

Rural Electrification in Fiji – Opportunities for Private Entrepreneurs

Department of Energy
Ministry of Infrastructure and Transport

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Fiji Department of Energy



Vision

To provide a sustainable Energy sector

Mission

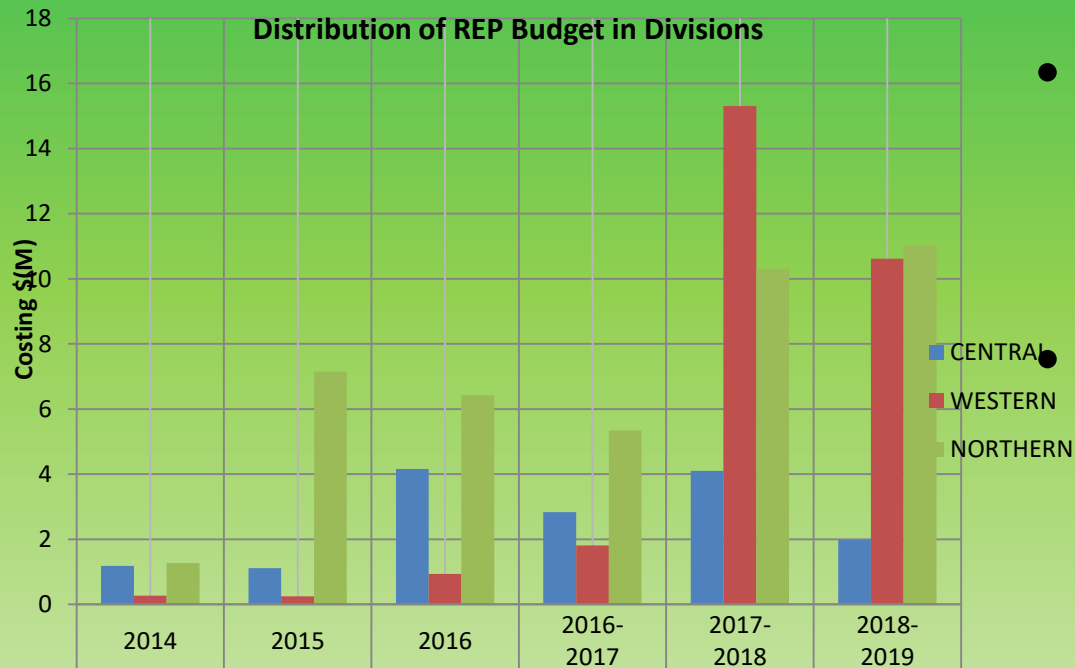
*To provide an enabling environment for
a sustainable energy sector*

National Frameworks/Drivers

National Document	Targets & Timelines
National Energy Policy 2014	Align to the SE4ALL targets -
Rural Electrification Policy 1993	Policy under Review
National Development Plan 2017-2030	<ul style="list-style-type: none">• 100% access to Electricity by 2021• 100% generation from Renewable Energy Sources by 2036
National Determined Contribution	<ul style="list-style-type: none">• 30% reduction in CO2 emissions in the Energy Sector from the Business-as-Usual (BAU) scenario by 2030.• Total Investment - US \$2.86 Billion• Private Sector Participation

Government Investment for Rural Electrification Project

Grid Extension Project Budget 2014 -date



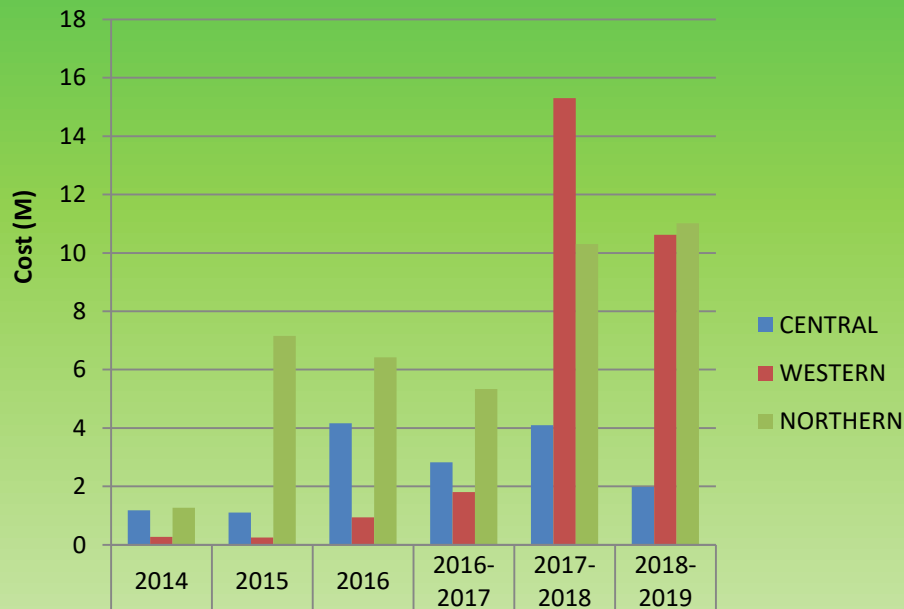
- Total Investment in Grid Extension Project - **\$86M**
- Total Number of Beneficiaries - **9141 Households**

CENTRAL	1.18	1.11	4.16	2.83	4.1	1.98
WESTERN	0.27	0.246	0.935	1.81	15.30	10.62
NORTHERN	1.27	7.15	6.42	5.34	10.3	11.01

Government Investment for Rural Electrification Project

Solar Home Systems

SHS Installation Cost (2014 - 2017/2018)



	2014	2015	2016	2016-2017	2017-2018	2018-2019
CENTRAL	1.18	1.11	4.16	2.83	4.1	1.98
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NORTHERN	1.27	7.15	6.42	5.34	10.3	11.01

- Total Investment - \$17.3 M
- Total Installation: 11,500 homes

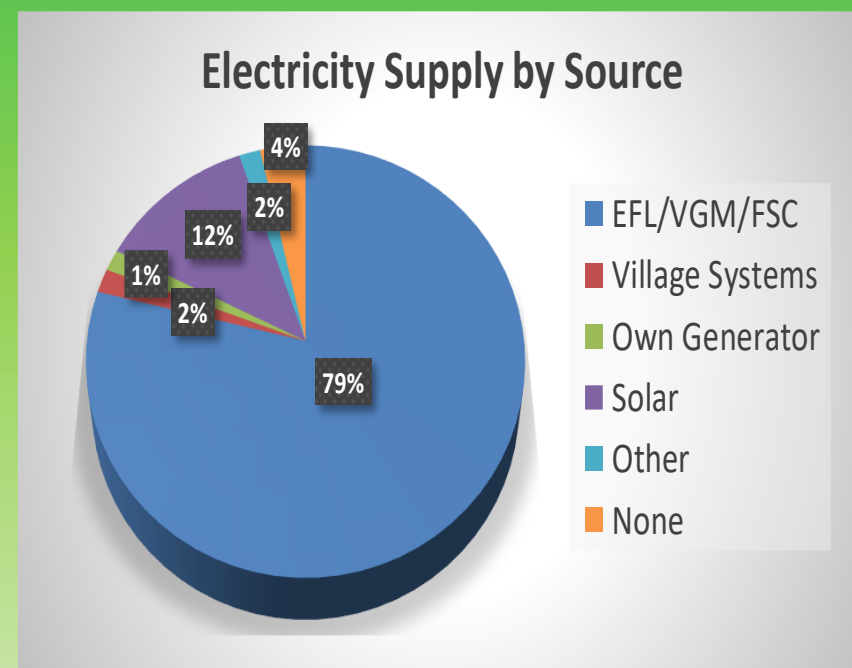
Types of Assistance from the DoE

Programme	Assistance
Grid Extension	Extension of National grid to areas without electricity. <ul style="list-style-type: none">• Extension of lines by EFL• House wiring by contractors
Solar Home Systems	Solar panels, battery, inverter, lights, AC powerpoint. For phone charging, TV and lighting at night (about 8000 houses)
Hybrid-Systems	PV/Diesel hybrid systems to provide 24hr electricity. E.g Tukavesi (100 houses, 60 KW), Namara Village (68 houses)
Micro-Hydro Projects	Hydro electricity for power generations
Biogas Digesters	Producing biogas from animal farms to use for heating or cooking. Enhances waste management.

Rural Electrification Results

FBOS Household Surveyed – 186,289

E_supply	Nodes	Individual	Total	%
EFL	145,385	781	146,166	78.5%
Village Diesel	2,986	7	2,993	1.6%
Village Hydro	362	6	368	0.2%
Vatukuola Gold Mine	403	0	403	0.2%
FSC	161	0	161	0.1%
Own Generator	2,834	196	3,030	1.6%
Solar	21,580	1,589	23,169	12.4%
Other	3,109	86	3,195	1.7%
None	6,521	283	6,804	3.7%
Total	183,341	2,948	186,289	100.0%



Source: ADB Report 2018

Opportunities for Private Sector

- **Increase private sector investment in large-scale electricity generation** by establishing a transparent process for procurement of new large-scale capacity from Independent Power Producers (from both renewable and non-renewable energy sources), pricing and other principles to be applied in all new Power Purchase Agreements, and grid-connection standards.
- **Increase private sector investment in small-scale grid-connected renewable generation**, by establishing economically justified feed-in tariffs or similar mechanisms to give incentives and reduce the risks for electricity production from small-scale renewable sources that are connected to the grid (including by providing investors an adequate return on capital). These mechanisms should not disadvantage either EFL or investors and the implementation of such mechanisms should not add unduly to the overall cost of electricity supply in Fiji.

Opportunities for Private Sector

Work Contracted
Electric wiring of houses for programmes such as Grid Extension, Solar Home Systems
Installation of Hybrid Systems /Micro-Grid Systems– Civil works, Electrical works
Grid electricity supply – Geothermal energy
Installation of Hydro Projects – Civil Works, Electrical Works

Thank You!

Vinaka!