## Description
The Asian Development Bank (ADB) will provide a loan to Energy Efficiency Services Limited (EESL), to be guaranteed by the Government of India, to support demand-side energy efficiency investments in several Indian states. EESL was set up as a government-owned energy services company (ESCO) to facilitate energy efficiency investments, including work designing, implementing, monitoring and investing in energy efficiency projects. ADB’s loan will cover high-priority areas under EESL’s ESCO business namely through use of: (i) more efficient light-emitting diode (LED) municipal street lighting equipped with remote operating technology; (ii) more efficient domestic lighting through replacement of incandescent lights with LEDs; and (iii) more energy efficient agricultural water pumps. EESL estimates that energy savings of 80% can be achieved in the domestic lighting programs and 30% can be achieved with more efficient pumps. Savings will result in lower electricity bills for consumers, peak power shaving, and reduced commercial losses for distribution companies. The project will also demonstrate the potential for energy efficiency achievements and scalability of the ESCO model for realizing energy savings in India.

### Project Rationale and Linkage to Country/Regional Strategy
The government has determined that increased end-use efficiency is critical to contain energy demand without jeopardizing growth. In 2015, the government pledged to reduce the energy intensity of its economy by 33%-35% below 2005 levels by 2030. A recent ADB report suggested that achieving an intermediate target of 20%-25% energy intensity reduction by 2022 will require investing approximately $68 billion in efficiency measures. But realizing the potential of energy efficiency in India faces several barriers: (i) regulatory challenges as electricity is subsidized and energy efficiency programs are voluntary; (ii) institutional challenges as capacity to support needed scaling of energy efficiency is limited; (iii) financing the up-front costs can be high for energy efficiency technologies, but project sizes are small from a lender’s perspective, and returns may be difficult to analyze; and (iv) limited understanding of energy efficiency technologies and associated benefits limit the uptake.

### Impact
Market for energy-efficient technologies expanded (National Mission for Enhanced Energy Efficiency)
Emissions intensity of economy reduced (India’s intended nationally determined contribution to the United Nations Framework Convention on Climate Change)

### Project Outcome
#### Description of Outcome
End-use energy efficiency in project areas increased

#### Progress Toward Outcome
Implementation is ongoing.

### Implementation Progress
#### Description of Project Outputs
Efficiency of street lighting in one or more municipalities in eligible states (including Goa, Maharashtra, Rajasthan, and Telangana) enhanced
Efficiency of bulbs, tube lights, and electric fans in households and institutions in utility service areas in eligible states (including Andhra Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh) enhanced
Efficiency of agricultural water pumps in utility service areas in eligible states (including Andhra Pradesh, Karnataka, Maharashtra, and Rajasthan) improved

#### Status of Implementation Progress (Outputs, Activities, and Issues)
Streetlight package awarded in October 2017.
Bids on agricultural pumps cancelled as negotiation with states on the Memorandum of Understanding could not be completed on time.

### Geographical Location
Nation-wide

### Safeguard Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>C</th>
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<tbody>
<tr>
<td>Environment</td>
<td>C</td>
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<tr>
<td>Involuntary Resettlement</td>
<td>C</td>
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### Summary of Environmental and Social Aspects

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<tr>
<th>Aspect</th>
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<tbody>
<tr>
<td>Environmental</td>
</tr>
<tr>
<td>Involuntary Resettlement</td>
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</table>
Indigenous Peoples
Stakeholder Communication, Participation, and Consultation
During Project Design
During Project Implementation

Business Opportunities
Consulting Services
It is unknown whether any project implementation consultants would be hired under this loan. If so, quality- and cost-based selection (QCBS) with a quality-cost ratio of 90:10 will be used. The consultants will be engaged in accordance with Guidelines on the Use of Consultants (April 2013, as amended from time to time)

Procurement
Energy Efficiency Services Limited (EESL) will serve as the executing agency and will implement all subprojects under the ADB loan. ADB assistance will be used to support municipal, domestic and agricultural energy efficiency projects already identified by EESL. A project director within EESL will oversee implementation of projects under the ADB loan and GEF grant will coordinate the individual subprojects across all municipalities and distribution companies and ensure compliance with ADB requirements.

Responsible ADB Officer
Jiwan S. Acharya
Responsible ADB Department
South Asia Department
Responsible ADB Division
Energy Division, SARD
Executing Agencies
Energy Efficiency Services Limited
MKHATRI@EESL.CO.IN
A-13, IWAI Building, 4th Floor Sector-1, Noida - 201301 Uttar Pradesh

Timetable
Concept Clearance
26 Feb 2016
Fact Finding
17 May 2016 to 26 May 2016
MRM
18 Jul 2016
Approval
30 Sep 2016
Last Review Mission
-
Last PDS Update
25 Sep 2018

Loan 3436-IND

<table>
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<th>Effectivity Date</th>
<th>Closing</th>
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<td>30 Sep 2016</td>
<td>30 Mar 2017</td>
<td>16 Jun 2017</td>
<td>30 Jun 2021</td>
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Financing Plan

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<th>Others</th>
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Status of Covenants

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<th>Economic</th>
<th>Others</th>
<th>Rating</th>
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Project Page
https://www.adb.org/projects/48224-002/main
Request for Information
http://www.adb.org/forms/request-information-form?subject=48224-002
Date Generated
20 September 2019

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