



Nepal: Power Transmission and Distribution Efficiency Enhancement Project

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| Project Name | Power Transmission and Distribution Efficiency Enhancement Project | | | | | | | | |
| Project Number | 50059-002 | | | | | | | | |
| Country | Nepal | | | | | | | | |
| Project Status | Approved | | | | | | | | |
| Project Type / Modality of Assistance | Loan Technical Assistance | | | | | | | | |
| Source of Funding / Amount | <table border="1"> <tr> <td colspan="2">Loan 3542-NEP: Power Transmission and Distribution Efficiency Enhancement Project</td> </tr> <tr> <td>concessional ordinary capital resources lending / Asian Development Fund</td> <td>US\$ 150.00 million</td> </tr> <tr> <td colspan="2">TA 9334-NEP: Strengthening the Capacity of Nepal's Energy Sector to Deliver Gender Equality and Social Inclusion Results</td> </tr> <tr> <td>Japan Fund for Poverty Reduction</td> <td>US\$ 2.00 million</td> </tr> </table> | Loan 3542-NEP: Power Transmission and Distribution Efficiency Enhancement Project | | concessional ordinary capital resources lending / Asian Development Fund | US\$ 150.00 million | TA 9334-NEP: Strengthening the Capacity of Nepal's Energy Sector to Deliver Gender Equality and Social Inclusion Results | | Japan Fund for Poverty Reduction | US\$ 2.00 million |
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| TA 9334-NEP: Strengthening the Capacity of Nepal's Energy Sector to Deliver Gender Equality and Social Inclusion Results | | | | | | | | | |
| Japan Fund for Poverty Reduction | US\$ 2.00 million | | | | | | | | |
| Strategic Agendas | Environmentally sustainable growth Inclusive economic growth | | | | | | | | |
| Drivers of Change | Governance and capacity development Knowledge solutions Partnerships Private sector development | | | | | | | | |
| Sector / Subsector | Energy - Electricity transmission and distribution - Energy efficiency and conservation | | | | | | | | |
| Gender Equity and Mainstreaming | Effective gender mainstreaming | | | | | | | | |
| Description | <p>Electricity is a necessary requirement for accelerating the economic development of any country and is considered an important input to improve quality of life. Overall, the electricity demand has far outgrown the supply, leading to load curtailment and increased dependence on imports from India in recent times. The peak suppressed demand in Nepal in FY2013_2014 has been around 1,200 megawatt (MW) as against installed capacity of 787 MW, hence resulting in a deficit of about 440 MW due to non-availability of generation. Government has plans to generate additional 10,000 MW in the next 10 years. About 63% of the population in Nepal has access to electricity but the supply quality is unreliable and inadequate. The government has recognized the immediate need for reinforcement and upgrade of outdated distribution systems crucial to deliver the required energy to the customers even if the generation and transmission lines are in place. In this regard, the need for immediate distribution network enhancement is included in the government's action plan to address energy crisis and provide universal access to reliable and efficient electricity for all by 2030. This will contribute in promoting sustainable energy for all (Sustainable Development Goal #7) and Nepal's Intended Nationally Determined Commitments for the United Nations Framework Convention on Climate Change.</p> <p>ADB's Nepal country partnership strategy 2013_2017 supports the government's development objective of accelerated and inclusive economic growth. It seeks to address the infrastructure bottlenecks in the key areas such as energy services and creating an enabling environment for increased business and employment opportunities. ADB's support for the energy sector in Nepal has largely focused on generation and transmission with some distribution extension. This project will be ADB's first investment in Nepal specifically targeting energy efficiency through distribution system enhancements measures.</p> | | | | | | | | |

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| Project Rationale and Linkage to Country/Regional Strategy | The Asian Development Bank (ADB) will provide a loan to the Government of Nepal (the government) to meet the immediate needs of electricity distribution network in Kathmandu Valley and strengthening of associated transmission lines by the Nepal Electricity Authority (NEA). Major sections of the existing distribution network in the valley were constructed decades ago and despite significant increase in electricity demand and the number of consumers, minimal reinforcement of the distribution network has been carried out. The project will enhance the distribution capacity and improve reliability and quality of electric supply in the Kathmandu Valley by reducing distribution system overloads and technical and commercial losses, which currently is about 20%. The project will also support implementation of other system efficiency upgrades and energy efficiency measures such as advanced grid operations software, distribution system automation, and smart metering. System efficiency improvements and loss reductions will improve NEA's financial health, while customers will benefit from a reliable and improved quality of electricity supply and reduced dependence on diesel generators to meet their daily electricity needs. Operational upgrades will also facilitate integration of new generation capacity scheduled to come on-line during the next three to four years. The project can be replicated in other cities in the country. |
| Impact | Reliable and efficient electricity supply for all achieved by 2030 (National Energy Crisis Reduction and Electricity Development) |

Project Outcome

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| Description of Outcome | Access to efficient, adequate, and high-quality power supply in the Kathmandu Valley improved |
| Progress Toward Outcome | |

Implementation Progress

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| Description of Project Outputs | Transmission grid capacity to feed the primary distribution networks for the Kathmandu Valley strengthened Kathmandu Valley distribution network rehabilitated and capacity increased Operational and financial performance of NEA distribution centers enhanced NEA's capacity to operate and manage an advanced distribution system and intelligent network (smart grid) technology with GESI aspects in electricity access and end-user awareness programs developed |
| Status of Implementation Progress (Outputs, Activities, and Issues) | |
| Geographical Location | |

Safeguard Categories

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|--------------------------|---|
| Environment | B |
| Involuntary Resettlement | A |
| Indigenous Peoples | C |

Summary of Environmental and Social Aspects

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| Environmental Aspects | Initial environmental examinations have been prepared following ADB's Safeguard Policy Statement (SPS) (2009) and the government's environmental regulations. |
| Involuntary Resettlement | Consultations have been undertaken and survey conducted. The resettlement plan will be publicly disclosed to interested stakeholders on ADB's websites. |
| Indigenous Peoples | No indigenous peoples' impact is expected as there is no indigenous peoples group in the project areas. |

Stakeholder Communication, Participation, and Consultation

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| During Project Design | A series of consultations with affected persons and communities have been conducted by the project implementing agency for project preparation, and they will be continued. |
| During Project Implementation | A series of consultations with affected persons and communities will be continued throughout project implementation. |

Business Opportunities

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| Consulting Services | Project Supervision Consultant will be engaged for this project. |
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Procurement All procurement of goods will be undertaken in accordance with ADB's Procurement Guidelines on ADBs Procurement Guidelines (2015, as amended from time to time). Before the start of any procurement, ADB and the government will review the public procurement laws of the central and state governments to ensure consistency with ADB's Procurement Guidelines (2015, as amended from time to time).
The procurement scope under the project will be limited to procurement of goods for the substations, distribution system enhancement and smart meters. International Competitive Bidding (ICB) procedures would be adopted where the estimated tender value is above the threshold limit as defined in the procurement Plan, and National Competitive Bidding (NCB) procedures may be adopted for bids with an estimated value up to the threshold limit. NEA has sufficient capacity to design and implement these activities. NEA has also demonstrated good performance and track record with procurement of goods and works other similar activities and has sufficient knowledge of NCB procedures.

Responsible Staff

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| Responsible ADB Officer | Acharya, Jiwan S. |
| Responsible ADB Department | South Asia Department |
| Responsible ADB Division | Energy Division, SARD |
| Executing Agencies | <i>Nepal Electricity Authority (NEA)</i> <i>P. O. Box 5352</i> <i>Kathmandu</i> <i>Nepal</i> |

Timetable

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|---------------------|----------------------------|
| Concept Clearance | 22 Jul 2016 |
| Fact Finding | 16 Sep 2016 to 30 Sep 2016 |
| MRM | 11 May 2017 |
| Approval | 29 Jun 2017 |
| Last Review Mission | - |
| Last PDS Update | 10 Mar 2017 |

Loan 3542-NEP

| Financing Plan | | Loan Utilization | | | |
|----------------|--------------------------------|----------------------------|------|--------|----------------|
| | Total (Amount in US\$ million) | Date | ADB | Others | Net Percentage |
| Project Cost | 189.00 | Cumulative Contract Awards | | | |
| ADB | 150.00 | - | 0.00 | 0.00 | % |
| Counterpart | 39.00 | Cumulative Disbursements | | | |
| Cofinancing | 0.00 | - | 0.00 | 0.00 | % |

TA 9334-NEP

| Financing Plan/TA Utilization | | | | | | Cumulative Disbursements | | |
|-------------------------------|--------------|-------------|---------------|-----------------|--------|--------------------------|------|--------|
| ADB | Cofinancing | Counterpart | | | | Total | Date | Amount |
| | | Gov | Beneficiaries | Project Sponsor | Others | | | |
| 0.00 | 2,000,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,000,000.00 | - | 0.00 |

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| Project Page | https://www.adb.org/projects/50059-002/main |
| Request for Information | http://www.adb.org/forms/request-information-form?subject=50059-002 |
| Date Generated | 03 July 2017 |

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