

# ENERGY FOR ALL: An Update



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# ENERGY ACCESS SITUATION IN ASIA-PACIFIC



**3.8 Billion**

Population in  
ADB's DMC's



**2 Billion**

People without access to  
clean cooking



**426 Million**

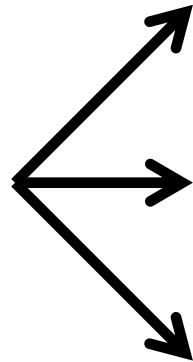
People without  
access to electricity

## Energy for All Initiative established 2008

- **INTERNAL goal:** Increase ADB's investment in energy access projects and enterprises to **scale up access to affordable, modern and clean energy** among the regions poor using **renewable energy** technologies
- **EXTERNAL goal:** **Energy for All Partnership** to develop strategic partnerships and alliances with other stakeholders
  - **2009-15: MET TARGET** of providing energy access to **100 MILLION** people by 2015
  - **2015-20: PARTNERSHIP EXTENDED & GOAL INCREASED TO 200 MILLION by 2020**

**\$1.2**  
**Billion**

Energy Access  
Investment In  
2015\*



New connections to  
electricity for **300,000**  
**households**



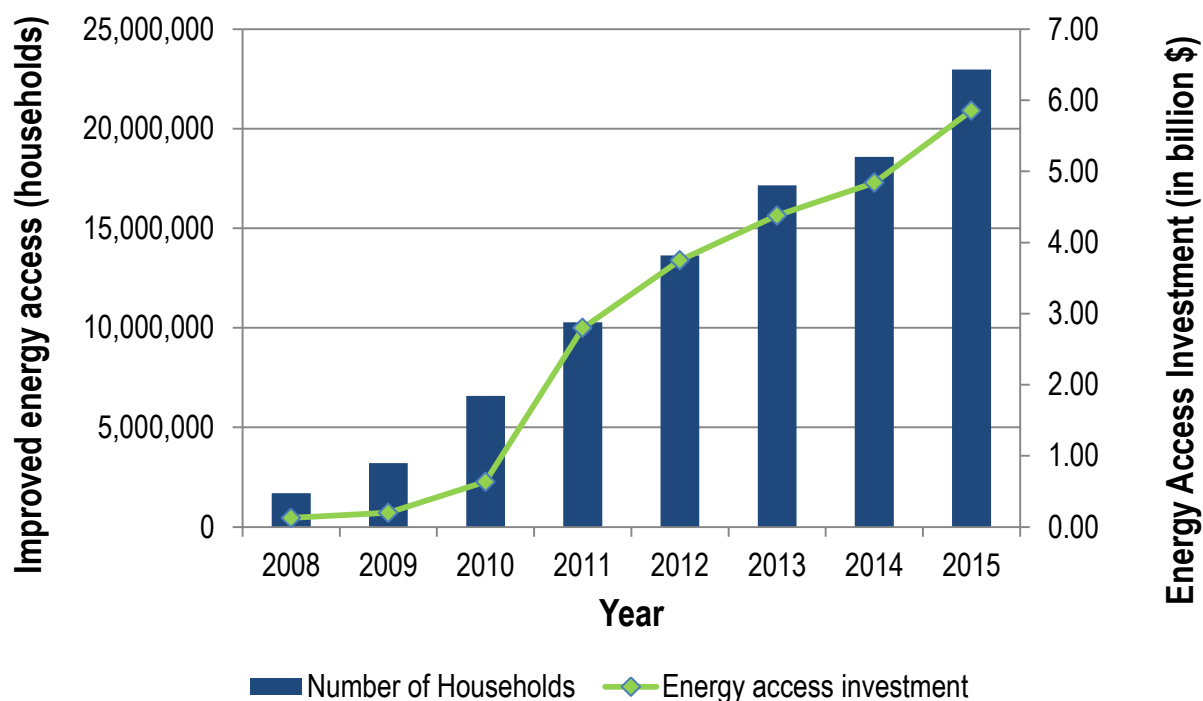
Improved electricity  
service to about  
**3 million households**



Improved gas or  
heating for over **40,000**  
**households**

\*Up from \$ 400million in  
2014

**Impact of ADB's investments on energy access  
(2008-2015 Cumulative)**



**USD 6.4 billion**

Total ADB investment  
in energy access  
(2008-2015)

**104.5 million**

Number of people  
who will benefit from  
ADB's energy  
access investments

## Project Development Facility (PDF)

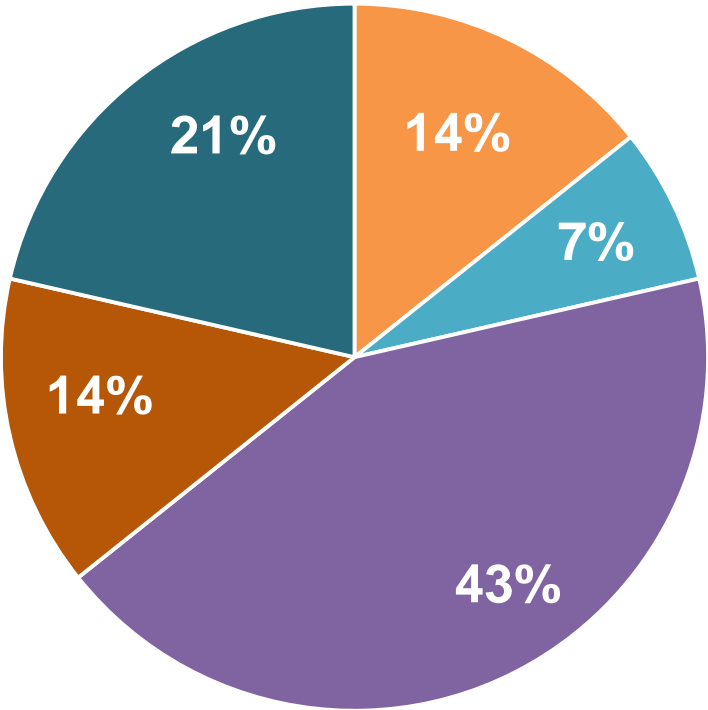
- To **increase private sector participation** in delivering modern energy to the poor
- **Offers services to clean energy access entrepreneurs** like
  - Customized mentoring
  - Credit enhancement
  - Investor matching
- **Offers services to investors** like
  - Investment referrals
  - Due Diligence support
  - Risk Sharing Facility

The PDF incubates business models from start-up to sustainability and helps to refine start-ups into bankable investment opportunities



PROJECTS SOURCED	125
PROJECT DEVELOPMENT	70
CUSTOMIZED MENTORING	14
INVESTMENT FACILITATION	35
DEALS CLOSED	14

## Country Distribution of Investment Closures



■ NEP 
 ■ CAM 
 ■ IND 
 ■ PHI 
 ■ BAN

**TOTAL INVESTMENT - USD 22M**

INTERNAL	Timeline
Output-Based Aid (OBA) for Promotion of Solar Home System Pilot (MYANMAR)	Implemented July 2015
Rural Mini-Grid Project – Gham Power (NEPAL)	Inaugurated March 2016
Hybridizing diesel mini-grids with RE - mini-grid Project in Cobrador Island, Romblon (PHILIPPINES)	Inaugurated March 2016
Pay-as-you-go Solar Home Systems Pilot (PAKISTAN)	Implementation underway
Technical assistance/ risk-sharing scheme with OIKO Credit India for issuance of Working Capital Loans (INDIA)	Implementation underway
Swarm Electrification Pilot Project (BANGLADESH)	Implementation underway
Off-grid Renewable Energy Demonstration Project (MYANMAR)	Procurement underway
Dhostekhor Khola Micro Hydropower Pilot Project (NEPAL)	Procurement underway
Output-Based Aid (OBA) for 100% Energy Access through Promotion of Solar Home System Pilot (NEPAL)	Procurement underway

## PILOT: SOLAR MINI-GRIDS IN RURAL COMMUNITIES

INAUGURATED MARCH 2016

NEPAL

- **Clean Energy:** Installation of 35kW solar power provides 95kWh of electricity/ day
- **Strong Business Model:** Private sector/ community participation/ local bank
- **Strong partnership with government:** collaboration with Alternative Energy Promotion Centre (AEPCC)
- **Aggregation:** 3 dispersed remote villages combined in one larger project
- **Economic activity:** Power for households and productive uses
- **Sustainability:** Operation & Maintenance - one person residing on-site serving the 3 villages in case of power supply emergencies

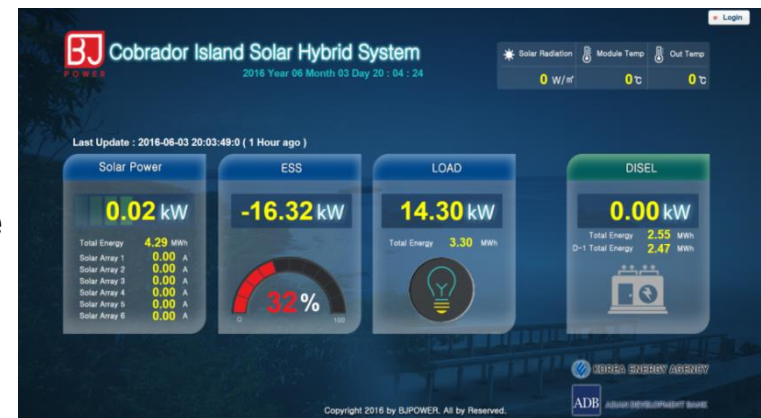


## PILOT: SOLAR HYBRID SYSTEM IN ISOLATED ISLAND

INAUGURATED MARCH 2016

PHILIPPINES

- **Clean Energy:** 30 kW solar PV plant and hybridizing with diesel gensets
- **Strong Business Model:** Collaboration with local distribution utility (electric cooperative)/replication of business model – Philippines has a large number of isolated grids powered by diesel
- **Strong partnership with government:** collaboration with National Electrification Administration/tapping of financial incentive schemes
- **Economic activity:** Power all households in the island and productive uses (marble industry, boat making)
- **Sustainability:** Operation & maintenance by a electric cooperative



### MYANMAR

- **Clean Energy:** Delivery and installation of ~1,000 solar home systems of 3 sizes (30W, 70W, and 110W)  
**Innovative Financial Mechanism:** ADB support through output based aid scheme

### PAKISTAN

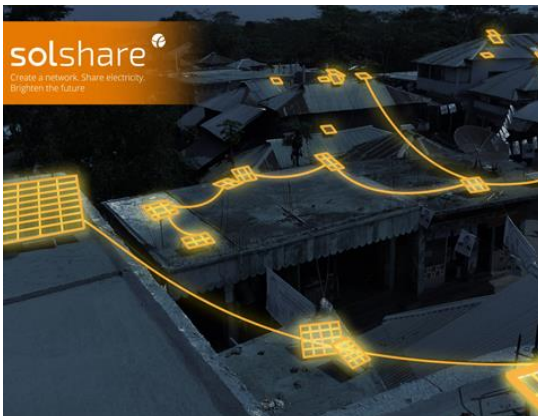
- Provision of 1,500 Solar Home Systems in off-grid villages in Western Punjab
- **Technology Innovation:** GSM-based remotely controlled metering systems as basis for pre-paid model
- **Innovative Financial Mechanism:** end-consumer financing, rent to own model
- Private sector distribution, maintenance, and customer service in the selected districts



# PROJECT DEVELOPMENT

## PILOT PROJECT (UNDER IMPLEMENTATION)

- Piloting of innovative technology (SOLshare box) with interconnection of 225 households to divert excess solar energy from SHS to poor households that cannot afford a SHS of their own
- Establishment of a market place to allow trading of energy between households & piloting of productive use components
- With more than 3.5 million SHS in use in Bangladesh there is high potential for scale up

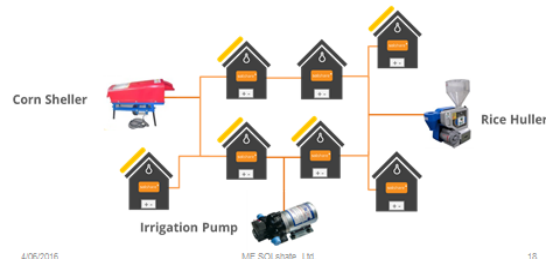
**BANGLADESH**

solshare®

Create a network. Share electricity. Brighten the future.

### The Solution – Bottom-Up Minigrids

...and Productive Energy Use appliances.



4/06/2016

18



### Credit Enhancement Support:

- Collaboration with OIKO Credit India
- ADB is providing technical assistance and a risk-sharing mechanism to **OIKO Credit India** to encourage issuance of working capital loans to clean energy companies in India
- The first 2 working capital loans for energy access companies in the amount of USD 750,00 have been disbursed

INDIA



## WORKSHOPS

Energy for All conducts workshops throughout the year to share its expertise in the energy access space (e.g. International Workshop on Best Practices for Energy Access Financing, Biogas Workshop, AFCEF 6)



**International Workshop on Best Practices for Energy Access Financing (Nepal)**



**Workshop: Innovations driving effective growth of biogas sector (Sri Lanka)**



**6th Asia Forum for Clean Energy Financing (Singapore)**

Date/Place	Event
<b>2015</b>	
27-31 July, Singapore	Asian Regional Workshop on Roadmaps for Energy Efficiency
2 September, Thailand	AFCEF-6 Project Development and Financing Workshop
26-30 October, Singapore	Asia Clean Energy Summit
26-30 October, Singapore	Renewable Energy Finance Workshop
28 October, Singapore	14 <sup>th</sup> Energy for All Steering Committee Meeting
17-19 November, Sri Lanka	International Workshop on Small and Medium Scale Biogas: Innovations driving effective growth of biogas sector
7-11 December, Singapore	Integrating Renewable Energy into the Grid Workshop
<b>2016</b>	
29 January 2016, Singapore	6th Asia Forum for Clean Energy Financing (AFCEF-6)
11-12 February 2016, Indonesia	Bali Clean Energy Forum
22-25 February 2016, Singapore	Renewable Energy for Bankers
18-22 April, Singapore	Developing Electricity Markets and Reforms Workshop
19-21 April, Maldives	REM 2016: Renewable Energy Integration with Mini/Micro-Grid Applied Energy Symposium and Forum

## COMMUNICATIONS

### FLYERS & BROCHURES

E4ALL has produced a number of country and thematic flyers to disseminate knowledge and promote E4ALL goals

### VIDEOS

E4ALL has produced:

- a video on the mini-grid pilot in Cobrador Island:

<https://www.youtube.com/watch?v=ygkJAIWJsBE>

- In collaboration with

South Asia Operations Department,

a video on the IDCOL business model:

<https://www.youtube.com/watch?v=ixuxa-jEB28>



## COMMUNICATIONS

### TWITTER | @energyforall

- Has 1092 followers and counting
- Reaches an average of 70,000 people in a week

### FACEBOOK | Energy for All Initiative

- Has 889 likes and counting
- Reaches up to 2,000 users per week

### WEBSITE | [www.energyforall.info](http://www.energyforall.info)

- The E4All website is undergoing a complete redesign.
- It will features news, events, case studies and publications from E4All and partners.





*ADB President and (former) CEO SE4ALL, June 2014  
at launch of ADB as SE4ALL Asia-Pacific Regional Hub*

### 3 GOALS OF SE4ALL:



**Universal Energy Access**



**Renewable Energy**



**Energy Efficiency**

ADB, **through Energy for All**, acts as the regional hub for efforts that contribute to the global Sustainable Energy for All Initiative (SE4All), alongside UN agencies and development partners.

### Asia-Pacific Regional Hub (AP Hub) was launched at ACEF 2014



- In March 2016, an **SE4ALL Investor and International Workshop on Best Practices and Business Opportunities for Energy Access Financing** was held in Nepal co-organized by ADB and Alternative Energy Promotion Center (AEPC)



## Support to ADB's Developing Member Countries in their country action processes

- ADB/ E4ALL has been requested by the Government of Indonesia to finalize the country's SE4ALL Rapid Assessment and Gap Analysis
- Indonesia's Country Action Agenda is next to be developed
- The draft Country Action Agenda of Nepal is currently in its final stage



## Social Media

The Hub has **created social media profiles** to reach a wider audience and is also looking into creating awareness raising and educational workshops in the region.



### SE4ALL Website & Social Media



[www.se4all.org](http://www.se4all.org)



Sustainable Energy for All  
– Asia Pacific



[@SE4All\\_AsiaPac](https://twitter.com/SE4All_AsiaPac)

# FOR MORE INFORMATION:

## ADB's Energy for All Website & Social Media

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[www.energyforall.info](http://www.energyforall.info)



Energy For All Partnership



@energyforall



ADB Energy for All



[secretariat@energyforall.info](mailto:secretariat@energyforall.info)

## SE4ALL Website & Social Media

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[www.se4all.org](http://www.se4all.org)



Sustainable Energy for All  
– Asia Pacific



@SE4All\_AsiaPac