

**EPC**



*"The Power of a Nation"*



**Lighting Samoa's 50th Independence  
Anniversary**



**Annual Report 2011-2012**



Government of Samoa

**OFFICE OF THE MINISTER**

**MINISTRY OF WORKS, TRANSPORT AND INFRASTRUCTURE**

(MINISTRY OF WORKS, TRANSPORT AND INFRASTRUCTURE; ELECTRIC POWER CORPORATION;  
SAMOA WATER AUTHORITY; SAMOA AIRPORT AUTHORITY; SAMOA PORTS AUTHORITY;  
SAMOA SHIPPING CORPORATION; LAND TRANSPORT AUTHORITY; HOUSING COMMITTEE)

---

15 May 2013

The Honourable Speaker  
Legislative Assembly  
MULINUU

Sir,

In accordance with Cabinet Directive FK (13) 15 of 1 May 2013, I am pleased to present you the Electric Power Corporation's Annual Report for the year ended 30 June 2012, for presentation to the Legislative Assembly of Samoa.

A handwritten signature in black ink, appearing to read 'Manu'alesagalala Enokati Posala'.

**Manu'alesagalala Enokati Posala**  
**MINISTER OF WORKS, TRANSPORT AND INFRASTRUCTURE**  
**& RESPONSIBLE MINISTER FOR THE ELECTRIC POWER CORPORATION**

### VISION

“Clean energy sources for affordable and sustainable electricity supply for Samoa.”

### MISSION

“To provide and maintain quality electricity services through innovative, sustainable and environmentally sound practices in developing renewable energy sources, generation and distribution infrastructure network, in partnership with customers and stakeholders, to support the development of Samoa”

#### STREET ADDRESS

Level 5  
Tui Atua Tupua Tamasese  
Efi Building  
Sogi, Apia

#### POSTAL ADDRESS

PO BOX 2011  
Apia  
Samoa

Telephone: (+685) 65 400  
Facsimile: (+685) 23 748  
Website: [www.epc.ws](http://www.epc.ws)  
E-mail: [epc.info@epc.ws](mailto:epc.info@epc.ws)

---

**BOARD OF DIRECTORS**

Hon Manu'alesagalala Enokati Posala  
**CHAIRMAN**  
(July 2011 – March 2012)

Fa'aolesā Fuimaono Seiuli Katopau T. Ainu'u  
**CHAIRMAN**  
(April 2012 – June 2012)

Hon. Matataualiitia Afa Lesa  
**Director**  
(July 2011 – March 2012)

Ulumalautea Papalii J Ryan  
**Director**  
(April 2012 – June 2012)

Ms Mataafa Tamaisailau  
**Director**  
(July 2011 – March 2012)

Fiu Peni Asi  
**Director**  
(April 2012 – June 2012)

Rev Elisaia Kolia  
**Director**  
(July 2011 – March 2012)

Leiataua Darryl Clarke  
**Director**  
(April 2012 – June 2012)

Vaaelua Nofo Vaaelua  
**CEO – Ministry of Works Transport & Infrastructure**  
(July 2011 – March 2012)

Fiu Taligi  
**Director**  
(April 2012 – June 2012)

Auelua Samuelu Enari  
**CEO – Ministry of Commerce, Industry & Labor**  
(July 2011 – March 2012)

Fanene Mark Betham  
**Director**  
(April 2012 – June 2012)

Ale Vena Ale  
**Director**  
(April 2012 – June 2012)

Lavea Tupaimatuna Iulai Lavea  
**CEO – Ministry of Finance (ex-officio Director)**  
(July 2011 – June 2012)

---

**MANAGEMENT**

Tologatā Galumalemana Lupematasila Tagaloatele Tile Leī'a Tuimalealiifano  
**GENERAL MANAGER**

Taulealeausumai Aumalaga Tiotio  
**DEPUTY GENERAL MANAGER OPERATIONS**

Vui Loau Tusa Laniselota Lameko  
**MANAGER CORPORATE SERVICES**

Toni Atilua  
**MANAGER GENERATION**

Lafaitale Johnny Pereira  
**MANAGER DISTRIBUTION**

Vagana Stephanie Ela Lomitusi  
**MANAGER SAVAII OPERATIONS**

Masoe Leilua Iosefa Tautua  
**MANAGER SALES & MARKETING**

Tagaloa Patricia Fruean  
**MANAGER HUMAN RESOURCES**

'Amelia P Faasau  
**MANAGER LEGAL SERVICES & POLICY**

Samuela Kava  
**MANAGER INFORMATION COMMUNICATIONS TECHNOLOGY**

Fonoti Perelini  
**ACTING PROJECT MANAGER**

---

## CONTENTS

1. Chairman's Overview	5
2. General Manager's Report	6
3. Annual Accounts	15
(a) Managements Report	16
(b) Directors Report	17
(c) Report of the Audit Office	18
(d) Statement of Financial Position	19
(e) Statement of Financial Performance	20
(f) Statement of Cash Flows	21
(g) Statement of Changes in Equity	22
(h) Notes to and forming parts of Accounts	23

---

## ACRONYMS

<b>ADB</b>	Asia Development Bank
<b>AusAID</b>	Australian Agency for International Development
<b>EPC</b>	Electric Power Corporation
<b>CEEG</b>	China Electric Equipment Group
<b>CSO</b>	Community Service Obligation
<b>GIS</b>	Geographic Information System
<b>IPP</b>	Independent Power Producer
<b>JICA</b>	Japan International Cooperation Agency
<b>HV</b>	High Voltage
<b>HFUS1</b>	Hospital Feeder Upgrading Stage 1
<b>kWh</b>	Kilo watt hour
<b>kV</b>	Kilo volts
<b>LV</b>	Low Voltage
<b>MWTI</b>	Ministry of Works, Transport and Infrastructure
<b>PEC</b>	Pacific Environment Community Fund
<b>PIGGAREP</b>	Pacific Islands Greenhouse Gas Abatement through Renewable Energy Projects
<b>PSEP</b>	Power Sector Expansion Project
<b>PMU</b>	Project Management Unit
<b>PV</b>	Photovoltaic

---

## CHAIRMAN'S OVERVIEW

It is a privilege for me to present the Electric Power Corporation's Thirtieth Annual Report which highlights the works of the Corporation for the fiscal year from July 2011 to June 2012.

The Corporation recorded a net operating profit of \$2.28 million at year end compared to a net operating loss of \$0.68 million being re-stated for the previous financial year.

The Corporation has achieved these positive results despite the increasing fuel costs as well as the impacts of climate change on hydro generation of electricity. These impacts have had a significant increase in the cost of producing electricity without any adjustment to the base tariff during the fiscal year.

The Corporation continues with the implementation of the monthly adjustment of the fuel surcharge rate applied as usual for all consumers, based on world oil prices.

As a result, the Corporation continues to research and develop projects to maximize the use of cost effective hydro generation and other renewable energy sources such as hydro power, solar, wind, biogen and others to reduce dependence on imported diesel fuel.

The Power Sector Expansion Project (PSEP) currently implemented by the Corporation aims to provide improvements to the power system in Samoa and at the same time sustain the reliability of electricity supply through sufficient generation capacity in meeting present and future demand.

The Corporation's Total Income has increased from \$96.89 million in 2011 to \$101.37 million in 2012, an increase of 4.6%. The Total Expenditure has increased from \$97.58 million in 2011 to \$99.09 million for this fiscal year 2012. The Corporation's Net Assets at year end stand at \$181.27 million.

In conclusion, the successful achievement for the year 2012, has contributed to the hard work and commitment by the Board of Directors, the Management and all staff of the Corporation to improve its financial operation, to meet its statutory objectives and continue with its developments in the future.

I therefore take this opportunity to convey to the Board, Management and Staff my appreciation for another successful year of operation.



Fa'aolesā Fuimaono Seiuli Katopau T. AINU'U  
Chairman  
**EPC Board of Directors**



---

## GENERAL MANAGER'S REPORT

### INTRODUCTION

The Electric Power Corporation's Annual Report for the fiscal year July 2011 to June 2012 marks the conclusion of another challenging financial year. The Corporation continues to focus its efforts on technologies and solutions to improve the financial performance and maximizing renewable energy projects to reduce dependence on imported fuel and avoid impacts of climate change on its operations.

### FINANCIAL PERFORMANCE

The Corporation concluded its fiscal year on 30 June 2012 with a recorded net profit of \$2.28million compared to a loss of \$0.68 million the previous year. Despite economic pressures forced on our local economy by escalating world oil prices, the Corporation was able to attain this positive accomplishment.

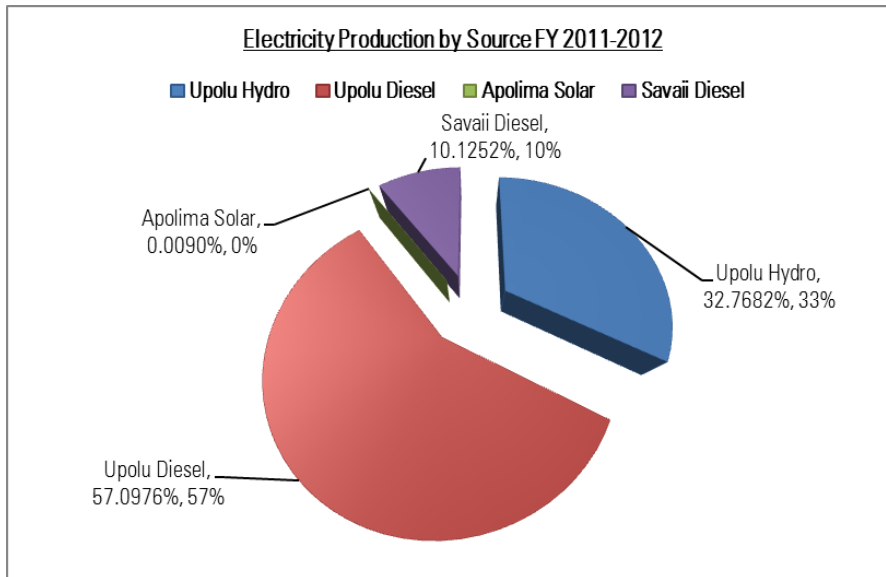
The Corporation still maintains its existing base tariff levels for all its consumers during the fiscal year, while the monthly fuel surcharge adjustment has been applied up to February 2012. As a result of the new Electricity Act 2010, this monthly application of the fuel surcharge adjustment is reviewed upon application from the Corporation and approved for implementation by the Regulator.

Electricity sales which represents 90.5% of Total Income, showed a record figure of \$91.7 million as compared to \$83.3 million in the previous year, an increase of \$ 8.4 million or 10.1%. Imported diesel fuel is the single major cost component of the expenditure for this fiscal year at \$58.6 million or 63.9% against the Total Electricity Sales of \$91.7 million.

### ELECTRICITY PRODUCTION

Hydro and diesel power were the main sources of electricity production, contributing 32.76% and 57.09% respectively, while solar power contributes 0.008 %. For this period, the Corporation generated 112,226,959 kWh, as illustrated in details as per table and chart below.

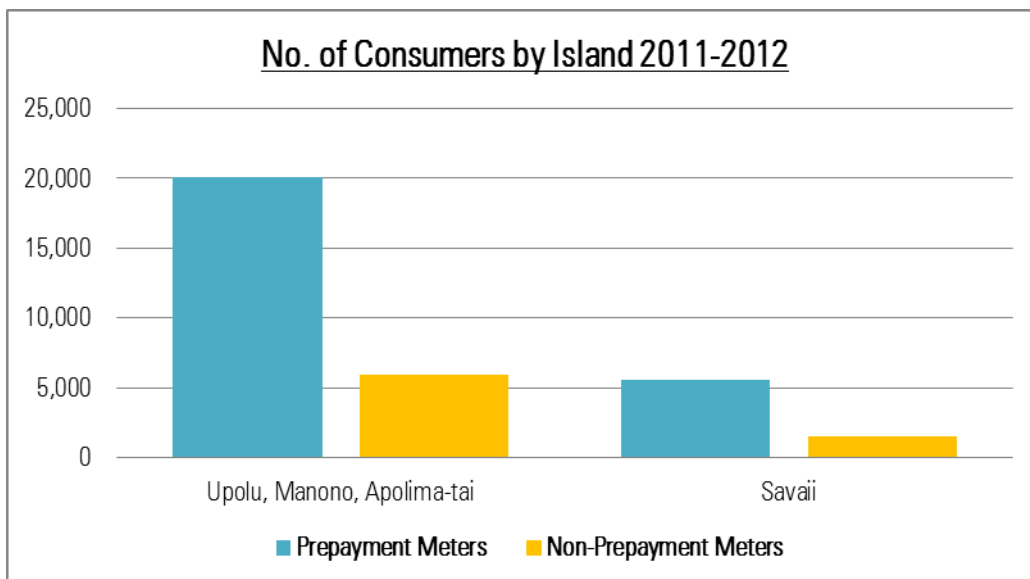
Location/Source	kWh	Contribution in %
Upolu Hydro	36,774,774	32.76 %
Upolu Diesel	64,078,915	57.09%
Apolima Solar	10,056	0.008%
Savaii Diesel	11,363,214	10.13%
Total	112,226,959	100%



### CONSUMER BASE AND CONSUMPTION

The total number of consumers as at the end of this fiscal year is 33,157. The total number of consumers on prepayment meters is 25,704, with non-prepayment meters at 7,453. This is shown in the table and chart below with the number of consumers by island per meter type and the consumption in kilo watt per hour by island.

Number of Consumers by Meter/Type	FY 2011-2012		
	Upolu, Manono, Apolima-tai	Savaii	Total
<b>Prepayment Meters</b>	20,109	5,595	25,704
<b>Non-Prepayment Meters</b>	5,914	1,539	7,453
<b>TOTAL No. of Consumers</b>	26,023	7,134	33,157
<b>Total Consumption in kwh</b>	<b>84,288,390</b>	<b>8,552,220</b>	<b>92,840,610</b>



---

## MAJOR DEVELOPMENT PROJECTS

### 1 RENEWABLE ENERGY PROJECTS

The Corporation in partnership with other Government Ministries and private sector continues to pursue one of its major goals of investigating economical and sustainable renewable energy sources that may be utilized for electricity generation.

There are several factors which have been identified as major barriers in implementing renewable energy projects such as lack of funding and access to appropriate technology as well as the unavailability of baseline data.

Renewable energy activities undertaken and progress achieved for this fiscal year are listed below;

#### (I) SOLAR PHOTOVOLTAIC (PV) /SOLAR ENERGY

##### (i) Samoa's 400kWp Solar Photovoltaic Project

A proposal by EPC for a USD\$4million grant to implement Samoa's first large scale solar PV Project has been approved by the Government of Japan. A 400kWp solar PV grid connected system will be funded from the Pacific Environment Community (PEC) Fund, a grant scheme implemented through the Pacific Islands Forum Secretariat.

The initial stages of this project comprises of a feasibility study, an environmental impact assessment, system design specifications and tender management assistance. This was funded through the PIGGAREP project and implemented by an offshore company, the Australia IT Power Limited.

Following the company's competitive tender and procurement guidelines, a call for proposals was issued in June 2012, for the design, manufacture, supply, installation and commissioning of the PV grid connected system. The chosen sites for this installation are within EPC's Tanugamanono Power Station compound, EPC's Vaitele compound and at EPC's Savaii Operations Salelologa compound.

#### (II) INDEPENDENT POWER PRODUCERS

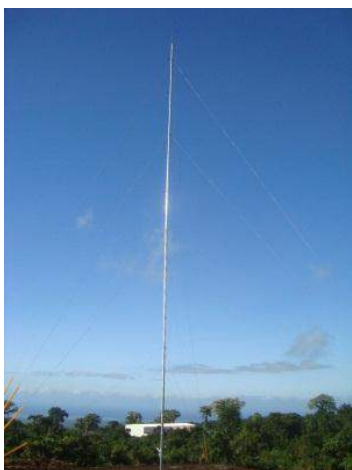
The amended Electricity Act which came into effect December 2011 has paved way for Independent Power Producers to generate and sell electricity to EPC.

The Cabinet approved in November 2011, as per FK (11) 36, a proposal by Biogen 3 Samoa Ltd to set up a bio-energy plant as an Independent Power Producer (IPP). Following this approval, a Power Purchase Agreement was signed between EPC and Biogen3 to generate and sell electricity to EPC from a 4MW plant. This is utilizing various renewable energy technologies using bio-energy. EPC is awaiting confirmation from Biogen 3 on its implementation.

On the same Cabinet approval FK (11) 36, Solar Samoa Limited, signed a Power Purchase Agreement with EPC on June 2012 to generate and sell power to the existing EPC grid using Solar PV technology. Solar Samoa has identified several sites around the island for the installation of their solar systems with a total combined capacity of 4MW.

---

### (III) WIND ENERGY ASSESSMENT



The Corporation continues with its efforts in the collection of data and researching for potential sites on wind development. One of its completed works during this fiscal year, is the installation of one (1) new wind monitoring mast at Fiaga and a replacement for an old mast at Mt. Le Pu'e. These two masts were donated by the Korean Government through the University of the South Pacific. Meanwhile, the Corporation continues to collect data from monitoring masts at Safotu and Mt. Fiamoe.

Peer review of the collected data and a wind pre-feasibility study is scheduled for the next fiscal year with funding assistance from the PIGGAREP fund and NZ-Aid.

**Left:** Wind Mast installed at Fiaga

## 2 POWER SECTOR EXPANSION PROJECT

The Corporation, through its Project Management Unit (PMU) continues with the implementation of the Power Sector Expansion Project (PSEP), during this fiscal year. This aims to *“improve the capacity of the power sector in providing sustainable and reliable electricity services to all consumers at affordable prices and to reduce its system losses”*.

There are two core subprojects under this project, namely the Hospital Feeder Upgrading Stage 1 which is completed, and the Single and Three Phase Prepayment Metering Project. There are nineteen (19) original sub-projects, plus twenty-seven (27) additional sub-projects that were later added. Meanwhile other remaining candidate subprojects, have yet to be completed and progress of works scheduled are noted in Section III of the PSEP update.

### (I) SINGLE AND THREE PHASE PREPAYMENT METERING PROJECT

Arthur D Riley Co & Ltd being the responsible company undertaking this project and local subcontractors continue with the implementation of this core subproject during the fiscal year. As at June 2012, a total of number 19,616 prepayment meters have been installed, leaving 1,384 meters remaining to be installed by the end of December 2012.

This is 71.87% of total active meters on prepayment meters with remaining 3.13% to achieve the 75% target.

### (II) PROJECTS IN PROGRESS

#### (i) Fiaga Diesel Power Station

During this fiscal year, following the ground breaking ceremony in the beginning of July 2011, contractors Bluebird Ah Lal JV, Woods Pacific, and Mitsubishi Japan proceeded with the construction of powerhouse. There were also four (4) new generators and other associated equipment which arrived during this time. Switchgears and transformers were also installed during this fiscal year. An access road with fence was also built by Contractors Silva Transport Ltd and completed as at June 2012.



**Above:** Fiaga Power Station during construction works February 2012



**Above:** Laying of conduit for underground 33kV lines connecting electricity supply at Fiaga.



**Above:** One of the generators installed at the Fiaga Diesel power station.



**Above :** Transformers outside the Fiaga Power Station shortly after installation.



**Above :** Contractors North Power staff with EPC staff during the installation of switchgear panels at the Fiaga Power Station.

## ii) Overhaul of Engine 7 & 9 at the Tanugamanono Power Plant

Major works on the overhaul of Tanugamanono Engines No.7 and No.9 were carried out during this fiscal year. Works for overhaul of Engine No. 7 began in late November 2011 for seven (7) months.

Engine No.7 was re-commissioned and load tested at the beginning of July 2012. The completed overhaul on Engine No.7 has assisted in capacity required to meet demand in electricity supply. This project was funded under the Power Sector Expansion Project (PSEP) ADB funding with local costs covered by EPC through its matching counter parts costs.



**Above:-** EPC Tanugamanono technical staff who assisted personnel from MAN Diesel during works on Engine No.7 and two of the few parts shipped back to Australia for testing.

### iii) Candidate Sub-Projects Progress

Candidate Sub-Projects	Progress / Achievement
<b>UPOLU (Generation)</b>	
1. Tanugamanono Power Station Noise & Emission Control Program	Project not yet started as at end of June 2012.
<b>(Transmission)</b>	
2. Fiaga Diesel Power Station to Fuluasou Substation 33kV Underground Cable Project	Feasibility Study complete. Tender for materials closed on December 2012. The 33kV transmission line has 2 circuits; underground and overhead. As at June 2012, materials have arrived from two suppliers, INTRACOR and South Austral. EPC started on the construction of overhead lines.
3. Hospital Feeder Upgrading Project Stage 2	Part 1 of this Project is 80% completed. Construction is continuing, with 90% of works completed as at end of June 2012. Part 2 on remaining works on installation of cables is 60% complete.
4. 22kV Fuluasou Substation Project	Construction of building and civil works is 60% completed as at June 2012 by Fletcher Construction.
5. Low Voltage Network Improvement Program	Construction not yet started. 50% of Materials received as at June 2012.
6. Fuluasou Substation to Apia Wharf Area 22kV Underground Cable Project	Construction not yet started.
7. 22kV Overhead Conductor Upgrading Program	Construction in progress with 60% of works completed as at June 2012, by GMA Construction Ltd.
<b>SAVAII – (Generation)</b>	
8. Hydro Scheme	Project in initial stage. Feasibility Study completed.
<b>(Transmission)</b>	
9. Puapua-Asau Transmission Line 22kV Reconductoring Project	Complete.
<b>GENERAL</b>	
10. Power Factor Improvement Program	Complete.
11. Low Voltage Network Improvement Program (Savaii)	Materials ordered and received. Works for this project yet to start as at June 2012.
12. Measurement Equipment: - Stream Flow Gauging Equipment	-Complete.

- HV/LV Testing Equipment	-Complete.
13. System Control and Data Acquisition (SCADA)	Contract for works on this software has begun, by Schneider Electric (Australia) Pty Ltd. Field survey completed. Design works continue as at June 2012.
<b>New Sub-Projects</b>	
1. Public Disemmination	Ongoing.
2. Vending System Expansion	Prospect Suppliers (2) of Cashpower meters in progress with testing.
3. Power System Planning Software	Ongoing data update to system. Changes completed.
4. Refurbishment of Salelologa Power Station/Vaiaata New Power Plant	Feasibility Study and Re-settlement Plan completed.
5. Vaipu Pump Assisted Scheme	No major works as at end of June 2012.

### 3 CORPORATE SERVICE/SALES & MARKETING/GENERATION/TRANSMISSION & DISTRIBUTION FACILITY PROJECTS

The following projects were undertaken during this period, which involved all sections of EPC.

#### (I) GEOGRAPHIC INFORMATION/MANAGEMENT INFORMATION SYSTEM (GIS/MIS)

The Corporation continued to utilize its Geographical Information/Management Information System was set up to improve strategic planning performance and enhance asset management capabilities.

Major works carried out in this fiscal year by the Corporation through its GIS/MIS Unit, included;

- (i) Capturing of all distribution, generation, and utilization assets in Upolu, Apolima, Manono-tai and Savaii included 25,726 poles, 31,365 meters and 800 transformers,
- (ii) Centralizing GIS database for access of GIS data on EPC network,
- (iii) Development of Enterprise GIS,
- (iv) Completion of the upgrade of GPS/GNSS infrastructure allowing the sharing of information with SWA under the new SWA-EPC spatial data sharing and corporation MOU.

#### (II) EPC & NATIONAL BANK OF SAMOA (NBS) CASH POWER TOP UP VENDING SYSTEM

Another convenient and easy option for EPC consumers to purchase their cash power units was launched on March 27 2012.

The cash power top up vending system contract between EPC and NBS was signed on the 2<sup>nd</sup> December 2011. A pilot testing was successfully conducted and completed by staff from both parties. This mobile Ezibank system allows consumers to top up their cash power units by simply texting, and payment will be made from their NBS accounts.

During the launch of this system, the Prime Minister thanked the EPC Board, Management and staff, for their work in realizing this partnership a success for this local bank. One of the noted benefits in this system is the use of this type of technology in the elimination of the misuse of funds, making it easier, and convenient for EPC consumers when they need to top-up their units.



**Above:** PM – Hon. Tuilaepa Sailele Malielegaoi, cutting the cake commemorating the launching of NBS's Ezibank prepaid power top-up.

---

### III) TRANSMISSION AND DISTRIBUTION – INDEPENDENCE CELEBRATION – 50TH ANNIVERSARY PROJECT

EPC played a major role in the Government's preparation of Samoa's 50 years of Independence. This included the relocation and installation of infrastructure to facilitate road widening from Sogi to Tiafau Malae, as well as installation of street and flood lights. EPC also ensured that necessary infrastructure such as transformers and floodlights were in place to facilitate capacity of electricity supply to the UB40 concert and other Independence celebrations.

There were also street lights installed between Apia and Faleolo, again ensuring complete service to replacement of damaged street lights.



**Above: L-R** Street-lights installed at the Malae-o-Tiafau in preparation for the 50<sup>th</sup> Independence Anniversary celebration & works on laying of conduits for flood lights

## 4 STAFF TRAINING AND DEVELOPMENT

The Corporation continues to implement its training and professional development programs for its employees. This includes internal house training and EPC sponsored training overseas, invitational trainings from the Public Service Commission, JICA and Ministry of Foreign Affairs and Trade.

### (I) AUSTRALIA PACIFIC TECHNICAL COLLEGE

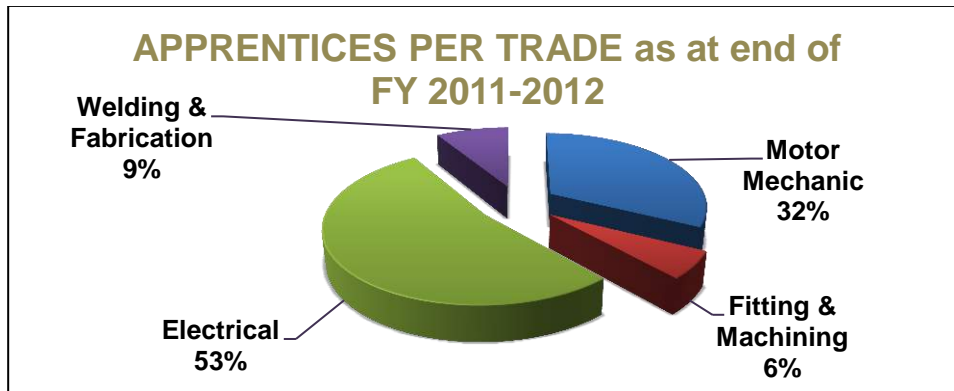
During this fiscal year, six (6) of its employees graduated from the Australia Pacific Technical College. These include graduates who completed Certificates III in Diesel Fitting, Automotive Mechanical Technology, all of whom were from our Generation Section in Upolu based at Tanugamanono.



---

## (II) APPRENTICESHIP PROGRAM

As at the end of this fiscal year, a total of thirty four (34) students were enrolled under the Apprenticeship Scheme employed by EPC. Shown below, are the study areas in which these staff members are enrolled under the Apprenticeship Scheme.



## CONCLUSION

In conclusion, we were able to achieve our objectives as set out for this fiscal year, as well as continue to drive forward on developments that bring about improvements to the Corporation and its service delivery and closed the year successfully with a profit of \$2.28 million.

In closing, I would like to acknowledge with gratitude that these outcomes would not have been possible without the commitment, dedication and support of our staff, Management and Board of Directors. I would also like to commend the support of our valued customers and stakeholders including international and regional agencies, the Government and its various Ministries.

Soifua

---

Tologatā G L T Tile Leʻa Tuimalealiifano  
**GENERAL MANAGER**