REC Foundation

Impact Assessment of CSR Projects

August 2021





KPMG Assurance and Consulting Services LLP Building No. 10, 4th Floor, Tower-C DLF Cyber City, Phase - II Gurugram - 122 002 (India)

Telephone: +91 124 336 9000 Fax: +91 124 336 9001

Internet: www.kpmg.com/in

Strictly Private & Confidential

Lodhi Road, New Delhi-110003

REC Foundation
Core 4, Scope Complex,

Date: 17 August 2021

Subject: Final report for Impact Assessment for the 14 nos. of REC's CSR Project in various

locations in India

Dear Srinivas Shroff Nagesha Rao,

This refers to the Request for Proposal dated 28.06.2021 issued by you, our proposal dated 5.07.2021, the Letter of Award issued to us dated 06.07.2021, our acceptance letter dated 15.07.2021 to provide services related to impact assessment of 14 nos. of REC's CSR Project ("Services").

We appreciate the opportunity to assist REC Foundation ("you") by providing Services.

This report is our final report and signifies completion of our Services as described in the Contract. The performance of our Services and the report issued to you pursuant to the Services are based on and subject to the terms of the Contract.

This report is solely for your benefit and information and is not to be referred to in communications with or distributed for any purpose to any third party without our prior written consent. We have been engaged by you for the Services and to the fullest extent permitted by law, we will not accept responsibility or liability to any other party in respect of our Services or the report.

It has been our privilege to work with you, and we look forward to continuing our relationship with you.

For KPMG Assurance and Consulting Services LLP

Signature.....

Name Manpreet Singh

Title Partner

Date 17 August 2021



Disclaimer and Notice to Reader

- 1 This report has been prepared by KPMG Assurance and Consulting Services LLP exclusively for REC Foundation, based on the terms of the Request for Proposal dated 28.06.2021 issued by REC Foundation, KPMG's proposal for services dated 05.07.2021, and KPMG's acceptance letter dated 15.07.2021
- 2 The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.
- 3 This report is confidential and for the use of management only. It is not to be distributed beyond the management nor is to be copied, circulated, referred to or quoted in correspondence, or discussed with any other party, in whole or in part, without our prior written consent.
- 4 This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions is not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.
- While performing the work, we assumed the genuineness of all signatures and the authenticity of all original documents. We have not independently verified the correctness or authenticity of the same.
- We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion
- 7 Our report may make reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data.
- In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- 10 By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

Table of Contents

Disclaimer and Notice to Reader	3
Table of Contents	4
List of Tables	10
List of Figures	10
List of Abbreviations	10
Executive Summary	11
1. Introduction	14
1.1 About REC Ltd. And REC Foundation	14
1.2 About the agency conducting impact assessment report	16
1.3 About the projects	16
2. Evaluation and Methodology	19
2.1 Objective of the Study	19
2.2 Method of Evaluation	19
2.3 Detailed Methodology	21
3. Snapshot of the projects	25
Project 1: Apparel Training and Design Centre	31
4.1 About the implementing agency	31
4.2 About the project	31
4.3 Objective of the project	32
4.4. Analysis and Findings	33
4.4.1 Evaluation criterion 1: Relevance	33
4.4.2 Evaluation criterion 2: Effectiveness	35
4.4.3 Evaluation criterion 3: Efficiency	35
4.4.4 Evaluation criterion 4: Impact	36
4.4.5 Evaluation criterion 5: Sustainability	37
4.5 Summary	38
Project 2: Energy Efficiency Services Limited- Madhya Pradesh	41
5.1 About the implementing agency	41
5.2 About the project	41
5.3 Objective of the project	42
5.4. Analysis and Findings	42

5.4.1 Evaluation criterion 1: Relevance	43
5.4.2 Evaluation criterion 2: Effectiveness	44
5.4.3 Evaluation criterion 3: Efficiency	44
5.4.4 Evaluation criterion 4: Impact	44
5.4.5 Evaluation criterion 5: Sustainability	44
5.5. Summary	45
Project 3: Energy Efficiency Services Limited- Uttar Pradesh	48
6.1 About the implementing agency	48
6.2 About the project	48
6.3 Objective of the project	49
6.4. Analysis and Findings	50
6.4.1 Evaluation criterion 1: Relevance	50
6.4.2 Evaluation criterion 2: Effectiveness	51
6.4.3 Evaluation criterion 3: Efficiency	51
6.4.4 Evaluation criterion 4: Impact	51
6.4.5 Evaluation criterion 5: Sustainability	52
6.5. Summary	52
Project 4: Indo-German Institute of Advanced Technology	55
7.1 About the implementing agency	55
7.2 About the project	55
7.3 Objective of the project	56
7.4 Analysis and Findings	57
7.4.1 Evaluation criterion 1: Relevance	57
7.4.2 Evaluation criterion 2: Effectiveness	58
7.4.3 Evaluation criterion 3: Efficiency	58
7.4.4 Evaluation criterion 4: Impact	59
7.4.5 Evaluation criterion 5: Sustainability	60
7.5 Summary	60
Project 5: Indian Institute of Science, Bangalore	63
8.1 About the implementing agency	63
8.2 About the project	63
8.3 Objective of the project	64
8.4. Analysis and Findings	64
8.4.1 Evaluation criterion 1: Relevance	64

	8.4.2 Evaluation criterion 2: Effectiveness	65
	8.4.3 Evaluation criterion 3: Efficiency	65
	8.4.4 Evaluation criterion 4: Impact	66
	8.4.5 Evaluation criterion 5: Sustainability	67
8.5	. Summary	67
Pro	oject 6: IIT Madras	70
9.1	About the implementing agency	70
9.2	About the project	70
9.3	Objective of the project	71
9.4	. Analysis and Findings	71
	9.4.1 Evaluation criterion 1: Relevance	71
	9.4.2 Evaluation criterion 2: Effectiveness	73
	9.4.3 Evaluation criterion 3: Efficiency	73
	9.4.4 Evaluation criterion 4: Impact	73
	9.4.5 Evaluation criterion 5: Sustainability	74
9.5	Summary	75
Pro	pject 7: NDDB Foundation for Nutrition	78
10.	1 About the implementing agency	78
10.	2 About the project	78
10.	3 Objective of the project	79
10.	4 Analysis and Findings	79
	10.4.1 Evaluation criterion 1: Relevance	80
	10.4.2 Evaluation criterion 2: Effectiveness	81
	10.4.3 Evaluation criterion 3: Efficiency	81
	10.4.4 Evaluation criterion 4: Impact	81
	10.4.5 Evaluation criterion 5: Sustainability	83
10.	5 Summary	83
Pro	eject 8: Population Foundation of India	86
11.	1 About the implementing agency	86
11.	2 About the project	86
11.3	3 Objective of the project	87
11.	4. Analysis and Findings	88
	11.4.1 Evaluation criterion 1: Relevance	88
	11.4.2 Evaluation criterion 2: Effectiveness	89

11.4.3 Evaluation criterion 3: Efficiency	89
11.4.4 Evaluation criterion 4: Impact	89
11.4.5 Evaluation criterion 5: Sustainability	91
11.5 Summary	91
Project 9: REACHA	94
12.1 About the implementing agency	94
12.2 About the project	94
12.3 Objective of the project	95
12.4 Analysis and Findings	96
12.4.1 Evaluation criterion 1: Relevance	96
12.4.2 Evaluation criterion 2: Effectiveness	97
12.4.3 Evaluation criterion 3: Efficiency	97
12.4.4 Evaluation criterion 4: Impact	98
12.4.5 Evaluation criterion 5: Sustainability	99
12.5 Summary	99
Project 10: REC Power Development and Consultancy Limited, Odisha	101
13.1 About the implementing agency	101
13.2 About the project	101
13.3 Objective of the project	102
13.4. Analysis and Findings	102
13.4.1 Evaluation criterion 1: Relevance	102
13.4.2 Evaluation criterion 2: Effectiveness	104
13.4.3 Evaluation criterion 3: Efficiency	104
13.4.4 Evaluation criterion 4: Impact	105
13.4.5 Evaluation criterion 5: Sustainability	105
13.5. Summary	106
Project 11: REC Power Development and Consultancy Limited, Rashtrapati Bhawan	108
14.1 About the implementing agency	108
14.2. About the project	108
14.3 Objective of the project	109
14.4 Analysis and Findings	109
14.4.1 Evaluation criterion 1: Relevance	109
14.4.2 Evaluation criterion 2: Effectiveness	110
14.4.3 Evaluation criterion 3: Efficiency	111

14.4.4 Evaluation criterion 4: Impact	112
14.4.5 Evaluation criterion 5: Sustainability	112
14.5 Summary	113
Project 12: Shree Bhagwan Mahaveer Viklang Sahayata Samiti	115
15.1 About the implementing agency	115
15.2 About the project	115
15.3 Objective of the project	116
15.4. Analysis and Findings	116
15.4.1 Evaluation criterion 1: Relevance	116
15.4.2 Evaluation criterion 2: Effectiveness	117
15.4.3 Evaluation criterion 3: Efficiency	117
15.4.4 Evaluation criterion 4: Impact	118
15.4.5 Evaluation criterion 5: Sustainability	119
15.5 Summary	119
Project 13: The Energy and Resources Institute	122
16.1 About the implementing agency	122
16.2 About the project	122
16.3 Objective of the project	123
16.4 Analysis and Findings	124
16.4.1 Evaluation criterion 1: Relevance	124
16.4.2 Evaluation criterion 2: Effectiveness	125
16.4.3 Evaluation criterion 3: Efficiency	125
16.4.4 Evaluation criterion 4: Impact	126
16.4.5 Evaluation criterion 5: Sustainability	126
16.5 Summary	127
Project 14: T-Hub Foundation	130
17.1 About the implementing agency	130
17.2 About the project	130
17.3 Objective of the project	131
17.4 Analysis and Findings	131
17.4.1 Evaluation criterion 1: Relevance	132
17.4.2 Evaluation criterion 2: Effectiveness	133
17.4.3 Evaluation criterion 3: Efficiency	133
17.4.4 Evaluation criterion 4: Impact	133

17.4.5 Evaluation criterion 5: Sustainability	.134
17.5 Summary	134
18. Conclusion	.137

L	ist	of	Ta	b	les

SDGs

WHO

Table 1 Center wise enrolled and pass	ed out candidates35
Table 2 Change in height and BMI afte	r intervention82
Table 3 Key Indicators	91
Table 4 Absenteeism and Retention ra	te of students enrolled in REACHA's 4 intervention
	98
• •	llation104
•	re installed111
•	
List of Figures	
•	
E: 4.050D.DAG(20
•	20
	21
•	come36
•	es37
•	60
•	66
•	66
	arbon footprint (CO2e emission) of IIT Madras (in million
O 7	74
	nemia82
	diminished distant vision83
•	90
·	ent performance98
·	urveyed beneficiaries (before intervention)118
Figure 14 Project outputs	133
Liet of Aleksey de Come	
List of Abbreviations	
CSR	Corporate Social Responsibility
CD	Community Development
NAS	Need Assessment Survey
INR	Indian National Rupee
	Organization for Economic Co-operation and Development (OECD
OECD DAC	Development Assistance Committee

Sustainable Development Goals

World Health Organization

Executive Summary

Since the application of mandatory Corporate Social Responsibility (CSR) provision in 2014, CSR spending by Corporate India has increased significantly. Along with increasing their CSR spending, the companies are also taking up innovative projects and demonstrating innovative ways of addressing social issues. These projects are then replicated or scaled up through investment from the government. REC Limited, being a responsible public-sector enterprise, has taken this opportunity to integrate CSR into its strategy. CSR forms an integral part of REC's culture. REC Limited as a company strives to achieve a balance between the need for economic growth, environmental protection, and social imperatives. As a business, it has been facilitating projects designed to reduce carbon footprint and ensure sustainable and secure growth. REC Limited implements its CSR program through REC Foundation. The Foundation was promoted by the company with an aim to undertake socially relevant, impactful, and sustainable CSR projects. The company supports socially beneficial projects with sustainability as a guiding principle. Aligned to national development priorities, the CSR programs of the company cover a wide spectrum of beneficiaries with a view to empower economically and socially backward communities across India. The CSR initiatives of the Company include projects on sanitation and hygiene, healthcare, skill development, women empowerment, environmental sustainability, and rural development.

To evaluate the impact of these initiatives and understand further the needs and aspirations of the beneficiaries, REC empaneled KPMG to conduct an impact assessment study of 14 selected CSR projects that were supported by them from 2013 to 2019. REC Foundation supported these selected 14 projects across India, which were executed by various implementing partners. REC signed MoAs with the implementing partners for all the projects, stating the expected date of completion, funding amounts, deliverables and monitoring and evaluation techniques. As part of their CSR initiatives, REC has provided funding to these projects that were designed to meet developmental needs such as education, clean energy, skill development, and healthcare, of vulnerable communities across the country. Almost 50% of the REC projects covered as part of this study, focused on improving access to renewable energy and solar power. Other 50% projects included thematic areas such as health, skill development, education, women empowerment, rural development, hygiene and sanitation and hygiene as well. All the projects assessed had an outlay of over 1 crore, with 28% of the projects having a budget of over 5 cr.

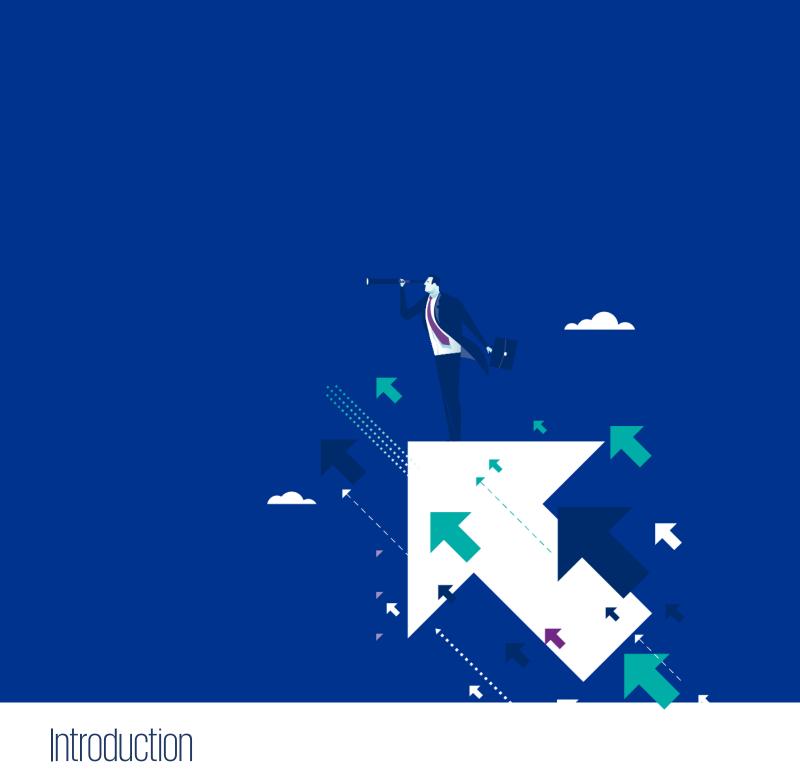
For the purpose of this study, KPMG reviewed documents and data provided by the REC and implementing agency's program team to understand the objective and impact generated by the programs. Documents reviewed included the MoA signed with REC Foundation for the projects, progress reports, baseline and end-line assessment reports, audited utilization certificates, completion reports, etc., basis availability of the documents. The team also conducted stakeholder interaction with selected implementing partners to further understand the projects, its objective and impact, as well as the sustainability strategy for ensuring long-term benefits. KPMG used the OECD DAC framework for evaluating the impact created and developed impact map for each project. A scoring guideline was designed where OECD DAC parameters were scored and bundled basis our understanding of REC projects and availability of information.

Based on our analysis and desk review, the performance for each project was mapped and scored on the OECD-DAC parameters. The table below provides a summary of the scorecard.

OECD Parameters ¹	Relevance	Effectiveness	Efficiency	Impact	Sustainability	Total
ATDC	S	ES	ES	ES	ES	ES
EESL-MP	S	ES	ES	mS	mS	S
EESL-UP	MS	ES	ES	mS	ES	S
IGIAT	ES	ES	ES	ES	S	ES
IISc	MS	ES	ES	S	ES	ES
IIT Madras	MS	ES	ES	S	ES	ES
NDDB	S	ES	ES	ES	ES	ES
PFI	ES	ES	ES	ES	ES	ES
REACHA	ES	ES	ES	ES	mS	ES
RECPDCL- Odisha	MS	ES	ES	mS	ES	S
RECPDCL- RB	MS	ES	ES	mS	ES	S
SBMVSS	MS	ES	ES	ES	ES	ES
TERI	MS	ES	ES	mS	ES	S
T-Hub	ES	ES	ES	S	mS	ES

All the projects scored an extremely satisfactory or satisfactory performance. All the projects evaluated were aligned to REC's CSR policy and global sustainable development goals. Overall, the projects covered 11 out of 17 SDGs with Goal 7- Affordable and Clean Energy emerging as the key focus for around 57% of the REC projects. All the projects efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes and had a target achievement rate between 80-100%. The project activities were timely executed as per the MoA and/or within the approved timelines. The projects had a pan-India geographical reach. The study calculated the total annual reduction of carbon emissions due to the selected solar energy project interventions, which stands approximately at 11296.5 tons. A total of 1533 candidates were provided skill development trainings with a placement rate of over 70% resulting in positive delta change across various indicators such as household income and savings, improved employability, quality of life, etc. Two of the selected projects focused on quality education at primary as well as higher education level and covered around 4800 students and 225 teaching faculties. Overall, the projects engaged with 81 educational institutes including government schools as well as universities through various interventions. The projects overall had an inclusive approach and ensured representation and coverage from various marginalized and vulnerable communities across the sectors and geographic locations. Based on our analysis, it was observed that there is opportunity for further strengthening the performance of the projects across parameters like relevance, sustainability, and impact. Going forward, implementing agencies could be encouraged to formulate a robust sustainability mechanism and strengthen their monitoring and evaluation process through conducting of baseline studies and identifying key performance indicators at the time of project commencement for outcome and impact.

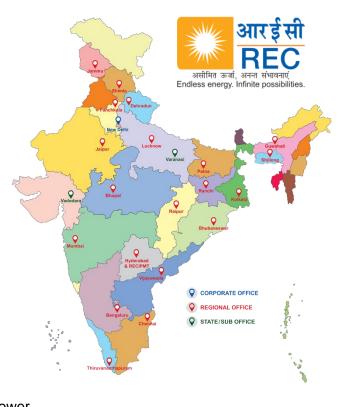
¹ *ES: Extremely Satisfactory; S: Satisfactory; MS: Moderately Satisfactory; mS: Marginally Satisfactory



1. Introduction

1.1 About REC Ltd. And REC Foundation

REC Limited (formerly Rural Electrification Corporation Limited), a Navratna company under the Ministry of Power was established in the year 1969 as a response to the pressing exigencies of the nation. In 1969, India faced severe drought impacting around 15 million people spread across Rajasthan, Gujarat, Tamil Nadu, Uttar Pradesh, Andhra Pradesh, Haryana, Karnataka, Madhya Pradesh. Agriculture sector completely disrupted. The country's leadership sought solutions to reduce the dependency of agriculture on monsoons and Rural Electrification Corporation Limited was conceived with an aim to electrify the rural area and thereby assist in adoption of agricultural pump-sets for optimized irrigation. Since then, the company has diversified to be a leader in providing financial assistance to the power sector in all segments, be it generation, transmission, or distribution. With a presence across 22 states, the company has been instrumental in building a sound infrastructure to provide affordable, accessible, and sustainable power.



REC aims to act as a competitive, client-friendly, and development-oriented organization for financing and promoting projects covering power generation, power conservation, power transmission and power distribution network in the country. REC has a country wide presence across 22 state offices, ensuring easy accessibility to their services. It is also involved in several government projects such as:

- Saubhagya (Pradhan Mantri Sahaj Bijli Har Ghar Yojana) and DDUGJY (Deendayal Upadhyaya Gram Jyoti Yojana)- Both these programs aim at providing 24x7 sustainable and affordable powers to all households in the country. REC has been appointed as the nodal agency for the execution of the same.
- <u>UDAY (Ujwal Discom Assurance Yojana)</u>- The project aims to operationally reform and financially turnaround the power distribution companies of the country and REC is the coordinating agency for the rolling out of this project.

Corporate Social Responsibility

REC Limited as a company strives to achieve a balance between need for economic growth, environmental protection, and social imperatives. As a business, it has been facilitating projects designed to reduce carbon footprint and ensure sustainable and secure growth.

REC Limited implement its Corporate Social Responsibility (CSR) program through REC Foundation. The Foundation was promoted by the company with an aim to undertake socially

relevant, impactful, and sustainable CSR projects. The company supports socially beneficial projects with sustainability as a guiding principle. Aligned to national development priorities, the CSR programs of the company cover a wide spectrum of beneficiaries with a view to empower economically and socially backward communities. The CSR initiatives of the Company include projects on sanitation and hygiene, healthcare, skill development, women empowerment, environmental sustainability, and rural infrastructural development. In order to contribute to the nation building, the company has a special focus on Aspirational Districts under its CSR program. It has implemented CSR initiatives in seven such districts listed below.

- 1. Muzaffarpur, Bihar
- 2. Chandel, Manipur
- 3. Mamit. Mizoram
- 4. Kiphire, Nagaland
- 5. Gajapati, Odisha
- 6. Udham Singh Nagar, Uttarakhand
- 7. West Sikkim, Sikkim

REC conducts interventions in the following 7 domains:



REC's CSR and Sustainability vision and mission²

"To fund and support Corporate Social Responsibility projects with Sustainability as a guiding principle giving priority to issues of foremost concern as in the national development agenda like safe drinking water for all, provision of toilets, health, sanitation, education, etc., and to reach a wide spectrum of beneficiaries with a view to empower economically and socially backward communities, old age persons, Specially-abled, children, youth, etc., by contributing in rural development, environmental protection, conservation of water and natural resources, slum development, cleanliness and sanitation, creation of livelihood, eradication of hunger/ poverty, skill development, etc."

_

² REC's CSR policy

1.2 About the agency conducting impact assessment report

About KPMG

KPMG is a global network of professional firms providing Audit, Tax and Advisory services. We work closely with our clients, helping them to mitigate risks and grasp opportunities. The independent member firms of the KPMG network are affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. We have over 227,000 outstanding professionals working together to deliver value in 146 countries worldwide. Combined revenues for KPMG member firms were US\$29.22 billion in the 2020 fiscal year, a decrease of approximately 1% annual growth.

KPMG in India

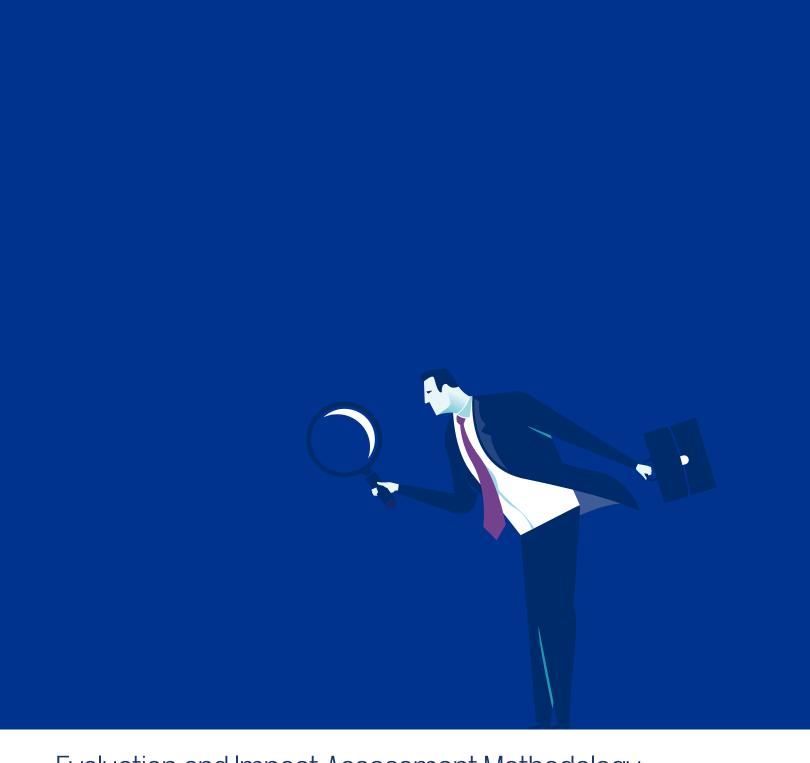
KPMG in India, a professional services firm, is the Indian member firm affiliated with KPMG International and was established in September 1993. Our professionals leverage the global network of firms, providing detailed knowledge of local laws, regulations, markets, and competition. KPMG has offices across India in Ahmedabad, Bengaluru, Chandigarh, Chennai, Gurugram, Hyderabad, Jaipur, Kochi, Kolkata, Mumbai, Noida, Pune, Vadodara, and Vijayawada. KPMG in India offers services to national and international clients in India across sectors. We strive to provide rapid, performance-based, industry-focused, and technology-enabled services, which reflect a shared knowledge of global and local industries and our experience of the Indian business environment. KPMG is a leader in providing advisory services to a variety of clients ranging from Government and Public sector Units, Non-Profit-Organizations, Financial Institutions, Private sector organizations and other industry segments. Our strategic sector focus targets key viable industry sectors including Water and Sanitation/Sewerage; Energy and Natural Resources; Real Estate and Construction; Transportation and Logistics; Telecom; Private Equity; Pharmaceuticals; Automotive; Media and Entertainment; IT & ITeS; Education; Defense; Financial Services, and Healthcare, etc.

1.3 About the projects

REC Foundation supported 14 projects across India, executed by various implementing partners. For all the projects, REC signed MoAs with the implementing partners stating the expected date of completion, funding amounts, deliverables and monitoring and evaluation techniques. The role of REC was to support the to the projects undertaken by the implementing partners. The details of the projects are:

S. No.	Implementing Partner	Projects
1.	Apparel Training and Design Centre (ATDC)	Job oriented Skill Development / upgradation program for youth
2.	Energy Efficient Services Limited – MP	Installation of LED based Solar street lighting in rural villages
3.	Energy Efficient Services Limited – UP	Installation of Solar Based Street Lighting System (SLS) and Solar High Mast Lights.

4.	IGIAT - Indo-German Institute of Advanced Technology	Job oriented skill development training to youth belonging to SC/ ST/ OBC/ PWD/ women/ EWS sections of the society
5.	IISc- Indian Institute of Science, Bangalore	Establishment of photovoltaic solar panels and installation of LED lights at various locations of the IISc Bangalore campus
6.	IIT Madras	Installation of SPV system in the academic zone and hostel building of IIT Madras.
7.	NDDB Foundation for Nutrition (NFN)	Distribution/ supply of Giftmilk to school children in Government schools
8.	Population Foundation of India	Amplifying the message of Swachh Bharat Mission and women empowerment via communication intervention titled 'Main Kuch Bhi Kar Sakti Hoon' Season 3'
9.	RECPDCL- Odisha (Rooftop)	Installation of Roof Top Solar PV power plant residential schools owned by the ST& SC Development Department of Govt of Odisha in backward districts
10.	RECPDCL- Rashtrapati Bhawan	Installation of solar power panels, in President Estate, Rashtrapati Bhawan
11.	REACHA	Improve learning outcomes in primary education for children studying in Govt. schools
12.	Shree Bhagwan Mahaveer Viklang Sahayata Samiti	Providing aids and appliances to especially abled persons of the society.
13.	The Energy and Resources Institute (TERI)	Setting up of Solar Micro Grids to provide Clean Energy Services in rural HHs.
14.	T-Hub Foundation	Raising young innovators through the conceptual research experience



Evaluation and Impact Assessment Methodology

2. Evaluation and Methodology

The section below provides information on the objective of the study, OECD-DAC framework and the detailed methodology used to evaluate the selected projects.

2.1 Objective of the Study

In order to strategize and plan its CSR activities, REC Foundation has planned to carry out an impact assessment of the projects and KPMG was empaneled to conduct the study. The objective of the study was to assess the outcomes and impact created on the stakeholders covered under the program.

Impact assessment was undertaken on the following parameters:

- Whether the project was implemented as per the MoA/plan
- Impacts created under the project
- Overall project performance
- Any shortfall, gaps, challenges if any in formulation, execution/implementation, monitoring and evaluation of the program

The expected benefits from the study are as follows:

- Captures the perceptions of benefits of beneficiaries, stakeholders, and their behavioral change
- Suggests improvements in management and monitoring systems
- Applicable across diverse interventions and recognizes the diverse range of development and humanitarian activities
- Guides more effective investment
- Recommends improvements in program delivery
- Enhances understanding of the status of upkeep of the assets created out of the CSR activities

2.2 Method of Evaluation

The study used the OECD DAC framework for evaluating the impact of the CSR projects.

OECD DAC Framework³

The Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria (relevance, effectiveness, efficiency, impact, and sustainability) in the 1991. These five criteria serve as the core reference for evaluating international development and humanitarian projects, programs, and policies. These evaluation criteria have been defined below:

• **Relevance:** The extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so if circumstances change.

³ http://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf

- **Effectiveness:** The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.
- **Efficiency:** The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
- **Impact:** The extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects.
- **Sustainability:** The extent to which the net benefits of the intervention continue or are likely to continue.

OECD DAC Framework

How it helps?

Helps in gaining qualitative understanding of the

impact created, stakeholder perception, extent

What is it?

Framework for evaluating performance of social

development programs on relevance,

effectiveness, convergence, and sustainability of collaboration with other actors and aspects sustenance of the change Indicative questions Key Performance Indicator **Evaluation Criteria** To what extent do beneficiaries from all Program included beneficiaries backgrounds get covered by the program? from all backgrounds, without any Inclusiveness discrimination To what extent does the program have the Program aligned to the needs capacity to meet the needs and expectations and expectations of society of society? To what extent does the program and involved adequate have the potential to facilitate participation engagement / participation Relevance from the community, linkage from the community and local government in with SDGs, etc. creating sustainable impact? Program has significant impact To what extent has the program been able to on health and wellbeing status create an impact on HDI profile of of beneficiaries, etc. **Effectiveness** beneficiaries? Program involves collaboration To what extent does the program have the potential to link beneficiaries to government with government or other nonprogram / schemes, etc.? government organization Convergence operating in program area To what extent does the program have the Enhancement of local potential to create a sustainable impact post community/ institution skills to withdrawal of REC's support? Sustainability govern and manage programs, linkages with government/

Figure 1 OECD DAC framework

2.3 Detailed Methodology

The impact study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria were followed throughout to effectively capture the impact of the programs.

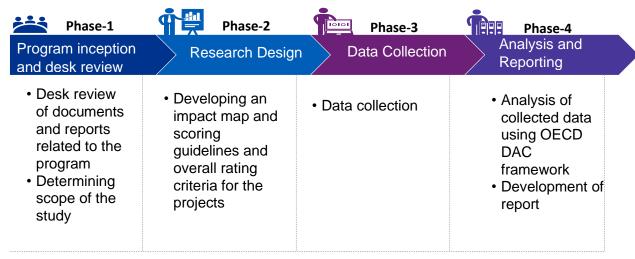


Figure 2 Methodology Phases

Phase 1: Program inception and desk review

At the beginning of the study, KPMG consulted REC Foundation to gather information about the programs and reviewed the documents related to the programs. Documents reviewed included the MoA signed with REC Foundation for the projects, progress reports, baseline and end-line assessment reports, audited utilization certificates, completion reports, etc., basis availability of the documents.

Phase 2: Research design

After developing an understanding of the programs, KPMG in consultation with REC Foundation finalized the scope and boundary of the study. Enhanced understanding of the program helped in developing:

- Impact map
- Scoring Guidelines

Impact Map: To achieve the desired long-term changes, one needs to establish clear linkages between the project's activities and the desired impact. An Impact map is a representation of the workflow of the project and identifies the various aspects of project implementation, as mentioned below⁴.

https://www.intrac.org/wpcms/wp-content/uploads/2016/06/Monitoring-and-Evaluation-Series-Outcomes-Outputs-and-Impact-7.pdf

- 1. **Inputs**: The financial, human, and material resources used for the development intervention by the implementing agency and other stakeholders.
- 2. **Activities**: The actual work on ground, actions taken, or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilized to produce specific outputs
- 3. **Outputs**: The products, capital goods and services which result from a development intervention and may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
- 4. **Outcomes**: Outcomes are the (long term) changes created for the stakeholders related to the activities in the scope/The likely or achieved short-term and medium-term effects of an intervention's outputs.
- 5. **Impact**: It is measured in terms of a significant change in the lives of the project beneficiaries due to the initiation of the project. Positive and negative, primary, and secondary long-term effects produced by a development intervention, directly or indirectly, intended, or unintended.

It is a tool for describing or illustrating how and why a desired change is expected to happen, that is, connecting the activities of the program with the outcomes, impacts and their contribution to achievement of the final goal. An impact map for this project was developed as part of the study.

Please refer to individual project chapters for impact maps of the project.

Scoring Guidelines: Subsequently, a scoring guideline was designed where OECD DAC parameters were scored and bundled basis our understanding of REC projects and availability of information. Weights were assigned to the bundled OECD DAC parameters. Various components within the parameters have been assigned scores. Weights and scores have been used to compute the overall score for each project



Company Score = W1 * Average (R, Ef) + W2 * Average (E1, I1) + W3 *S1

Parameters Components		Scores	Variables	
	Need assessment report	20%		
	Availability of information on need	20%		
Relevance	assessment	20 /0	R	
	Alignment to CSR Policy of REC	40%		
	Alignment to SDGs	20%		
Efficiency	Adherence to timelines	50%	Ef	
Efficiency	Adherence to budget	50%		
Effectiveness Target achievement (planned vs actuals)		100%	E	
	Baseline assessment report	20%		
	Availability of baseline indicators	10%		
Impact	Impact assessment report/ Impact	50%	ı	
	Availability of clearly defined impact indicators	20%		
Sustainability Sustainability mechanism, Convergence		100%	S	

Weighted Scores were then used to develop a 6-point scale:

- 85-100 % -> Extremely satisfactory
- 70-84% -> Satisfactory
- 55-69 %-> Moderately satisfactory
- 40-54 %-> Marginally satisfactory
- 20-39 %-> Dissatisfactory
- < 20 % -> Extremely dissatisfactory

Phase 3: Data Collection

Once the framework for undertaking the study was finalized, data from program documents available with the REC project team was collected. Desk review included review of documents including project proposal, MoA signed with the implementing agency, and progress report submitted on ongoing work. Data collection was done through a virtual mode owing to the COVID -19 pandemic. The team conducted stakeholder interaction with selected implementing partners to further understand the projects, their objectives and impact, as well as the sustainability strategy for ensuring long-term benefits.

Phase 4: Analysis and Reporting

The data and observations from documents review and relevant stakeholder interaction (where applicable) were analyzed. The study also checked project's compliance to MoA and whether the project was completed within the allocated budget and timeline. Draft copy of report was developed and shared with REC Foundation for feedback/ inputs. Subsequently, final report was prepared and submitted to REC Foundation.



Project-wise Impact Analysis

3. Snapshot of the projects

This section provides a brief snapshot of the selected fourteen projects, followed by detailed project-wise impact assessment sections of the projects as listed below:

Projects	Title	Impact				
ATDC	Job oriented Skill Development / upgradation program for youth	 Out of a target goal of 540 candidates, the project successfully trained 533 candidates across 8 skill development courses. The project achieved a total placement rate was 89.86%. Both baseline and end line assessments were conducted for the project, and the report indicated positive delta change for household income and saving. as well as other socio-economic indicators. Significant improvement in the socio-economic indicators was noted for the beneficiaries surveyed, for example, around 62.2% beneficiaries constructed or renovated their house after the project which was earlier 9%. Post placement, candidates were tracked- 3 months after the completion of the project. 				
EESL-MP	Installation of LED based Solar street lighting in rural villages	 Project successfully installed 1600 LED Street Lighting systems in 425 villages across 3 districts of Madhya Pradesh. The study calculated the annual reduction in CO2 emissions due to project intervention to be around 73.4 tons approximately. Impact assessment report also indicated positive change on social, safety, education, health, and environmental aspects for the community. Maintenance of solar LED lights for 5 years was part of the project to help sustain the impact. 				
EESL-UP	Installation of Solar Based Street Lighting System (SLS) and Solar High Mast Lights.	 Project successfully installed 420 Solar Street Lights and 145 Solar High Mast Lights. The study calculated the annual reduction in CO2 emissions due to project intervention to be around 15.8 tons approximately. There is a sustainability mechanism which provides warranty for 5 years after installation and commissioning. Also, the sustainability plan includes setting-up of a centralized post-sale service system to address customer grievances and conduct local trainings for smooth operation and maintenance. 				

IGIAT	Job oriented skill development training to youth belonging to SC/ ST/ OBC/ PWD/ women/ EWS sections of the society	 Project completed its goal of training 1000 candidates across 12 courses and achieved a placement rate of 74%. Around 22% of trained candidates were female. Over 80% students belonged to EWS sections. Average Salary across all courses stands at INR 9691. CNC Operator course had the highest average salary of INR 11,087. Around 73% of candidates mentioned that the training had satisfactory or highly satisfactory impact on their career. The program provides post training placement and follow up support for around 3-6 months depending on the candidate's requirements. Also, the training is aligned to NSDC, and trainees are certified by the relevant skill sector council.
IISc	Establishment of photovoltaic solar panels and installation of LED lights at various locations of the IISc Bangalore campus	 Project successfully established 279 KWP photovoltaic rooftop solar panels on 3 nos. of sites/buildings and installed 2200 nos. of LED lights on IISc campus. Impact Assessment report provides data on impact indicators such as- Annual reduction in Carbon Footprint (604 tons), Annual Electricity Generation (379080 units) and Savings (225424 units), and Annual Monetary savings (INR 36.27 lacs). The Center for Campus Management Department, IISc is responsible for maintaining and monitoring. There's a data control system which records and monitors the functioning of the installed panels.
IIT Madras	Installation of SPV system in the academic zone and hostel building of IIT Madras.	 The project successfully installed 2MV rooftop solar panels in the IIT Madras hostels and academic building as per the target goal. The installation of the solar panels will lead to a reduction of emission of 3.15 million kg of CO2, thereby reducing the carbon footprint of the campus. There has been a reduction in total electricity consumption of IIT Madras by 8.7% and reduction in the electricity demand by 1MVA. The performance of the solar panels is monitored through an online monitoring system to analyze its functioning.
NDDB	Distribution/ supply of Giftmilk to school children in Government schools	 All the targets were achieved as per the MoA which included the supply 200ml of fortified milk, purchase of 500 insulated boxes and 33 mobile tablets as school's property for real time monitoring at consumption point. Significant improvement on all the identified indicators such as height, vision, anemia etc. Number of children

		 having severely low BMI (<-3SD) reduced by 3.3% after the intervention. Anemic population in the intervention schools was reduced to 56% in comparison to the control schools, where it was reduced to 64%. This program was further adopted by the Government of Jharkhand and expanded to more schools under 'PM Giftmilk Scheme.
PFI	Amplifying the message of Swachh Bharat Mission and women empowerment via communication intervention titled 'Main Kuch Bhi Kar Sakti Hoon' Season 3'	 Project produced and broadcasted 26 episodes of 'Main Kuch Bhi Kar Sakti Hoon' Season 3' as per the target goal. The project had an outreach of 9.8 million viewership for the first 26 episodes which were supported by REC. A comparative study between viewers and non-viewers was conducted on knowledge attitude and practices on the sanitation indicators and impact of the serial-MKBKSH. The report indicated that 82.3% of viewers were aware of negative impact of open defecation on health as compared to 65.3% of non-viewers. About 45% of viewers reported taking some action and willingness to take some action in future as a result of watching the show. Episodes produced are uploaded on various social media platform and are also periodically reposted/reused to continue generating awareness on the issues.
REACHA	Installation of Roof Top Solar PV power plant residential schools owned by the ST& SC Development Department of Govt of Odisha in backward districts	 Solar panels of 5kWp were installed at 16 residential schools across 9 districts of Odisha as per the target. Annual Reduction in CO₂ Emissions: 305.84 tons. The installation of the panels was beneficial in ensuring that the students have regular and continued supply of electricity which would further support their educational outcomes. Of the 16 schools covered, 9 are exclusively girls' schools with predominantly SC/ST background, leading to the possibility of significant impact on the girl children in these schools.
RECPDCL- Odisha	Installation of solar power panels, in President Estate, Rashtrapati Bhawan	 The panels were successfully installed at 5 buildings in the Rashtrapati Bhawan estate. Annual Reduction in CO₂ Emissions: 348.32 tons. Expected impact inferred from secondary research and quarterly report suggest that the panels would reduce the carbon footprint of Rashtrapati Bhawan as well as encourage other similar institutions to adopt clean energy. The plant is expected to generate approximately 0.95 million units (MUs) of green energy. The panels were

		cleaned and maintained to ensure that they function optimally.
RECPDCL- RB	Improve learning outcomes in primary education for children studying in Govt. schools	 As per the target the project had an outreach of 3000 school children through the establishment of 75 learning centers. The intervention brought down the percentage of students scoring 0% marks from 14% to 7.2%. The project brought about an overall change in the perception and attitude towards education and project-based learning, among the Teachers, Principals, Parents, Community leaders and the students. The project trained and built capacity of 75 women from the local community on teaching pedagogy and project-based learning.
SBMVSS	Providing aids and appliances to especially abled persons of the society.	 The target was achieved, and the project successfully reached 2600 beneficiaries. The initiative was successful with over 90% of the surveyed beneficiaries being satisfied with the aids received and noting that the intervention helped them restore their dignity. More than 90% of people were fully satisfied with the fitment of artificial limbs/calipers and other aids and appliances. They regained their self-esteem and confidence and became very productive members of the society. Less than 10% faced fitting/adjustment issues.
TERI	Setting up of Solar Micro Grids to provide Clean Energy Services in rural HHs.	 Project successfully provided clean and affordable lighting to around 1400 rural households through installing 140 solar micro grids in Jharkhand and Odisha. Annual Reduction in CO₂ Emissions: 6476.24 tons. Impact assessment report indicates positive change on household savings, social, child education, women's workload, health issues, etc., for the beneficiaries. The project has a robust sustainability mechanism and uses a fee for service model in the selected villages. It also linked the solar micro grids with the Energy Enterprises (EE) and conducted capacity building trainings for operating and managing SMGs.
T-Hub	Raising young innovators through the conceptual research experience	 Project completed its goal of engaging 1800 students and 150 faculty from government institutions in rural areas of Andhra Pradesh and Telangana on solution-oriented thinking, innovation and entrepreneurship and renewable energy. The project successfully engaged students and faculty to deliver around 600 proposals. Out of which 24 research papers were developed through advanced mentoring. 6

	projects were then shortlisted for developing a prototype at T-Hub Foundation.
•	Project envisages a long-term tangible impact, where students involved in this program will be inspired to continue being involved in the space of Renewable energy



Project 1: Apparel Training and Design Centre

4.1 About the implementing agency

ATDC was set up in 1991 with the aim to work towards skill excellence in an integrated manner by creating a "step ladder training ecosystem with clear focus on scaling inspirational Indian youth specially women and underprivileged for wage and self-employment for downstream apparel sector which has the maximum potential for employment generation, specially to revive rural economy". Over a span of time ATDC has emerged as India's largest quality vocational training provider for all apparel sectors with over 200 directly run centers spread across 23 states. Being one of its kind, ATDC has unique skill training centers which offer shopfloor, supervisory and managerial level training courses i.e. 300 hours to 3000 hours short-term entry level certificate courses to long duration bachelor's degree (B.Voc.). Further, they have a vast pool of over 500 qualified and experienced faculty members bringing a wide range of domain expertise covering most of critical skill initiative areas of textile-apparel value chain.

In order to conduct their activities in a socially responsible manner, they have adopted an innovative model of collaboration with apex organizations to enhance employability of youths from underprivileged backgrounds and link them with employment opportunities. ATDC has formed partnerships with central and state government organizations such as Nehru Yuva Kendra Sangathan (NYKS), National Backward Classes Finance and Development (NBCFDC), National Scheduled Castes Finance and Development Corporation (NSFDC), Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) etc. and has shown good outcomes in terms of outreach to youth, women and disadvantaged sections of the society making them employable in the job markets.

4.2 About the project

Introduction of the project

RECL provided funds to ATDC under its CSR initiatives to conduct employment linked vocation training of 540 school/college dropouts/socio-economically disadvantaged candidates belonging to SC, ST, backward and other minority groups. It was mutually decided by ATDC and RECL to provide training on the courses like Production Supervisor Sewing and Apparel Pattern Making Basic, which had enough potential to be absorbed for shopfloor employment/ self-employment in government trade at various locations of India. The course duration was 6 months with around 720 hours of training.

Project documents

The following documents were available for KPMG to review:

- MoA signed between ATDC and REC Foundation
- Baseline survey
- Impact assessment report
- Project completion and outcome report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 18 months.

Funding Amount

The project's allocated budget stands at INR 10 cr.

Location

The project's geographical reach covers Chandigarh, Punjab, Odisha, Gujarat, West Bengal, Haryana, Jharkhand, and Bihar through ATDC centers.

Beneficiaries

The project aimed to benefit to 540 underprivileged youths belonging to SC, ST, backward classes, minorities, women, and persons from the economically weaker sections of society.

Key thematic areas

The project was focused on skill development for youth as its targets, which is in alignment with REC's CSR policy.

4.3 Objective of the project

The project aimed to provide employment-oriented skill training to develop the capacity and capability of underprivileged youth who are academically challenged for employment at shop floor level in garment industry and impart advance skill training to intermediate or graduate underprivileged youth. The project also aims to develop professionally qualified/professional entrepreneurs through self-employment in garment segment for overall economic growth and development of garment industry.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Time by ATDC and REC Human resources by ATDC 	 Provide 6 months training in suitable batches at the proposed ATDC centers Purchase and procure goods needed for the project Provide placement including 	■ 533 candidates successfully completed their training, out of which 474 (88.93%) secured 80% attendance and were eligible for stipend ■ 337 (63.22%) trained candidates got wage employment in	 Significant improvement in the socio-economic indicators was noted for the beneficiaries surveyed. Improvement in lifestyle e.g. 62.2% constructed or renovated their house after the project as compared to 9% during the preintervention stage; 33.3% bought a 	Improved access to skill development training and positive change in the lifestyle and social aspects of the beneficiary's lives.

self- employment /wage employment to at least 70% of the candidates Provide stipends to the candidates	various leading garment industries and 142 (26.64%) chose self- employment	motorcycle which was limited to only 8.1% during the baseline. Improvement in household income and saving. Improvement in social aspects of lives of female students	
for 6 months		students	

4.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

4.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. The project is also aligned with the National Skill Development Mission.

The Sustainable Development targets for 2030 call for guaranteeing equal access to quality technical and vocational education for everyone. ATDC's project contributes to the following SDG goals:

SDG SDG Targets How is it aligned? Target 4.3 The project ensured - Ensure equal access for all women and men that vocational education is available to affordable and quality technical, vocational, for all the beneficiaries and tertiary education, including university so that they are able to SDG 4: Quality seek employment or be Target 4.4 education self-employed. - Substantially increase the number of youth QUALITY and adults who have relevant skills, including **EDUCATION** technical and vocational skills, employment, decent jobs, and entrepreneurship Target 4.5 Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous people, and children in vulnerable situations Target 8.2 The project focuses on ensuring that the Achieve higher levels of economic productivity beneficiaries are trained diversification. technological in such a manner that upgrading, and innovation, including through they are able to seek a focus on high value added and labouremployment and have intensive sectors. the sufficient skill set to sustain themselves in Target 8.3 the work force and **SDG 8: Decent work** — Promote development-oriented policies that support themselves support productive activities, decent job and economic growth financially. creation, entrepreneurship, creativity, and innovation, and encourage the formalization DECENT WORK AND **ECONOMIC GROWTH** and growth of micro-, small- and mediumsized enterprises, including through access to financial services. Target 8.5 Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. Target 8.6 By 2020, substantially reduce the proportion of youth not in employment, education, or

training.

SDG 8: Industry, innovation, and infrastructure



Target 9.2

— Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries The project aimed to train beneficiaries who are marginalized in order to make them contribute to the workforce and economy.

4.4.2 Evaluation criterion 2: Effectiveness

Effectiveness is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Out of a target goal of 540 candidates, the project successfully trained 533 candidates i.e. 98.7% of the candidates across 8 skill development courses. Out of 533 passed out candidates, 474 pass out candidates secured 80% attendance and were thus eligible for the stipend.

S. No.	Centre name	Total Candidates Sanctioned	Total candidates enrolled	Total candidates passed out
1	ATDC-Patna		25	23
2	Chandigarh		54	46
3	Ludhiana		70	56
4	Faridabad		75	57
5	Sirsa		50	50
6	Bhubaneswar		60	49
7	Cuttack	540	35	34
8	Surat		50	41
9	Kolkata		51	17
10	Santoshpur		50	45
11	Jalpaiguri		81	77
12	Ranchi		50	38
	TOTAL	540	651	533

Table 1 Center wise enrolled and passed out candidates

4.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of INR 10 cr. towards the project, for a time-period of 18 months, in FY 2016-17.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

4.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

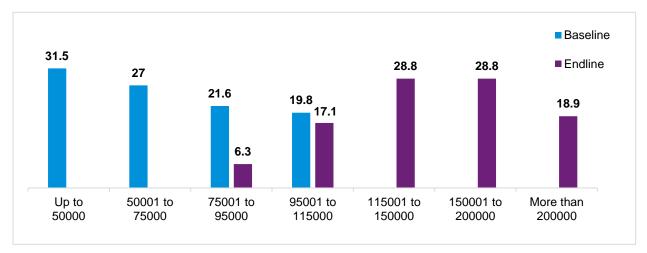


Figure 3 Improvement in household income

The project had a positive change on the household income of the beneficiaries⁵. During the baseline assessment, it has found that majority (31.5%) of the beneficiaries had a household income that was up to INR 50,000/-. During end line assessment, it was found that now the household income for most of the beneficiaries (57.6%) ranged from INR 1,15,000-2,00,000.

⁵ Based on the project completion and impact assessment report

With respect to women, the program brought about a social change in their lives as well. Before training, as per the baseline study, 8.1% of the beneficiaries had a prospect of getting married and during the end line assessment it was found that this prospect had increased to 98.2%. Around 98.2% of the beneficiaries felt that the program had enhanced their prospect of getting married. While only 2.7% girls received support towards developing their career during the baseline, this percentage increased by 95.5% during the end line assessment. The pressure to get married just after schooling was reduced for around 14.5% of the girls.

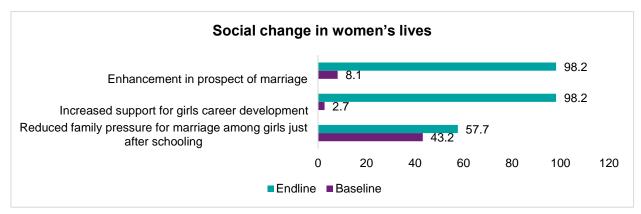


Figure 4 Social change in women's lives

With respect to other social economic indicators, there was an upward change in them as well. For example, 60.4% of the beneficiaries purchased a smart phone for their household members. Similarly, 100% felt that there was a change in their personality and living standards after the project. The change can also be noted through the parameter of purchasing household assets or items such as renovation of the house. 62.2% of the beneficiaries renovated their house in comparison to 9% during baseline. The number of beneficiaries who purchased a music system increased by 49.6% while for those who purchased a motorcycle, it increased by 25.2%. The project thus had a positive impact on the quality of life of the beneficiaries trained and their family members as well.

4.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention.

The program provides post training placement and follow up support for around 3 months depending on the candidate's requirements to ensure that the outcomes of the program are sustained. The project was supported by REC and ATDC and was aligned with the vision of the national skill development mission which aims to create convergence across sectors and states in terms of skill training activities.

4.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by ATDC. ATDC has implemented the skill development program to support the development of 540 underprivileged youth across India. Major activities included mobilization of candidates, skill development training, provision of stipends and placement of the candidates. Through these interventions, the project created a positive impact on several indicators such as household income and savings, quality of life, as well as other socio-economic indicators. The total score of the project is Extremely Satisfactory, with four parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Extremely Satisfactory
Sustainability	Extremely Satisfactory
Total Score	Extremely Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current project and planning new projects that would be implemented in Company's operational areas.

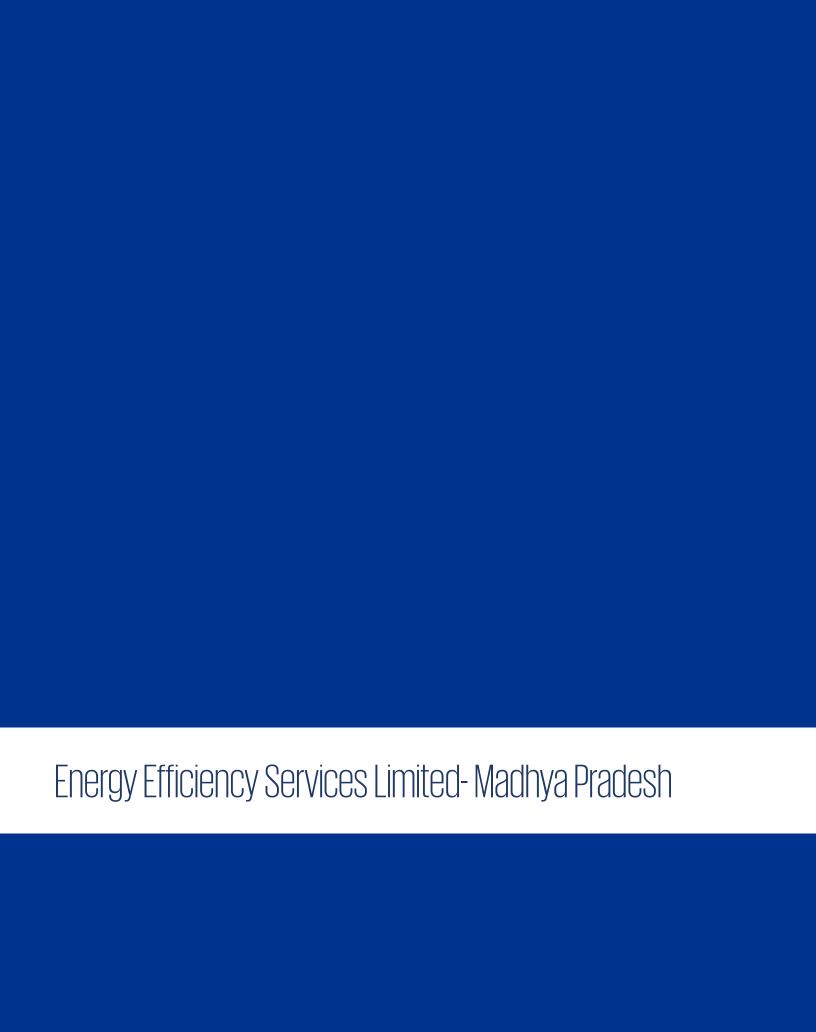
The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The project intervention was relevant as it is aligned to REC's CSR policy and is directly linked to the National Skill Development Mission.
- Information collected at the baseline was helpful in tracking various changes across the lives of the beneficiaries and understand the role of the program in bringing about the positive change.
- Collecting feedback from beneficiaries and employers is essential to the success of the project since incorporating these in the future initiatives would make them more efficient and effective.
- The project conducted post placement tracking which provides support to candidates post training and helps in sustaining the impact for long-term.

The challenges observed in the program were:

- The beneficiaries as well as the employers felt that programs of a similar nature should be
 of a longer duration in the future.
- The initiative providing stipend was appreciated by the beneficiaries, but they were also
 of the opinion that it should be provided on a monthly basis rather than providing it at the
 end of the program.

- Employers felt that a provision should be made for signing a bond between them and the employee for at least two years from the date of joining to ensure the retention of employee. They also felt that ATDC must play an enabling role in this process.
- Responses from candidates also indicated that ATDC should give more emphasis on personality development and leadership skills along with other technical skills. It was also noted that field visits or industry exposure would be beneficial to make the candidate job ready.
- Another strong feedback from the beneficiaries was to strengthen post placement tracking and conduct rigorous follow up of candidates for at least six months where candidates can share their experiences.



Project 2: Energy Efficiency Services Limited- Madhya Pradesh

5.1 About the implementing agency

Energy Efficiency Services Limited (EESL) is a Super Energy Service Company (ESCO) with the goal of promoting universal access to sustainable energy solutions. EESL was formed in 2019 and is promoted by Ministry of Power, Government of India as a Joint Venture of four public-sector undertakings NTPC Limited, Power Finance Corporation Limited, REC Limited and POWERGRID Corporation of India Limited. It works towards enabling stakeholders towards more responsible energy adoption and effective management of their energy needs through energy efficient technologies. EESL is involved with various large-scale energy efficiency portfolio across sectors like lighting, buildings, electric mobility, smart metering, agriculture, etc., and has led to reduction of 36.5 million tons of carbon emission annually in India.⁶

5.2 About the project

Introduction of the project

REC Foundation engaged with EESL for their consultancy services for setting up of 1600 LED based solar street lighting system in three districts in Madhya Pradesh. The project has been implemented by EESL in association with Tata Power Solar Systems Limited in 425 villages across three districts- Shiv Puri, Guna, and Ashok Nagar-of Madhya Pradesh. In regions, such as Madhya Pradesh, with abundance of sunlight, solar streetlights are a cost-effective and environmentally sustainable solution for illuminating streets and public spaces. Solar LED streetlighting systems can provide significant lowering of carbon footprint with minimal operational costs as compared to conventional streetlights. The energy consumption of an LED fixture is at least 50% lower than the High-Pressure Sodium (HPS) fixture which is widely used as the lighting source in traditional streetlights. Also, solar LED streetlights improve road safety through illumination as well as reducing risks of accidents as external wires are eliminated in solar streetlights.

Project documents

The following documents were available for KPMG to review:

- MoA signed between EESL and REC Foundation
- Impact assessment report
- Project completion and outcome report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 6 months.

Funding Amount

The project's allocated budget stands at INR 5.05 cr.

⁶ https://eeslindia.org/en/about-us/

Location

The project's geographical reach is three districts- Shiv Puri, Guna, and Ashok Nagar in Madhya Pradesh.

Beneficiaries

The project targets 425 villages in Madhya Pradesh.

Key thematic areas

The project was focused on improving access to renewable energy and promoting rural development, which is in alignment with REC's CSR policy.

5.3 Objective of the project

To set up 1600 LED based solar street lighting system in three districts in Madhya Pradesh.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Foundation Time and Human Resources by EESL 	 Procure, install, and commission 1600 LED based solar street lighting system in the selected villages. Maintaining the LED based solar street lighting system (1600) for five years after installation and commissioning 	 425 Villages selected from three districts- Shiv Puri, Guna, and Ashok Nagar-of Madhya Pradesh 1600 LED based solar street lighting system installed across 425 villages Maintenance of 1600 LED based solar street lighting system for five years 	 425 villages provided with LED based solar street lighting system Increase in safety and mobility of women and children during the night. Reduced pollution due to use of LED based Solar Street Lighting system. Increase in number of informal social gathering and assembly of villagers under streetlight. 	 Improved road safety due to street lighting in 425 villages Improved access to clean energy in rural areas Reduction in carbon emissions (73.4 tons approximately)

5.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

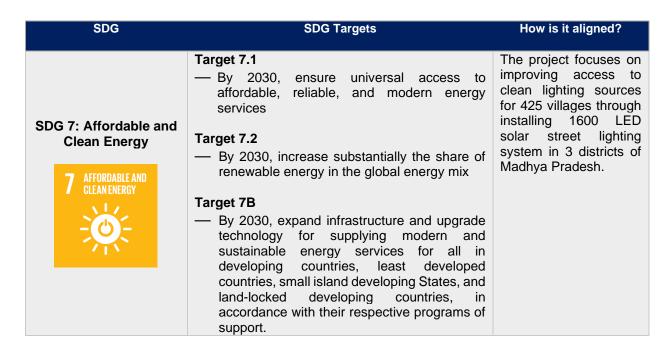
5.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power.

Lack of clean and safe lighting makes life come to a standstill at dusk which limits the productivity and acts as an impediment to development opportunities in sectors such as health, education, and infrastructure. In regions with abundance of sunlight, solar streetlights are a cost-effective and environmentally sustainable solution for illuminating streets and public spaces. Solar LED streetlighting systems can provide significant lowering of carbon footprint with minimal operational costs as compared to conventional streetlights. The Sustainable Development targets for 2030 call for ensuring universal access to affordable and renewable energy. EESL's project in Madhya Pradesh contributes to the following SDG goals:



5.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Project successfully provided clean and affordable solar street lighting systems to 425 villages in three districts of Madhya Pradesh- Shiv Puri, Guna and Ashok Nagar.

5.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of 5.05 cr. towards the EESL Project in Madhya Pradesh, for a time-period of 6 months as well as five year of maintenance, in FY 2013-14.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

5.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The impact assessment report reviewed, indicates that the project had benefitted several aspects of lives of the households supported under it and had potential to act as a key enabler to catalyse positive change in the long-term as well. There has been an increase in number of informal social gathering and assembly of villagers under streetlight. The report indicated increase in social interactions especially amongst women. Installation of LED based Solar Street Lighting has led to improved road safety for all and increased safety and mobility of women and children during the night. Also, improved access to lighting has increased the study time for the children through discussions and educational talks as they interact more with their peers under LED based Solar Street Lighting which has enhanced their interest in academics.

Thus, the impact assessment report indicates positive change on road safety, social, women's safety, reduction in pollution, etc., for the beneficiaries. Also, this study calculated the annual reduction in CO₂ emissions due to project intervention to be around 73.4 tons approximately.

5.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project had a sustainability mechanism which included maintenance support of solar LED lights for 5 years as part of the project to help sustain the impact. Also, solar LED streetlights require minimal operational expenditure due to off-grid nature.

5.5. Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by EESL. The intervention has successfully provided clean and affordable solar street lighting systems to 425 villages in three districts of Madhya Pradesh- Shiv Puri, Guna and Ashok Nagar. Through these interventions, the project created positive change on road safety, social, women's safety, reduction in pollution, etc., for the beneficiaries. Also, this study calculated the annual reduction in CO₂ emissions due to project intervention to be around 73.4 tons approximately. The total score of the project is Satisfactory, with two parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Marginally satisfactory
Sustainability	Marginally satisfactory
Total Score	Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

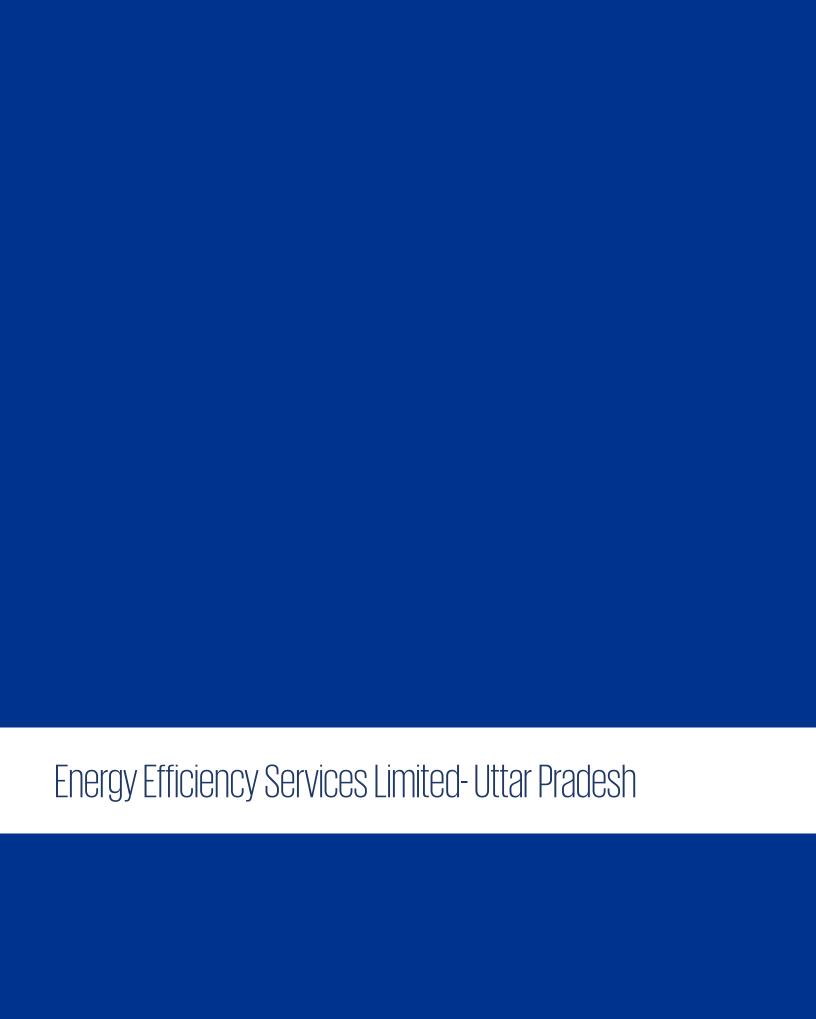
The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and successfully installed and maintained 1600 LED streetlights in Madhya Pradesh.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the National Solar Mission.
- Setting up of a monitoring and maintenance system for the Solar LED lighting systems enhances the sustainability of the program.
- Documentation and reporting at all stages of the project cycle helped in improving the monitoring and evaluation system.

The challenges observed in the program were:

• Baseline study for the project was not available for review. Information on situational context and need assessment was present in the impact assessment report shared.

- Information on delta change was not available to establish impact. Information on quantifiable outcome indicators could not be evidenced in the impact report.
- Practices around community engagement, provision of trainings to the local communities and engaging with NGOs to ensure improved monitoring and management of installed solar streetlights to ensure sustained impact, could not be evidenced.



Project 3: Energy Efficiency Services Limited- Uttar Pradesh

6.1 About the implementing agency

Energy Efficiency Services Limited (EESL) is a Super Energy Service Company (ESCO) with the goal of promoting universal access to sustainable energy solutions. EESL was formed in 2019 and is promoted by Ministry of Power, Government of India as a Joint Venture of four public-sector undertakings NTPC Limited, Power Finance Corporation Limited, REC Limited and POWERGRID Corporation of India Limited. It works towards enabling stakeholders towards more responsible energy adoption and effective management of their energy needs through energy efficient technologies. EESL is involved with various large-scale energy efficiency portfolio across sectors like lighting, buildings, electric mobility, smart metering, agriculture, etc., and has led to reduction of 36.5 million tons of carbon emission annually in India.⁷

6.2 About the project

Introduction of the project

REC Foundation engaged with EESL for their consultancy services for setting up 445 solar based LED street lighting system (SLS) and 145 solar high mast lights (SHMLS) in Bareilly, Aonla, Bareilly Cantt, and Bisalpur Assembly Constituencies of Uttar Pradesh. The project implemented by EESL encouraged community activities, increase commerce, improve safety conditions for women as well as promotion of green and energy efficient technologies. In regions, such as Uttar Pradesh, with abundance of sunlight, solar streetlights are a cost-effective and environmentally sustainable solution for illuminating streets and public spaces. Solar LED streetlighting systems can provide significant lowering of carbon footprint with minimal operational costs as compared to conventional streetlights. The energy consumption of an LED fixture is at least 50% lower than the High-Pressure Sodium (HPS) fixture which is widely used as the lighting source in traditional streetlights. Also, solar LED streetlights improve road safety through illumination as well as reducing risks of accidents as external wires are eliminated in solar streetlights.

Project documents

The following documents were available for KPMG to review:

- MoA signed between EESL and REC Foundation
- Project completion report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 2.38 cr.

⁷ https://eeslindia.org/en/about-us/

Location

The project's geographical reach covers Bareilly, Aonla, Bareilly Cantt, and Bisalpur Assembly Constituencies of Uttar Pradesh

Beneficiaries

The project targets population of four assembly constituencies of Uttar Pradesh.

Key thematic areas

The project was focused on improving access to renewable energy and promoting road safety, which is in alignment with REC's CSR policy

6.3 Objective of the project

To install 445 nos. Solar based LED Street Lighting System (SLS) and 145 no's Solar High Mast Lights (SHMLS) in Bareilly, Aonla, Bareilly Cantt, and Bisalpur Assembly Constituencies of Uttar Pradesh. The project also aimed to encourage community activities, increase commerce, improve safety conditions for women, increase regional aesthetics and promote green and energy efficient technologies.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Foundation Time and Human Resources by EESL 	 Procuring, installing, and commissioning of 445 solar based LED street lighting system (SLS) and 145 solar high mast lights (SHMLS) in Bareilly, Aonla, Bareilly Cantt, and Bisalpur Assembly Constituencies of Uttar Pradesh Maintaining the SLS and SHMLS systems for five years after installation and commissioning 	 420 solar based LED street lighting system (SLS) were installed 145 solar high mast lights (SHMLS) were installed Maintenance of 420 SLS and 145 SHMLS system for five years 	 Increase in safety and mobility of women and children during the night. Reduction in pollution level due to use of LED based Solar Street Lighting 	 Improved road safety due to street lighting Improved access to clean energy Reduction in carbon emissions (15.8 tons approximately)

6.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

6.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power.

Lack of clean and safe lighting makes life come to a standstill at dusk which limits the productivity and acts as an impediment to development opportunities in sectors such as health, education, and infrastructure. In regions with abundance of sunlight, solar streetlights are a cost-effective and environmentally sustainable solution for illuminating streets and public spaces. Solar LED streetlighting systems can provide significant lowering of carbon footprint with minimal operational costs as compared to conventional streetlights. The Sustainable Development targets for 2030 calls for and ensuring universal access to affordable and renewable energy. EESL's project in Madhya Pradesh contributes to the following SDG goals:



6.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Project successfully provided clean and affordable solar street lighting systems through installing and maintaining 420 solar based LED street lighting system (SLS) and 145 solar high mast lights (SHMLS) in Bareilly, Aonla, Bareilly Cantt, and Bisalpur of Uttar Pradesh.

Area ⁸	Solar High Mast Lights		Solar Stre	et Lights
Alea	Target	Actuals	Target	Actuals
Bareilly	50	50	100	100
Aonla	50	50	100	100
Bareilly Cantt	25	25	25	0
Bisalpur	20	20	220	220
Total	145	145	445	420

6.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

• Utilization of budget

REC Foundation had committed a budget of INR 2.38 cr. towards the EESL Project in Uttar Pradesh, for a time-period of 12 months as well as five year of maintenance, in FY 2017-18.

Project execution as per timelines

Project was timely executed within the specified budget as per the MoA.

The program proved to be efficient with the support of various stakeholders.

6.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

This study calculated the annual reduction in CO₂ emissions due to project intervention to be around 15.8 tons approximately. Installation of LED based Solar Street Lightings leads to improved road safety for all and increased safety and mobility of women and children during the night.

⁸ Project completion certificate

Statistics on Solar Energy in Uttar Pradesh	
Estimated Potential of Renewable - Solar Power (MW)	22830
State-wise cumulative installed capacity of Grid Interactive Renewable Power (2019)	960.1
Installation of Off-grid / Decentralized Renewable Energy Systems/ Devices (i) Street Lighting System	264,179
(ii) Home Lighting System	235,909
(iii) Solar Lantern	2,284,425
(iv) Power Plants	10,638

6.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project had a sustainability mechanism which included maintenance support of solar LED lights for 5 years as part of the project to help sustain the impact. The project also included setting-up of a centralized post sale service system to address customer grievances and conduct local training, live demos, disseminate easy-to-use manuals for smooth operation and maintenance. Also, solar LED streetlights require minimal operational expenditure due to off-grid nature.

6.5. Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by EESL. The intervention has successfully provided clean and affordable solar street lighting systems in Bareilly, Aonla, Bareilly Cantt, and Bisalpur of Uttar Pradesh. Through these interventions, the project created positive change on road safety, women's safety, reduction in pollution, etc., for the beneficiaries. Also, this study calculated the annual reduction in CO₂ emissions due to project intervention to be around 15.8 tons approximately. The total score of the project is Satisfactory, with three parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Marginally Satisfactory
Sustainability	Extremely Satisfactory
Total Score	Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and successfully installed and maintained 420 Solar Street Lights and 145 Solar High Mast Lights.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the National Solar Mission.
- Setting up of a monitoring and maintenance system for the Solar LED lighting systems enhances the sustainability of the program.
- Documentation and reporting at all stages of the project cycle helped in improving the monitoring and evaluation system

The challenges observed in the program were:

- Baseline study for the project was not available for review. Information on situational
 context and need assessment was present in the impact assessment report shared.
 Information on delta change was not available to establish impact. Information on
 quantifiable outcome indicators could not be evidenced in the impact report.
- Practices around community engagement, provision of trainings to the local communities and engaging with NGOs for improved monitoring and management of installed solar streetlights to ensure sustained impact, could not be evidenced.

.



Project 4: Indo-German Institute of Advanced Technology

7.1 About the implementing agency

Indo-German Institute of Advanced Technology (IGIAT) provides training in advanced technologies to the students of various educational institutes, job seekers and industrial personnel with a special focus on the disadvantaged groups of the society. IGIAT has been set up in Visakhapatnam as a partnership project of Govt, of Andhra Pradesh, Government of Germany and Gayatri Vidya Parishad. It aims to impart high quality, employment-oriented training & qualification, consultancy, and related services in advanced technologies, aimed at making Industry globally competitive and at improving employability. It offers various advanced courses which provide training on relevant and employable technology skills through dedicated faculty that combine academic theory with real-life industry knowledge for providing quality learning experience and sharing the knowledge with the students. IGIAT also offers self-paced and customizable online training can be conducted at almost any time and place, with good internet connection.

7.2 About the project

Introduction of the project

The Skill Development Training Program were designed to provide job-oriented skill development training (residential) to 1000 youth. It aimed to provide sustainable livelihood to the unemployed youths from weaker sections of the society in the prevalent sunrise sectors. The project aimed to develop their capacity and capability by imparting training required by the industry to earn a decent livelihood. IGIAT conducted pre-mobilization and mobilization activities to canvass about the training courses and identification of unemployed candidates. The mobilization team visited the rural areas in and around the centers. Various industrial trainers and academicians designed the courses to meet the skill requirement of the industry as well as promote entrepreneurship. Also, IGIAT liaison with recruiters and organize interviews and campus drives to ensure placement for the candidates.

Project documents

The following documents were available for KPMG to review:

- MoA signed between IGIAT and REC Foundation
- Baseline Report
- Impact assessment report
- Project completion and outcome report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 2.68 cr.

Location

The project's geographical reach is Andhra Pradesh, Odisha, Tamil Nadu, Bihar, and Telangana.

Beneficiaries

The project targets 1000 unemployed marginalized youth.

Key thematic areas

The project was focused on improving access to quality skill development training and livelihood opportunities, which is in alignment with REC's CSR policy

7.3 Objective of the project

To provide sustainable livelihood to the unemployed youths from weaker sections of the society, in the prevalent sunrise sectors to develop their capacity and capability by imparting skill sets required by the industry to earn a decent livelihood.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
Resources by REC Foundation Time and Human Resources by IGIAT	 Pre-Mobilization and Mobilization Activities Training and Post Training Activities like on-job training for some courses Placement Activities and provision of post placement support Provide placement to at least 70% of trained candidates Administrative Activities 	 Unemployed youth were identified and enrolled Training of 1000 youth conducted Placement support provided to all trained candidates Post Placement support and tracking provided Placement rate of 74% achieved 22% of trained candidates were female. 80% students belonged to EWS sections 	 Improved access to skill development training to marginalized youth in rural areas Improved access to employment to youth Increased knowledge and skills on chosen technical field Improvement in soft skills and interview skills Increase in income with average salary of employed youth is around INR 9691 per month 	Improve access to skill development training and employment opportunities to marginalized unemployed youth

7.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

7.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

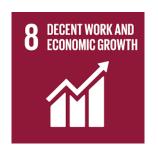
This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. The project is aligned with the National Skill Development Mission.

The Sustainable Development targets for 2030 call for guaranteeing equal access to opportunities for access to quality technical and vocational education for everyone as well as promoting renewable energy. IGIAT's project contributes to the following SDG goals:

SDG	SDG Targets	How is it aligned?
SDG 4: Quality Education 4 QUALITY EDUCATION	 Target 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including university Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship Target 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations 	The project aims to improve accessibility to quality vocational education for vulnerable and marginalized unemployed youth.

SDG 8: Decent work and economic growth



Target 8.5

 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

Target 8.6

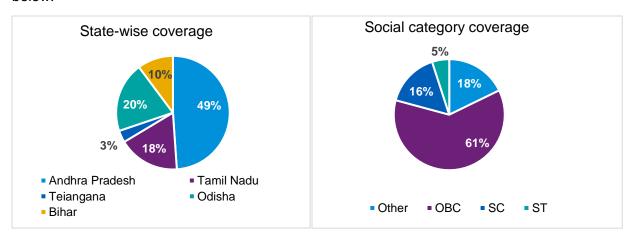
 By 2020, substantially reduce the proportion of youth not in employment, education, or training The project focuses on skilling marginalized youth to make them employable and help them contribute to the workforce and economy.

7.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Project completed its goal of training 1000 candidates across 12 courses and achieved a placement rate of 74%. Around 22% of trained candidates were female. Over 80% students belonged to EWS sections. State-wise and social category coverage is shown in the graphs below:



7.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of INR 2.68 cr. towards the IGIAT Project, for a time-period of 12 months, in FY 2017-18.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

7.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The project successfully trained 1000 candidates across 12 courses and achieved a placement rate of 74%. A clear selection criterion for beneficiaries were defined as only unemployed youth were covered as part of the skill development training program. The intervention had around 22% of female candidates and over 80% of students belonging to EWS sections. The following courses were conducted through the IGIAT:CNC Operator, Welding Technology, Home Appliances and R & AC, Four Wheeler Mechanic, Building Services, Site & Survey Technician, BPO Non Voice, Sewing Machine Operator, Hospitality - Waiter & Steward, Solar Panel Installation Technician, Manufacturing Assistant Pharma, and Retail Associate.

The intervention achieved a 74% placement rate with average salary across all courses standing at INR 9691 per month. Around 78.6 percent of candidates who were employed post-training were offered jobs through campus placement. The CNC Operator course had the highest average salary of INR 11,087 per month. The impact assessment report found that around 73% of candidates mentioned that the training had satisfactory or highly satisfactory impact on their career. All the trained candidates who found employment after course (74%) felt that this training was relevant to industry needs. Around 80% of the candidates were satisfied with the facilities provided by the training centres. The report also indicated that about 20% of the trained candidates had ventured into entrepreneurship post completion of training. The impact report indicates an overall positive impact on the lives of beneficiaries inducted and trained in this skill development project which also provided them a source of employment.

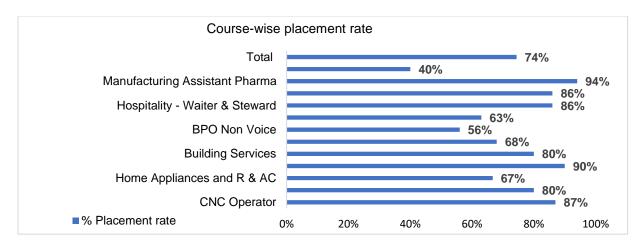


Figure 5 Placement Rate

7.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The program provides post training placement and follow up support for around 3-6 months depending on the candidate's requirements to ensure that the outcomes of the program are sustained. Also, the training is aligned to NSDC, and trainees are certified by the relevant skill sector council. It is aligned with the vision of the national skill development mission which aims to create convergence across sectors and states in terms of skill training activities.

7.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by IGIAT. The intervention has successfully trained 1000 candidates across 12 skill development courses. Major activities included conducting pre-mobilization and mobilization activities, training and post training activities like on-job training for some courses, and placement activities and provision of post placement support. Through these interventions, the project created positive impact through achieving 74% placement rate with average salary across all courses standing at INR 9691 per month. The total score of the project is Extremely Satisfactory, with four parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Extremely Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Extremely Satisfactory
Sustainability	Satisfactory
Total Score	Extremely Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and completed the targeted goal of training 1000 candidates and providing placement to over 70% of them.
- The project had a robust monitoring system and had baseline and impact assessment report. A clear selection criterion for beneficiaries were defined as only unemployed youth were covered as part of the skill development training program. Thus, positive delta change in employment rate and monthly income was noted.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the National Skill Development Mission.

The challenges observed in the program were:

- The project can improve through providing more emphasis on personality development and leadership skills along with other technical skills.
- The project conducts post placement tracking which provides support to candidates post training and helps in sustaining the impact for long-term. This sustainability plan can be furthered strengthened through stakeholder governance by forming and involving alumni groups of trained candidates.



Project 5: Indian Institute of Science, Bangalore

8.1 About the implementing agency

The Indian Institute of Science (IISc) Bangalore was granted the Institute of Eminence status in 2018. It is a public research university for higher education and research in science, engineering, design, and management. The institute was established in 1909 and was deemed to be a university in 1958. The IISc campus houses over 40 departments, is fully residential and is spread over 400 acres in Bangalore.

8.2 About the project

Introduction of the project

REC Foundation supported IISc for the establishment of 279 KWp photovoltaic solar panels on 3 no. of sites/ building on department rooftops to generate power for institutional grid and installation of 2200 no. of LED lights at various locations on the campus. This would further reduce the carbon footprint and dependency on non-renewable energy resources of the campus. Project interventions on solar installation for educational institutes add substantially towards monetary savings and have wide-reaching social and cultural impacts. University or school campuses are ideal for establishing solar panels since most of them have large flat roofs and big open spaces, allowing them to install more panels, which means a greater energy harvest. Savings on energy requirements allows more budget for improving quality of education and increasing access to students. Moreover, campuses installing solar panels and making efforts towards reducing their carbon emissions increases awareness about renewable energy amongst students and staff, as well as the local community. Institutions can demonstrate their commitment to sustainability while also providing opportunities to familiarize students and visitor on panels and inspiring investment in solar energy.

Project documents

The following documents were available for KPMG to review:

- MoA signed between IISc and REC Foundation
- Impact assessment report
- Project completion and outcome report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 4.93 cr.

Location

The project's geographical reach is Karnataka.

Beneficiaries

The project targets 5000 Beneficiaries-students and staff of IISc Bangalore.

Key thematic areas

The project was focused on improving access to renewable energy and reducing carbon emissions, which is in alignment with REC's CSR policy

8.3 Objective of the project

The objective of the project is to establish photovoltaic solar panels for power generation and LED lighting system at various locations on the Indian Institute of Science (IISc) Bangalore campus in order to reduce the campus carbon footprint and dependency on nonrenewable energy sources.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Foundation Time and Human Resources by IISc Bangalore 	 Establishing photovoltaic rooftop solar panels on sites/buildings Installing LED lights in the following places: Library, health center, classrooms, and streets at IISc Campus Bangalore 	 Establishment of 279 KWP photovoltaic rooftop solar panels on 3 nos. of sites/buildings Installation of 2200 nos. of LED 	 Annual reduction in carbon footprint (604 tons) Annual electricity generation (379080 units) Annual electricity savings (225424 units) Annual monetary savings (INR 36.27 lacs) 	 Improved access to clean energy sources Reduction in carbon emissions (604 tons approximately)

8.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

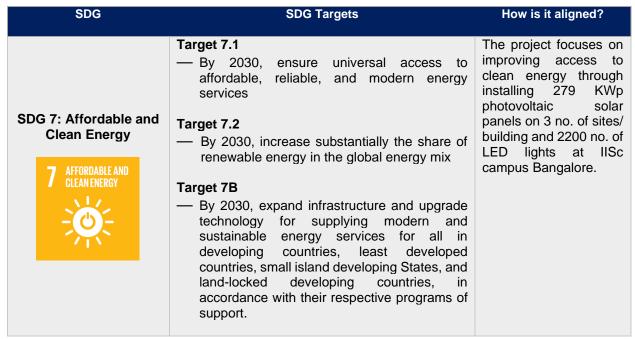
8.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power.

The Sustainable Development targets for 2030 call for ensuring universal access to affordable and renewable energy. IISc's project contributes to the following SDG goals:



8.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Project successfully provided clean energy source through establishment of 279 KWp photovoltaic solar panels on 3 no. of sites/ building and installation of 2200 no. of LED lights at IISc campus Bangalore.

8.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of INR 4.93 cr. towards the IISc Project, for a timeperiod of 12 months, in FY 2016-17.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

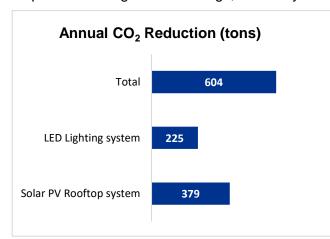
The program proved to be efficient with the support of various stakeholders.

8.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The impact assessment report reviewed, indicates that the project has led to benefits in various aspects including annual savings, electricity consumption, and reduction in carbon emissions.



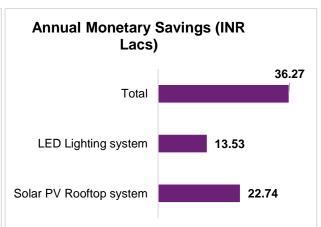


Figure 7 Carbon Emissions reduction

Figure 6 Annual Savings

The installation of solar PV Rooftop system generates 379080 units of electricity which is utilized by the IISc campus. The LED Lighting system has resulted in saving of 225424 units of electricity. Overall, the intervention has resulted in annual monetary savings of around INR 36.27 lacs, with LED lighting system leading to INR 13.53 lacs of savings annually and solar PV rooftop system contributing to 22.74 lacs of annual savings. These funds can further be used for other developmental or academic projects. The project overall has led to a reduction of 604 tons of CO₂ annually, thus, reducing IISc campus carbon footprint.

8.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project has a robust sustainability mechanism as the Center for Campus Management Department, IISc is responsible for maintaining and monitoring. There's a data control system which records and monitors the functioning of the installed panels. An online monitoring system has been installed and the performance parameters are continuously displayed by the software installed in the computer therefore providing real time analytics of the solar panel's output.

8.5. Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by IISc. The intervention has successfully provided clean energy source through establishment of 279 KWp photovoltaic solar panels on 3 no. of sites/ building and installation of 2200 no. of LED lights at IISc campus Bangalore. Through these interventions, the project created positive impact on indicators such as- Annual reduction in Carbon Footprint (604 tons), Annual Electricity Generation (379080 units) and Savings (225424 units), and Annual Monetary savings (INR 36.27 lacs). The total score of the project is Extremely Satisfactory, with four parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Satisfactory
Sustainability	Extremely Satisfactory
Total Score	Extremely Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and installed the solar panels and LED lights as per the target goals benefitting 5000 students and staff at IISc.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the National Solar Mission.

- Setting up of a monitoring and performance evaluation system for the plants enhances the sustainability of the program.
- Documentation and reporting at all stages of the project cycle helped in improving the monitoring and evaluation system

The challenges observed in the program were:

 Need assessment/baseline study report was not available for review. Such reports are important for establishing the relevance, tracking the progress, and assessing the actual impact of the project.



Project 6: IIT Madras

9.1 About the implementing agency

IIT Madras is one of India's premiere Institutes for Technology, recognized both nationally and internationally for excellence in technical education, basic and applied research, innovation, entrepreneurship, and industrial consultancy. It houses a faculty of international repute, a highly motivated and brilliant student community, excellent technical and supporting staff and an effective administration, all contributing to it achieving the pre-eminent status⁹.

IT Madras is a residential institute with nearly 550 faculty, 8000 students and 1250 administrative & supporting staff and is a self-contained campus located across 250 hectares. The campus is located in the city of Chennai, Tamil Nadu. The Institute has sixteen academic departments and advanced research centers in various disciplines of engineering and pure sciences, with nearly 100 laboratories. It has been the top-ranked engineering institute in India for four consecutive years as well as the 'Best Educational Institution' in Overall Category in the NIRF Rankings of 2019 put out by the Ministry of Human Resource Development.

9.2 About the project

Introduction of the project

IIT Madras collaborated with REC to install 2MV rooftop solar panel (SPV) in the academic zone and hostel zone for power generation to reduce peak demand from the grid in the campus. The aim of the project was to reduce the carbon footprint and dependency on non-renewable energy resources of the campus.

Project documents

The following documents were available for KPMG to review:

- MoA signed between IIT Madras and REC Foundation
- Baseline verification report
- Impact assessment report
- Project completion report
- Photographs
- Utilization Certificate

Project Duration

The project had a timeline of 15 months.

Funding Amount

The project's allocated budget stands at INR 14.5 cr.

⁹ https://www.iitm.ac.in/the-institute/about-iit-madras/overview

Location

The project's geographical reach was within the campus of IIT Madras, Tamil Nadu.

Beneficiaries

The project covers all the people residing within the campus of IIT Madras or using its facilities.

Key thematic areas

The project was focused on the promotion of renewable energy and climate change, which is in alignment to REC's CSR policy.

9.3 Objective of the project

The project aimed to install 2MV rooftop solar panel (SPV) in the academic zone and hostel zone of IIT Madras for power generation, to reduce peak demand from the grid in the campus and reduce the carbon footprint and dependency on non-renewable energy resources.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Foundation Time by IIT Madras and REC Human resources by IIT Madras 	 Supply, installation, testing and commissioning (SITC) of Mono crystalline PV modules of aggregate capacity of 2.0 MW roof top solar PV plant Procurement of material 	 2.0 MW rooftop solar PV plant installed successfully. Data monitoring systems successfully installed for live monitoring and reporting of panels. 	 Reduction in total electricity consumption of IIT Madras by 8.7% and reduction in the electricity demand by 1MVA. Reduction in the CO₂ emission of the IIT Madras campus by 3.15 million kg. 	 Reduction of emission of 3.15 million kg of CO₂, thereby reducing the carbon footprint of the campus. Improved access to clean energy sources

9.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

9.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

The project is aligned to SDGs and REC's CSR policy. REC's vision focuses on ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agro-forestry, conservation of natural resources and maintaining quality of soil, air & water. Therefore, the project aligns with their viewpoint of sustainability. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power. The Sustainable Development targets for 2030 call for ensuring universal access to affordable and renewable energy. IIT's project contributes to the following SDG goals:

SDG **SDG Targets** How is it aligned? Target 7.1 The installation of the - Ensure universal access to affordable, panel ensures that the campus switches to reliable, and modern energy services SDG 7: Affordable and renewable and clean energy sustainable forms of Target 7.2 energy for their daily Increase substantially the share of renewable consumption. AFFORDABLE AND energy in the global energy mix CLEAN ENERGY Target 7.B Expand infrastructure upgrade technology for supplying modern and sustainable energy services for all in developing countries, least developed countries, small island developing States, and developing countries. land-locked accordance with their respective programs of support SDG 11: Sustainable Target 11.B The solar plants help in cities and communities reducing the footprint of — By 2020, substantially increase the number of the residential campus cities and human settlements adopting and located in the capital implementing integrated policies and plans SUSTAINABLE CITIES city and adds to the goal inclusion. resource towards efficiency. AND COMMUNITIES increasing mitigation and adaptation to climate change, sustainable resilience to disasters, and develop and settlements. implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030. holistic disaster risk management at all levels SDG 13: Climate action Target 13.3 This initiative would not educate only the - Improve education, awareness-raising and residents of the campus human and institutional capacity on climate 3 CLIMATE about its benefits but change mitigation, adaptation, impact reduction and early warning. also encourage other institutions to gain information on it and adopt similar models.

9.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

The project was successful in achieving its target of installing 2MV rooftop solar panel (SPV) in the academic zone and hostel zone of the IIT Madras Campus.

9.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of Budget

REC Foundation had committed a budget of INR 14.5 cr. towards the project, for a time-period of 15 months, in FY 2016-17.

Project Execution as per Timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

9.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned because of the intervention and can be positive or negative.

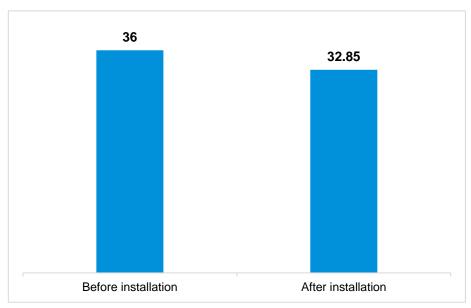


Figure 8 Expected change in annual carbon footprint (CO2e emission) of IIT Madras (in million kg)

The installation of the 2 MW solar power plants in IIT, Madras along with an existing 1 MW grid connected solar plant has significantly reduced their annual spending on electricity by 20 million. These funds can further be used for other developmental or academic projects. Further, it has led to a reduction in the CO₂ emission i.e. carbon footprint of the campus by 3.15 million kg¹⁰. Achievement of this level of reduction is equivalent to planting 2.3 million tree seedlings and then growing for 10 years. Similarly, it is equivalent to removal off more than 2000 passenger vehicles from the roads in a year. Lastly, it can lead to a reduction in health issues of the residents of the campus as well as those around it and overall improved well-being of the beneficiaries.

9.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs. The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

Photovoltaic power plants are required to adhere to a range of strict guidelines, regulations, and safety standards to maintain the quality and safety of the plant. To fulfill this goal, IIT Madras empaneled the National Productivity Council to conduct the inspection and validation of the rooftop power plants and its components. This exercised involved discussions, documents inspection, field visits and monitoring and verification of the output generation from the system. An online monitoring system has been installed and the performance parameters are continuously displayed by the software installed in the computer therefore providing real time analytics of the solar panel's output. All 19 solar plants have been linked to this system and the data is gathered

¹⁰ Impact assessment report

on instant, hourly, daily, monthly, and yearly basis along with cumulative data which is then generated in the form of a report.

Such strong monitoring regarding the performance of the plants ensures quick redressal if low productivity is noted, through the five-year AMC for the plant. Furthermore, this can be an excellent case study for other institutions and industries in India making sure that such initiatives are undertaken by them as well and inspiring other institutions to switch to renewable energy sources for their consumption. Also, it can be a stepping-stone for conducting research in the solar sector.

9.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by IIT Madras. IIT Madras has implemented the renewable energy promotion program to support green power initiatives in the campus of IIT Madras. Major activities included installation of the panels and establishing monitoring systems. The project was successful in installing the solar panels in the campus, leading to a reduction in IIT Madras's power consumption by 8.7% and a decline their demand for electricity by 1 MW. Through these interventions, the project created a positive impact on several indicators such as reduction in carbon emission, monetary savings, etc. The total score of the project is Extremely Satisfactory, with three parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately satisfactory
Effectiveness	Extremely satisfactory
Efficiency	Extremely satisfactory
Impact	Satisfactory
Sustainability	Extremely satisfactory
Total Score	Extremely satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and installed the 2 MW solar panels in the campus.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the National Solar Mission.
- Setting up of a monitoring and performance evaluation system for the plants enhances the sustainability of the program.
- Documentation and reporting at all stages of the project cycle helped in improving the monitoring and evaluation system

The challenges observed in the program were:

 Need assessment/baseline study report was not available for review. Such reports are important for establishing the relevance, tracking the progress, and assessing the actual impact of the project.



Project 7: NDDB Foundation for Nutrition

10.1 About the implementing agency

The National Dairy Development Board (NDDB) has been involved in Dairy Development programs in the country for more than 50 years. India is currently the world's biggest producer of milk. 'Operation Flood' implemented by NDDB created a new policy environment in the dairy sector and linked rural and urban populations, introduced market orientation and technological advancements, developed extension services, and supported the growth of cooperatives in a sustainable manner. NDDB was granted the status of an institution of National importance by making it a statutory body corporate established under the NDDB Act (37 of 1987).

On 9th October 2015, it setup the NDDB Foundation for Nutrition (NFN) to provide nutrition support to government school going children thereby addressing malnutrition prevalent in the country by exploring funds under CSR Companies Act, 2013. NFN began its 'Gift milk' program in pilot mode on 26th February 2016 at Z P High School, Lakhsmapur, Telangana under which 200 ml of flavored milk was provided to the children on all working days. Since then it has expanded its coverage to 95 more schools in Delhi, Gujarat, Jharkhand, Maharashtra, Tamil Nadu and Uttar Pradesh with the CSR allocation of NDDB subsidiaries, Bokaro Power Supply Corporation Ltd. (BPSCL), India Trade Promotion Organization (ITPO), Rural Electrification Corporation Foundation (REC), and ONGC (Ahmedabad Asset). Presently, there are around 42,000 students under the program who have consumed about 55 lakh units of 'Giftmilk'.

10.2 About the project

Introduction of the project

NFN in association with Rural Electrification Corporation Foundation (REC) India initiated the 'Gift milk' program in Latehar district of Jharkhand where 14,000 students studying in Government schools were provided with 200ml of fortified flavored pasteurized toned milk on all working days under the CSR funds of REC. The milk was supplied by Jharkhand Milk Federation (JMF) in the brand name of "Medha" milk.

Project documents

The following documents were available for KPMG to review:

- MoA signed between NDDB and REC Foundation
- Impact assessment report
- Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 2.6 cr.

Location

The project's geographical reach was the Latehar district of Jharkhand.

Beneficiaries

The project aimed to benefit 10,000 students across 33 schools in the selected district.

Key thematic areas

The project was focused on the eradication of malnutrition in young children and ending hunger, which is in alignment to REC's CSR policy.

10.3 Objective of the project

The objective of the project was to tackle malnutrition among children through distribution of milk to approximately 10,000 students studying in approximately 33 government schools in the Latehar district of Jharkhand for a period of one year.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Time by NDDB and REC Human resources by NDDB 	 Supply 200ml of fortified flavored pasteurized milk ('Gift milk') to approximately 10,000 students Buy 500 insulated boxes; each box carries 40 pouches of milk Purchase approximately 33 mobile tablets on non-returnable basis as school's property for real time monitoring at consumption point. 	All the targets were achieved as per the MoA which included the supply 200ml of fortified milk, purchase of 500 insulated boxes and 33 mobile tablets as school's property for real time monitoring at consumption point.	 Overall improvement in the health outcomes of the students when compared to the baseline on parameters such as vision, height, BMI etc. Anemic population in the intervention schools was reduced to 56%. 3.3% reduction in number of children having severely low BMI (<-3SD) 	The program has brought a significant change in the health outcomes of the students in the target schools when compared to the control schools, indicating that the program had a role to play in the change.

10.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

10.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

The project is aligned to the SDGs and REC's CSR policy. One of REC's CSR policy's mission is to support projects that focus on eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation, including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water. Thus, the project is in alignment with REC's vision on nutrition.

The Sustainable Development targets for 2030 call for ending hunger and ensuring access to safe, nutritious, and sufficient food all year round for everyone. NDDB's project contributes to the following SDG goals:

SDG SDG Targets How is it aligned? Target 2.1 The distribution of the Giftmilk ensures that the — End hunger and ensure access by all people, SDG 2: Zero Hunger children receive some particularly the poor and people in vulnerable form of nutrition in situations, including infants, to safe, school across the year, nutritious, and sufficient food all year round. adolescent including girls. Target 2.2 End all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons. Target 3.2 The project successful in improving - End preventable deaths of new-borns and SDG 3: Good Health the health outcomes of children under 5 years of age, with all and Well-Being the students across countries aiming to reduce neonatal mortality **GOOD HEALTH** various indicators such to at least as low as 12 per 1,000 live births AND WELL-BEING as cognitive capacity, and under-5 mortality to at least as low as 25 Body Mass Index, and per 1,000 live births. infection fighting capacity. Target 3.4 Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

10.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

With the target goal of 10,000 students, NDDB was successful in providing 200ml of fortified flavoured pasteurised toned milk to 14,000 students across 36 schools in the Latehar District of Jharkhand through the Jharkhand Milk Federation (JMF).

10.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of Budget

REC Foundation had committed a budget of INR 2.60 cr. towards the project, for a time-period of 12 months, in FY 2017-18.

Project Execution as per Timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

10.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned because of the intervention and can be positive or negative.

The impact assessment conducted post project completion surveyed students on a sample basis where a total of 16 clusters were allocated into two groups with 8 schools each in the intervention and control group. In each school, 60 students were selected from class 1 to 7, 30 from each sex preferably. Therefore, a total of 480 students in each group were studied. This was in accordance with the available resources, time and the planned steps of cluster stratified random sampling in consultation with NFN. In the end line assessment, the number of common students participating in both assessments (baseline as well as end-line) in the intervention and control schools were

266 and 262 respectively. The rest of the students in the both the groups were absent and instead, other students were consequently sampled from the same class and gender.

The project displayed a positive impact on the health outcomes of the students based on the information from the impact assessment report. 5% of the children were faced with illness in intervention schools during the end line assessment while in the control schools, this statistic was 13%. On the parameter of vision, the number of children with visual impairment (far vision) in the intervention group was 4.4% less than the number of children with similar problem in the control group. Students with anaemia in the intervention schools was reduced to 56% in comparison to the control schools, where it was reduced to 64%. With reference to improvement in the Body Mass Index, the number of children having severely low BMI (BMI <-3SD of the normal) was reduced by 3.3% after the intervention. To understand the impact on the female students, it was found that the haemoglobin status in the female students who were a part of both the baseline and end-line assessment increased by 25%.

Table 2 Change in height and BMI after intervention

Students severely below normal	Characteristics	Baseline	End line	Delta change
	Intervention	16.92%	7.89%	-9.03%
Height as per age	Control	11.07%	12.21%	1.14%
A dequate PMI	Intervention	14.29%	8.65%	-5.64%
Adequate BMI	Control	5.73%	10.69%	4.96%

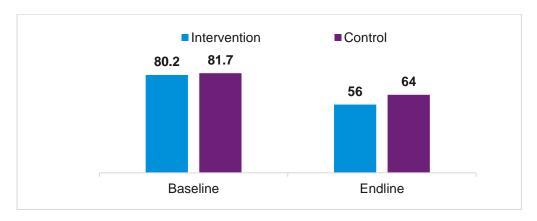


Figure 9 Percentage of students with anemia

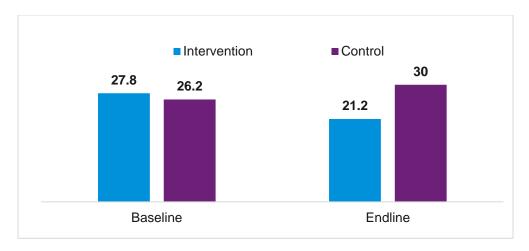


Figure 10 Percentage of students with diminished distant vision

10.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project was able to show significant positive outcomes across various parameters due to which it was adopted by the Government of Jharkhand and expanded to more schools under 'PM Giftmilk Scheme' under which students up to class 8th of 100 government schools in the Bokaro, Latehar, Ranchi and Hazaribagh districts of Jharkhand receive 200 ml of flavored pasteurized toned milk fortified with vitamin A & D.

10.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by NDDB. NDDB has implemented the milk distribution program to support the development of 10,000 students in the Latehar district of Jharkhand. Major activities included milk procurement and distribution along with other required appliances. Through these interventions, the project created a positive impact on students on several health indicators as height, vision, anemia etc. The total score received is Extremely Satisfactory.

OECD Parameters	Score
Relevance	Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Extremely Satisfactory
Sustainability	Extremely Satisfactory
Total Score	Extremely Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program was:

- Presence of baseline and end line study and treatment and control group clearly indicated the progress made and impact created through the intervention. KPIs were identified during the project inception and monitored throughout the project cycle.
- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The project intervention is relevant as it is aligned to REC's CSR policy. Furthermore, it
 was able to establish direct linkages with government initiatives and was adopted as the
 PM Giftmilk scheme for Jharkhand.
- There was an overachievement of the target as the project reached 4000 more students than the estimate and covered 3 additional schools.

The challenges observed in the program were:

• Students that formed part of the sample size during the baseline could not be made a part of the end line survey, due to their non-availability. However, students with similar health indicators were included in the end line assessment



Project 8: Population Foundation of India

11.1 About the implementing agency

Population Foundation of India (PFI) is a non-government organization working on gender sensitization, health and development policy and awareness generation across India. It was founded in 1970 under the leadership of the late JRD Tata and Dr Bharat Ram. The organization engages strategically with policymakers, influencers, and the media through providing compelling evidence on population issues and informing policies and decision making. PFI uses Social and Behaviors Change Communication (SBCC) approach across its programs and recognizes that social norms drive individual behavior and actions on various issues like reproductive and sexual health, family planning, adolescent health, and access to information.

PFI uses the power of educational entertainment through television serials, Interactive Voice Response System (IVRS) and chatbots, to reach out to various stakeholders especially women and youth to empower them. It was involved with the first few TV soap operas produced in India – Hum Log (1984-85) and Hum Raahi (1992-93) and was also the lead agency which collaborated with All India Radio on the radio drama series on youth sexuality, Dehleez.

11.2 About the project

Introduction of the project

REC Foundation supported one of PFI's flagship programs- Main Kuch Bhi Kar Sakti Hoon (MKBKSH – I, A Woman Can Achieve Anything), a transmedia program that has reached millions of viewers across India. REC Foundation and Bill and Melinda Gates Foundation jointly supported the production of Season 3 of 'Main Kuch Bhi Kar Sakti Hoon'. The program follows the journey of the protagonist, Dr Sneha, who returns to her village to work for better health and rights of women. The core of the initiative is the radio and television drama series, with extensions in local community radio stations, social media channels and through the Interactive Voice Response System. The series inspired people from disadvantaged and marginalized communities to make positive changes in their lives. Season 3 of MKBKH builds upon the lessons and successes of Seasons 1 & 2 in using entertainment-education for a transmedia initiative, continues the story of Dr. Sneha's journey to becoming sarpanch in her village. The project aimed to amplify the message of Swachh Bharat Mission- sustained and safe sanitation practices in addition to the issues around women's health and empowerment for the first 26 episodes of the third season. Season 3 of MKBKSH addressed women's rights, promoted sexual and reproductive health, especially among the youth, and addressed socio-cultural barriers to safe sanitation and hygienic practices.

Project documents

The following documents were available for KPMG to review:

- MoA signed between PFI and REC Foundation
- Baseline survey
- Impact assessment report
- Project completion and outcome report

Audited Utilization Certificate

Project Duration

The project had a timeline of 18 months.

Funding Amount

The project's allocated budget stands at INR 10 cr.

Location

The project's geographical reach is pan-India.

Beneficiaries

The project targets rural population and had an outreach of 9.8 million viewership.

Key thematic areas

The project was focused on skill development and vocational training as its targets, which is in alignment with REC's CSR policy

11.3 Objective of the project

To increase awareness and improve perception on the need for cleanliness in public and private spaces as a key requirement for promoting preventive healthcare.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
Financial Resources by REC Foundation Time and Human Resources by PFI	 Pre-production and production of 'Main Kuch Bhi Kar Sakti Hoon', Season 3, by Bombay Local Pictures Broadcasting of the episodes on Doordarshan and All India Radio. 	 Viewership: 9.8 million Social Media: YouTube Views- 1.7 Million Facebook Reach: 21 Million Interactive Voice Response System – IVRS More than 0.23 million calls received on IVRS from 0.12 million unique numbers 	 Increased knowledge and awareness on various aspects of Sanitation and Health Increase in awareness of negative impact of open defecation on health Increase in Households with access to toilet (16.3%) Increase in people with access to toilet who use it regularly (3.3%) Increase in no of ODF villages (49%) 	Improved awareness and adoption of sustained and safe sanitation practices

11.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

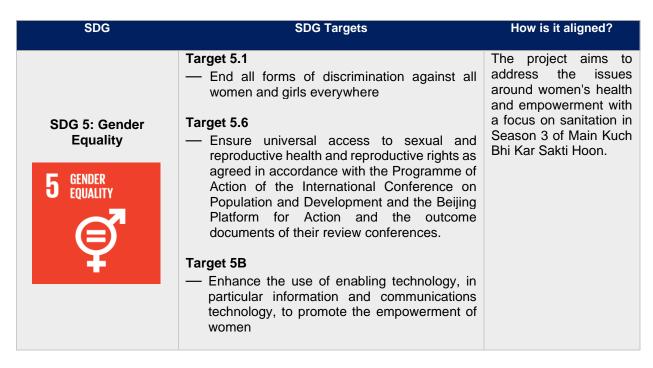
11.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. This project is directly linked to the Swachh Bharat Abhiyan or Clean India Mission, a country-wide campaign initiated by the Government of India in 2014 to eliminate open defecation and improve solid waste management.

Globally, ending open defecation has been identified as a priority for reducing inequalities in sanitation and hygiene. The Sustainable Development targets for 2030 call for gender equality and guaranteeing equal access to adequate and equitable sanitation and hygiene for everyone. Population Foundation of India's project contributes to the following SDG goals:



SDG 6: Clean Water and Sanitation



Target 6.2

— By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations The project focuses on amplifying the message of Swachh Bharat Mission on sustained and safe sanitation practices.

11.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Project produced and broadcasted 26 episodes as per the target goal. It achieved an outreach of 9.8 million viewership for the first 26 episodes which were supported by REC. Over 0.23 million calls received on Interactive Voice Response System (IVRS) from 0.12 million unique numbers. The program's Facebook reach was around 21 Million with over 1.7 Million views on YouTube.

11.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of INR 10 cr. towards the Population Foundation of India Project, for a time-period of 18 months, in FY 2018-19.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

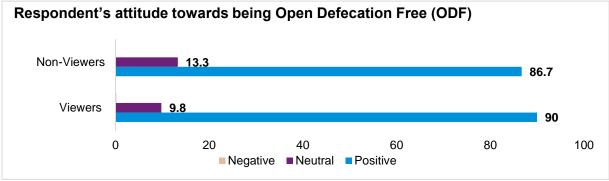
The program proved to be efficient with the support of various stakeholders involved.

11.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended

effects are effects that were not planned as a result of the intervention and can be positive or



negative.

Main Kuch Bhi Kar Sakti Hoon (MKBKSH) used Entertainment Education (EE) to trigger shifts in people's perceptions related to the use and maintenance of toilets. This approach is used widely for social and behaviour change communication (SBCC), as the EE format allows audiences to understand, accept and imbibe positive behaviours without feeling challenged or tutored. Television is a very powerful medium of entertainment and despite inroads of digital media, the reach and hold of television continues to grow in India – it's a community of 835 million viewers who have access to television.4 PFI's partnership with India's public broadcaster Doordarshan, which provided free airtime for the serial, has ensured that it reaches the farthest corners of the country. MKBKSH is a well-established television programme with a strong viewership and following, especially among rural audiences.

The project had an outreach of 9.8 million viewership for the first 26 episodes which were supported by REC. The 26 episodes of the serial focusing on sanitation got an average of about one million viewers per episode on Doordarshan5, India's public broadcasting channel. It also got more than 7.5 million views on YouTube and Facebook from January to April 2019. The overarching campaign hashtag on social media #SwachhtaElaan reached more than four million, with engagement by 60,000 users. The IVRS received over 200,000 calls while the episodes related to sanitation were on air from January to April 2019. Apart from weekly quizzes related to the broadcast episodes, the IVRS ran outbound call and SMS campaigns, and invited viewers to contribute their own messages and pledges related to good sanitation practices. More than 27,000 unique listeners heard and contributed to the sanitation messages on the IVRS, with an equal share by women and men.

Impact assessment report provided data on baseline and end-line indicators as well as a detailed comparative analysis between viewers and non-viewers which can be treated as a treatment vs control study. 82.3% of viewers were aware of negative impact of open defecation on health as compared to 65.3% of non-viewers. About 45% of viewers reported taking some action and willingness to take some action in future as a result of watching the show. More than 8 viewers out of ten (80%) could recall messages from the serial. Study showed with the increasing level of education of the Chief Wage Earner (CWE) in the household, the ownership of toilet increased. Watching MKBKSH Season 3 helped viewers better value the importance of sanitation and

Figure 11 Attitude on ODF

hygiene as well as other issues addressed in the program. The report indicates increase in knowledge and awareness on various aspects of sanitation and health as well as better awareness of negative impact of open defecation on health amongst viewers of the program. Also, the report provided information on indicators such as increase in Households with access to toilet, increase in people with access to toilet who use it regularly as well as increase in no of ODF villages to suggest impact on a pan-India level as mentioned in the below table.

Table 3 Key Indicators

Indicators ¹¹ (Pan-India)	Baseline	End-line	Delta Change
Households with access to toilet	77%	93.3%	16.3%
People with access to toilet who use it regularly	93.4%	96.7%	3.3%
No of ODF villages	401,925	599,963	49% 198,038

11.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project implemented by PFI had financial convergence and was supported by REC and Bill and Melinda Gates Foundation for 26 Episodes each. Moreover, a clear sustainability strategy was present in the project designed. The episodes of MKBKSH series created by PFI were uploaded on social media platforms and are regularly reposted and reshared to increase viewership and audience outreach.

11.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by the Population Foundation of India. PFI has successfully implemented the social and behaviour change communication program to promote awareness on sanitation and health as well as women's rights. Major activities included pre-production, production, and promotion of Main Kuch Bhi Kar Sakti Hoon, Season 3, by Bombay Local Pictures. Through these interventions, the project created positive impact on several indicators such as knowledge and awareness on

¹¹ Sources for indicators: National Annual Rural Sanitation Survey (NARSS) 2017-18 and NARSS 2018-19; Swachh Bharat Garmin Dashboard.

various aspects of sanitation and health as well as better awareness of negative impact of open defecation on health amongst viewers of the program. Also, indicators such as increase in Households with access to toilet (16.3%), increase in people with access to toilet who use it regularly (3.3%) as well as increase in no of ODF villages (49%) suggest impact on a pan-India level. The total score of the project is Extremely Satisfactory, with all parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Extremely Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Extremely Satisfactory
Sustainability	Extremely Satisfactory
Total Score	Extremely Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project has a detailed impact report and baseline study with key performance indicators defined. It was thus possible to calculate the delta change and establish the impact generated by the project. Furthermore, a comparative study of treatment (viewers) and control group (non-viewers) was undertaken for establishing the effectiveness and impact
- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and completed the targeted goal of producing 26 episodes and reaching to 9.8 million viewers across India.
- Project follows a well-designed sustainability strategy with convergence as well as ensuring episodes are regularly reposted/reused to continue generating awareness on the issues.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the Swachh Bharat Abhiyan or Clean India Mission, a country-wide campaign initiated by the Government of India in 2014 to eliminate open defecation and improve solid waste management.

The challenges observed in the program were:

 Since social behavioral change programs have long-term effects, establishing linkages between cause and effect in the short run might be difficult.



Project 9: REACHA

12.1 About the implementing agency

Research and Extension Association for Conservation Horticulture and Agro–forestry (REACHA) was established in the year 1992. It is a community-based (NGO) with a mission to deliver high impact projects on various human development sectors like education, health, skilling of youth, women's empowerment etc. It was established by a group of conscientious bureaucrats, technocrats, scientists and educationists to create an institution that could 'reach-out' to the masses and enable them to empower themselves with knowledge, know-how and the will to bring about positive changes in their lives. REACHA has facilitated the effective implementation of many government programs - mainly in the domain of agriculture, rural development, health & family welfare, and education. Over the years REACHA devised its own programs and their delivery methodologies based on local needs, customs, and traditions, in tune with its 'mission and philosophy'. Their vision is to develop and implement sustainable models of socio-economic growth and development through a participatory process. They work closely with beneficiaries from underprivileged communities on need-based projects, partnering with various stakeholders including government, corporates, civil society, and academic institutions for optimizing impact on the society.

12.2 About the project

Introduction of the project

REC Limited collaborated with REACHA to provide financial assistance for improving learning outcomes in primary education to 3000 children (studying in government schools) through project-based learning. REACHA aims to provide quality education through their program of LEARN-Learning in Education through Applied Reinforcement as per Need-to government school students in Atraulia block of Azamgarh district of Uttar Pradesh.

Project documents

The following documents were available for KPMG to review:

- MoA signed between REACHA and REC Foundation
- Impact assessment report
- Final Project completion report
- Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 1.31 cr.

Location

The project's geographical reach was the Atraulia block of Azamgarh district in Uttar Pradesh.

Beneficiaries

The project aimed to benefit 3000 children belonging to age group of 6-14 years studying in government schools in the selected block.

Key thematic areas

The project was focused on education as well as women empowerment, which is in alignment with REC's CSR policy.

12.3 Objective of the project

The objective of the project was to improve learning outcomes in primary education to 3000 children through project-based learning with focus on multiple reinforcement. It aimed to improve access, retention and learning outcomes for children in the age group of 6-14 years so that they receive quality education at the elementary level. The project worked to enroll and mainstream residual out of school children from the disadvantaged and marginalized social groups residing in rural villages and urban slums. It strived to improve retention in schools and lower the dropout rates, and to improve teaching quality in schools. Also, the project focused on improving learning outcomes as per indicators developed and ensuring age-appropriate learning levels through supplementary and remedial coaching.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources invested by REC Time invested by REACHA and REC Human resources invested by REACHA 	 Identification of schools and beneficiaries in consultation with local government authorities, parents, and community leaders Capacity building of schoolteachers in the concerned classes Setting up a Learn center with one center in each identified school with a total of 75 learn centers Teaching learning at the centers for children during school hours with each 	 75 learn centers were established in all the schools Teaching took place at the learning centers through 4 activity-based learning projects, each identifying a social issue. 	 Improvement in academic performance of students as well as attendance rate. Skill training of 75 women teachers Increased parent involvement in student's growth and development 	 Improved learning outcomes and access to quality education for students in government schools. Empowerment of young women of the community through capacity enhancement.

center having a		
mix of children		
in the age		
group of 6 to		
14 years		

12.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

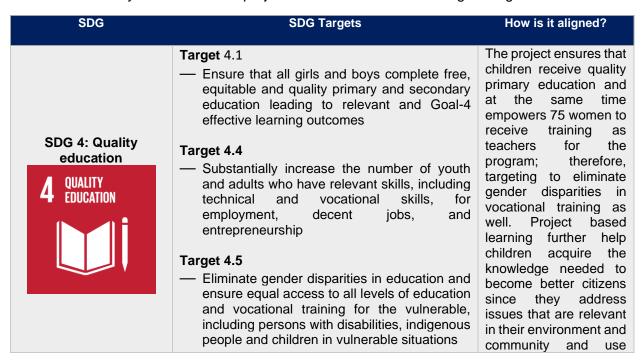
12.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

The project is aligned to SDGs and REC's CSR policy. REC's CSR policy lays emphasis on the importance of promoting education including special education and employment enhancing vocation skills, especially among children, women, elderly and differently abled and livelihood enhancement projects. Therefore, the project was in alignment with this vision since it focused on enhancing primary level education through project-based learning for children and at the same time provided vocational training to women from the community.

The Sustainable Development targets for 2030 call for guaranteeing equal access to quality education for everyone. REACHA's project contributes to the following SDG goals:



Target 4	
— Subs	
teach	
coop	

them as a tool for education.

 Substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states

SDG 10: Reducing inequalities



Target 10.2

C.

 Empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status This goal is ensured by the fact that the project aims to empower 75 female teachers in order to promote their growth and inclusion in the society.

12.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

As per the target the project had an outreach of 3000 school children through the establishment of 75 learning centres. The project also trained 75 women from the local community as teachers.

12.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of Budget

REC Foundation had committed a budget of INR 1.31 cr. towards the project, for a time-period of 12 months, in FY 2017-18.

Project Execution as per Timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

12.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

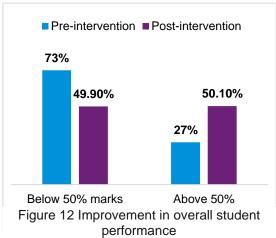
The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned because of the intervention and can be positive or negative.

With respect to academic performance, the intervention brought down the percentage of students scoring 0% marks from 14% to 7.2% (almost by 49%)¹². All 4 projects had a low absenteeism rate with Project 1 having an absent percentage of 15% while the rest of the projects had an absent percentage of less than 1%. Retention rate was more than 85% for all 4 projects. In terms of women empowerment, 75 young community women have become empowered. They are now becoming agents of action and positive social change in the community. The project thus brought about an overall change in the perception and attitude towards education and project-based learning, among the teachers, principals, parents, community leaders and the students. 100% of principals, teachers, and community leaders and 78% of the parents surveyed shared that linking core concepts in math, science, and language, with community human development issues made significant value addition in school. Before the intervention, 50% percent community leaders had the perception that children will not benefit from activity-based learning. However, after the intervention, 100% of these leaders found the intervention beneficial. 100% of the principals and teachers surveyed shared that the intervention has improved the academic performance as well as the learning outcome of the children.

Table 4 Absenteeism and Retention rate of students enrolled in REACHA's 4 intervention projects

Project	Absent Percentage	Retention Rate
Project 1	15.10%	85%
Project 2	0.10%	99.90%
Project 3	0.40%	99.60%
Project 4	0.00%	100%



¹² Project closure report

12.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project trained and built capacity of 75 women from the local community on teaching pedagogy and project-based learning. These teachers have the capacity to now become agents of further social change and work as educators. However, REACHA was of the view that to sustain the project they would need a continued funding for 3-5 years.

12.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by REACHA. REACHA has implemented the learning outcome improvement program to support the learning of students from the ages of 6-14 through project-based learning. Major activities included setting up of learning centers, teacher training and community mobilization. Through these interventions, the project created a positive impact on several indicators. The total score received is Extremely Satisfactory.

OECD Parameters	Score
Relevance	Extremely satisfactory
Effectiveness	Extremely satisfactory
Efficiency	Extremely Satisfactory
Impact	Extremely satisfactory
Sustainability	Marginally satisfactory
Total Score	Extremely satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- Need assessment was conducted as part of this project to ensure that the project is aligned to the needs of the beneficiaries. Baseline survey served the purpose of a base reference against which the changes due to implementation of the project was measured. Impact assessment was conducted to clearly indicate the progress across the indicators identified during the baseline survey.
- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.



Project 10: REC Power Development and Consultancy Limited, Odisha

13.1 About the implementing agency

REC Power Development and Consultancy Limited (RECPDCL) (formerly REC Power Distribution Company Limited), a subsidiary of REC Ltd., was incorporated with the specific focus on developing and investing in electricity distribution and its related activities. Established in 2007, RECPDCL was setup with the goal to capitalize on opportunities offered through the provisions of Section 4 and Section 5 of the Electricity Act, 2003 which aimed at opening up the electrification sector to various private players while exempting them from holding a license for distribution and retail supply. RECPDCL is currently rendering consultancy services to power utilities across the country in 41 Power Distribution Companies (DISCOMs) and 4 Co-operative societies in 27 States across India.

Through its corporate social responsibility and sustainable development initiatives, RECPDCL is focusing on undertaking projects for sustainable development to fulfil the power and energy needs of the society and improve the quality of life of the society at large.

13.2 About the project

Introduction of the project

REC Limited collaborated with RECPDCL for the installation of Roof Top Solar PV power plant of capacity 5 kWp each in 16 residential schools that were owned by the ST & SC Development Department of the Government of Odisha in 9 backward districts.

Project documents

The following documents were available for KPMG to review:

- MoA signed between RECPDCL and REC Foundation
- Annual service report
- Inspection report
- Sanction letter
- Request letter and invoices

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 1.97 cr.

Location

The project's geographical reach was confined to 9 backward districts in Odisha, namely Nabarangpur, Koraput, Kandhamal, Rayagada, Bolangir, Sambalpur, Bargarh, Sundargarah and Keonjhar.

Beneficiaries

The project aimed to benefit all the students and staff of the selected schools.

Key thematic areas

The project was focused on the promotion of renewable energy as well as the upliftment of the marginalized as its targets, which is alignment with REC's CSR policy.

13.3 Objective of the project

The objective of the project was to install roof top Solar PV power plant of 5 kWp each in 16 residential schools run by the ST and SC Development Department of Government of Odisha in 9 backward districts of Odisha, with the aim of promoting access to renewable sources of energy.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Time by RECPDCL and REC Human resources by RECPDCL 	 Procurement of material Installation, commissioning and testing of power plants Training of at least 2 persons per school to facilitate its operation Associating with 5-year AMC for maintenance 	Successful installation of rooftop Solar PV power plants of 5kWp each across 16 residential schools	 Annual reduction in CO2 Emissions by 305.84 tons. Improved access to regular and continued supply of electricity for schools. Increase in studying time for students due to regular supply of electricity. 	 Improved access to affordable and clean energy. Improved educational outcomes for the students. Overall upliftment of students from marginalized backgrounds.

13.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

13.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

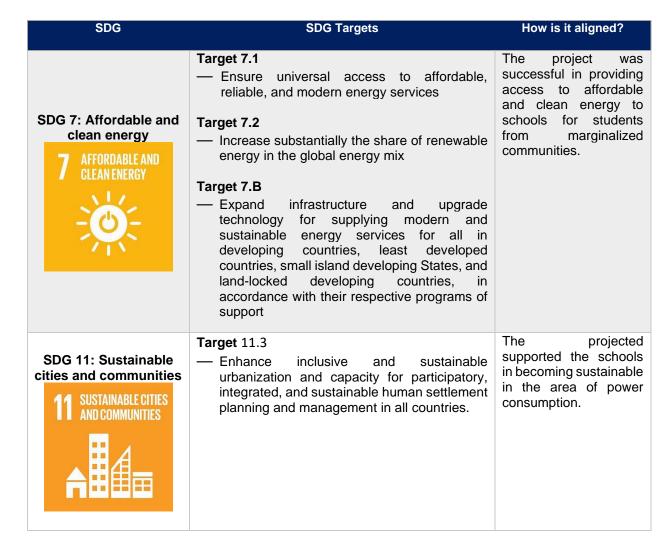
This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

As a socially responsible corporate entity, RECPDCL endeavors to promote and leverage green technologies to produce goods and services that contribute to social and environmental

sustainability. Also, they promote projects that provide energy, water and sanitation facilities to the communities and contribute to inclusive growth and integrated development in society through education, capacity building measures, empowerment of the marginalized and underprivileged sections/communities. This project was successful in fulfilling these parameters since it aimed at uplifting marginalized communities through providing access to renewable energy in 9 backward districts of Odisha.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power.

The Sustainable Development targets for 2030 call for ensuring universal access to affordable and renewable energy. RECPDCL's project contributes to the following SDG goals:





Target 13.3

 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning The project can be used as an example for other similar initiatives which, if implemented at a large scale, can contribute to the prevention of the climate crisis.

13.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

With reference to this project, solar panels of 5kWp were installed at 16 residential schools across 9 districts of Odisha as per the target. They were installed in the following districts¹³:

Table 5 District wise solar panels installation

District	No. of solar plants installed	Locations of installation
Nabarangpur	2	Khuduku High School (New Building) Belgaon High School
Koraput	2	Balipata High School Kumbhariput High School
Kandhamal	1	Durgapanga High School
Rayagada	1	Dangasil Girls High School
Bolangir	1	Govt. Girls High School (SSD)
Sambalpur	5	Govt. (SSD) Girls High School Rabga Govt. (SSD) Girls High School Badamundaloi Govt. (SSD) Girls High School Phasimal Govt. (SSD) Girls High School Sandhapathar Govt. (SSD) Girls High School Tikilipada
Bargarh	1	Govt. (SSD) High School
Sundargarah	2	Govt. (SSD) Girls High School Jampali Govt. (SSD) Girls High School Lahanda
Keonjhar	1	Govt. (SSD) High School

The maximum number of solar plants were installed in 5 residential schools in the Sambalpur district of Odisha, all 5 of which were schools for female students.

13.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

¹³ Annual service report

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of Budget

REC Foundation had committed a budget of INR 1.97 cr. towards the project, for a time-period of 12 months, in FY 2013-14.

Project Execution as per Timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

13.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The solar rooftop plant provides reliable and assured supply for almost 24x7 to the school, thereby increasing the comfort of the students as well as saving on energy costs for the schools. Further, the installation of the rooftop solar panels can mitigate the problem of low voltage and disruptions in power supply for the schools, thereby increasing the available time for studying to students. Of the 16 schools covered, 9 are exclusively girls' schools (56%) with predominantly SC/ST background, resulting in significant impact on the girl children in these schools through improving their access to resources. In terms of environmental impact, the plants will lead to an estimated annual reduction in CO₂ emissions of the schools by 305.84 tons¹⁴.

13.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The sustainability of the project can be assessed by the fact that regular inspections and maintenance were ensured and conducted after the completion of the project, to ensure long term utility and functionality of the panels. In addition to this, through such interventions, schools can demonstrate their commitment to sustainability while also providing opportunities to familiarize students and visitors on panels and inspiring further investment in solar energy and promoting renewable energy.

¹⁴ Calculated based on available information

13.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by RECPDCL in Odisha. RECPDCL has implemented the renewable energy promotion program to support the installation of solar panels across 16 residential schools in 9 backward districts of Odisha. Major activities included installation and ensuring of maintenance of the panels. Through these interventions, the project created a positive impact on several indicators such as access to electricity and renewable energy, increase in studying time for students, etc. Also, it is estimated to have led to an annual reduction in CO₂ Emissions by 305.84 tons approximately. The total score of the project is Satisfactory, with three parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately satisfactory
Effectiveness	Extremely satisfactory
Efficiency	Extremely satisfactory
Impact	Marginally satisfactory
Sustainability	Extremely satisfactory
Total Score	Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project focused on the upliftment of marginalized communities with special focus on gender and implementation in remote locations. This was an initiative directed towards cause of promoting renewable sources of energy.
- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- This intervention is aligned to REC's CSR policy and is directly linked to the National Solar Mission. This alignment establishes the relevance of the same.

The challenges observed in the program were:

- It was difficult to establish outcomes for the project since no baseline or impact report was available for review. Outcomes were calculated based on assumptions and information collected through secondary research.
- There is a need to put a sustainability plan in place, to ensure that the impact is sustained
 even after the warranty expires and the AMC exits. Sustainability plan to include
 information about the bodies who would be managing the operation and maintenance of
 these systems after project completion.



Project 11: REC Power Development and Consultancy Limited, Rashtrapati Bhawan

14.1 About the implementing agency

REC Power Development and Consultancy Limited (RECPDCL) (formerly REC Power Distribution Company Limited), a subsidiary of REC Ltd., was incorporated with the specific focus on developing and investing in electricity distribution and its related activities. Established in 2007, RECPDCL was setup with the goal to capitalize on opportunities offered through the provisions of Section 4 and Section 5 of the Electricity Act, 2003 which aimed at opening up the electrification sector to various private players while exempting them from holding a license for distribution and retail supply. RECPDCL is currently rendering consultancy services to power utilities across the country in 41 Power Distribution Companies (DISCOMs) and 4 Co-operative societies in 27 States across India.

Through its corporate social responsibility and sustainable development initiatives, RECPDCL is focusing on undertaking projects for sustainable development to fulfil the power and energy needs of the society and improve the quality of life of the society at large.

14.2. About the project

Introduction of the project

REC Limited collaborated with RECPDCL to provide financial assistance for the installation of solar power panels in the President Estate, Rashtrapati Bhawan to reduce the carbon footprint of the estate and promote renewable energy.

Project documents

The following documents were available for KPMG to review:

- MoA signed between RECPDCL and REC Foundation
- Quarterly report

Project Duration

The project had a timeline of 18 months.

Funding Amount

The project's allocated budget stands at INR 6 cr.

Location

The project's geographical reach was the President Estate, Rashtrapati Bhawan, New Delhi.

Beneficiaries

The project aimed to benefit all the residents of the Rashtrapati Bhawan estate and those using their facilities.

Key thematic areas

The project was focused on the promotion of renewable energy and climate change, which is in alignment with REC's CSR policy.

14.3 Objective of the project

The project aimed to promote environmental sustainability and renewable sources of energy through the installation of solar panels at 5 sites in the Rashtrapati Bhawan estate.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Time by RECPDCL and REC Human resources by RECPDCL 	 Provide financial assistance and technical expertise for designing, procurement, commissioning, and maintenance for 5 years. Procurement of goods and services by RECPDCL Identifying other small sites at Rashtrapati Bhawan and determine additional capacity 	 Successful installation of solar power panels of approximate ly 508kW at 5 sites in the President Estate, Rashtrapati Bhawan Ensuring AMC by installation agency for 5 years 	 Annual Reduction in CO2 emissions Generation of clean and green energy Reduction in spending on power and increased savings 	 Contributing to a cleaner environment Contribution to better long-term health outcomes of the residents Creating a model of sustainable settlements which can be adopted by other organizations in the future

14.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

14.4.1 Evaluation criterion 1: Relevance

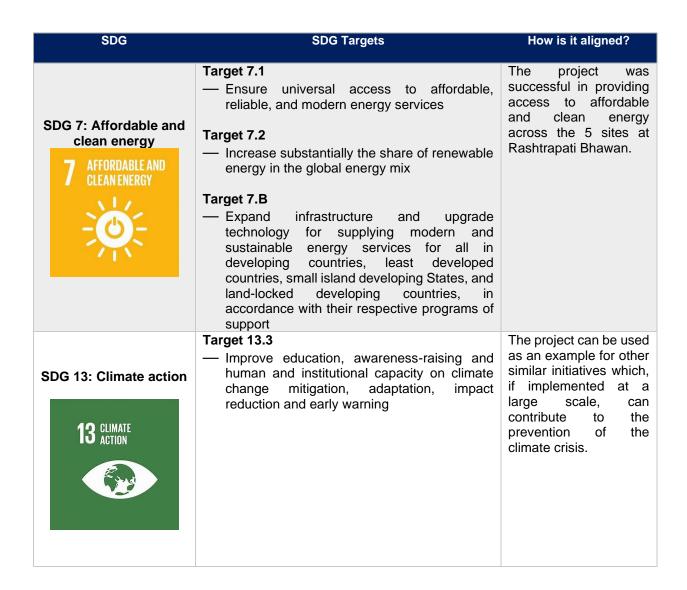
'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power. Also, as a socially responsible corporate entity,

RECPDCL endeavors to promote and leverage green technologies to produce goods and services that contribute to social and environmental sustainability.

The Sustainable Development targets for 2030 call for promoting access to renewable energy. RECPDCL's project contributes to the following SDG goals:



14.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

With reference to this project, solar panels of approximately 508kW were installed at 5 sites at the Rashtrapati Bhawan, namely:

- Rashtrapati Bhawan MT Garage I and II
- Rashtrapati Bhawan Market
- Rashtrapati Bhawan Museum
- Rashtrapati Bhawan School
- Rashtrapati Bhawan Sewage Treatment Plant

Table 6 Sites where the solar panels are installed

Name of the Project	Project DC Capacity(kWp)	Project AC Capacity(kW)
Rashtrapati Bhawan MT Garage I	32.12	30.00
Rashtrapati Bhawan Market	25.00	20.00
Rashtrapati Bhawan MT Garage II	57.90	60.00
Rashtrapati Bhawan Museum	23.94	20.00
Rashtrapati Bhawan School	345.87	300.00
Rashtrapati Bhawan Sewage Treatment Plant	23.30	20.00
Total	508.13	450.00

The panels installed at the Rashtrapati Bhawan School were of the highest DC capacity of 345.87 kWp while the panels installed at the Sewage Treatment Plant were of the lowest capacity of 23.30 kWp. The combined capacity of all the panels came to 508.13 kWp which was in alignment with the target as per the MoA.

14.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of Budget

REC Foundation had committed a budget of INR 6 cr. towards the project, for a time-period of 18 months, in FY 2015-16.

Project Execution as per Timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

14.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The solar panels will provide reliable and assured supply of clean and renewable energy to the estate and contribute towards saving energy costs for the Rashtrapati Bhawan. The plant is expected to generate approximately 0.95 million units (MUs) of green energy which is sufficient to light more than 650 homes for over 25 years¹⁵. Further, the initiative can reduce the carbon footprint of Rashtrapati Bhawan by around 316 Metric Tons (MT) every year. In terms of performance, the average performance ratio for all the solar panels was greater than 80% across October and November 2019 for all 5 buildings. Out of the 5 panels established, the Rashtrapati Bhavan Museum had the lowest performance ratio (62%) whereas the Rashtrapati Bhavan Sewage Treatment Plant had the highest performance ratio (98%) in December 2019. This represents that even at its lowest, the panels will still perform at a capacity greater than 60%.

14.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention.

The sustainability of the project can be assessed by the fact that regular inspections and maintenance were ensured and conducted after the completion of the project. The performance of the project was also monitored quarterly to keep a check on its functioning and report any errors¹⁶ at the earliest. In addition to this, such interventions can help demonstrate the commitment to sustainability while also providing opportunities to familiarize the residents and visitors on solar panels. and inspiring further investment in solar energy and promoting renewable energy.

¹⁵ Source: Tata <u>Power-DDL Inaugurated 668 KWp Solar Power Plant At President's Estate (indiaprojectsnews.in)</u> The impact is an approximation since the project was jointly executed with Tata Power

¹⁶ Quarterly report

14.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by RECPDCL. RECPDCL had successfully installed the solar panels in the Rashtrapati Bhawan Estate. Major activities included installation, monitoring and maintenance of the solar panels. Through these interventions, the project significantly reduced the annual carbon footprint of Rashtrapati Bhawan by approximately 316 Metric Tons (MT). The total score of the project is Satisfactory, with three parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately satisfactory
Effectiveness	Extremely satisfactory
Efficiency	Extremely satisfactory
Impact	Marginally satisfactory
Sustainability	Extremely satisfactory
Total Score	Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- A quarterly report was maintained to track the performance of the panels during the month
 of October to December. This was a good practice because it can help understand how
 the solar panels function specially when the seasons change and can also be used as
 learnings for future similar projects.
- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and installed the solar panels in Rashtrapati Bhawan, as per the targets.
- The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the National Solar Mission.

The challenge observed in the program was:

• It will be a good practice to conduct a baseline and impact report assessment in the future to clearly indicate the progress and outcomes of the project. Outcomes were calculated based on assumptions and information collected through secondary research.

.



Project 12: Shree Bhagwan Mahaveer Viklang Sahayata Samiti

15.1 About the implementing agency

Shree Bhagwan Mahaveer Viklang Sahayata Samiti (SBMVSS) is a Jaipur based NGO. Registered as a society, SBMVSS is the world's largest organization for people with disability and has benefitted more than 1.83 million disabled people through donating artificial limbs/calipers and other aids and appliances. It is the parent body of "Jaipur Foot" and has a special consultative status with the Economic & Social Council of the United Nations Organization (UNO). The main objective of SBMVSS is physical, economic, and social rehabilitation of the disabled population. SBMVSS strives to work and provide services to people with disabilities to enable them to regain their mobility and dignity, thereby enhancing their self-respect and role as a productive member of the society. Their mission is to provide artificial limbs, calipers, and other aids and appliances, to as many disabled as possible through their centers, outreach programs and rehabilitation camps, both in India and abroad. They work towards providing economic support for livelihood (on selective basis) as a poverty alleviation program and undertake in-house or collaborative research for improving quality and lowering cost of aids and appliances.

15.2 About the project

Introduction of the project

REC Limited collaborated with SBMVSS in 2019 and sanctioned a CSR grant for a project to provide rehabilitation to people with disabilities. This project aimed to provide 2600 aids and appliances to the disabled through the SBMVSS Jaipur headquarter center and two camps held at Mandal (District Bhilwara) and Choti Sadari (District Pratapgarh) with the financial support of REC Foundation.

Project documents

The following documents were available for KPMG to review:

- MoA signed between SBMVSS and REC Foundation
- Impact assessment report
- Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 1 cr.

Location

The project's geographical reach is pan-India.

Beneficiaries

The project aimed to benefit 2600 beneficiaries who were living with disabilities and belonged to economically weaker sections of the society across India.

Key thematic areas

The project was focused on empowering people with disabilities and supporting the marginalized and vulnerable, which is in alignment to REC's CSR policy.

15.3 Objective of the project

To provide aids and appliances to 2660 number of disabled persons of the society belonging to the EWS category across India. The project aimed to change lives of thousands of disabled by providing them the necessary rehabilitation, ranging from physical to social and economic support. The project worked towards supporting the beneficiaries to regain their mobility and dignity, and become confident, responsible, and productive members of the society.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Time by SBMVSS and REC Human resources by SBMVSS 	Distribution of 1500 artificial limbs/calipers, 300 hand paddled tricycles, 650 crutches (pairs), 150 wheelchairs ISI to a total of 2600 disabled persons at various locations in India	Successful distribution of artificial limbs/calipers and aids and appliances to 2600 people with disabilities across India.	Satisfaction with the appliances for most of the beneficiaries	■ Enhancement in quality of life of disabled persons due to provision of aid and appliances.

15.4. Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

15.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

The project is aligned to SDGs and REC's CSR policy. REC's CSR policy talks about providing special focus to projects aimed at helping people from the weaker sections of the society such as women, people belonging to the SC/ST/OBC categories, children, old persons, persons with disabilities, armed forces veterans, war widows & their dependents and other deprived sections of society etc. Thus, the project was is in alignment with REC's vision to support persons with disabilities.

The Sustainable Development targets for 2030 call for empowering and promoting social, economic, and political inclusion for everyone. SBMVSS project contributes to the following SDG goals:

SDG	SDG Targets	How is it aligned?
SDG 10: Reduce inequalities 10 REDUCED INEQUALITIES	 Target 10.2 Empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status 	The provision of the aids and appliances will be helpful in empowering the disabled beneficiaries to participate fully in the society which in turn would facilitate their inclusion in all aspects of life.

15.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

The set target of the project was achieved as aids and appliances were provided to 2600 disabled beneficiaries across various states of India such as Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Punjab etc.

15.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of Budget

REC Foundation had committed a budget of INR 1 cr. towards the project, for a time-period of 12 months, in FY 2018-19.

Project Execution as per Timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

15.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned because of the intervention and can be positive or negative.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned because of the intervention and can be positive or negative.

Based on interaction with 60 beneficiaries on a sample basis through telephonic conversations, the impact assessing agency found that more than 90% of people¹⁷ were fully satisfied with the fitment of artificial limbs/calipers and other aids and appliances. They regained their self-esteem and confidence and became very productive members of the society. For the 10% who were not fully satisfied, the cause lied in fitting/adjustment issues. These issues were mainly found in children of less than 5 years or elderly people over 65 years of age. It was found that 45% of the surveyed beneficiaries were living with disabilities caused due to accidents. However, REC and SBMVSS's support has now led them to become self-productive and overcome the challenges they faced due to an external event.

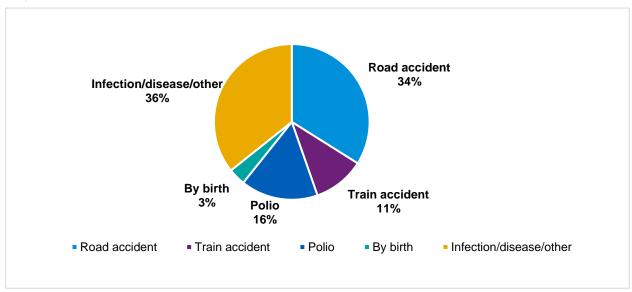


Figure 13 Cause of amputation of 60 surveyed beneficiaries (before intervention)

¹⁷ From the 60 surveyed beneficiaries

15.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

In order to support initiatives of a similar nature, REC has undertaken multiple projects with SBMVSS due to their strong reach and significant impact. This step would ensure that a diverse range of beneficiaries are supported and provided with aid across various time intervals.

15.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by SBMVSS. SBMVSS has implemented the resource provision project to provide appliances and aids to 2600 people who are living with disabilities across India. Major activities included identification of beneficiaries and distribution of equipment as per their disability. Through these interventions, the project created a positive impact on several indicators such as mobility, quality of life, self-esteem. The total score received is Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately satisfactory
Effectiveness	Extremely satisfactory
Efficiency	Extremely satisfactory
Impact	Extremely satisfactory
Sustainability	Extremely satisfactory
Total Score	Extremely satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- Beneficiaries surveyed expressed satisfaction with the artificial aids and appliances supplied
- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- REC supported similar interventions undertaken by the same organisation, which in turn led to the supply of beneficiaries to a larger group of beneficiaries over a period.
- Impact assessment of the project was conducted by a third party called "Yellow Leads" to assess the performance of the project after its completion.

The challenges observed in the program were:

- It was difficult to establish outcomes for the project since no baseline or need assessment report was available. It would be a good practice in future to Identify key outcome indicators for the beneficiaries, which in turn will help in tracking the progress against the defined indicators and determining the impact created against the set targets.
- Grievance redressal mechanism needs to be put in place, through the setting up of camps or centers, particularly for the beneficiaries who were facing difficulty with adjustments of the equipment. This will further enhance the experience of the beneficiaries and ensure creation of sustained impact.



Project 13: The Energy and Resources Institute

16.1 About the implementing agency

The Energy and Resources Institute (TERI) is a reputed think-tank that specializes in the fields of energy, environment, and sustainable development. TERI focuses on resource efficiency and waste management and aims to promote efficient use of resources, improve access and adoption of sustainable practices, and reduce impact on environment. "Lighting a Billion Lives" (LaBL) is one of TERI's flagship initiatives that aim to reduce use of kerosene lanterns by replacing them with solar lighting devices in rural India. Since 2008 TERI has been implementing the LaBL initiative to provide clean lighting sources through an entrepreneurial model. The initiative has reached out to over 3000 villages across the country benefitting around 16,00,000 lives through establishing solar charging stations using LED based solar lantern in un-electrified or poorly electrified villages.

16.2 About the project

Introduction of the project

REC Foundation supported LaBL in reaching out to remote areas in Jharkhand and Odisha through its innovative model. The project aimed to bring clean and affordable lighting to around 1400 households in need of reliable lighting service through establishment of SMGs . The project included conducting of feasibility analysis and identifying villages as well as Energy Enterprises and NGOs which will provide last mile delivery services to ensure system is delivered to the deserving users. TERI was responsible for designing, procuring, installing, and commissioning of SMGs in the selected villages. Solar micro grids and the Energy Enterprises (EE) in the project locations were linked to ensure proper after sales services of the micro grids. As part of the project, sensitization programs about solar lighting products usage were organized. The project conducted capacity building training of local energy operators and Energy Enterprise to operate, maintain and manage SMGs. Also, fee for service model of solar lighting devices in the selected villages was used to facilitate livelihood opportunities.

Project documents

The following documents were available for KPMG to review:

- MoA signed between TERI and REC Foundation
- Impact assessment report
- Project completion and outcome report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 18 months.

Funding Amount

The project's allocated budget stands at INR 1.98 cr.

Location

The project's geographical reach covers Jharkhand and Odisha.

Beneficiaries

The project targets 1400 rural households.

Key thematic areas

The project was focused on improving access to clean and affordable energy for rural development, which is in alignment with REC's CSR policy

16.3 Objective of the project

To bring clean and affordable lighting to around 1400 households in need of reliable lighting service through establishment of SMGs. The project also strives to facilitate livelihood opportunities through the fee for service model of solar lighting devices in the selected villages. The project aims to link the solar micro grids with the Energy Enterprises (EE) in the project locations to ensure proper after sales services of the micro grids.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
 Financial Resources by REC Foundation Time and Human Resources by TERI 	 Conducting feasibility analysis Identifying villages as well as Energy Enterprises and NGOs which will provide last mile delivery services to ensure system is delivered to the deserving users Designing procuring, installing, and commission SMGs in the selected villages Organizing sensitization programs about solar lighting products usage Building capacity of local energy operators and Energy 	 35 villages selected from Jharkhand (7) and Odisha (28) Installation of 140 Solar Micro Grids 1400 Households provided with access to clean energy 	 Increased knowledge and awareness on solar energy and usage of solar lighting products Reduction in household's expenditure towards lighting sources Reduced workload and improved work environment for women Reduction in health issues and expenditure towards medical bills Improved capacity of energy enterprises to maintain the installed SMGs Increase in Households that use clean 	Improved access to clean energy sources in rural areas Reduction in carbon emissions (6476.24 tons approximately)

Enterprise to	energy and
operate,	have reduced
maintain and	their
manage SMGs	consumption of
	kerosene and
	paraffin

16.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

16.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries. It also aligned to the Jawaharlal Nehru National Solar Mission (also known as the National Solar Mission), an initiative of the Government of India and state governments to promote renewable energy, especially solar power.

Around 13 per cent of the global population lack access to modern electricity and over 3 billion people still rely on wood, coal, charcoal or animal waste for cooking with indoor air pollution causing 4.3 million deaths in 2012. In developing rural communities, kerosene lamps and paraffin candles are used as a lighting solution that do not provide sufficient illumination and add to indoor air pollution. The lack of clean and safe lighting makes life come to a standstill at dusk which limits the productivity and acts as an impediment to development opportunities in sectors such as health, education, and infrastructure.

The Sustainable Development targets for 2030 call for ensuring universal access to affordable and renewable energy. TERI's project contributes to the following SDG goals:

¹⁸ https://www.un.org/sustainabledevelopment/energy/

SDG	SDG Targets	How is it aligned?
SDG 7: Affordable and Clean Energy 7 AFFORDABLE AND CLEAN ENERGY	 Target 7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services Target 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix Target 7B By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support. 	The project focuses on improving access to clean energy through installing solar micro grids. It provides access to clean lighting sources to 1400 households.

16.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Project successfully provided clean and affordable lighting to around 1400 rural households through installing 140 solar micro grids inn Jharkhand and Odisha. The project covered1050 households with Low Voltage DC system for powering 2 lights and a mobile charger and 350 households were covered with AC system for powering of 2 lights, a mobile charger and provisioning of a Fan/TV.

16.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of INR 1.98 cr. towards the TERI Project, for a time-period of 18 months, in FY 2014-15.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of the local communities, village committees, local NGOs, and energy enterprises.

16.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The impact assessment report reviewed, indicates that the project had benefitted several aspects of lives of the households supported under it and had potential to act as a key enabler to catalyse positive change in the long-term as well. Beneficiaries surveyed were especially happy with the various usages of the micro grid energy in their daily household chores like cooking, washing utensils, studying, mobile charging, livelihood activities, etc. Moreover, the households surveyed expressed satisfaction with the brightness of LED lights installed. The project intervention helped reduce the household's expenditure towards lighting sources as they are now using solar power for their lighting requirement. The LED lights installed under the project has a very positive impact on child education as the children are studying for extended hours in the evening, which contributed to their improved academic performance in school. Furthermore, the bright light doesn't have any adverse effect on their eyes which enabled them to get better grades in the school.

Women also experienced reduced workload and improved work environment to carry out their household chores after the installation of solar micro grids. The survey also found that the women engaged in various livelihood activities due to availability of solar light, which in turn increased their income levels. Women surveyed shared that they felt safer after the availability of solar lights in the evening hours. There is a vast reduction in health issues and expenditure towards medical bills as the cases of red eyes, headache, blackened nostrils, and watery eyes has been reduced to a large extent. Thus, the impact assessment report indicates positive change on household savings, social, child education, women's workload, health issues, etc., for the beneficiaries. Also, this study calculated the annual reduction in CO2 emissions due to project intervention to be around 6476.24 tons approximately.

16.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

The project has a robust sustainability mechanism and uses a fee for service model in the selected villages. It also linked the solar micro grids with the Energy Enterprises (EE) and conducted capacity building trainings for operating and managing SMGs. Village energy committees were constituted in each project village who are responsible for looking after day to day operation with

support of selected village level entrepreneur/ micro grid operator as well as sensitizing their respective communities for safe and better use of solar light. The same committees or operators regularly report to local partner NGO on performance of micro grid systems. Besides, the fund collected from the local community is regularly deposited in joint bank account of solar project under direct guidance of local village committee and NGO partner. Every project village has bank account for developing maintenance fund at the community level, which ensures sustainability of impact generated.

16.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by TERI. TERI has successfully implemented the solar energy project to increase access to clean and affordable energy for rural households in Jharkhand and Odisha. Major activities included conducting of feasibility analysis and identifying villages as well as Energy Enterprises and NGOs which will provide last mile delivery services to ensure system is delivered to the deserving users. TERI successfully carried out designing, procuring, installing, and commissioning of SMGs in the selected villages. Through these interventions, the project created positive impact on several aspects for the households such as household savings, studying, mobile charging, livelihood activities, child education and reduced use of kerosene/paraffins. The total score of the project is Satisfactory, with three parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Moderately Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Marginally Satisfactory
Sustainability	Extremely Satisfactory
Total Score	Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and completed the targeted goal of providing access to clean energy by 1400 rural households in Jharkhand and Odisha.
- The project included interactions with the community stakeholders through formation of village committees. Furthermore, it focussed on creation of awareness among the beneficiaries and conducted capacity building activities for the representatives of the local community, NGOs, and Energy Enterprises. All these led to improved sustainability quotient for the project.

 The project intervention is relevant as it is aligned to REC's CSR policy and is directly linked to the Swachh Bharat Abhiyan or Clean India Mission, a country-wide campaign initiated by the Government of India in 2014 to eliminate open defecation and improve solid waste management.

One of the challenges observed in the program relates to:

 There was no baseline report available for review. Impact assessment report and project completion report were shared, however, information on delta change was not available to establish impact. Information on quantifiable outcome indicators could not be evidenced in the impact report.



Project 14: T-Hub Foundation

17.1 About the implementing agency

T-Hub Foundation was formed in 2015 and is one of India's pioneering innovation ecosystem which has provided 1,100+ national and international startups access to better technology, talent, mentors, customers, corporations, investors, and government agencies. T-Hub has been recognized as a business incubator by the National Department of Science and Technology. It is one the first of its kind to receive this grant outside premier institutes such as IITs and IIMs. They offer various incubation programs in the country and use the Triple Helix model of innovation based on interaction and collaboration between industry, academia, and the government. T-Hub Foundation also provides thought leadership for Telangana and other state and central government organizations to build innovation ecosystems.

17.2 About the project

Introduction of the project

The Rural Electrification Corporation (REC) Innovation Platform for Renewable Energy was conducted jointly by T-Hub and Kestone Integrated Marketing Services (KIMS). The Innovation platform extended support and mentoring to 30 Government Institutions across Andhra Pradesh and Telangana. About 1,800 Students in the selected Government Institutions were taken through a rigorous Conceptual Research Experience Program and were mentored on the Research and Innovation in the field of Renewable Energy. Dedicated Research mentors mentored student research teams towards innovations in Renewable Energy ranging from Solar Energy and Wind Energy to Geothermal Energy, alternative biofuels and many more. The platform provided an opportunity for these 1800 young college innovators to work on 600 ideas focused on renewable energy. Out of these, 30 projects were selected for advanced mentoring. Finally, top 6 projects were selected for further mentoring at T-Hub Foundation which were then felicitated at T-Hub in an exclusive event.

Project documents

The following documents were available for KPMG to review:

- MoA signed between T-Hub and REC Foundation
- Baseline Report
- Impact assessment report
- Project completion and outcome report
- Audited Utilization Certificate

Project Duration

The project had a timeline of 12 months.

Funding Amount

The project's allocated budget stands at INR 2.55 cr.

Location

The project's geographical reach covers Andhra Pradesh, and Telangana.

Beneficiaries

The project targets 1800 students, 150 faculty and 30 government institution.

Key thematic areas

The project was focused on improving access to quality higher education and promote renewable energy, which is in alignment with REC's CSR policy

17.3 Objective of the project

To enable students to become active learners who can apply their knowledge to understand the benefits of innovation in renewable energy, develop novel applications and promote its use in their surroundings.

The following impact map was developed for this project as part of the study.

Input	Activity	Output	Outcome	Impact
Financial Resources by REC Foundation Time and Human Resources by T-Hub	 Identification of 30 government institutions, faculty, and researchers Orientation of leadership Development of curriculum and pedagogy, as well as technology platforms Professional skill mapping, skill building, innovation bootcamp and solution research Selection of 30 projects for advanced mentoring and 6 projects for showcasing/mentoring at T-Hub Foundation 	 Engaged with 1800 students, 150 faculty, and 30 government institutions Conduction of skill bootcamps, skill building exercises, etc. Conduction of Conceptual Research Experience Program 	 Students and Faculty developed 601 concept papers 24 research papers were produced through advanced mentoring and support 6 projects were shortlisted for prototype development and advanced mentoring Increased conceptual knowledge and awareness on renewable energy 	Empowered 1800 students from rural areas across Telangana and Andhra Pradesh and built their interest in entrepreneurship and innovation in the field of renewable energy.

17.4 Analysis and Findings

The section below showcases the observations as perceived during the evaluation of the project. The methodology used, ensures that the OECD-DAC evaluation criteria are followed to provide our findings and implementable recommendations.

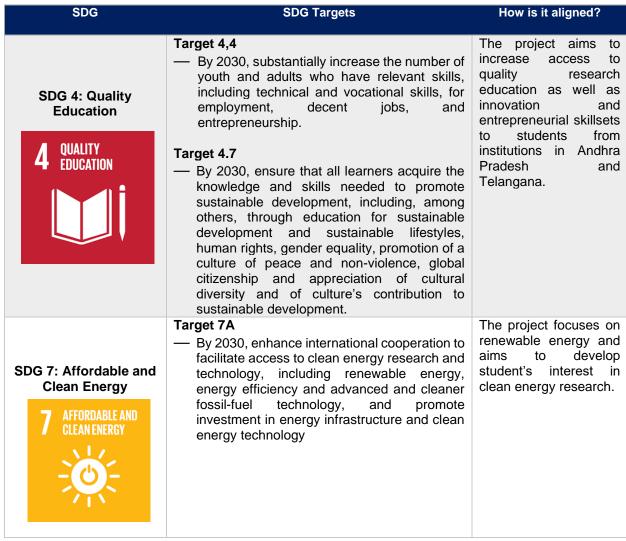
17.4.1 Evaluation criterion 1: Relevance

'Relevance' is a measure of the extent to which the program has been able to support the suited needs and priorities of the stakeholders.

This is done to understand the extent to which the intervention objectives and design respond to the beneficiaries needs. The purpose of the analysis is to capture if the objectives and design of the project were sensitive to the needs of the stakeholders covered.

Project is aligned to REC's CSR policy, which prioritizes and supports the country's development agenda on various issues such as health, sanitation, education, rural development, environmental protection, skill development, etc. with the aim of reaching and empowering a wide spectrum of beneficiaries.

The Sustainable Development targets for 2030 call for guaranteeing equal access to quality higher education and vocational education for everyone as well as promoting renewable energy. T-Hub Foundation's project contributes to the following SDG goals:



17.4.2 Evaluation criterion 2: Effectiveness

Effectiveness' is an assessment of the factors affecting the progress towards outcomes for every stakeholder and validation of robustness of systems and processes by assessing the utilization of the resources.

The criterion reviews the implementation strategy and mechanism. The purpose of this is to understand if the intervention has achieved its objective and the extent to which it did.

Outputs	Value
Students Engaged	1800
Teachers Engaged	150
Government Institutions	30

Figure 14 Project outputs

Project successfully completed its goal of engaging 1800 students and 150 faculty from government institutions in rural areas of Andhra Pradesh and Telangana on solution-oriented thinking, innovation and entrepreneurship and renewable energy.

17.4.3 Evaluation criterion 3: Efficiency

'Efficiency' criterion aims to measure if the project was implemented in a cost-effective and timely manner.

The purpose is to understand if the inputs (funds, expertise, time, etc.) were utilized efficiently to achieve the intervention outcomes. Factors such as budget utilization and timelines have been reviewed.

Utilization of budget

REC Foundation had committed a budget of INR 2.55 cr. towards the T-Hub Foundation Project, for a time-period of one year, in FY2018-20.

Project execution as per timelines

Project activities were timely executed as per the MoA and/or within the approved timelines.

The program proved to be efficient with the support of various stakeholders.

17.4.4 Evaluation criterion 4: Impact

'Impact' has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The purpose of measuring the impact is to ascertain the primary or secondary long-term effects produced by the project. This could be directly or indirect and intended or unintended. Unintended effects are effects that were not planned as a result of the intervention and can be positive or negative.

The project empowered 1800 students from rural areas across Telangana and Andhra Pradesh and built their interest in entrepreneurship and innovation while promoting renewable energy. The project engaged students and faculties to develop 601 concept papers. Out of the 600 proposals, 24 research papers were produced through advanced mentoring and support. 6 projects were then shortlisted, and the teams were mentored and provided support for developing a prototype at T-Hub Foundation. The shortlisted teams were from The University College of Engineering and Technology for Women, Warangal, Kakatiya University and University College of Engineering and Technology, Mahatma Gandhi University in Telangana and from Andhra Pradesh JNTUA College of Engineering Pulivendula and RGUKT, IIIT, R K Valley were represented.

Out of the 200 students who responded to the survey¹⁹, around 80% of them had a positive opinion about the program and found value in participating in the program. They felt that being involved in this program enabled them to come-up with practical ideas and solutions in Renewable Energy. Over 80% of the student respondents felt that the program enabled them to inculcate a solution-oriented thinking and enabled them to come-up with practical ideas & solutions in Renewable Energy. The students were able to deliver innovative solutions for practical problems and disseminate it at an international level. Faculties wanted to be associated with this program in the future since it facilitated their own professional development which made them feel even more engaged. Over 85% of the faculty noted that the program helped students foster an entrepreneurial mindset, create interest in innovation, and inculcate a solution-oriented thinking in them.

17.4.5 Evaluation criterion 5: Sustainability

This criterion assesses the likelihood that project achievements will continue after the project. This includes an examination of the capacities of the systems needed to sustain benefits over time. The criterion analyses the resilience, risks, and potential trade-offs.

The purpose of this criterion is to look at the longer-term effects of the intervention. The different aspects of sustainability include financial, institutional, technological etc. These different aspects have been assessed when looking at the sustainability of the intervention

Project envisaged a long-term tangible impact where students involved in this program will be inspired to continue being involved in the space of Renewable energy.

17.5 Summary

This study presents the impact assessment of the CSR project of REC Foundation implemented by T-Hub. The intervention successfully completed its goal of engaging 1800 students and 150 faculty from government institutions in rural areas of Andhra Pradesh and Telangana on solution-oriented thinking, innovation and entrepreneurship and renewable energy. Through these interventions, the project produced around 600 proposals, out of which 24 research papers were developed through advanced mentoring and 6 were further selected for prototype development.

¹⁹ Impact Assessment on REC Raising Young Innovators Through Conceptual Research Experience

The total score of the project is Extremely Satisfactory, with three parameters scoring Extremely Satisfactory.

OECD Parameters	Score
Relevance	Extremely Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Extremely Satisfactory
Impact	Satisfactory
Sustainability	Marginally Satisfactory
Total Score	Extremely Satisfactory

It is important to mention that the entire evaluation had certain constraints associated to it. The inclusion of these constraints is important as they help us in strengthening the future course of current projects and planning new projects that would be implemented in Company's operational areas.

The good practices observed in the program were:

- The project efficiently utilized the inputs (funds, expertise, time, etc.) to achieve the intervention outcomes.
- The intervention achieved its objective and completed the targeted goal of engaging with 1800 students across 30 government institutions.
- The project focused on increasing accessibility of the students from institutions in the
 predominantly rural or semi-rural areas of Telangana and Andhra Pradesh to research
 methods and critical thinking exercises. This in turn led to improved interest level of the
 students in renewable energy

The challenges observed in the program were:

- Although, baseline and impact reports were shared for review, it was observed that KPI for the outcome and impact were not clearly defined in either of the reports.
- The project did not seem to have a strategy in place to sustain the impact created through the intervention.



Conclusion

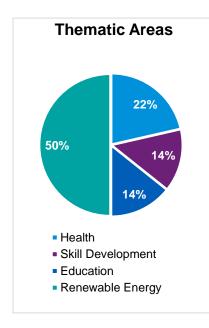
18. Conclusion

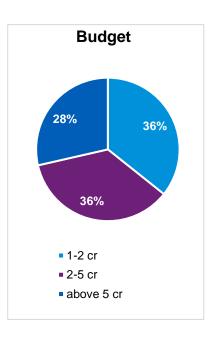
The study presents the impact analysis of 14 selected projects supported by REC Foundation. REC Foundation has implemented various programs to support developmental needs such as education, clean energy, skill development, and healthcare of communities across the country.

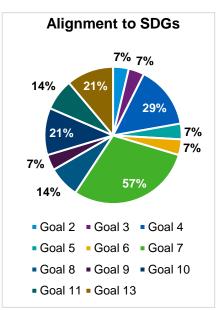
50% of the REC projects assessed focused on Renewable Energy and Solar Power. Other 50% projects included thematic areas -Health, Skill Development and Education. Also, there were projects that had components of women empowerment, rural development and sanitation and hygiene as well.

All the projects assessed had an outlay of over 1 crore, with 28% of the projects having a budget of over 5 cr.

All the projects were aligned to SDGs. Overall, the projects had linkages to 11 out of 17 SDGs. Goal 7- Affordable and Clean Energy, which emerged as the key SDG for around 57% of the REC projects.







The projects had a timeline range from 12 months-18 months. All the projects were executed within the allocated budget and the specified time or approved extensions (wherever applicable).

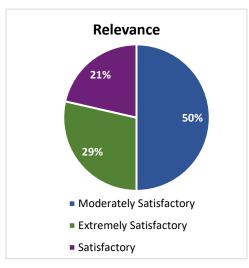
Based on our analysis and desk review, the performance for each project was mapped and scored on the OECD-DAC parameters. The table below provides a summary of the OECD Scorecard across all projects.

OECD Parameters ²⁰	Relevance	Effectiveness	Efficiency	Impact	Sustainability	Total
ATDC	S	ES	ES	ES	ES	ES
EESL-MP	S	ES	ES	mS	mS	S
EESL-UP	MS	ES	ES	mS	ES	S
IGIAT	ES	ES	ES	ES	S	ES
IISc	MS	ES	ES	S	ES	ES
IIT Madras	MS	ES	ES	S	ES	ES
NDDB	S	ES	ES	ES	ES	ES
PFI	ES	ES	ES	ES	ES	ES
REACHA	ES	ES	ES	ES	mS	ES
RECPDCL- Odisha	MS	ES	ES	mS	ES	S
RECPDCL- RB	MS	ES	ES	mS	ES	S
SBMVSS	MS	ES	ES	ES	ES	ES
TERI	MS	ES	ES	mS	ES	S
T-Hub	ES	ES	ES	s	mS	ES

Relevance

All the projects evaluated were aligned to REC's CSR policy and global sustainable development goals. Projects that scored 'Extremely Satisfactory' (36%) and 'Satisfactory' (7%) had information on need assessment which further established the relevance of the project activities. Some of the projects were also directly linked to national policy goals, such as National Skill Development Mission (IGIAT and ATDC) and Swachh Bharat Abhiyan (PFI).

Need assessment review prior to commencing the project substantially improves the quality of project design as well as measurable impact. Quality of the need assessment/ baseline report of the projects were varied. It would be



beneficial to have a template for a baseline report to provide contextual understanding, situational

²⁰ *ES: Extremely Satisfactory; S: Satisfactory; MS: Moderately Satisfactory; mS: Marginally Satisfactory

analysis, planned activities to be undertaken, clear indicators to measure progress, logic flow (log frame analysis) that connects cause of concern to the planned activities.

Effectiveness

With regards to effectiveness, the target achievement rate was 80-100% for all the projects. Projects including NDDB, SBMVSS, IIT Madras, PFI, IGIAT, etc. achieved 100% of their target. All the projects had a maximum of 2-3 defined outputs including outreach in the MoA. To further improve the monitoring of project, detailed activities to be undertaken, key performance indicators for output, outcome and impact need to be clearly defined and monitored at regular intervals.

Efficiency

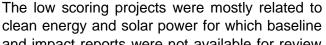
On the Efficiency parameter, all the projects performed extremely well with timely completion of targets within the allocated budget. There were few cases requiring extensions which were sanctioned by the REC Foundation. The study notes that the MoA provides a comprehensive schedule of payment with fund disbursement linked to milestones and deliverables. The payments are released in installments post submission of progress report and utilization certificate that tracks milestones achieved and funds utilized.

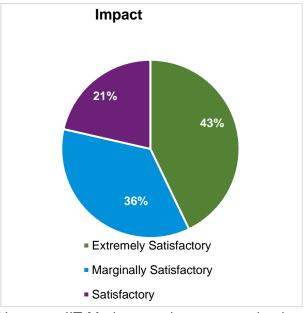
Impact

The study considered four aspects to score projects on the impact created: availability of baseline report, baseline indicators, impact assessment report/impact, and availability of clearly defined impact indicators.

Based on these criteria, NDDB, PFI, ATDC, IGIAT were amongst the top performers, whereas EESL-Lights (UP), RECPDCL Rashtrapati Bhawan and RECPDCL scored the lowest since

impact report was not available. Around 64% of the projects which scored 'Extremely Satisfactory' or 'Satisfactory' has information on baseline available. The top scoring projects had detailed baseline and end-line assessment which helped in assessing and reporting the delta change and impact. Also, impact indicators were clearly defined and in some projects such as NDDB and PFI, treatment vs control group study was also available, which further strengthened the claim of positive change. Presence of baseline and need assessment reports emerge as the differentiating factor in highlighting the change in a more impactful manner.





and impact reports were not available for review. However, IIT Madras can be an exception in this case since they scored 80% by conducting an impact assessment at the end of the project,

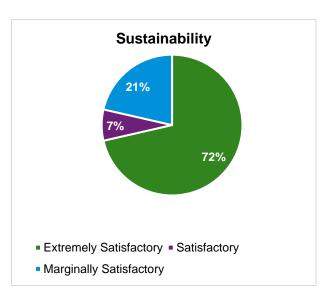
taking into consideration estimated power consumption of the campus, the linked carbon footprint, and its estimated reduction.

In solar energy projects like TERI, EESL (UP and MP), RECPDCL (Odisha and Rashtrapati Bhawan), amount of CO₂ reduction due to consumption of clean energy was calculated as part of this study, basis the information provided in MoA and other assumptions.

Projects performed well where impact was reported with clear outcome and impact indicators, and key performing indicators where defined in the baseline study as well. This information is crucial in analyzing impact at the end of the project as well as attributing change to the project intervention and identifying specific areas for improvement. Good practice of including KPIs and outcome and impact indicators in the project design from the beginning helps in better monitoring of the project and intended positive impact.

Sustainability

72% of the evaluated projects were extremely satisfactory i.e. they ensured that their impact would be sustained even after the project has ended. One of these projects was NDDB's Giftmilk program which was later adopted by the Jharkhand State Government as Minister's Giftmilk scheme to provide students of government schools with flavored milk in certain districts of Jharkhand. This step substantiates the fact that the project was impactful and successful in building sustainability through creating government linkages which led to the project becoming a government initiative.



Similarly, the project implemented by PFI had financial convergence and was supported by REC and Bill and Melinda Gates Foundation. Moreover, a clear sustainability strategy was present in the project designed. The episodes of MKBKSH series created by PFI were uploaded on social media platforms and are regularly reposted and reshared to increase viewership and audience outreach.

For projects related to solar power, reports indicated the presence of processes for operation and maintenance of installed equipment to ensure that the impact is sustained post project completion. Most of the project had a five-year maintenance component whereas in some cases the campus was responsible for the upkeep and functioning of the solar panels.

Projects like TERI has adopted a fee-based service model and built capacity of local energy operators and Energy Enterprise to operate, maintain and manage the solar micro grids installed.

It is essential to have a sustainability plan in place, with a locally body or managing committee responsible for ensuring the sustainability i.e. ensure the smooth functioning and maintenance of infrastructure/assets created. This is particularly important for projects like RECPDCL Odisha, where the beneficiaries were 16 residential schools across 9 districts. In such a scenario it is difficult to establish the nature of maintenance and the managing body that would oversee its performance once the 5-year guarantee expires.

In case of projects related to education such as that of REACHA, it is important to note that such projects need to be supported for longer periods of time in order to make sure that the benefits are long-term and permanent as compared to short term and temporary. In order to ensure long term sustainability, the implementing partners will need to devise a detailed sustainability plan before the start of the engagement and based on the quality and nuances of the plan, REC can subsequently support the projects.

Overall Score

Overall, all the projects scored an extremely satisfactory or satisfactory performance. Based on our analysis, it was observed that there is opportunity for further strengthening the performance of the projects across parameters like relevance, sustainability, and impact.

Going forward, sustainability plan by implementing agency should be a major area of focus since it can act as a reflection of the plan for creating continued impact through the intervention. Furthermore, in terms of relevance and impact it would be a good practice to ensure that baseline is conducted for all projects so that their outcomes are tangible, and impact can be measured and articulated clearly.

