trained to inspect the physical fitness of FFEs on the basis of features like – date of installation of FFE, Location of FFE installed, Rust,
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	40	2	40	Monthly	NONE	
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)							
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	18	1	20	Monthly	NONE	
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot	13	1	36	Monthly	NONE	

Table 22: FFE Monitoring Status**(as on 31st March 2021)**

S.No	Sub-projects			Type & No. of FFEs			Frequency of Inspection	Observed Deficiency (as on 31 st March)	Corrective Action
	Project Name	Project Code & Capacity	Project Location	DCP	MF	CO2			
			State: Karnataka						Corrosion, leakage, weight (by lifting, wherever possible) and pressure gauge indicator. Accordingly, the FFEs are refilled/replaced The monthly FFE reporting is attached as Annexure 19
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	17	1	17	Monthly	NONE	
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	17	1	20	Monthly	NONE	
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	4	1	2	Monthly	NONE	
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	15	12	14	Monthly	NONE	

Table 22: FFE Monitoring Status**(as on 31st March 2021)**

S.No	Sub-projects			Type & No. of FFEs			Frequency of Inspection	Observed Deficiency (as on 31 st March)	Corrective Action
	Project Name	Project Code & Capacity	Project Location	DCP	MF	CO2			
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	18	19	19	Monthly	NONE	
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II & III, Karnataka	ASoIEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	9&8	4&1	13&6	Monthly	NONE	
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	2	0	4	Monthly	NONE	
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	3	1	12	Monthly	NONE	
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana	4	0	4	Monthly	NONE	

Table 22: FFE Monitoring Status**(as on 31st March 2021)**

S.No	Sub-projects			Type & No. of FFEs			Frequency of Inspection	Observed Deficiency (as on 31 st March)	Corrective Action
	Project Name	Project Code & Capacity	Project Location	DCP	MF	CO2			
	Private Limited, Maharashtra		State: Maharashtra						
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	2	0	2	Monthly	Okay	
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar District: Bikaner State: Rajasthan	3	0	4	Monthly	Okay	

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**Table 23: Summary of Workforce
(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			% of Direct Employees	% of Direct Female employees	% of new employees hired	% of direct employees terminated	% of Security force	% of contractor employees
	Project Name	Project Code & Capacity	Project Location						
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	5	-	-	-	62	33
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	5	-	-	-	60	36
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)							
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	2.56	0	0	0	35.90	61.54
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot State: Karnataka	3.85	0	0	0	50	46.15
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	3.13	0	0	0	31.24	65.63

**Table 23: Summary of Workforce
(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			% of Direct Employees	% of Direct Female employees	% of new employees hired	% of direct employees terminated	% of Security force	% of contractor employees
	Project Name	Project Code & Capacity	Project Location						
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	3.45	0	0	0	34.45	62.10
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	10	0	0	0	50	40
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	6	0	0	0	44	50
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	2.65	0	0	0	24.78	72.57
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II & III, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	3 & 7	0	0	0	32 & 55	65 & 38
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	10	0	0	0	22	68
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj	10	0	0	0	20	70

Table 23: Summary of Workforce (01st April 2020 - 31st March 2021)									
S.No	Sub-projects			% of Direct Employees	% of Direct Female employees	% of new employees hired	% of direct employees terminated	% of Security force	% of contractor employees
	Project Name	Project Code & Capacity	Project Location						
			District: Badaun State: Uttar Pradesh						
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	27	0	22	0	36	15
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	25	0	0	0	51	24
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar District: Bikaner State: Rajasthan	30	0.25	3.25	1	38.5	27
	Total Average			10	0.02	1.9	0.08	40	48

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13.0 EMERGENCY DRILLS & COMMUNITY PARTICIPATION

The projects due to their construction and operation phase activities do not pose any emergency risk to the local community. Identified Environmental and social impact, if any, associated with the project is limited to the 500 m radius from the plant boundary (air quality impact) during the construction phase and within the plant boundary during the operation and maintenance phase. Hence, the need for emergency drills alongwith community participation is not warranted in case of Solar PV Plants. However, there are various community participation program/celebrations like world environment day is carried out in conjunction with the CSR plan to create environmental and social awareness. The glimpse of World Environment Day Celebration is given in **Figure 19**. During the ongoing activities at project site all the workforce undergoes intensive training on relevant issues/topics including the emergency preparedness. The details of emergency drills are attached as **Annexure 18**.





Figure 19: Glimpse of World Environment Day-2020 Celebrations across all sites & offices

13.1 Changes in the Company's engagement with private/public security forces

There have been no changes in the Company's engagement with private security agencies. Avaada has a list of selected Security Agencies who contractually manage the security at Avaada project sites. Security Agencies are contractually bound to follow SOP for Security Management. A sample copy of service order of security agency alongwith the signed copy of SOP is attached as **Annexure 20**

14.0 STAKEHOLDER ENGAGEMENT

14.1 Public Consultation/Disclosure on Environmental and Social Risks around Sites

Stakeholder engagement is about building and maintaining constructive relationships over time. It is an ongoing process between a company and its project stakeholders that extends throughout the life of the project and encompasses a range of activities and approaches, from information sharing and consultation, to participation, negotiation, and partnerships. The nature and frequency of this engagement reflects the level of project risks and impacts. The identification of stakeholders and their inclusion in the decision-making process is thus essential in the process of prioritizing, analysing, and addressing issues; and in creating management systems and strategies to address the concerns/ expectations of the various stakeholders.

In undertaking active community engagement through its projects, Avaada stresses collaborative, consultative, and partnership approaches in its community investment programs and amongst other stakeholders. Avaada integrate Community Investment considerations into decision-making and business practices and assist in local capacity building to develop mutually beneficial relationships with communities. Avaada contribute to host communities' quality of life by supporting innovative programs in education, empowerment, environment & health.

Engaging with stakeholders and responding to their expectations and concerns helps us create shared value that provides us with critical inputs on the sustainability impacts of our business.

Our stakeholders are prioritised on the basis of how we impact them and how they affect our business. We engage with stakeholders to understand their concerns and priorities and use those inputs for decision-making and system formulation. In order to make the stakeholder engagement process more effective and relevant, the engagement methodology and topics are customised depending on the stakeholders. The feedback from stakeholders is sought through direct interactions in the form of an open forum or one-to-one interactions. Visits are also conducted to meet local community representatives to understand their expectations and concerns at all the respective project locations.

During the reporting period, there has been a regular consultations and interactions with the local community through various means like meetings, group discussions, regular interaction with sarpanches and village leaders, regular visit to panchayats and government offices. This has helped in rapport building and smooth functioning of our project activities. For detailed view of stakeholder engagement efforts, refer **Annexure 8**. The photographs of the consultations alongwith the issues raised during consultations is attached as **Annexure 21**

15.0 GRIEVANCE REDRESSAL

15.1 External/Internal Grievances – Asset Level

The grievance registers are maintained for recording the grievances, requests, demands etc. of the local community, which is shared by them either verbally or in written at each site. The details like logged date & time, name of person, name of village, address with mobile/ telephone no., description of problem, mode of sharing of problems, nature of problem, person who attended & action taken are maintained. There has been a total of 36 internal 29 external grievances across all our sites, all internal and external grievances have been closed.

The copy of site level internal/external grievance redressal log is attached as **Annexure 22**. Further, summary status of grievances is given in **Table 24**

15.2 Internal Grievances – Corporate Level

The summary of grievances of Avaada Employees area is attached as **Annexure 22**

Table 24: Summary of Grievances**(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			Type of Grievance	No. of Grievances	No. of Grievances Closed	Grievance forwarded to legal redressal
	Project Name	Project Code & Capacity	Project Location				
1.	M/s Fermi Solarfarms Private Limited, Chalishgaon, Maharashtra	FSPL, 108 MWdc (80MWac)	Village: Shivapur & Bodare Taluk: Chalishgaon District: Jalgaon State: Maharashtra	External Internal	1 2	All Closed	None
2.	M/s Avaada Energy Private Limited	AEPL, 33 MWdc (28 MWac)	Village: Varkute Malavari Taluk: Mann District: Satara State: Maharashtra	Internal	3	All Closed	None
	M/s Avaada Satara MH Private Limited	ASMHPL, 97 MWdc (72 MWac)					
3.	M/s Avaada Sustainable Energy Private Limited, Hangal (Tumkurhalli), Karnataka	ASEPL, 40.5 MWdc (30 MWac)	Village: Hangal Taluk: Molakulmuru District: Chitradurga State: Karnataka	Internal	1	Closed	None
4.	M/s Solarsys Non-Conventional Energy Private Ltd, Ilkal, Karnataka	SNCEPL, 81 MWdc (60MWac)	Village: Balkundi Taluk: Ilkal District: Bagalkot	Internal	3	Closed	None

Table 24: Summary of Grievances**(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			Type of Grievance	No. of Grievances	No. of Grievances Closed	Grievance forwarded to legal redressal
	Project Name	Project Code & Capacity	Project Location				
			State: Karnataka				
5.	M/s Solarsys Non-Conventional Energy Private Ltd, Banavikal, Karnataka	SNCEPL, 45 MWdc (30 MWac)	Village: Hulikunte Taluk: Kudilgi District: Bellary State: Karnataka	Internal	2	All Closed	None
6.	M/s Avaada Non-Conventional Energy Pvt Ltd, Poojarhalli (KH Halli), Karnataka	ANCEPL, 40.5 MWdc (30 MWac)	Village: Pujarhalli Taluk: Kudilgi District: Bellary State: Karnataka	Internal	2	All Closed	None
7.	M/s Avaada Clean Energy Private Limited, Kanpur, Uttar Pradesh	ACEPL, 7 MWdc (5 MWac)	Location: OFC District: Kanpur State: Uttar Pradesh	Internal	1	Closed	None

Table 24: Summary of Grievances**(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			Type of Grievance	No. of Grievances	No. of Grievances Closed	Grievance forwarded to legal redressal
	Project Name	Project Code & Capacity	Project Location				
8.	M/s Clean Sustainable Energy Private Limited, Bhadla, Rajasthan	CSEPL, 140 MWdc (100 MWac)	Village: Bhadla Taluk: Bap District: Phalodi State: Rajasthan	Internal	3	All Closed	None
9.	M/s Avaada Solar Energy Private Limited, Pavagada -I, Karnataka	ASEPL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Internal	2	All Closed	None
10.	M/s Avaada Solarise Energy Private Limited, Pavagada -II & III, Karnataka	ASolePL, 210 MWdc (150 MWac)	Village: Thirumani Taluk: Pavagada District: Tumkur State: Karnataka	Internal	4	All Closed	None
11.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	Internal	2	All Closed	None

Table 24: Summary of Grievances**(01st April 2020 - 31st March 2021)**

S.No	Sub-projects			Type of Grievance	No. of Grievances	No. of Grievances Closed	Grievance forwarded to legal redressal
	Project Name	Project Code & Capacity	Project Location				
12.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	Internal	2	All Closed	None
13.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	Internal	3	All Closed	None
14.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	External Internal	11 4	3 Ongoing, rest are closed All Closed	None
15.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar District: Bikaner State: Rajasthan	External Internal	17 2	10 Closed All Closed	None

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15.3 Interactions with NGOs/Local Media

The existence of NGOs at the project areas are minimal, except at Chalishgaon where there are few NGOs with whom we have interacted to know their work towards community development.

15.4 Community Health & Safety Awareness Campaigns

Conducted health awareness campaign, health camp, free health services etc for reduction of mortality rate in rural area, undertaking infrastructure development work for better health services and beds availability in hospital, installation of drinking water facility in government school and conducting awareness programs for adolescent girls & for ensuring health of infants, provision of beds and other furniture in health care centre for improving health care services and support of mask, respirator, hand sanitizer, ventilators, kit for diagnosis & prevention of Corona epidemic etc. Details of Community Health & Safety Awareness Campaigns has been Attached as **Annexure 8**

15.5 Local Employment and Procurement Efforts

As per our commitment during village level stakeholder consultations, we have engaged semi-skilled/unskilled Labours in our projects through contractors/sub-contractors. Also, the procurement of all the basic amenity requirements is done locally.

15.6 Community Development and CSR Activities

Focus areas of AVAADA's Community Development are as follows

15.6.1 Education

We understand that the most direct way to empower the current and future generations is to spread literacy. We have been proactively understanding and responding to people's needs for education. There is much that a teacher can do foster and promote the overall development of a student. It is the teacher who reaches the students and transforms them into a good citizen. That is the reason Avaada constantly endeavor to keep teacher motivated, enhance their teaching skills and providing them a platform to express their ideas.

We work closely with the government and educational institution for improving quality of teachers, providing infrastructure to transform the classroom setup & the overall experience of the student at school & leveraging support to various government initiatives are a few ways in which we continue to make a positive difference. Some initiatives like teacher training, infrastructure development, library set up, smart classroom, support of teaching learning and playing materials etc. are the activities which may implement for the educational development.

15.6.2 Empowerment

A firm commitment to the empowerment of women, focusing on providing them training that will enable them to earn a livelihood and be self-sufficient has been introduced by promotion of Skill India. We set up tailoring centers which is providing the women skill training, with a certification & an opportunity to earn their livelihood & augment their family income. Many of the women have also begun their own small-scale businesses & are meeting the needs of the local communities. Adding to stitching center program, digital literacy education program was also set for the rural youth, so that the youth can get jobs and get digitally empowered.

15.6.3 Health & Environment

We place prime importance on health and environment's continuous improvement. Our program and action plan has prepared such a way which addresses the needs and requirement of society. Avaada is committed to environment sustainability and advancing action for mitigating climate change. At all our project sites, we are promoting environmental awareness within the community.

Summary of Development Activities along with details of lives touched and expenses incurred is given in **Table 25**

16.0 LAND ACQUISITION & INVOLUNTARY RESETTLEMENT MONITORING

The respective project sites have been selected in such a manner that it does not involve any vulnerable community land and no displacement of people (including indigenous people). There were no cases of infringement of rights of indigenous community groups across our locations. We did not have any significant negative impact on local communities at any of our locations and there were no cases of physical or economic displacement of local people at any of our project sites. The land acquisition/purchase details of our new/under pipeline projects is given in **Table 26**

17.0 STATUS OF IMPLEMENTATION OF THE E&S ACTION PLAN (ESAP)

The implementation Status of E&S Action Plan as on 31st March 2021 is given in **Table 27**:
Environmental and Social Action Plan - Corporate, **Table 28**: ESAP Status of Chalishgaon Site & **Table 29**: ESAP Status for Pavagada Site

Table 25: Summary of Development Activities along with details of lives touched and expenses incurred

CSR Initiative Location	Project Name	Project Description	Total Individual Benefited	Total Expenditure (in Rupees)	Completion Date
Bangalore, Karnataka	Education	Promotion of quality education through set up laptop classroom	500	211,696.00	21-Aug-2020
Khamgaon, Maharashtra	Education	Promotion of quality education through set up laptop classroom	645	119,298.00	07-Sep-2020
Surendranagar, Gujarat	Education	Promotion of quality education through set up laptop classroom	65	7,730.00	26-Jan-2021
Surendranagar, Gujarat	Education	Promotion of girls education program	6	3,360.00	26-Jan-2021
Surendranagar, Gujarat	Education	Support of sport materials for ensuring extra curriculum activities in school	410	18,579.00	26-Jan-2021
Surendranagar, Gujarat	Education	Drawing & essay competition for the promotion of Girl's Education	65	3,137.00	26-Jan-2021
Surendranagar, Gujarat	Education	Infra development work under Sarva Shisha Abhiyan Program, Sitting arrangement	100	68,512.00	31-Mar-2021
Surendranagar, Gujarat	Education	Infra development work under Sarva Shisha Abhiyan Program, steel fabrication work	410	201,235.00	31-Mar-2021
Surendranagar, Gujarat	Education	Shiksha Karmi intervention in school for ensuring quality education, especially in Math, English & Science subjects	65	12,000.00	31-Mar-2021
Bikaner, Rajasthan	Education	Special class initiative in school for the preparation of 10th board	20	1,500.00	31-Mar-2021

Table 25: Summary of Development Activities along with details of lives touched and expenses incurred

CSR Initiative Location	Project Name	Project Description	Total Individual Benefited	Total Expenditure (in Rupees)	Completion Date
		exam			
Haridwar, Uttarakhand	Education	Construction of educational campus for underprivileged children - Divya Prem Seva Mission	635	2,100,000.00	21-Jan-2021
Jayapur, Uttar Pradesh	Empowerment	Promotion of "Skill India" movement in rural villages by operating Nav Kiran Stitching Centre	35	230,114.00	31-Mar-2021
Nagepur, Uttar Pradesh	Empowerment	Promotion of "Skill India" movement in rural villages by operating Nav Kiran Stitching Centre	30	64,353.00	31-Mar-2021
Kakarahiya, Uttar Pradesh	Empowerment	Promotion of "Skill India" movement in rural villages by operating Nav Kiran Stitching Centre	33	79,844.00	31-Mar-2021
Chalisingaon, Maharashtra	Empowerment	Promotion of "Skill India" movement in rural villages by operating Nav Kiran Stitching Centre	27	88,435.00	31-Mar-2021
Jayapur, Uttar Pradesh	Empowerment	Promotion of "Digital India" theme in rural villages by operating Nav Kiran Computer Centre	30	264,020.00	31-Mar-2021
Nagepur, Uttar Pradesh	Empowerment	Promotion of "Digital India" theme in rural villages by operating Nav Kiran Computer Centre	16	9,750.00	31-Mar-2021
Kakarahiya, Uttar Pradesh	Empowerment	Promotion of "Digital India" theme in rural villages by operating Nav Kiran Computer Centre	13	43,609.00	31-Mar-2021
Bikaner, Rajasthan	Empowerment	Promotion of "Skill India" movement in rural villages by operating Nav Kiran Stitching Centre	12	96,338.00	31-Mar-2021

Table 25: Summary of Development Activities along with details of lives touched and expenses incurred

CSR Initiative Location	Project Name	Project Description	Total Individual Benefited	Total Expenditure (in Rupees)	Completion Date
Bikaner, Rajasthan	Empowerment	Promotion of "Digital India" theme in rural villages by operating Nav Kiran Computer Centre	20	9,090.00	31-Mar-2021
Bikaner, Rajasthan	Empowerment	E Mitra Camp for enrollment of the youths in various government schemes	80	14,900.00	31-Mar-2021
Surendranagar, Gujarat	Empowerment	Promotion of "Skill India" movement in rural villages by operating Nav Kiran Stitching Centre	18	60,233.00	31-Mar-2021
Satara, Maharashtra	Healthcare	Multipara Monitor Support in Covid 19 Hospital for the prevention of Corona pandemic	Approx	180,000.00	20-Apr-2021
Buldhana, Maharashtra	Healthcare	Multipara Monitor Support in Covid 19 Hospital for the prevention of Corona pandemic	Approx	180,000.00	20-Apr-2021
Jhandewalan, New Delhi	Healthcare	Contribution to Keshav Smarak Samiti for undertaking various charitable activities such as free health services, dispensary with highly technically equipments, health care camps, old age care home, education support & training classes etc in Keshav Kunj	450	12,500,000.00	20-Jan-2021
Mumbai, Maharashtra	Healthcare	Contributed for organizing the happiness program during Covid lockdown period	300	21,000.00	12-Oct-2020
Mumbai, Maharashtra	Healthcare	Supported Food Grain packets to labors during lockdown period	800	609,781.00	02-May-2020

Table 25: Summary of Development Activities along with details of lives touched and expenses incurred

CSR Initiative Location	Project Name	Project Description	Total Individual Benefited	Total Expenditure (in Rupees)	Completion Date
Surendranagar, Gujarat	Healthcare	Supported Food Grain packets to labors during lockdown period	500	350,000.00	28-May-2020
Surendranagar, Gujarat	Healthcare	Clean & safe drinking water facility in school by installation of RO	418	66,000.00	31-Mar-2021
New Delhi	Healthcare	Support of spectacles to needy people under Netra Kumbh Program	1764	375,592.00	12-Oct-2020
New Delhi	Healthcare	Supported liquid oxygen tank in Covid 19 hospital for the treatment of Corona patients	Approx	200,000.00	03-Nov-2020
Bikaner, Rajasthan	Healthcare	Distributed Blankets to needy & old aged people in the society in winter season	1500	313,424.00	15-Dec-2020
Bikaner, Rajasthan	Healthcare	Corona kit distribution in schools	95	22,052.00	18-Feb-2021
Bikaner, Rajasthan	Healthcare	Clean & safe drinking water facility for the community by installation of Community RO	1350	162,250.00	31-Mar-2021
Mumbai, Maharashtra	Healthcare	Distribution of clothes to orphan care home, St. Catherine's Orphan Home	75	74,340.00	25-Dec-2020

Table 25: Summary of Development Activities along with details of lives touched and expenses incurred

CSR Initiative Location	Project Name	Project Description	Total Individual Benefited	Total Expenditure (in Rupees)	Completion Date
Badaun, Uttar Pradesh	Healthcare	Distributed Blankets to needy & old aged people in the society in winter season	500	112,875.00	19-Jan-2021
Sirsa, Haryana	Healthcare	Distributed Blankets to needy & old aged people in the society in winter season	500	126,500.00	04-Feb-2021
Surendranagar, Gujarat	Environment	Tree Plantation under "Save the Tree" & "Go Green Environment" Program	50 Sapling	2,500.00	26-Jan-2021
Jayapur, Uttar Pradesh	Electrification	Providing electricity to households (1 board comprising 2 points of CFL and mobile charging point) through 25KW*2 solar plants.	634 households, 2853 members	415,450.00	31-Mar-2021
Surendranagar, Gujarat	Electrification	Installation of LED street light for illuminating the rural community	45	297,742.00	28-Jan-2021
Surendranagar, Gujarat	Rural Infra Development	Approach road renovation/construction work for internal movement of the villagers	5000 Community People	725,289.00	31-Mar-2021
Cumulative CSR Expense FY 2020-21				2,01,92,226	

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**Table 26: Land Acquisition Details for New Projects
(01st April 2020 - 31st March 2021)**

S.No.	Project Name	Project Code & Capacity (MWdc)	Project Location	Total No. of Plots	Total Required Land for Project (acre)	Total Land Purchased (acre)	Percentage of Land Purchased (%)
A	Projects under Construction						
1.	Avaada Green HN Projects Private Limited / Avaada HNSirsa Private Limited, Haryana	AGHNPPL, 65 MWdc (50 MWac)	Village: Phorka Taluk: Ellenabad District: Sirsa State: Haryana	26	242	242	100
2.	Avaada Non-Conventional UP Project Private Limited, Badaun, Uttar Pradesh	ANCUPPL, 72.5 MWdc (50 MWac)	Village: Jamalpur & Dubri Hassura Taluk: Dataganj District: Badaun State: Uttar Pradesh	47	247	247	100
3.	Viraj Solar Maharashtra Pvt. Limited/ Avaada MHKhamgaon Private Limited / Avaada MHBuldhana Private Limited, Maharashtra	VSMPL, 130 MWdc (100 MWac)	Village: Ambikapur Taluk: Khamgaon District: Buldana State: Maharashtra	66	546	508	92.50
4.	Avaada Sunrise Energy Pvt Ltd, Surendranagar, Gujarat	ASEPL, 420 MWdc (300MWac)	Village: Talsana Taluk: Lakhtar District: Surendranagar State: Gujarat	192	1359	1293	81

**Table 26: Land Acquisition Details for New Projects
(01st April 2020 - 31st March 2021)**

S.No.	Project Name	Project Code & Capacity (MWac)	Project Location	Total No. of Plots	Total Required Land for Project (acre)	Total Land Purchased (acre)	Percentage of Land Purchased (%)
5.	Avaada Sunce Energy Private Limited, Bikaner, Rajasthan	ASEPL, 490 MWdc (350 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	125	1600	1487	92.94
B	Projects Under Pipeline						
1.	AVAADA Sunrays Energy Pvt Ltd	ARJHNPL, 448 MWdc (320 MWac)	Village: Solanki ki Dhani Taluk: Kolayat District: Bikaner State: Rajasthan	16	1600	557	34.81
2.	Avaada Sustainable RJ Project Private Limited	ARJHNPL, 420 MWdc (300 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	15	1200	292	24.33
3.	Avaada RJHN Private Limited, Bikaner, Rajasthan	ARJHNPL, 336 MWdc (240 MWac)	Village: Noorsar Taluk: Bikaner District: Bikaner State: Rajasthan	34	1060	614	57.92

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Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
0	Capacity Development	Expert guidance on corporate and project level missing	<p>Mandate letter displaying engagement into a business support services (BSS) / Capacity Development (CD) program – and request investors to co fund. Program to be developed with the input from the E&S advisory board and investors. Program to include but not limited to:</p> <ul style="list-style-type: none"> i. ESAP implementation ii. ESMS review and update iii. Trainings iv. On the job coaching v. Assistance in E&S due diligence in at least 2 projects vi. Support in communication to Board 	Mid-term Action	3 months after financial close, with total implementation and project duration up to 18 months after financial close.	EHS Head at Corporate Office	<p>Management cost & cost for engaging third party for executing the Program</p> <p>Cost contribution Avaada: 70.000 € estimate</p>	<p>CLOSED</p> <p>M/s Arcadis, appointed as BSS/CD program consultant.</p> <p>ESMS alongwith all the Annexures have been reviewed, updated and submitted for approval</p> <p>ESDD of one site has been conducted and report shared with the investors.</p> <p>All other site related BSS CD activities like Trainings and ESDDs have been precautionary postponed in view of Corona outbreak. Accordingly, agreement with the consultant has also been extended upto December 2021</p>

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
1	Environment and Social Management System (ESMS) to be updated and strengthened	1.1 Existing E&S screening tools and methods lacks coverage of some E&S aspects. 1.2 Terms of Reference for	1.1. Strengthened E&S screening tools and methods. The site screening and categorization checklist needs to be further enhanced to include a more detailed information of site status and sensitivities for land (type/historical and current use), dependencies (if any), nearest settlement/habitation and linkages to site etc.; eligible to BSS/CD support 1.2. Strengthened Terms of Reference for existing studies/assessments (like E&S DD/ESIA ToR/ E&S audit etc). Specifically, they should include the assessment of	Mid-term Action	Timeframe for completion of deliverables 1.1 and following as per schedule of BSS/CD program, satisfactory to the investors	EHS Head at Corporate Office	Management cost	CLOSED – under BSS/CD program

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>existing studies/ assessments (like E&S DD/ESIA ToR/ E&S audit etc) needs include cumulative impacts, institutional requirements, and environment monitoring plan.</p> <p>1.3 Checklist for monitoring of workers accommodation lacks requirements as per IFC's good practice note</p>	<p>cumulative impacts, institutional requirement and environmental monitoring plan in the ToR suggested for ESIA studies; eligible to BSS/CD support</p> <p>1.3. Checklist for E&S Audit for Construction Phase includes environmental aspects.</p> <p>Worker's accommodation checklist to be updated to include requirements as per IFC's good practice handbook for workers accommodation; eligible to BSS/CD support.</p> <p>1.4 Strengthened E&S terms/conditions in the EPC and other contracting</p>					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>1.4 Non compliances with respect to Contractor and Labour management especially working and living conditions, worker housing and regulatory requirements. The EHS requirement in the contracts do not refer to the ESMS and not consistent with the ESMS.</p>	<p>documents. The responsibilities and liabilities for sub-contractors is clearly identified and determined (including compliance with ESMP/responsibilities there under, and social protection requirements such as minimum wages, healthy and safe working conditions, labour housing and other applicable statutory requirements); Site Management ensures that compliance pertaining to labour and contract management plan (ESMS) to be adequately implemented at Site; eligible to BSS/CD support.</p>					
		1.5 ESMS does not	1.5 A site-specific E&S organo					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>include a typical / standard E&S organogram at the project-level for the management of E&S risks and impacts during the project lifecycle.</p> <p>1.6 Few Site-specific approvals were missing. The Legal Register (Register of Regulations) which is a part of ESMS, is not updated as per the latest rules and regulations.</p>	<p>gram for management for E&S risks and impacts during the lifecycle of the project; eligible to BSS/CD support.</p> <p>1.6 Format for E&S legal register to be maintained for each site.</p> <p>ESMS to be updated to include the latest version of the legal register and arrange for periodic updates; eligible to BSS/CD support.</p> <p>1.7 Terms of reference for a construction phase audit covering EHS and labour aspects developed and included in ESMS. The periodicity/frequency of this</p>					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		1.7 Periodicity of construction phase audits has not been defined in ESMS.	audit and its desired outcomes is to be defined and stipulated that audit to take place at latest 1 month after construction; eligible to BSS/CD support.					
		1.8 ESMS has not established mechanism/guidelines in relation to recruitment, code of conduct, training, work equipment (e.g.	1.8 Formulate standard operating procedures for security management. These includes the roles/protocols for management of on-site security including benefits and entitlements of security personnel. Mechanism/guidelines in relation to hiring, rules of conduct, training, equipment, and monitoring of security staff to be established and formalised; eligible to BSS/CD					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>arms/uniform), and monitoring of security staff.</p> <p>1.9 Documentation procedures for stakeholder engagement and Grievance handling are not in place /informal and no records are being maintained.</p> <p>1.10 ESMS lacks a procedure for tracking of</p>	<p>support.</p> <p>1.9 ESMS includes defined Stakeholder Engagement Plan and Grievance Redressal Mechanism. However, site specific implementation needs to be strengthened; eligible to BSS/CD support.</p> <p>1.10 ESMS includes monitoring of resources such as energy and water consumption per MW of the project. Indicative list of water and energy conservation comprising of rainwater harvesting and ground water recharge that can be adopted at sites to be included; eligible to BSS/CD</p>					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>resources and an indicative list of water and energy conservation measures in line with good industry practice to be adopted at various Avaada projects.</p> <p>1.11 ESMS is not yet covering investments in foreign markets.</p>	<p>support.</p> <p>1.11 All relevant ESMS components and framework plans are checked and upgraded to investments in foreign markets. This includes components like legislation register on environmental, health and safety as well as social issues, sub-contractor management planning, labour management, E&S governance. A separate E&S checklist and E&S management procedure for entering new markets are prepared; eligible to BSS/CD support.</p> <p>1.12 ESMS will include a</p>					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>1.12 ESMS does not include a framework for an Indigenous People Plan (IPP).</p> <p>1.13 The reporting template needs updating to reflect investors requirements.</p>	<p>framework for an Indigenous People Plan (IPP).</p> <p>1.13 Reporting form for investors to be updated with ADB requirements (this will be provided in the investment documentation).</p>					
2	E&S team/capacity	2.1 The capacity of EHS department in terms of human resource is not sufficient to effectively implement the requirements of	2.1 Appointment letter of two additional E&S experts' literate in IFC Performance Standards, subject to E&S advisory committee approval to handle all EHS and social issues at operational sites. These persons have clear lines of responsibility	Immediate Action	3 months after financial close	EHS Head – Corporate Office	Cost for additional resource	<p>2.1 CLOSED - Two qualified EHS staffs have already been appointed and joined Avaada on 15th July 2019 and 26th August 2019, respectively. A copy of offer letter has already been shared.</p> <p>2.2 CLOSED - For all construction sites</p>

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>ESMS at project sites.</p> <p>2.2 EHS capacity at sites is not sufficient.</p> <p>2.3 Training needs are vast but not systematically identified</p>	<p>and authority for environmental and social issues and should be provided with all the necessary EHS trainings – selection and recruitment process eligible to BSS/CD support</p> <p>2.2 Ensure that there is E&S personnel responsible for E&S for projects sites; these personnel may be dedicated at one site or shared across multiple sites.</p> <p>2.3 Training needs assessment is conducted and training plan implemented; undertake 6 monthly training on ESMS for all projects' teams and facilities; provide E&S training (including on ESMP) to the site team at the start of construction and start of operation. Retain records.–</p>					<p>one EHS officer is dedicated and for Operation Sites, Site In-charge is designated as EHS officer after imparting him training by trained EHS officer.</p> <p>2.3 CLOSED - We have site specific training calendar plan for all sites. A sample copy of Training Calendar is attached as Annexure 1. However, activities under BSS/CD program have been majorly affected due to COVID 19 since last since March 2020</p>

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
			eligible to BSS/CD support					
3	Construction Phase E&S audit of Subprojects	<p>3.1 Non compliances due to poor labour management practices at the project sites. Unsafe and unhealthy working and living conditions for labours.</p> <p>3.2 Checklist for monitoring of workers accommodation lacks requirements as per IFC's good practice handbook for workers</p>	<p>3.1 Qualified E&S Consultant to undertake construction phase audit of new sub-projects to ensure compliance to ESMS, IFC PS and ADB SPS requirements and prepare a corrective action plan is engaged. The ToR for this audit should also include a review of labour and contractor management procedures at site.</p> <p>3.2 Worker's accommodation checklist is updated to include requirements as per IFC's good practice handbook for workers accommodation – eligible for BSS/CD support.</p>	Mid-term Action	<p>Audit to be carried out after one month of the start of construction activities</p> <p>3 months after financial close</p>	EHS Head – Corporate Office	Management time in undertaking audits	<p>3.1 CLOSED - The terms of reference for a construction phase audit covering EHS and labour aspects have been formulated and incorporated as Annexure J1 in ESMS.</p> <p>3.2 CLOSED Under BSS/CD program - Worker's accommodation checklist has been updated as per requirements of IFC/ADB and is attached in ESMS as Annexure K.</p>

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		accommodation						
4	Environmental and Social Management Plan (ESMP) for Subprojects	<p>4.1 Corporate level E&S requirements are not systematically reflected at the project level.</p> <p>4.2 Construction and Operation phase ESMP are not systematically developed and implemented.</p>	<p>4.1 Corporate level framework management plans on all related issues and adapt these plans for all new projects based on the characteristics of projects, ESIA's and ESMPs - eligible for BSS/CD support.</p> <p>4.2 For each project: construction and operation phase ESMPs based on E&S Assessment, E&S responsibilities, stakeholder engagement plan and Project-level GRM are developed and implemented. ESMP to include for testing of drinking water, waste</p>	Immediate Action	<p>Presence of framework management plans</p> <p>Implementation to be monitored after one month of the start of construction activities and every three months during the operation phase</p>	EHS Manager at the Site level (once allocated)	<p>External Consultant input</p> <p>Management time in monitoring of ESMP implementation</p>	<p>4.1 CLOSED - All the site specific ESMPs are addressed in respective ESIA's and it is being fully implemented at project sites.</p> <p>4.2 CLOSED - Site specific ESMPs have been shared and implemented at site.</p> <p>4.3 CLOSED - Site specific RoR has been prepared and shared with the site, which is timely updated.</p>

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
			<p>management, handling of hazardous materials and managing OHS issues (such as snake bites). Compliance with construction stage ESMP to be included in contract between AVAADA and contractor and monitoring to be undertaken by Avaada.</p> <p>4.3 Implement legislation register for each subproject, including tracking on non-compliances (E&S monitoring and permits).</p>					
5	Waste management	5.1 Non compliances due to unavailability of buy back agreement for disposal of damaged	5.1 Buyback agreement/recycle agreement is in place for end of life/redundant modules.	Mid-term Action	Within three months for existing subprojects. Prior to	EHS Head	Management time in development of	5.1 In India, there are no guidelines for disposal or recovery/ part recovery for solar panels by Government of India till date. However, damaged Solar Modules are being kept in

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>or dormant solar modules.</p> <p>5.2 Mechanism on safe handling and disposal of different types of waste (non-hazardous and hazardous) generated during the life cycle of the project has not been developed.</p>	5.2 Management procedure/mechanism for various types of wastes like hazardous waste, solid municipal waste, construction, and demolition waste, etc. Are developed and incorporated in the ESMS and at each of the Project Sites.		construction of each new subproject.		procedures and its implementation	<p>isolated closed and covered area and whenever new notification will come from Government of India we will act/dispose accordingly.</p> <p>5.2 CLOSED - In Solar PV project no waste is generated except packaging material, and damaged solar modules. However, SOP for management of waste has been formulated.</p>
6	Land Procure	6.1 Land procurement procedure does not	6.1 Land procurement procedure reflects modalities of Avaada and its resultant social footprint. The	Mid-term	Within six months	Head of Land Procurement	Management time	6 CLOSED under BSS/CD Program - Land procedure has been updated and attached as Annexure D in

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
	ment	reflect land take modalities and establish willing seller willing buyer arrangement	process/documentation to establish good faith negotiation and willing seller-buyer arrangement is established. The process of conducting, monitoring and documenting stakeholder consultations will address whether free and informed negotiation process is being carried out, whether the process of prior public notice, disclosure of panchayat meetings and any other communication linked to decision making is being documented and disclosed. Eligible to BSS/CD support.	Action		Department	to develop the checklist	ESMS. All the points have been covered in Annexure C1 of ESMS and reviewed by Arcadis also
		6.2 The land procurement procedure document in the ESMS does not include any clear	6.2 Robust checklist as part of the Land procurement procedure to ensure effective implementation of the Land Policy is developed and implemented: eligible to					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
		<p>checklist of parameters as stated in the objectives mentioned in the Land Procurement Policy.</p> <p>6.3 Land procurement is organized in a separate department from the responsibilities for consultation and community engagement.</p> <p>6.4 Land aggregator management and monitoring needs strengthening</p>	<p>BSS/CD support.</p> <p>6.3 Procedures and organizational responsibilities for consultation and community engagement and community development (CSR) are strengthened and better integrated in the land procurement processes and organizational structure.</p> <p>6.4 Fully implemented process by which GRPL will manage and monitor the land aggregator to ensure that the procedure and clauses of the agreement are being followed; This will also include the requirement for a</p>					

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
			social due diligence to ascertain if there has been involuntary resettlement for land leased through the government or transfer of public land					
7.	Reporting and Disclosure	7.1 Reporting and disclosure requirements from investors need revising.	<p>7.1 Review and validation (by ADB) of site-screening and categorization checklist for each/new subproject prior to investment decision.</p> <p>7.2 Submission of E&S Assessment (and applicable E&S documentation) to ADB for each/new sub-project.</p> <p>7.3 Submission of Annual Environment and Social report (AESR) in a format agreed by ADB (to be updated in the ESMS). The</p>	Mid-term Action	<p>Based on applicable and agreed timelines.</p> <p>The AESR to be submitted / disclosed annually</p>	EHS Head	Management time in development of site-screening and categorization checklists and AESR	<p>7.1 ONGOING PROCESS - For all new projects the preliminary E&S screening checklist are being prepared and shared with the investors.</p> <p>7.2 ONGOING PROCESS - ESIA's are shared with investors for all new sub projects.</p> <p>7.3 ONGOING PROCESS - Annual Environment and Social reporting (AESR) in agreed format has been shared for the FY April 2019 to March 2020.</p>

Table 27: Environmental and Social Action Plan - Corporate

No.	Topic	Specific Gap	Activities/Deliverables	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/Response from Avaada
			AESR will be disclosed on ADB's website.					

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Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
PS 1 – Assessment and Management of Environmental and Social Risks and Impacts								
1	Hazard Identification and Risk Assessment	No site-specific Hazard Identification and Risk Assessment (HIRA) for the operation phase in place	Undertake Hazard Identification and Risk Assessment to identify risks and impacts.	Mid-term Action	3 months after Financial Close (FC)	EHS Head (Corporate) with help of Site Management	Management Time	CLOSED - HIRA has been initiated in house. However, it will also be covered under BSS/CD program
2	Environment and Social Management Plan	No site-specific Environment and Social Management Plans except emergency preparedness and response plan (ERP).	Develop and implement site-specific management plans based on the ESMP of the ESIA report, also addressing the outcomes of the HIRA (action 1). Include in training program. ERP to be updated at regular intervals.	Mid-term Action	3 months after FC	EHS Head (Corporate) with help of Site Management	Management Time	CLOSED - Site specific EMSP has been prepared as a part of ESIA report and implemented at site level.
3	Training and	No dedicated EHS officer has been	Impart specific EHS and contract labour management related training (incl. ESMS	Mid-term	3 months after FC	EHS Head (Corporate)	Management Time	CLOSED - O&M in-charge itself is designated as EHS

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
	Capacity Building	deputed. Training activities are not documented and do not cover the specific training of designated EHS personnel.	implementation) to staff designated to manage EHS and contract labour aspects at site. Update training calendar to include all topics required as per this ESAP	Action		with help of Site Management		officer after suitable training imparted to him by trained EHS officer. The Training calendar is attached as Annexure 1
4	Emergency Response Plan	Emergency contact numbers in the ERP not up to date Inadequate snake bite prevention/response arrangements. module cleaning workers are not imparted in ERP	Update Emergency Contact numbers in ERP Implement adequate snake-bite prevention/response measures (i.e. pictorial snake identification list, provision of anti-snake venom, snake catchers, etc.) at site. Engage with snake rescue NGO / authorised agency, to assist in	Immediate Action	1month after FC	EHS Head (corporate) with help of Site Management	Management Time	CLOSED All the Emergency contact numbers in on site emergency Plan has been updated and displayed at all strategic locations. All the workers have been imparted regular training. Snake repellent and snake catchers are available at site.

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
		training.	emergency situations. Include module cleaning workers in regular mock drill and training program.					Photographs of Emergency Contact Number and Snake repellent and snake catcher are attached as Annexure 2
PS 2 – Labour and Working Conditions								
5	Labour license	License as per Contract Labour Act 1970 (required for principle employer and contractors engaging 20 or more contract workers) was not available for review.	Obtain Licence as required by principle employer and contractors engaging more than 20 workers as required under Contract Labour Act 1970. Keep evidence on site.	Immediate Action	1.5 month after FC	Site management & applicable contractors	Management time and nominal license fee	CLOSED - Principal Employer License is already there and properly documented at site

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
6	Basic Terms and Conditions of Employment	Site management does not monitor payment of wages by contractors (for module cleaning, grass cutting etc.). key information as required under regulatory provisions, is missing on notice board of the facility	Establish monitoring mechanism to ensure compliance to minimum wage payment, working hours, overtime payment etc. Keep attendance register at the site to monitor compliance. List and display information that are required to be displayed as per applicable labour regulation/factories Act(e.g. minimum wage rate, working hours, labour inspector/factory inspector contact detail, prohibition of child labour & forced labour etc.)	Immediate Action	1 month after FC	Site Management	Management time	CLOSED - Notice board has been updated with all the required information.
8	Grass Cutting	Grass cutting at site is not carried out at regular intervals, leading	Increase frequency of grass-cutting on the project site; include in the daily inspection checklist.	Immediate Action	1 month after FC	Site Management	Operational Cost	CLOSED - Grass cutting is a regular and continuous activity at site.

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
		to increased risk of fire and of infestation of insects and snakes.						
PS 3 – Resource Efficiency and Pollution Prevention								
9	Source of water	Water from bore well in agricultural field, permitted to be used for irrigation purpose, is being used on site for module cleaning. (two other bore wells will be used in future, after taking due permission. Application for NOC has already	Source water only from authorised sources.	Immediate Action	2 weeks after FC	Site Management	Management time	CLOSED - NOC for abstraction of groundwater has been obtained from CGWA.

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
		been submitted)						
10	Waste Management	<p>Waste management plan has not been documented. Waste storage is not compartmented per waste type.</p> <p>Faulty and damaged solar panels were observed stored on unpaved area mixed with other type of wastes.</p>	<p>Maintain inventory of all types of solid waste being generated from site and ensure that wastes are segregated and stored in appropriate waste storage containers or areas.</p> <p>Ensure that the audit and inspection regime include waste storage inspections perform daily checks.</p> <p>Provide sufficient hazardous waste storage receptacles.</p> <p>Include waste segregation practices in</p>	Mid-term Action	3 months after FC	Site Management	Management Time	<p>In Solar PV project no waste is generated except packaging material, and damaged solar modules.</p> <p>Damaged Solar PV modules are stored in an isolated and closed area until its final disposal to authorized vendors.</p> <p>Packaging Material are being stored in separate and secured area and later sold to the local vendors.</p> <p>Regular training is being imparted to handle waste.</p>

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
			training. Designate area for the storage of damaged solar panels.					
11	Handling of hazardous material	Empty and filled drums of transformer oil were seen stored without secondary containment on unpaved area open to sky.	Transformer oil and other hazardous material to be stores in appropriate designated area (sheltered from weather conditions and fully integral secondary containment. Provide and display required labelling and Material Safety Data Sheets (MSDSs) in a language understandable to the workers. Training on handling of hazardous material to be provided. Include hazardous materials transportation, storage, and handling arrangements in the daily inspection	Mid-term Action	3 months after FC	EHS Head (corporate) with help of Site Management	Management Time	CLOSED - Designated and separated location having sufficient spill control measures like cemented platform for storage of transformer oil drums is have been constructed

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
			checklist.					
PS 4 – Community Health, Safety and Security								
12	Community Emergency and Preparedness	No mechanism to alert nearby community in times of any emergency related to fire, electrocution, etc. in place	Protocol/ mechanism to alert community in case of emergency to be defined and communicated to Affected Communities, relevant government agencies, or other relevant parties.	Mid-term Action	3 months after FC	EHS Head (corporate) with help of Site Management	Management Time	<p>CLOSED - The influence area and risk of the Solar PV projects are limited to the plant boundary only consequently, a detailed-on site Emergency Plan is prepared (including all relevant emergency contact numbers) and implemented at site.</p> <p>In view of above, there is no need to involve nearby communities, government agencies, etc.</p>
13	Security Training	No record of behaviour-based training to security	Provide training on behavioural guidelines (use of force and proportionality and conduct toward workers and Affected Communities) to	Mid-term Action	3months after FC	EHS Head (corporate) with help of Site	Management Time	CLOSED - Required training is being imparted as per trailing calendar

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
		staff. Site management does not monitor background check up record for security staff before engagement by security agency.	the security personal. Record and investigate security incidents to identify any necessary corrective or preventive actions for continuing security operations. Require security agency to conduct background check to track whether security personnel have been implicated in past abuses.			Management		SOP for Security Management has been formulated and circulated in all sites and attached in the PO/WO of Security Agency. A copy of accepted SOP from Security Agency is attached as Annexure 3
PS 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources								
14	Critical Habitat	The desk-based review of ecological sensitivities has identified several Critically	Have presence of ecological sensitivities verified through a detailed desk-based screening of the species, consultations with key stakeholders (e.g. Forest Department, Wildlife Department, and local communities) and verified through	Mid-term Action	3 months after FC	EHS Head (corporate)	Cost of engaging external agency for undertaking this study	CLOSED - This is already addressed in ESIA and ESMP reports as such there is no significant impact on Wildlife habitat. Also, the project is in operation phase and our

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
		Endangered and Endangered species in the region.	a rapid site assessment.					activities are limited to the plant boundary only.
15	Adaptive Management of Biodiversity	The potential impact due to electrocution of avifauna on operational transmission lines is significant because of the presence of threatened and protected species in the region.	Regularly check transmission lines and towers (by Operation and Maintenance team) to understand if bird roosting is occurring and adaptive management measures including better use of insulators can be implemented. Depending on outcome of monitoring, implement reduction measures for avifauna electrocution risk, such as insulator improvements along transmission line components (use of plastic insulator caps, plastic tubing, bird-safe strain poles and changes in design to ensure that switches are installed below the cross-arm of the transmission tower)	Mid-term Action	3 months after FC	EHS Head (Corporate) and site-level O&M manager	Cost associated with insulators.	CLOSED - We have already implemented bird safe strain poles and bird diverters/bird guards to avoid electrocution of avifauna at transmission line and visual monitoring is being done regularly.

Table 28: ESAP Status of Chalishgaon Site

No.	Topic	Specific Gap	Recommendation	Priority	Timeframe for Completion	Responsible	Cost Estimates	Status/ Remarks from Avaada
			and the installation of bird diverters.					

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Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
PS 1 – Assessment and Management of Environmental and Social Risks and Impacts								
1.	Environmental and Social Management	Company grievance redressal procedures not adequately implemented and not documented Contractors not aware of Company EHS Policy	Implement the grievance redressal procedures at the site level and set up and implement a formal site-level grievance mechanism for employees and contractors (to be audited by corporate management as per action 1.9 of the corporate ESAP). Set up and implement induction training for contract workers engaged through third parties on Company's EHS policies and applicable procedures.	Mid-term Action	3 months after Financial Close (FC)	EHS Team at the site for maintaining records and implementing procedures at site. Corporate Team for internal audits.	Management time involved.	CLOSED - We have detailed Grievance Redressal Mechanism which is duly addressed in ESMS and maintained as Grievance Redressal logs/register at corporate and site specific at asset level. But during the site visit of ERM, no Grievance was observed as this site is a part of Solar park. The EHS policy is duly displayed in the site office and it is communicated to all the workers through toolbox/pep talk and EHS training. All training records like attendance sheet, feedback form and photographs are maintained at site level.

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
2.	Organizational Capacity and Competency	EHS staff has limited awareness/knowledge of IFC Performance Standards requirements. no dedicated E&S staff planned for E&S functions during the operational phase	Set up and execute training of site-level management and staff with E&S related tasks and responsibilities. Strengthen staffing at site for E&S related tasks and responsibilities, following the provisions in the ESMS. Appoint an E&S person (or designate an existing team member) to handle all EHS and social issues associated with the operational phase of the project and take care of the environmental permit related issues.	Mid-term Action	6 months after FC	HR department managing Site level resources	Operational cost	CLOSED - We have imparted various trainings related to EHS as per training calendar and all training records like attendance sheet, feedback form and photographs are maintained at site level. O&M in-charge itself is designated as EHS officer after suitable training imparted to him by trained EHS officer. The Training calendar is attached as Annexure 1
PS 2 – Labour and Working Conditions								

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
3.	Occupational Health & Safety	<p>No Hazard Identification and Job Safety Analysis have been performed.</p> <p>Some of the workers were not using adequate Personal Protective Equipment</p> <p>Some contractors have not conducted pre-employment health check-ups for all workers</p>	<p>Perform Hazard Identification and Job Safety Analysis and translate the outcomes into adequate preventive and protective measures.</p> <p>Periodically train workers on the use and importance of PPE in order to accomplish a behavioural change.</p> <p>Identify all workers engaged at the site without pre-medical check-ups and arrange for these to be conducted and files</p>	Immediate Action	1 month after FC	EHS team at the Site	Management time (for in-house EHS team) or ~ €4000-5000 for the appointment of an external party.	CLOSED - HIRA has been initiated in house. However, it will also be addressed under BSS/CD Program

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
			maintained.					
4.	Basic terms and Conditions of Employment	<p>Conditions of camps for the accommodation of contractors are inadequate and not in compliance</p> <p>Company is not monitoring status of living conditions of workers in labour areas set up by contractors.</p>	<p>Develop and implement a Labour Camp Management Plan.</p> <p>Require and enforce that contractors meet requirements of labour colony as established in ESMS document and as expected under Inter-State Migrant Workers Act 1979 and the IFC Performance Standards</p> <p>Conduct weekly monitoring with labour colony</p>	Immediate Action	1 month after FC	Site management	Management time	CLOSED - We have already developed "Statutory and Policy E&S Requirement for Contractors" which is attached in ESMS as Annexure G . Further, to ensure compliance it is annexed in the Work Order of Service Contractors.

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
			monitoring check list from the ESMS and report to corporate EHS team with monitoring findings on a fortnightly basis.					
5.	Basic Terms and Conditions of Employment	Certain key information as required under regulatory provisions, were missing on notice board of the facility (current minimum wage rate, working hours, contact detail of labour inspector, etc.)	Update notice board with all information as required under applicable labour regulations	Mid-term Action	3 months after FC	Site management	Management time	CLOSED - The notice board has been displayed with all information related to labour laws and Factory Act.

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
6.	Basic Terms and Conditions of Employment	Site management awareness of Contractor labour Management Plan (CLMP) is insufficient	Arrange an internal training program on corporate ESMS requirements including CLMP and management of labour accommodation areas.	Mid-term Action	3 months after FC	Corporate EHS team	Management time	CLOSED - ESMS implementation training including CLMP was conducted internally and externally by third party consultant (M/s Emergent Ventures), at sub-project site.
7.	Basic Terms and Conditions of Employment	No documented evidence of written contracts with key terms of employment for contractors' workers (incl security staff)	Ensure that contract terms between contractors and their workers are documented and agreed by both parties. Provide a copy of this document to each worker.	Mid-term Action	3 months after FC	Site management	Management time	CLOSED - We have already developed "Statutory and Policy E&S Requirements for Contractors" which is attached in ESMS as Annexure G as well as in WO/PO of Contractors. This document is further circulated to the workers by respective contractors.
PS 3 – Resource Efficiency and Pollution Prevention								
8.	Pollution Prevention, Resource Conservation, Energy,	Site representatives were not aware whether the water suppliers/ vendors	a) Procure water from authorized water suppliers only. Develop a procedure to verify vendors	Immediate Action	a): 1 month after FC	EHS Team at the corporate.	a)& b): Management time and minor cost (€1000-	CLOSED – Water is sourced from local vendors through tankers. Application for obtaining NOC for ground water abstraction has been submitted Also,

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
	Resource and Water Efficiency	are authorised by the concerned regulatory authorities to sell the water. The area falls under over-exploited zone with regards to ground water utilization. No plan for water conservation and ground water recharge is in place	permits/authorizations before engaging them for water supply. b) Obtain a No Objection Certificate (NOC) from the Central Groundwater Board (CGWB) prior to the installation of water well. c) Conduct a study for sustainable utilization of groundwater resources and rainwater harvesting potential.		b) & c): before installation of the groundwater abstraction well at the site.		1500) c): €6000-8000	robotic dry cleaning of modules has been adopted.
9.	Waste Manageme	Inadequate waste management at the project site and	Design, communicate and implement a waste management plan for the	Mid-term	3 months after FC	EHS team at the corporate	Managemen t Time and minor	CLOSED - In Solar PV project no waste is generated except packaging material, and

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
	nt	labour camp	<p>construction and operational stages, including the responsibilities of (sub) contractors and the supervision thereof.</p> <p>Identify and implement alternatives for the safe transportation and disposal of the different waste streams (including hazardous waste); assign authorised contractors to manage and dispose of the waste during the construction phase.</p> <p>Construct waste storage areas according to good industry practice and designate an area for</p>	Action		and project level.	cost is involved.	<p>damaged solar modules.</p> <p>Damaged Solar PV modules are stored in an isolated and covered area until its final disposal to authorized vendors.</p> <p>Packaging Material are being stored in separate and secured area and later sold to the local vendors.</p> <p>Regular training is being imparted to handle waste.</p>

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
			<p>damaged solar panels</p> <p>Provide EHS Training to all staff in charge of the manipulation of waste including hazardous waste.</p>					
10.	Hazardous Material Management	No designated hazardous materials storage area.	<p>Store Hazardous materials in designated areas designed following best industry practice for construction Sites.</p> <p>Train staff in charge of the manipulation of hazardous materials about H&S aspects to hazardous materials\ handling.</p>	Immediate Action	1 month after FC	EHS team at the corporate and project level.	Management Time and minor cost is involved.	CLOSED - Designated and separate location with sufficient spill control measures like cemented platform for storage of transformer oil drums has been constructed.

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
PS 4 – Community Health, Safety and Security								
11.	General Community Health and Safety	No traffic management plan is place, while two frequently used village access roads pass across the solar plant area.	Set up and implement a Traffic Management Plan, Including transport planning, communication to villagers, driver training and (sub) contractor supervision.	Immediate Action	1 month after FC	EHS team at the corporate and project level.	Management Time.	<p>CLOSED - We have fenced our project site and the road is secured and bifurcated from our plant.</p> <p>Traffic Management Plan has been implemented at site.</p> <p>Extensive training has been given to all the site personnel.</p> <p>However, under BSS/CD program – M/s Arcadis have also formulated a Traffic Management Plan which is currently under review of DFIs</p>
14	Grievance Mechanisms	No documented Grievance Redress system in place	Set up and implement a grievance mechanism for local communities as stipulated in ESMS.	Mid-term Action	6 months after FC	EHS team at the corporate and project	Management Time.	<p>CLOSED - Grievance Redressal logs/ register is available for the grievances of local community and workers and documents are available at project site.</p>

Table 29: ESAP Status for Pavagada Site

No.	Topic	Specific Gap	Action / Deliverable	Priority	Time frame for Completion	Responsible	Cost Estimates	Status/ Remarks of Avaada
						level		

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18.0 STATUS OF IMPLEMENTATION OF THE GENDER ACTION PLAN (GAP)

The implementation Status of Gender Action Plan (GAP) as on 31st March 2021 is given in **Table 30: Status of Gender Action Plan**

Table 30: Status of Gender Action Plan					
Output	Targets, and Indicators	Actions	Period	Responsibility	Status
Women employed during operation.	Increase employment of women in the company (excluding project locations) by 10% (from current baseline of 12% to 20%)	The company will actively recruit women.	2018-2022	Human Resources Department	<p>ACHIEVED</p> <p>Priority has been accorded for gender diversity mix reach desired percentage. Significant effects are being made through various digital composition etc. to enrich gender diversity also fulfill various staffing positions.</p> <p>Progress on gender diversity at work has been increased. With these efforts, gender diversity has been achieved at 20% from 12%.</p> <p>The increased proportion of under-represented gender has contributed in strengthening of the organization's value system.</p>
Meaningful consultation with women affected by the project.	All people directly affected by project construction and operation are engaged in meaningful consultation for additional action plans (50% of whom will be women).	Targeted women participation in environment and social assessments and consultations to design and implement mitigation measures	2018-2021	Community Liaison Officer	During the ESIA study, it is made sure that the women group are part of focused group discussions. It is ensured that all the concerns of women group are duly captured and addressed in the environment and social assessments. The mitigation measures are included in the ESMP and implemented at site through CSR plan in conjunction with the need base assessment.
Organization and management adapted to deliver gender action plan.	All management staff oriented on gender action plan activities and targets.	A gender focal point within the company who will be responsible for the implementation,	2018-2019	Human Resources Department	Maintaining gender action plan with priority focus on gender diversity awareness with supportive eco-system and assignment of SPOC who will be responsible for the implementation, monitoring

	Financial and human resources allocated to support implementation and monitor the gender action plan.	<p>monitoring and reporting on the GAP activities.</p> <p>Gender focal point will support the CSR and HR teams in implementation of GAP targets.</p>			and reporting on the GAP activities.
Community Development activities	Increase participation and targeted benefits to women in community development activities	<p>1. 50% of all livelihood and skill development trainings to be provided to women groups.</p> <p>2. Support girl child education (introduce programs aimed at increasing enrolment and retention of girls in schools).</p> <p>Targeted activities aimed at providing sanitation facilities to women in affected villages;</p>	2018-21	CSR department	<p>1. Avaada Foundation has set up Nav Kiran Stitching Centre (livelihood) for women only where 100% participation has ensured.</p> <p>Avaada Foundation has set up Nav Kiran Digital Centre (livelihood & skill development) where we ensured more than 50% participation from adolescent girls.</p> <p>Nav Kiran Production Centre has set up especially for women to increasing the earning level under livelihood program</p> <p>2. Under CSR we conducted “Beti Padhao Beti Bachao”, “Save the Girl Child”, “Beti He to Kal He” rally in villages.</p> <p>Also, conducted various awareness program on promoting girl education through quiz, drawing, essay competition etc.</p> <p>Provided teaching, learning, and playing materials in schools for the retention of children (both boys & girls).</p> <p>Constructed special toilet and urinal for girl</p>

					<p>child in school to increase the enrolment and retention of girl child.</p> <p>E learning & smart classroom has been set up for ensuring quality & fun by learn education in school (both boys & girls).</p> <p>3. Avaada Foundation has constructed community toilet, especially for rural women under Swachh Bharat Mission.</p> <p>Various awareness program and activity has been implemented on menstruation health & hygiene for women & adolescent girls.</p> <p>Sanitary pad has been distributed in rural villages for promoting the use of sanitary pad and avoiding usage of unhygienic cloth.</p>
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19.0 ENVIRONMENT, HEALTH, SAFETY & SUSTAINABILITY AT AVAADA

Environmental Health Safety and Sustainability - Glimpse

Avaada Safety Culture



Mockdrill and Training

Awards and Accolades

Awards and Accolades

CII – ITC Sustainability Awards 2020

- Excellence in Corporate Social Responsibility
- Commendation for Significant Achievement in Environment Management



- Greentech Sustainability Award 2020 - Outstanding achievements in 'Affordable & Clean Energy'.
- Greentech Safety Awards 2020 - Occupational Health and Safety.
- Greentech Safety Awards 2019 - Occupational Health and Safety.





World Environment Day 2020 Celebration



National Safety Week 2021 Celebration



National Electrical Safety Week 2021 Celebration



2 Lakh Safe Man Hours Celebration



EHS Safety Signboards



Nav Kiran Stitching Centre - Skill development and livelihood generation program - An effort for women empowerment

Nav Kiran Stitching Centre - Women Empowerment



Covid relief measures- PPE kit, safety items and ration distribution



CSR Initiatives and Covid relief measures taken