



Tonga Pipeline Projects

'Eliate T. Laulaupea'alu Department of Energy

TERM 2010-2020

TERM objectives:

Reduced vulnerability to oil price shocks, reducing price and price fluctuation

Reduced dependence on fossil fuels

Increased share of electricity generated from renewable sources

Increased access to electricity

Increased conversion efficiency of fossil-fueled electricity generation

Reduced transmission and distribution losses

Introduction of demand side energy efficiency measures

Reduced dependence on fossil fuels



Project Location	Project Name	Project Capacity [MW]	Total Cost USD \$	Donor
Tongatapu	Mata e La'a Solar Farm [Vaini]	1.1	7	Government of Japan
	Maa Mai Solar Farm [Popua]	1.3	5	NZ Aid Programme
	Matatoa Solar Farm [Matatoa]	2.0	10	Synergie
	li 'o Manumataongo Wind	1.13	20	JICA
Vava'u	La'a Lahi Solar Farm	0.5	2	UAE
Ha'apai	Ha Mai Solar Farm	0.55	6	ADB, DFAT, EU, Second Danish Cooperation Fund
'Eua	Huelo Fungafonua Solar Farm	0.2	0.75	ADB, DFAT, EU, GEF
Niuatoputapu	NTT Solar Farm (OIREP Project)	0.15	1	GCF, ADB, EU,
Niuafo'ou	NFF Solar Farm (TREP Project)	0.25	1.5	GCF, ADB, EU





Increased share of electricity generated from renewable sources

Project Location	Project Name	Donor
Tongatapu	St Andrew Solar Farm	
	Tonga High School Solar System	
	Police Training Headquarter Solar Farm, Longolongo	
	Solar Street Light	People's Republic of China Government
	Solar Water Pumps	IUCN
	Solar Tuk Tuk	Partnering with German Company
Vava'u	SHS for all the outer islands	EU, Japan
	Solar Water Pumps for 'Uta Vava'u (PEC Fund project)	JICA, IUCN
	Solar Freezer System for outer islands (PEC Fund project)	JICA
Наараі	SHS for all the outer islands	EU, IUCN
	Solar Water Pumps	IUCN
	Solar Freezer System for outer islands (PEC Fund project)	
Niuafo'ou	Solar System for Niuafo'ou Hospital	ADB, DFAT, EU











Increased access to electricity

Project Location	Project Name	Project Capacity [MW]	Total Cost USD \$
Vava'u	Ofu,Hunga, (Kapa, Otea, Falevai) Island, (Matamaka & Nuapapu) Island	To be confirmed	
Наараі	Nomuka Solar Farm	0.1	0.7
	Uiha Solar Farm	0.1	0.7
	Haano Solar Farm	0.1	0.7
	Haafeva Solar Farm	0.06	0.6
	Tungua Solar Farm	0.058	0.4
	'O'ua Solar Farm	0.084	0.8
	Kotu Solar Farm	0.069	0.6
	Mo'unga'one solar Farm	0.035	0.4
Niuatoputapu	NTT Solar Farm (OIREP Project)	0.3	1
Niuafo'ou	NFF Solar Farm (TREP Project)	0.25	1.5

Reduced transmission and distribution losses

Project Location	Project Name	Donor	Total Cost NZD \$
	TVNUP	ADB, MFAT	20.3 M
	NNUP	ADB, MFAT	







Other Pipeline Projects

Name	Donor	Description	Status
Tonga Climate ESF	US State Department	focus on developing guidelines and identifying possible key measures for increasing resilience of the Energy sector.	Implementation Stage
Energy Data Repository	ESCAP	aims to provide a platform for key energy analysis and scenarios in the country's efforts to achieve its SDG 7 and NDC targets in line with the recommendation of the SDG7 roadmap	Concept note writing
Circular Economy	UNIDO	Biogas concept	Feasibility study completed
OISES	GCF Readiness	Institutional capacity building of OISES to operate at a more sustainable level	Interim reporting stage
China Wind Farm	Government of PRC	A 2.3 MW Wind farm to operate at Lapaha that will help contribute to the 50% RE electricity generation commitment by 2020	Designing stage
EE on Land Transport		This project aims at reducing the GHG emissions and reduced fuel use in the transport sector through energy efficiency gains and technology enhancements in the land transport sector in Tonga.	Proposal writing