



USICEF

US-India Clean Energy Finance

Impact and Lessons
Learned, 2017-2020

Published October 2020

Contents

p. 03 Scaling-up Distributed Solar Power: The Need for USICEF

p. 06 What is USICEF and how it works

p. 11 USICEF Impact Highlights: 2017-2020

*Case studies of many of USICEF's project developers are highlighted throughout the report.

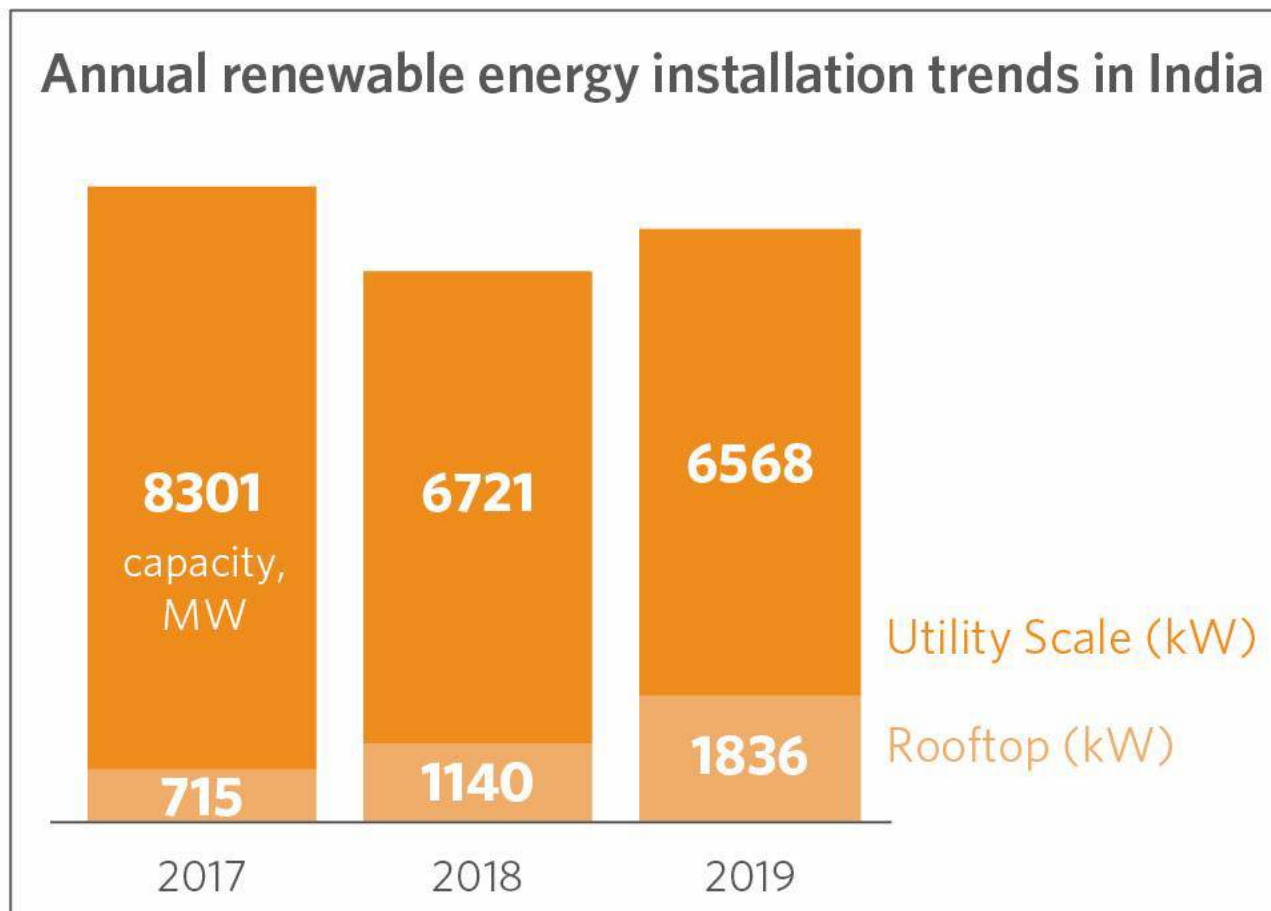
SCALING-UP DISTRIBUTED SOLAR POWER: THE NEED FOR USICEF

India's distributed renewable energy sector is an attractive market to invest in, and requires significant investment to meet national targets

The Government of India plans to install 175 GW of renewable energy projects by 2022.

Despite India's installed capacity rising six-fold to nearly 86 gigawatts in 2019, reaching the 2022 target still seems challenging

While India has made strides in terms of utility scale installation, only one-third of distributed generation targets are expected to be met by 2022. (Source: JMK Research)



Source: Bridge to India

India requires focused solutions to financing barriers in distributed renewable energy

FINANCIAL BARRIERS	SOLUTIONS - MARKET NEEDS
<ul style="list-style-type: none">• Limited information and validation on bankability and impact of business projects.• Small ticket size investments leading to high transaction costs• Lack of transaction structuring skills and legal robustness	<p>Portfolio preparation support</p>
<ul style="list-style-type: none">• Resource assessment and credit quality of rooftop projects• Execution abilities of DRE companies on proposed plans	<p>Credit guarantee mechanism</p>
<ul style="list-style-type: none">• Lack of balance sheet strength and the inability to meet standard lending conditions such as collateral, debt, service coverage ratio etc.	<p>Project financing through venture debt characteristics</p>

WHAT IS USICEF & HOW DOES IT WORK?

USICEF

US-India Clean Energy Finance

The U.S.-India Clean Energy Finance (USICEF) initiative is India's first project preparation and pipeline development facility to help promising distributed solar projects develop into viable investment opportunities and drive long-term debt financing.

USICEF is a critical step towards increasing access to reliable energy in underserved regions in India.

USICEF stems from a partnership between the Indian Ministry of New and Renewable Energy, the Overseas Private Investment Corporation (OPIC), and a consortium of foundations and investors.

PARTNERS



JEREMY AND HANNELORE
GRANTHAM ENVIRONMENTAL TRUST



PROJECT MANAGER



How USICEF works: 5-step process

1.



CALL FOR PROPOSALS

The Project Developer applies for a USICEF grant for project preparation support.

2.



SCREENING & SELECTION

The application is evaluated by CPI, as the Program Manager, and the Advisory Committee.

3.



SELECTION OF SERVICE PROVIDERS

Upon approval, the Program Manager engages USICEF's network of empaneled Service Providers to provide the relevant project support.

4.



GRANT DISBURSEMENT

Grant money is transferred to the Service Provider upon successful delivery of services.

5.



ONGOING SUPPORT

Project Developers receive project development support and become eligible for long-term financing from OPIC and other institutions.

USICEF's three ingredients to success



PROJECT PREPARATION

Grant funded technical assistance helps prepare high quality investment grade project proposals to increase prospects of obtaining long-term debt financing



PROMISING & TRANSFORMATIVE PROJECTS

Promising, actionable, catalytic, and financially sustainable projects reduce risks and barriers to investment in sustainable development.



MOBILIZING FINANCE

Enables a critical mass of projects to unlock access to capital from public and private sources which in turn will benefit disadvantaged communities in India

USICEF IMPACT HIGHLIGHTS: 2017-2020

Since 2017, USICEF has awarded grants to over 30 early-stage businesses for various project preparatory activities including legal, technical, and financial advisory.

GRANT AWARDEES



These early-stage businesses belong to six main sub-segments that USICEF targets

SUPPORTED SUB-SEGMENTS



Solar Home Systems



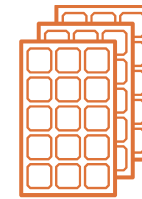
Rooftop solar
(Commercial & industrial)



Mini-grids



Rooftop residential & institutional



Small ground mounted solar projects



Financial intermediaries

60%

18 out of 30 supported developers, till round 4, have successfully mobilized debt using USICEF grants

The Program has achieved its debt mobilization target of 20x that translates to

\$200M

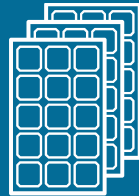
mobilized in debt from 14 different international and domestic lenders

Debt Mobilization is expected to reach \$225M by end of 2020

Potential USICEF Impact



USD \$5.1M
Grant support
committed



500 MW
Capacity
installed



660,000 MT P.A
CO2 emissions
avoided



17,500
New jobs



710,000 MWh p.a
Electricity generated



USD \$250M
Expected
debt funding

Projects spread across **20 INDIAN STATES**



Case Study

OMC



OMC is the pioneer of its unique ABC business model, wherein we set up solar power plants with mini grids and bring energy access to remote rural locations with limited or no grid connectivity. We serve “A” nchor customers (telecom towers), small and medium rural “B” usinesses and rural “C” ommunities.

Our experience with USICEF has been very positive and encouraging, as they provided us with financial support enabling us to engage consultants for conducting due diligence for a proposed financial closure.

PROGRESS TO DATE

- 102 plants with mini grids on the ABC model
- 90 sites serving telecom customers
- Around 13.5 MW total installed capacity (conventional + renewable)
- 20,000 “B” and “C” customers; 206 “A” customers



Rohit Chandra
CEO, OMC Power

“Our mission is ‘Power, Everywhere’ to bring clean, green, affordable energy access to the bottom of the pyramid. USICEF has been a valuable partner of OMC in our efforts to fuel growth . They provided us with timely catalytic support that enabled the same.”

Case Study

Frontier Markets



Frontier Markets is a social tech enterprise that focuses on connecting products and services to rural customers in India. It is an end-to-end commerce platform that provides last-mile products and services, delivered at the doorsteps of consumers in villages through an assisted commerce model run by rural women entrepreneurs called Saral Jeevan Sahelis. Solutions include: in clean energy, agri, home and mobile appliances, as well digital and essential services

Our association with USICEF has proved to be a successful story and helped us to reach out to lenders and raise debt capital for our expansion activities.

PROGRESS TO DATE

- Sold 715,000 solar products to 600,000 households
- Supported 10,000 women entrepreneurs
- Provided 1.2+ million solutions in clean energy, agri, home and mobile appliances
- Provided digital and essential services to 500,000 customers in 2,000+ villages in India



Ajaita Shah
Founder & CEO

"USICEF has been an important partner for Frontier Markets in its journey and helped us to further our mission of supporting rural women while addressing the electricity access challenges"

Case Study

candi

candi was incorporated 2.5 years ago, with the intent of unlocking the potential of solar for SMEs which, until that time was a largely overlooked market, fiscally constrained and unable to readily embrace the transition to a sustainable and renewable future.

Equipped with a vision on how to streamline everything from contracts to credit screening for this sector, we initiated our journey in India with the invaluable support of USCIEF from very early on. Leveraging this assistance to realise our vision, candi now straddles two countries, has over 20 clients across almost 5MW and has successfully closed Series A as well as debt rounds with international investors.

PROGRESS TO DATE

- **CO₂ mitigated: 2.6 Tons**
- **Clean kWhs generated: 2,586 kWh**
- **Direct or Indirect employment created: 41**
- **Clients signed on to solar: 28**



Philippe Flamand,
CEO, candi solar

“USCIEF was instrumental in allowing candi to focus on the building blocks of an investable/lendable company far earlier in its journey than would otherwise have been possible, ultimately accelerating candi’s growth and impact.”

Case Study

HCT Sun

HCT Sun had sought and received USICEF's grant a couple of years back for strengthening its internal business process, with regards to financial parameters for our business model, technical standards, health and safety standards, credit analysis tools for our customer segment, and legal contracts for our projects.

Thanks to USICEF's support, we could engage with the best consultants from across the country in these fields. Their support was especially helpful in our business operations since we were trying to introduce a concept to a largely uncharted area.

PROGRESS TO DATE

- Signed up over 6,600 kWp worth of projects
- ~ 2,700 kWp revenue generating projects
- 3,900 kWp in projects ready to come online by early 2021



Aryeh Glickman
Founder & Director, HCT Sun

"USICEF has been a huge help in accessing top tier consultants who helped us raise our standards to those of international companies with a lot more experience and a much larger portfolio."

Media Coverage

ABC→Live
www.abclive.in
The Real Story Behind News

Alliance
For philanthropy and social investment worldwide

Business Standard

THE HINDU
BusinessLine

CLEAN ENERGY SOLUTIONS CENTER
ASSISTING COUNTRIES WITH CLEAN ENERGY POLICY

DNA

electronics **B2B.com**
All About Electronics Industry

ENERGY.GOV

gtm:

INDIA BRIEFING
From Dezan Shira & Associates

INSIGHTS2SUCCESS
The way of business solutions

MERCOM
india

NEWS NATION

pv magazine

PVTECH

Projects under USICEF benefit from the support of a robust USICEF network



MANISH CHOURASIA

Managing Director,
TCCL

“For India’s clean energy transition, distributed solar energy is critical. USICEF has played a vital role in supporting rooftop solar developers through their most critical phase of project development and helping them scale up. The TCCL team is pleased to partner and finance many promising distributed rooftop solar projects through USICEF”



ELIZABETH L. LITTLEFIELD

Former President and
CEO, OPIC

“The USICEF initiative is a critical step towards increasing access to energy in underserved regions in India. This public-private partnership presents the opportunity for OPIC to finance and deploy high-impact development projects that support underserved communities throughout India to help the country meet its energy goals.”

This report was prepared by Climate Policy Initiative, Project Manager for the US-India Clean Energy Finance Initiative



CLIMATE
POLICY
INITIATIVE

With deep expertise in finance and policy, CPI is an analysis and advisory organization that works to improve the most important energy and land use practices around the world. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has six offices around the world in Brazil, Europe, Kenya, India, Indonesia, and the U.S.

Climate Policy Initiative, as the project manager:


- Manages USICEF
- Guides the selection process
- Develops partnerships with international and national lenders and facilitates debt for supported projects
- Convenes the committee meetings

USICEF

US-India Clean Energy Finance

US-INDIA CLEAN ENERGY FINANCE
www.USICEF.org

 @climatepolicy

 /company/climatepolicyinitiative