



ASIAN DEVELOPMENT BANK

Papua New Guinea: Power Sector Development Investment Program

Project Name	Power Sector Development Investment Program						
Project Number	47356-002						
Country	Papua New Guinea						
Project Status	Approved						
Project Type / Modality of Assistance	Grant Loan Technical Assistance						
Source of Funding / Amount	<table><tr><td colspan="2">Loan: Power Sector Development Program</td></tr><tr><td>Ordinary capital resources</td><td>US\$ 572.00 million</td></tr><tr><td>concessional ordinary capital resources lending / Asian Development Fund</td><td>US\$ 40.00 million</td></tr></table>	Loan: Power Sector Development Program		Ordinary capital resources	US\$ 572.00 million	concessional ordinary capital resources lending / Asian Development Fund	US\$ 40.00 million
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Strategic Agendas	Environmentally sustainable growth Inclusive economic growth						
Drivers of Change	Governance and capacity development Knowledge solutions Partnerships Private sector development						
Sector / Subsector	Energy - Energy sector development and institutional reform						
Gender Equity and Mainstreaming	Effective gender mainstreaming						
Description	<p>The government has requested ADB to finance the investment program to support the government's target of 70% of household's electrification by 2030. The proposed investment program is in line with ADB's Country Partnership Strategy (2016-2020) which prioritize energy as key area of support in renewable energy generation, improving transmission and distribution efficiencies and its expansion to peri-urban areas. The proposed investment program will respond to government's national development and sector strategies by promoting sustainable development in peri urban and rural areas and by increasing the grid penetration from 12% to approximately 19% by 2028 and replacing diesel generation with renewable energy sources in provincial centers. The investment program will also enhance operational efficiency of PPL and address institutional capacities, policy framework and facilitate private sector mobilization in off-grid areas.</p> <p>The impact of the program will be improved socio economic conditions and aligned with PNG Vision 2050. The outcome will be a consumption to clean and reliable power supply in the investment program areas improved. This will be achieved through following outputs: (i) transmission network strengthened and expanded in three main grid areas, (ii) distribution network expanded, (iii) renewable energy for provincial grids increased, (iv) capacity of monitoring system enhanced, (v) private sector investments in rural electrification mobilized, and (vi) Institutional support and capacity of EA/IAs, program beneficiaries and stakeholders enhanced.</p>						
Project Rationale and Linkage to Country/Regional Strategy	About 12% of PNG's population has access to electricity, but grid penetration in provincial capitals is less than 4% with negligible access to electricity in rural areas. PNG's per capita consumption ratio of electricity is also one of the lowest in the world. Geographical spread coupled with rugged terrain and very thin population density, makes it more challenging to develop rural electrification infrastructure in the country. PNG has a total 600 megawatt (MW) of installed capacity generated by hydropower (40%), diesel (38%), gas fired (14%), and geothermal (8%). Out of the total generating capacity, 320 MW is managed by PNG Power Limited (PPL), the only government utility company responsible for the electricity generation, transmission and distribution. The remaining 280 MW is generated by the mining industry as captive power stations for their own consumption. There is no national grid in PNG, and therefore, the country is powered by three main grids (Port Moresby, Ramu and Gazelle) operated by PPL which only serves the main urban centers. In addition to these three main grids, provincial capitals are powered by inefficient loss making diesel based isolated grids (19 in total) which leaves no incentive for PPL to expand the grid further into rural areas.						
Impact	Improved socio economic conditions and poverty reduction through increased utilization of clean and reliable electricity						

Project Outcome	
Description of Outcome	Consumption of clean and reliable power supply in the program areas improved.
Progress Toward Outcome	
Implementation Progress	
Description of Project Outputs	Transmission network strengthened and expanded Distribution network expanded Renewable energy for provincial grids increased Capacity of PPL monitoring system enhanced Private sector investments in rural electrification mobilized Institutional support and capacity of EA/IAs, program beneficiaries and other stakeholders enhanced.
Status of Implementation Progress (Outputs, Activities, and Issues)	
Geographical Location	Nation-wide
Summary of Environmental and Social Aspects	
Environmental Aspects	
Involuntary Resettlement	
Indigenous Peoples	
Stakeholder Communication, Participation, and Consultation	
During Project Design	
During Project Implementation	
Responsible ADB Officer	Haider, Syed Hussain
Responsible ADB Department	Pacific Department
Responsible ADB Division	Transport, Energy and Natural Resources Division, PARD
Executing Agencies	<i>Energy Division of the Department of Petroleum and Energy P.O. Box 494 Waigani, NCD Papua New Guinea</i>
Timetable	
Concept Clearance	13 Oct 2017
Fact Finding	18 Jun 2018 to 29 Jun 2018
MRM	26 Jul 2018
Approval	28 Feb 2019
Last Review Mission	-
Last PDS Update	29 Sep 2017
Project Page	
https://www.adb.org/projects/47356-002/main	
Request for Information	
http://www.adb.org/forms/request-information-form?subject=47356-002	
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