



Nauru: Electricity Supply Security and Sustainability - Additional Financing

Project Name	Electricity Supply Security and Sustainability - Additional Financing
Project Number	46455-004
Country	Nauru
Project Status	Approved
Project Type / Modality of Assistance	Grant
Source of Funding / Amount	Grant 0443-NAU: Electricity Supply Security and Sustainability - Additional Financing Australian Grant US\$ 4.74 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 - Energy sector development and institutional reform
Gender Equity and Mainstreaming	No gender elements

Description

Nauru is a Pacific island country with a total population of 10,000 people. Access to grid electricity is universal, but unreliable, due to underinvestment and poor maintenance history of its generation and distribution assets. Installed generation currently comprises eight units with a total nameplate capacity of 12.9 megawatts (MW). However, Nauru's available capacity is only 3.7 MW due to inoperability (two units) and de-rating of installed units. Current peak load is 3.75 MW. Scheduled curtailments are a constant feature of electricity service in Nauru and unscheduled outages due to faults are frequent. The physical structure of the power house at Nauru Utility Corporation (NUC) is likewise in poor condition and is vulnerable to Nauru's electricity supply security. Addressing reliability and efficiency shortcomings in Nauru's current diesel generation fleet is of the first-order priority to mitigate the risk of catastrophic failure of Nauru's power generation.

The ongoing Nauru Electricity Supply Security and Sustainability Project (the project) has three outputs: (i) New diesel-fired generation put into service: a new, medium-speed, 2.6-3.0MW diesel generator will be installed, together with related auxiliary equipment and NUC personnel will be trained on its operation and maintenance; (ii) Repair and/or replacement of existing roof and structural reinforcements of NUC's powerhouse: the NUC powerhouse roof will be rehabilitated and all asbestos will be removed and safely disposed; (iii) Efficient project implementation: NUC will be assisted by a project management unit (PMU) with services of international consultants during project implementation .

The project was approved by the Asian Development Bank (ADB) on 7 November 2014. The project is financed by a grant 0414-NAU of \$2.00 million from ADB's Special Funds resources (Asian Development Fund [ADF]), and a cofinancing grant 0424-NAU of 2.00 million (\$2.70 million equivalent), provided by the EU, and fully administered by ADB. ADB and the EU concluded a contribution agreement and will finance project costs in three installments. Both grants became effective as of 16 April 2015. The government will provide contributions in-kind equivalent to \$0.57 million, and in taxes and duties exemptions of \$0.27 million. The government will make the proceeds of the grants available to the NUC under the subsidiary grant agreement signed between the government and NUC. The total project cost was estimated at \$5.54 million.

The project's impact will be increased economic activity; all NUC customers will enjoy more dependable supply with fewer outages, and the NUC will resume supply to commercial and industrial customers. The project's outcome will be increased reliability, lower cost, and greater sustainability of power generation in Nauru. The incidence of power outages is expected to decrease by 50% by March 2017, and generation efficiency is expected to increase from 3.4 kWh per liter of fuel consumed to 4.1 kWh. The peak load is expected to increase by 20%.

The selection of design and supervision consultant (DSC) for PMU under the project was completed in 29 April 2015 and the consultants are currently engaged on preliminary investigations, consultations with NUC staff and preparing project implementation plan for the delivery of project outputs. The project Inception Mission by ADB was completed from 7-10 June 2015 in Nauru and a Memorandum of Understanding was signed between NUC and ADB on the agreements reached during the Mission. In accordance with the latest revised project schedule, the award of roof and generator contracts will be in February 2016. The expected date of completion of roof contract will be in August 2016 and generator contract will be in March 2017.

Project Rationale and Linkage to Country/Regional Strategy

The Nauru Energy Road Map states the aim of the Government of Nauru is to ensure 24/7 grid electricity supply with minimal interruptions. NUC requires sufficient installed generation capacity to achieve the target and to avoid load shedding and concurrent outage due to engine failures of the existing generating units. Over 50% of the current capacity is from high speed diesel engines and these are not ideally suited to supplying base-load power as they consume more diesel per kWh generated and require more maintenance per run-hour than medium speed engines. Installing two new medium-speeds, 2.6-3.0MW diesel generators will increase the generating capacity by 5.2-6.0MW totaling to around 9.7MW. The increased capacity will ensure less likelihood of power outages when generators are taken off-line for maintenance. NUC envisages the actual total demand in the island to be around 10-12 MW including the demand currently not connected to the grid. The increased capacity will serve this demand and generate additional revenue for the Government. NUC expects to replace the operations of the old and high speed generators with medium speed, fuel efficient new generators. NUC's power system reticulates supply around the island at 11kV. The existing 11kV switchgear at the power station is in a very poor condition and presents a significant safety issue for NUC and requires immediate replacement and to allow for the connection of the two new generators.

On request of the Government of Nauru, the Government of Australia has agreed to provide an additional cofinancing grant of A\$6.4 million (\$4.96 equivalent) for the project for supply and installation of another similar type and rated generator and 11kv switchboard. The Government of Nauru has requested ADB to administer this additional cofinancing grant. The additional cofinancing grant from the Government of Australia will help finance the increase in project cost from \$5.54 million to \$10.5 million or by 89.5%. The project was recently approved by the Board and the additional cofinancing grant from the Government of Australia only materialized after approval. The additional financing will be used to expand the scale of the scope of the project.

The additional cofinancing is consistent with the project's development objectives, government priorities as per Nauru Energy Road Map 2014 (footnote 3), and ADB's Country Operation Business Plan 2016-2018.

Impact Increased economic activity

Project Outcome

Description of Outcome Increased reliability, lower cost, and greater sustainability of power generation in Nauru

Progress Toward Outcome

Implementation Progress

Description of Project Outputs	New diesel-fired generation put into service Repair and/or replacement of existing roof and structural reinforcements of NUC's powerhouse Efficient project implementation
--------------------------------	--

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

Geographical Location

Safeguard Categories

Environment	B
Involuntary Resettlement	C
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design	government officials, development partners and other stakeholders have been consulted during the project design process.
During Project Implementation	government officials, development partners and other stakeholders will be consulted during the project implementation process.

Responsible Staff

Responsible ADB Officer	P.P.G.P.P. Indrawansa
Responsible ADB Department	Pacific Department
Responsible ADB Division	Pacific Liaison and Coordination Office in Sydney, Australia
Executing Agencies	<i>Ministry of Finance Government Building Nauru</i>

Timetable

Concept Clearance	17 Jun 2015
Fact Finding	08 Jun 2015 to 10 Jun 2015
MRM	14 Aug 2015
Approval	16 Oct 2015
Last Review Mission	-
Last PDS Update	30 Jul 2015

Grant 0443-NAU

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
16 Oct 2015	-	-	30 Sep 2017	-	-

Financing Plan		Grant Utilization			
Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage	

Project Cost	4.74	Cumulative Contract Awards			
ADB	0.00	16 Oct 2015	0.00	0.00	0%
Counterpart	0.00	Cumulative Disbursements			
Cofinancing	4.74	16 Oct 2015	0.00	0.00	0%

Project Page <https://www.adb.org/projects/46455-004/main>

Request for Information <http://www.adb.org/forms/request-information-form?subject=46455-004>

Date Generated 06 July 2017

ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.