Solomon Islands: Provincial Renewable Energy Project

Project Name	Provincial Renewable Energy Project	
Project Number	46014-002	
Country	Solomon Islands	
Project Status	Active	
Project Type / Modality of Assistance	Grant Loan	
Source of Funding / Amount	Grant 0386-SOL: Provincial Renewable Energy Project	
Anount	concessional ordinary capital resources lending / Asian Development Fund US\$ 6.00 mil	llion
	Loan 3127-SOL: Provincial Renewable Energy Project	
	concessional ordinary capital resources lending / Asian Development Fund US\$ 6.00 mil	llion
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Private sector development	
Sector / Subsector	Energy - Renewable energy generation - small hydro	
Gender Equity and Mainstreaming	Effective gender mainstreaming	
Description	The impact of the Project will be improved economic conditions in provincial centers. The outcome of Project will be an increased supply of reliable, cleaner power to provincial centers by SIEA. The output the Project will be (i) hydropower plants put into operation by SIEA, (ii) extension of distribution by SI (iii) capacity building undertaken for implementing agency and project beneficiaries, and (iv) the Proj Management Unit (PMU) renders efficient project management services.	its of IEA ,

Project Rationale and Linkage to Country/Regional Strategy

The proposed Outer Island Renewable Energy Project (Project) will support development of renewable energy in the Solomon Islands. It focuses on the outer islands where it will decrease the cost of power supply and increase access to power. This will be achieved through the development of low cost hydropower generation in provincial centers and through expansion of existing distribution grids . Electricity is generated and supplied by the Solomon Islands Electricity Authority (SIEA), which is a stateowned electricity utility that has the sole mandate to provide power across the country, including the national capital (Honiara) and eight outstations (Auki, Buala, Gizo, Kirakira, Lata, Malu'u, Noro-Munda, and Tulagi). Installed capacity in Honiara is 26 MW (peak load 14.3 MW) and combined installed generation capacity in the outer islands is 4MW. Provision of electricity services is concentrated on Honiara in Guadalcanal. While 87% of the installed power generation is located in Honiara, Guadalcanal accounts for only 12% of the population (total population 553,000). Electricity in the outstations is 100% diesel generated with the exception of mini-hydropower operated in Malu'u (0.04 MW) and Buala (0.15 MW). There is currently no private sector participation in power generation. Due to the reliance on diesel generation, power tariffs in Solomon Islands are high. SIEA charges a national uniform tariff, which in 2010 was \$0.59 c/kWh to residential customers and \$0.63/kWh to commercial customers. Due to the high cost of transporting diesel to the outstations, generation costs in the outer islands are considerably higher than Honiara. Generation costs in the outer islands are significantly higher than in Honiara (\$0.53 in Honiara compared to \$0.94 in Lata). The high cost of power generation in the outer islands has a negative financial impact to SIEA's operations and provides a disincentive to the corporatized SIEA to expand the distribution network. Nationwide electricity is supplied to approximately 14% of the population . With few exceptions, electrification is confined to Honiara and eight provincial centers. Outside of these urban centers, less than 5% of the rural population has access to electricity through a small number of off grid and individual household solar systems. Access rates in Guadalcanal (Honiara) is 20% and Western Province is 17%, however access rates in the remaining provinces is extremely low, for example Malaita 3%, Temotu 3%, Choiseul 2%. The current electricity tariff does not allow full cost recovery for SIEA. As a result investment in maintenance and expansion of core power infrastructure has been lacking. Revenue collection is relatively low (estimated 80-90%), however SIEA is undertaking an ambitious effort to install prepayment meters on all consumers in parallel with an overhaul of the billing, accounting, and data management systems. Existing off-grid renewable energy projects in Solomon Islands include a range of household solar system programs and a small number of community based pico-hydropower schemes operating located in remote villages. Wind monitoring is also proposed at target sites. Grid connected renewable energy is limited to mini-hydropower at Buala and Malu'u and a SIEA trial to replace diesel with coconut oil in the second largest outstation (Auki, Malaita). The Tina River Hydropower Project (14 MW) is currently being assessed to supply the Honiara grid. Previous technical analysis has identified excellent hydropower resources in the outer islands near demand load centers. It is estimated that hydropower could deliver levelized cost of energy generation of 6-12 c/kWh to a number of outstations. The proposed project will not only contribute to SIEA's financial restructuring through reducing financial losses in the outstations, but also significantly increase access to electricity in the outer islands. The proposed project is also in line with the ADB's country partnership strategy (CPS) 2012-2016 for Solomon Islands, which prioritizes energy as a key area of support. The CPS supports the Solomon Islands National Development Strategy 2011-2020, which prioritizes development of reliable and affordable power supply in urban centers through renewable energy and prioritizes increasing electricity access. The proposed project supports the Solomon Islands National Energy Policy Framework, 2007 which prioritizes development of renewable energy for urban areas.

Impact

Increased economic activity in Auki, Malaita Province.

Project Outcome

Description of Outcome	SIEA has increased supply of more reliable and cleaner power to Auki, Malaita Province
Progress Toward Outcome	Cadastral and topographical surveys are now ongoing. Project was declared effective on 16 June 2015. Design and supervision consultant contract to be negotiated. On land acquisition, waiting certificate of no appeal from magistrate.
Implementation Progress	
Description of Project Outputs	 Fiu River Hydropower plant put into operation by SIEA Extension of distribution grid by SIEA Capacity building undertaken for implementing agency and project beneficiaries The Project Management Unit (PMU) renders efficient project management services

Activities, and Issues)

Geographical Location

Safeguard Categories

Environment

Indigenous Peoples

Summary of Environmental and Social Aspects

Environmental Aspects	The Project has been classified as category B for environment following ADB's Safeguard Policy Statement (2009) (SPS). An initial environmental examination (IEE) has been prepared. The main potential environmental impacts will be created by construction of the access road, installation of plant at intake and powerhouse site, and vegetation trimming with the low voltage transmission line corridor. After updating following detailed design, the results of the IEE will be integrated into the bidding documents, if there are changes to the scope of the works an updated IEE and environmental management plan (EMP) will be compiled by the Project Management Unit (PMU) and approved by ADB. As part of the assessment a climate change adaptation risk evaluation was conducted and considered in the preliminary design of the schemes, the findings of the assessment will be integrated into the detailed design. The PMU will be supported by environmental specialists (3 months international and 14 months national) to ensure capacity building to SIEA, and implementation and monitoring of the EMP.
Involuntary Resettlement	The project has been classified as category B for resettlement and category C for indigenous peoples following ADB's SPS. The project will involve land acquisition impacts that are not deemed significant. The hydropower scheme will require land acquisition and tree clearance for construction.
Indigenous Peoples	A draft resettlement plan has been prepared based on impact assessment and consultations with affected persons during the PPTA. Affected persons will be further consulted during the detailed design and implementation. Relevant information including an information brochure in local language has been disseminated to affected persons and local stakeholders. SIEA will endorse the Resettlement Plan for posting on ADB website before ADB's management review meeting.
Stakeholder Commun	ication, Participation, and Consultation

During Project Design

During Project Implementation	

Business Opportunities

Consulting Services	The TA will require 9 international consultants (23 months) and 4 national consultants (13 months) to be hired through a consulting firm. Consultants will be engaged by ADB in accordance with the Guidelines on the Use of Consultants (2010, as amended from time to time). The consulting firm will be engaged through quality and cost based selection method (quality-cost ratio of 90:10) using simplified technical proposal.
Procurement	The procurement of equipment by consultants under the TA, will follow ADB's Procurement Guidelines (2010, as amended from time to time). The proceeds of the TA will be disbursed in line with ADB's Technical Assistance Disbursement Handbook (2010, as amended from time to time). The equipment procured under the TA will be turned over to the Government upon TA completion.

Responsible Staff

Responsible ADB Officer	Maxwell, Anthony
Responsible ADB Department	Pacific Department
Responsible ADB Division	Transport, Energy and Natural Resources Division, PARD
Executing Agencies	Ministry of Mines, Energy and Rural Electrification MARY@MINES.GOV.SB P.O Box G37, HONIARA, Solomon Islands

Timetable

Concept Clearance	10 Aug 2012
Fact Finding	17 Jun 2013 to 28 Jun 2013
MRM	09 Aug 2013
Approval	12 May 2014
Last Review Mission	-
Last PDS Update	28 Sep 2016

Grant 0386-SOL

Milestones						
Approval	Cinning Data Effectivit			Closing		
Approval	Signing Date	Effectivity Date	Original	Revised	Actual	
12 May 2014	16 Jun 2014	16 Jun 2015	31 Mar 2022	-	-	

	Financing Plan		Grant Utilization		
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	6.00	Cumulative Co	ontract	Awards	
ADB	6.00	12 May 2014	0.86	0.00	14%
Counterpart	0.00	Cumulative Disbursements			
Cofinancing	0.00	12 May 2014	0.17	0.00	3%

Loan 3127-SOL

Milestones						
Approval	Approval Signing Date		Closing			
Арргочаг	Signing Date	Effectivity Date	Original	Revised	Actual	
12 May 2014	16 Jun 2014	16 Jun 2015	31 Mar 2022	-	-	

Financing Plan		Loan Utilization			on
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	9.00	Cumulative Co	ontract	Awards	
ADB	6.00	12 May 2014	0.00	0.00	0%
Counterpart	3.00	Cumulative Disbursements			
Cofinancing	0.00	12 May 2014	0.00	0.00	0%

Project Page	https://www.adb.org/projects/46014-002/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=46014-002
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