



Indonesia: Sustainable Energy Access in Eastern Indonesia-Electricity Grid Development Program

Project Name	Sustainable Energy Access in Eastern Indonesia-Electricity Grid Development Program	
Project Number	50016-001	
Country	Indonesia	
Project Status	Approved	
Project Type / Modality of Assistance	Loan	
Source of Funding / Amount	Loan: Sustainable Energy Access in Eastern Indonesia-Electricity Grid Development Program	
	Ordinary capital resources	US\$ 600.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Knowledge solutions Private sector development	
Sector / Subsector	Energy - Electricity transmission and distribution	
Gender Equity and Mainstreaming	No gender elements	
Description	<p>The proposed \$600 million result-based loan (RBL) program aims to support the development of electricity distribution networks to connect businesses and households and to enhance the quality of life in Eastern Indonesia by the sustainable use of electricity as a key driver of increased economic activity. The program will complement a proposed sector loan for small- to mid-sized natural gas-fired power stations to deliver more sustainable energy services to communities across Eastern Indonesia. Natural gas is a much cleaner fuel compared to diesel and the quick-responding nature of gas-fired engines and turbines make them a good match for intermittent renewable energy sources such as solar and wind. It is an appropriate <u>transition fuel</u> to move towards a low-carbon energy system. The two loans will help enhance access to sustainable energy services and contribute to climate change mitigation.</p> <p>The overall investment needs for the government's generation, transmission, and distribution program are \$83.5 billion of which \$43.5 billion is to come from the private sector (independent power producers) and the balance of \$40 billion from the State Electricity Corporation (Perusahaan Listrik Negara or PLN). The government and PLN will not be able to meet the investment needs on their own. PLN has an estimated funding gap of \$30.3 billion which will have to be borne by other financing sources including from development partners. In Eastern Indonesia where there are many isolated grids, PLN is already using its own resources to establish 70 kilovolt (kV) and 150 kV backbone transmission systems while seeking support from ADB and other partners to strengthen and expand local distribution networks.</p> <p>A results-based lending modality will be used for this proposed operation. This will finance a slice of the overall broader program needs as identified in PLN's Electric Power Supply Business Plan (Rencana Usaha Penyediaan Tenaga Listrik or RUPTL) 2015 -2024 for grid development in Eastern Indonesia. 8. A results-based lending modality will be used for this proposed operation for strengthening and developing the electricity distribution network, which involves many small-scale activities and expenditures. This will finance a slice of the overall broader program needs as identified in PLN's RUPTL, 2016 2025 for grid development in Eastern Indonesia. The RBL is a suitable modality for the program as: (i) it allows PLN to use its own program systems, thus providing a platform for institutional strengthening; (ii) it focuses attention on results rather than expenditures, leading to a stronger evaluation culture and in line with the government's intent to move towards performance-based regulation; (iii) it is well-aligned to a broader nationwide PLN program and is, therefore, able to scale up innovations from the RBL program; (iv) it has lower transaction costs associated with program implementation; and (v) it could stimulate cofinancing and donor harmonization with other development partners through a focus on common results. This operation is part of an overall programmatic approach and is embedded within a policy reform framework that is supported by the Sustainable and Inclusive Energy Program policy-based loan and complements the ongoing RBL for grid strengthening in Sumatra. This RBL is included in the Country Operations Business Plan, 2015- 2017 and is integral to the Country Partnership Strategy's goal of closing the energy divide between Western and Eastern Indonesia.</p>	

Project Rationale and Linkage to Country/Regional Strategy

The Indonesian economy is at a major crossroads. Economic growth has decelerated from its peak of 6.4% in 2010 to 4.8% in 2015 mainly due to the drop in commodity prices. Eastern Indonesia has an enormous potential to spur new sources of inclusive growth, in sectors such as fisheries, agro-industry and tourism, but this potential is held back by a lack of key infrastructure including electricity, ports, roads, and communications. Uneven development across provinces has also contributed towards widening regional income disparities with several provinces in Eastern Indonesia significantly lagging behind Java and Bali. To address this, the government has made it a priority to significantly boost and accelerate investment in infrastructure under the current National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional, or RPJMN), 2015- 2019 with outer_ and Eastern regions explicitly included as geographical priorities.

One of the pillars of the government's infrastructure investment plan is to significantly improve access to electricity services, including a nation-wide target of adding 35 gigawatts of new power generation capacity and expand power grids to raise the electrification ratio to 97% by the end of 2019 from a baseline of 84% in 2014. The biggest challenge in meeting these targets is in Eastern Indonesia where power grids across the islands are isolated, of poor quality and underdeveloped. The electrification ratios in some eastern provinces are particularly low West Sulawesi 74%, Southeast Sulawesi 67%, West Nusa Tenggara (Nusa Tenggara Barat, or NTB) 68%, East Nusa Tenggara (Nusa Tenggara Timur, or NTT) 59%, and Papua 44%.

Impact Quality of life in Indonesian society enhanced by sustainable use of electricity as a key driver of increased economic activity

Project Outcome

Description of Outcome Access to more reliable electricity services for residential, commercial, and industrial customers in the Eastern Indonesian provinces in Sulawesi and Nusa Tenggara expanded

Progress Toward Outcome

Implementation Progress

Description of Project Outputs Distribution system strengthened and expanded
Innovation and institutional capacity enhanced

Status of Implementation Progress (Outputs, Activities, and Issues)

Geographical Location

Safeguard Categories

Environment	B
Involuntary Resettlement	B
Indigenous Peoples	B

Summary of Environmental and Social Aspects

Environmental Aspects The program results area with potential environmental impact is expansion and reinforcement of the low voltage distribution network. The program is categorized B for environment because the potential adverse environmental impacts are site-specific (confined within the sites subject to physical works), mainly occurring during the construction period, few (if any) of them are irreversible, and in most cases, mitigation measures can be readily designed.

Involuntary Resettlement The expansion of the distribution network usually involves (i) the installation of concrete poles using no more than 0.2 m² of land and (ii) the stringing of conductors possibly requiring the cutting/trimming of trees. Impacts of involuntary resettlement will be identified during program implementation.

Indigenous Peoples The islands of Sulawesi and Nusa Tenggara are inhabited by a variety of ethnic groups with diverse languages, however they consist only a small proportion of the total population and the program's activities are not expected to have significant impacts on indigenous peoples. While the general areas are known, the program's subprojects' sites for the expansion of the distribution network have not been selected and will be determined during program implementation. The program will not specifically target activities in areas (land or territory) occupied, owned, or used by indigenous peoples, and/or claimed as ancestral domain.

Stakeholder Communication, Participation, and Consultation

During Project Design The stakeholders will be consulted through meetings, interviews and surveys in order to increase awareness about the program and seek inputs to the program. Consultation with the poor, vulnerable and excluded groups will focus on issues associated with environment, involuntary resettlement, if any, and other social issues that may affect them.

During Project
Implementation

Responsible ADB Officer	Kubo, Toru
Responsible ADB Department	Southeast Asia Department
Responsible ADB Division	Energy Division, SERD
Executing Agencies	<i>P.T. Perusahaan Listrik Negara Kepala Dinas Rencana Pendanaan Gd.Timah Lt.III,Jl. Gatot Subroto Kav.18 Jakarta Selatan, Indonesia</i>

Timetable	
Concept Clearance	21 Jun 2016
Fact Finding	25 Jul 2016 to 04 Aug 2016
MRM	20 Sep 2016
Approval	14 Sep 2017
Last Review Mission	-
Last PDS Update	19 Sep 2017

Project Page	https://www.adb.org/projects/50016-001/main
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