

ECONOMIC SURVEYS

ELECTRICITY

2016

JUNE 2018

Published in June by the

Fiji Bureau of Statistics

P. O. Box 2221

Government Buildings

Suva

Republic of Fiji

Reproduction of Material

Any table or material published in this Report may be reproduced and published without the Fiji Bureau of Statistics' prior approval. However, the source of information should always be identified and acknowledged in all modes of presentation.

ISSN 1996-8183

Key title: Economic surveys. Electricity ...

Abbreviated key title: Econ. surv., Electr.

© **Fiji Bureau of Statistics**

Printer:

Enquiries:

Fiji Bureau of Statistics
Ratu Sukuna House
MacArthur Street
Suva
Fiji

P O Box 2221
Government Buildings
Suva
Fiji

Telephone: [679] 331 5822
Fax No: [679] 330 3656
E-mail: info@statsfiji.gov.fj
Website: www.statsfiji.gov.fj

PREFACE

The report provides information on the electricity industry in 2016. The activities covered include power generation, transmission and distribution. The important numbers presented are the macro-economic aggregates such as Gross Output, Intermediate Consumption, Value Added, Compensation of Employees, Consumption of Fixed Capital and Gross Fixed Capital Formation. These aggregates are combined with similar information on other industries to provide an estimate of GDP, which is a measure of our economy's size. Information made available in this report will allow us to work out the industry's contribution to the country's economy.

The amount of electricity produced in a given year mirrors the level of economic activity while the estimated Gross Fixed Capital formation reflects investment levels in the industry. Information contained in this report constitutes inputs to a national accounts system which basically provides a quantitative image of the whole economy.

Information on the electricity industry would be useful to a good number of users, for instance the;

- 1) Energy Planners who needs to advice on the country's energy needs.
- 2) Economic Planners who uses the data to forecast the economy's performance.
- 3) Investors who wishes to identify opportunities in the Electricity Industry.

The cooperation of those who supplied the information presented in this report is hereby acknowledged. The Bureau of Statistics will continue to seek their support as we need to continually provide reliable statistics for evidence based planning. I also would like to thank the staffs who were engaged in the conduct of the survey and the preparation of this report.



Epeli Waqavonovono [Mr]
Government Statistician

NOTES

1 The interpretation of the symbols used in this report are as follows:

0 Nil or a figure less than half the given value

2 Total values are subject to rounding errors.

3 Key to Abbreviations:

BR	Business Register
CFC	Consumption of Fixed Capital
COE	Compensation of Employees
EPI	Electricity Production Index ¹
FBoS	Fiji Bureau of Statistics
FSIC	Fiji Standard Industrial Classification
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GO	Gross Output
IC	Intermediate Consumption
IPI	Industrial Production Index
OS	Operating Surplus
SAS	Statistical Analysis System
VA	Value Added

4 VA in the report refers to Gross Value Added

¹ Forms part of the Industrial Production Index

CONTENTS

		<u>Page No</u>
1	INTRODUCTION	
	1.1 History of Surveys Undertaken	1
	1.2 Need for statistics relating to Electricity	1
2	METHODOLOGY	
	2.1 Legal Basis	1
	2.2 Coverage and Scope	1
	2.3 Statistical Unit	1
	2.4 The Frame	2
	2.5 Questionnaire Design	2
	2.6 Data Collection and Survey Procedures	2
	2.7 Data Processing	2
	2.8 Reference Period	2
	2.9 Non-responding Establishments	2
3	RESULTS	
	3.1 The Survey Response	3
	3.2 Legal Status of Establishments	3
	3.3 Ownership of Establishments	3
	3.4 Size of Establishments	4
	3.5 Number of Persons Engaged as at 30 June 2016	4
	3.6 Macroeconomic Aggregates	4
	3.7 Gross Fixed Capital Formation	5
	3.8 Average Turnover per Establishment	5
	3.9 Average Turnover per Paid Employee	5
	3.10 Average Compensation of Employees per Paid Employee	6
	3.11 Loans and Advances	6
	3.12 2016 Results Compared with 2015 Results	6

4. LIST OF APPENDICES

I	Concepts and Definitions	7
II	Industrial Classification Used	9
III	Composition of Macroeconomic Aggregates	10
IV	Sales of Electricity 2000 - 2016	12
V	Annual Electricity Production Index	13
VI	Quarterly Electricity Production Index	13
VII	Gross Output, Intermediate Consumption and Value added 2005-2016	14
VIII	Sample Questionnaire	15

STATISTICAL TABLES

1	The Survey Response	
	A. The Survey Response	3
	B. Responding Establishment Contribution	3
2	Legal Status of Establishments	3
3	Ownership of Establishments	3
4	Size of Establishments	4
5	Number of Persons Engaged as at 30 June 2016	
	A. Number of Persons Engaged	4
	B. Number of Persons Engaged by Gender	4
6	Macroeconomic Aggregates	4
7	Gross Fixed Capital Formation	5
8	Average Turnover per Establishment	5
9	Average Turnover per Paid Employee	5
10	Average Compensation of Employees per Employ	6
11	Loans and Advances	6
12	2016 Results compared with 2015 Results	6

1 INTRODUCTION

1.1 History of Surveys Undertaken

This report contains the results of the survey carried out for Electricity for 2016.

The first economic survey of the electricity sector was done in 1969 and was combined with the study of the mining and quarrying and manufacturing sectors. Since then the survey has been carried out annually. The results of the survey from 1969 to 1994 were published in reports titled “Census of Industries”; from 1995 to 2001 in reports titled “Census of Mining and Quarrying, Manufacturing and Electricity and Water, but from 2002 the results of the electricity sector are being produced solely on its own under the title “Economic Surveys: Electricity”.

1.2 Need for statistics relating to Electricity

Electricity production and generation is an important economic activity, whether in terms of the sector to the Gross Domestic Product (GDP) or in terms of its share of total employment and Gross Fixed Capital Formation (GFCF).

Statistics on electricity are therefore needed for the preparation of national accounts so that a meaningful study of the whole economy can be made. The data can also be used to construct the input-output table that shows the inter-connection of the electricity industry with other industries. Policy makers too require the data for formulating sound economic and social policies that augment capital formation. In addition, the establishments engaged in the electricity industry find the data helpful in assessing the future direction of their business.

2 METHODOLOGY

2.1 Legal Basis

The surveys were conducted under the provisions of the Statistics Act (Cap 71). This Act protects the confidentiality of the information submitted by the establishment and stipulates the completion of the questionnaire as well.

2.2 Coverage and Scope

The 2016 survey covered all establishments operating in the electricity industry defined by the Fiji Standard Industrial Classification (FSIC) 2010 Section D.

The businesses in the electricity industry include the generation of bulk electric power, transmission from generating facilities to distribution centers and distribution to end users (refer Appendix II on Industrial Classification Used).

2.3 Statistical Unit

The unit of reporting was the establishment (refer Appendix I on Concepts and Definitions).

2.4 The Frame

The frame utilised to survey the establishments engaged in the electricity industry in 2016 was the list of establishments maintained by the Fiji Bureau of Statistics (FBoS). This list is known as the Business Register (BR), which is kept updated on the basis of information supplied to the FBoS by the Fiji Revenue and Customs Authority, Registrar of Companies and the City and Town Councils.

2.5 Questionnaire Design

The questionnaire used for surveying the electricity industry called for information on the particulars of the establishment e.g type of organisation; income; expenditure; stocks and employment.

2.6 Data Collection and Survey Procedures

The questionnaires were posted on 29th June, 2017 and replies were required within a month. Response by the due date was low (54%), therefore personal visits to obtain the questionnaires were made to those establishments that did not respond in spite of the reminders and to those establishments that required assistance in filling out the questionnaires.

Once the questionnaires were received in the office, scrutiny and editing of data contained in them followed. Errors and omissions if found, called for more correspondence, telephone calls or personal visits in an attempt to obtain complete and correctly filled up returns, which were then placed in files sorted by activity and passed on for data entry.

On completion of data entry, tables were run, data edited and analysed and reports written.

2.7 Data Processing

Data was processed by FBoS' Information Technology Business Unit using Statistical Analysis System (SAS) software.

2.8 Reference Period

The establishments contacted were to submit details for the calendar year 2016. Where the accounting year differed from the calendar year, establishments were asked to provide information for the accounting year that covered the major part of the calendar year.

2.9 Non-responding Establishments

All the establishments operating in the electricity industry responded.

3 RESULTS

All data contained in this report are in Fijian Dollars and in current prices.

3.1 The Survey Response

Table 1A: The Survey Response

FSIC 2010		SURVEY FRAME	RETURNS RECEIVED	RESPONSE RATE %
SUB-CLASS	ACTIVITY			
35101	Electricity power generation, transmission and distribution	17	17	100

Table 1B: Responding Establishment Contribution (000)

INDUSTRY	TOTAL GO OF INDUSTRY	GO OF RESPONDING ESTABLISHMENT (as per survey)	% CONTRIBUTION RESPONDING ESTABLISHMENT TO TOTAL GO
Electricity	339,427	339,427	100

3.2 Legal Status of Establishments

Table 2: Legal Status of Establishments

FSIC 2010		Sole Trader	Partnership	Private Limited Company	Public Limited Company	Co-operative	Government Owned Trading Entity	Other Business Type (specify)	Total
SUB-CLASS	ACTIVITY								
35101	Electricity power generation, transmission and distribution	0	0	4	0	0	13	0	17

3.3 Ownership of Establishments

Table 3: Ownership of Establishments

FSIC 2010		Fiji Owned	Branch of an Overseas Company	Subsidiary of an Overseas Company	TOTAL
SUB-CLASS	ACTIVITY				
35101	Electricity power generation, transmission and distribution	14	0	3	17

3.4 Size of Establishments

Table 4: Size of Establishments

FSIC 2010		NUMBER OF PERSONS ENGAGED						
SUB-CLASS	ACTIVITY	1-4	5-9	10-19	20-49	50-99	100+	TOTAL
35101	Electricity power generation, transmission and distribution	3	3	3	4	1	3	17

3.5 Number of Persons Engaged as at 30 June 2016

Table 5: Number of Persons Engaged as at 30 June 2016

FSIC 2010		TOTAL WORKING WITH PAY	GENDER		
SUB-CLASS	ACTIVITY		MALES	FEMALES	TOTAL
35101	Electricity power generation, transmission and distribution	851			
			732	119	851

3.6 Macroeconomic Aggregates

Table 6: Macroeconomic Aggregates (\$000)

FSIC 2010		GO	IC	VA	COE	CFC	OS
SUB-CLASS	ACTIVITY						
35101	Electricity power generation, transmission and distribution	339,427	183,793	155,634	30,265	39,553	85,816

3.7 Gross Fixed Capital Formation

Table 7: Gross Fixed Capital Formation (\$000)

TYPE OF CAPITAL FORMATION	FSIC 2010 SUB-CLASS	TOTAL
	35101	
Land	0	0
Buildings	0	0
Plant and machinery	34	34
Furniture, fixtures and office equipment	(1)	(1)
Transport vehicle and related equipment	(75)	(75)
Wind Mill	0	0
Dam tunnels	(828)	(828)
Others (Capital work in progress)	45,326	45,326
GROSS FIXED CAPITAL FORMATION	44,456	44,456

3.8 Average Turnover per Establishment

Table 8: Average Turnover per Establishment

FSIC 2010		ESTABLISH- MENTS	INCOME FROM SALES OF ELECTRICITY	AVERAGE TURNOVER PER ESTABLISHMENT
SUB- CLASS	ACTIVITY	NUMBER	\$000	\$000
35101	Electricity power generation, transmission and distribution	17	329,620	19,389

3.9 Average Turnover per Paid Employee

Table 9: Average Turnover per Paid Employee

FSIC 2010		INCOME FROM SALES OF GOODS AND SERVICES	PAID EMPLOYEE	AVERAGE TURNOVER PER PAID EMPLOYEE
SUB- CLASS	ACTIVITY	\$000	NUMBER	\$000
35101	Electricity power generation, transmission and distribution	329,620	851	387

3.10 Average Compensation of Employees per Paid Employee

Table 10: Average Compensation of Employees per Paid Employee

FSIC 2010		COMPENSATION OF EMPLOYEES	PAID EMPLOYEE	AVERAGE COMPENSATION PER PAID EMPLOYEE
SUB-CLASS	ACTIVITY	\$000	NUMBER	\$000
35101	Electricity power generation, transmission and distribution	30,265	851	35

3.11 Loans and Advances

Table 11: Loans and Advances (\$000)

FSIC 2010		CLOSING BALANCE		
SUB - CLASS	ACTIVITY	ABROAD	LOCAL	TOTAL
35101	Electricity power generation, transmission and distribution	0	319,459	319,459

3.12 2016 Results Compared with 2015 Results.

Table 12: 2016 Results Compared with 2015 Results

AGGREGATES	2015		2016		Percentage change
	\$000	aggregates expressed as % of GO	\$000	aggregates expressed as % of GO	
GO	349,350		339,427		-2.84
IC	236,302	67.64	183,793	54.15	-22.22
VA	113,048	32.36	155,634	45.85	37.67
COE	23,803	6.81	30,265	8.92	27.15
CFC	37,932	10.86	39,553	11.65	4.27
OS	51,313	14.69	85,816	25.28	67.24
GFCF		142,521		44,456	-68.81
NUMBER OF PERSONS ENGAGED		817		851	4.16

For supplementary information on the electricity statistics reference can be made to Appendix I for the Concepts and Definitions; Appendix II for the Industrial Classification Used; Appendix III for the Composition of Macroeconomic Aggregates; Appendix IV for the Sales of Electricity; Appendix V for the Annual Electricity Production Index; Appendix VI for the Quarterly Electricity Production Index; Appendix VII for the GO, IC & VA 2005 – 2016; and Appendix VIII for the Sample Questionnaire.

APPENDIX I: CONCEPTS AND DEFINITIONS

All concepts and definitions used in this report are based upon the recommendations of the United Nations for their World Programme on Industrial Statistics. The major concepts and definitions and their treatment are briefly explained below.

<i>Compensation of Employees</i>	Includes payments, whether in cash or in kind, made by the employer during the inquiry period for the work done to all persons included in the count of employees. It includes all cash payments, commissions, bonuses, cost of living allowances and wages paid during periods of vacation and sick leave, contributions in respect of their social security and pension and payments in kind.
<i>Consumption of Fixed Capital</i>	In theory this is the value of the current replacement cost of fixed assets used up during the accounting period as a result of normal wear and tear. The consumption of fixed capital shown in this report is derived from the information supplied by the firm. This is expected to conform largely to the requirements of Income Tax Act.
<i>Employees</i>	This includes all persons who work in the establishment and receive regular pay and persons working away from the establishment when paid by and under the control of the establishment, including persons on sick leave, holiday or vacation. Also included are salaried managers, and directors of incorporated businesses except when paid solely for their attendance at board of directors meetings. This category excludes working proprietors and unpaid family workers.
<i>Establishment</i>	An establishment can be referred to as an enterprise that engages in one or predominantly one kind of economic activity, at or from one location, for which data are available or can be meaningfully compiled, that allow the calculation of the operating surplus.
<i>Fixed Assets</i>	Fixed assets include the value of all physical assets expected to have a productive life of more than one year and intended for use by the establishment. Included are major additions, alterations and improvements to existing fixed assets that extend their normal economic life or raise their productivity.
<i>Foreign Owned</i>	Subsidiary of an overseas company is always considered foreign owned, whereas a branch of an overseas company is only considered foreign owned if 51 per cent of its equity is held abroad.
<i>Government Owned Entities</i>	These include commercial companies and commercial statutory authorities either wholly owned by Government or in which the Government has a majority shareholding.
<i>Gross Fixed Capital Formation</i>	This is the outlay on new and second-hand durable goods less their sales plus their own account capital construction work done.
<i>Gross Output</i>	This is the gross value of all goods and services produced during the accounting period, the value of own account capital construction and other income.

<i>Intermediate Consumption</i>	Intermediate consumption consists of non-durable goods and services which have a lifetime of use of less than one year. Compensation of employees do not form part of intermediate consumption, but expenditure such as travelling expenses of management personnel are included. Intermediate consumption differs from total purchases of raw materials, fuels etc. by the amount of stock changes of such goods. Valuation of intermediate consumption is at purchasers' value i.e. it is inclusive of all costs incurred by producers in the acquisition of the required goods and services.
<i>Local Owned</i>	All companies with 51 per cent or more of its equity held in Fiji are considered locally owned.
<i>Operating Surplus</i>	This is the excess of value added by producers over compensation of employees, consumption of fixed capital and net indirect taxes.
<i>Payments in kind</i>	This is defined as the net cost to the employer of those goods and services furnished to employees free of charge or at markedly reduced cost that are clearly and primarily of benefit to the employees as consumers. The item includes food, beverages, clothing (except uniforms for civilians as these are not worn off-duty) and lodging etc.
<i>Persons Engaged</i>	This is defined as the total number of persons who worked in or for the establishment during the reference period, including working proprietors, active business partners, unpaid family workers and regular paid workers.
<i>Statistical Unit</i>	Statistical unit is the Unit for which information is collected.
<i>Unpaid Family Workers</i>	Unpaid family workers are persons living in the household of any of the proprietors of the owning establishment and working in the establishment without regular pay for at least one third of the working time normal to the establishment.
<i>Value Added</i>	Value added is the difference between the gross output and the intermediate consumption. It provides a useful way of measuring without duplication the economic importance of an industry or industrial sector.
<i>Working Proprietors</i>	Working proprietors are owners of establishments who are actively engaged in the work of the establishment. Excluded are silent or inactive partners.

APPENDIX II: INDUSTRIAL CLASSIFICATION USED

Only electricity from SECTION D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY of the Fiji Standard Industrial Classification 2010, commonly known as the FSIC 2010 has been used. FSIC 2010 is based on the International Standard Industrial Classification Rev 4.

ELECTRICITY includes the activity of providing electric power through a permanent infrastructure (network) of lines, mains and pipes. The dimension of the network is not decisive; also included are the distribution of electricity in industrial parks or residential buildings. This section therefore includes the operation of electric utilities, which generate, control and distribute electric power.

DIVISION	GROUP	CLASS	SUB-CLASS	DESCRIPTION
35				ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY
	351	3510	35101	<p>Electric power generation, transmission and distribution</p> <p>This sub-class includes the generation of bulk electric power, transmission from generating facilities to distribution centers and distribution to end users:</p> <ul style="list-style-type: none"> -operation of generation facilities that produce electric energy, including thermal, hydroelectric, gas turbine, diesel and renewable -operation of transmission systems that convey the electricity from the generation facility to the distribution system -operation of distribution systems (i.e. consisting of lines, poles, meters, and wiring) that convey electric power received from the generation facility or the transmission system to the final consumer -sale of electricity to the user -activities of electric power brokers or agents that arrange the sale of electricity via power distribution systems operated by others -operation of electricity and transmission capacity exchanges for electric power <p>This sub- class excludes:</p> <ul style="list-style-type: none"> -production of electricity through incineration of waste, see 38201

APPENDIX III: COMPOSITION OF MACROECONOMIC AGGREGATES (\$000)

FSIC SUB-CLASS 35101	
INCOME	
Primary Activity	327,820
Sales	327,820
Secondary Activity	9,807
Fuel rebates	0
Contract sales	5,143
Subsidies received	870
Business insurance claims received	0
Rent received for hire of :	
Building	19
Plant & machinery	0
Training rebates	67
Own account construction	0
Construction services	1,800
Receipts from industrial services rendered to others	0
Services & license fees	2,117
Power poles rentals	601
Others	990
Gross Output	339,427
Miscellaneous Income	24,158
Fuel surcharge	0
Casualty insurance	0
Profit or Loss received from any other business	0
Property income received	0
Rent received from land	0
Interest received	1,688
Dividends received	0
Bad & doubtful debts recovered	0
Exchange gain	1,688
Gain on sales of fixed assets	0
VAT charged on goods and services provided	20,782
TOTAL INCOME	363,585
EXPENDITURE	
Expenditure ^[2]	106,503
Opening Stock	32,128
Less Closing stock	34,458
Expenditure incurred on fuel, electricity and water :	
Fuel	3,135
Electricity	793
Water	317

² Includes expenditure on materials used for the generation, transmission or distribution of electricity.

FSIC SUB-CLASS 35101	
Current repairs & maintenance on :	
Building	0
Motor vehicles	4,548
Machinery & equipment	49,350
Cartage and haulage	24
Travel expenses :	
Air	112
Water	41
Land	309
Value of contract and commission work done	0
Audit and accounting	88
Legal fee	132
Advertising & promotion	217
Bank charges	120
Postage	0
Telephone & telecommunications	309
Office stationery & supplies	1,206
Rent paid for :	
Building	174
Plant & machinery	1,620
Management & consultation fees	657
Royalty paid	276
Business insurance	8,839
All other costs	7,353
<i>Intermediate Input</i>	183,793
Miscellaneous Expenditure	48,075
Casualty insurance	0
Property income paid	0
Rent paid for land	25
Interest paid	13,087
Dividend paid	0
Bad & doubtful debts written off	0
Business licenses, rates on property paid to central or local government	109
FNU levy	43
Exchange losses	3
Loss on sale of fixed assets	66
VAT paid on supplies of goods and services	34,742
<i>Compensation of employees</i>	30,265
Wages and salaries	28,312
FNPF	1,465
Payment in Kind	488
<i>Consumption of fixed capital</i>	39,553
TOTAL EXPENDITURE	301,686

APPENDIX IV

SALES OF ELECTRICITY⁴ 2000 – 2016

Period	INDUSTRIAL SALES		COMMERCIAL SALES		DOMESTIC SALES		OTHER		TOTAL SALES	
	000 Kwh	F\$000	000 Kwh	F\$000	000 Kwh	F\$000	000 Kwh	F\$000	000 Kwh	F\$000
2000	na	na	205,437	42,201	135,769	27,971	151,385	27,207	492,591	97,379
2001	na	na	220,135	45,384	143,990	29,885	251,435	30,861	615,560	106,130
2002	na	na	260,470	47,649	164,250	33,521	233,312	31,079	658,032	112,249
2003	163,915	21,572	240,691	49,465	154,153	32,035	101,355	11,134	660,114	114,206
2004	169,108	22,364	261,988	53,890	172,794	35,796	97,340	10,250	701,230	122,300
2005	164,989	23,385	275,769	60,426	187,317	39,147	93,185	10,846	721,260	133,804
2006	186,496	34,697	321,950	69,360	227,177	44,823	na	1,093	735,623	149,973
2007	195,133	34,145	332,657	68,477	239,030	44,229	na	868	766,820	147,719
2008	189,697	35,872	339,337	75,457	240,407	47,357	na	750	769,441	159,436
2009	183,745	37,877	343,045	81,642	240,057	48,588	na	942	766,847	169,049
2010	210,482	49,668	372,552	114,810	252,135	61,052	na	1,408	835,169	226,938
2011	218,079	71,413	372,192	137,718	246,910	76,500	na	3,147	837,181	288,778
2012	191,737	74,303	326,206	138,831	201,209	70,458	12,480	6,860	731,632	290,452
2013	202,223	78,819	349,029	140,844	216,175	69,279	12,646	3,974	780,073	292,916
2014	205,360	74,344	354,902	143,708	222,045	73,791	11,806	3,999	794,114	295,842
2015	206,143	76,768	376,872	155,537	230,575	73,566	12,522	4,142	826,112	310,013
2016	211,171	78,368	389,181	157,459	228,927	75,823	12,554	4,216	841,833	315,866

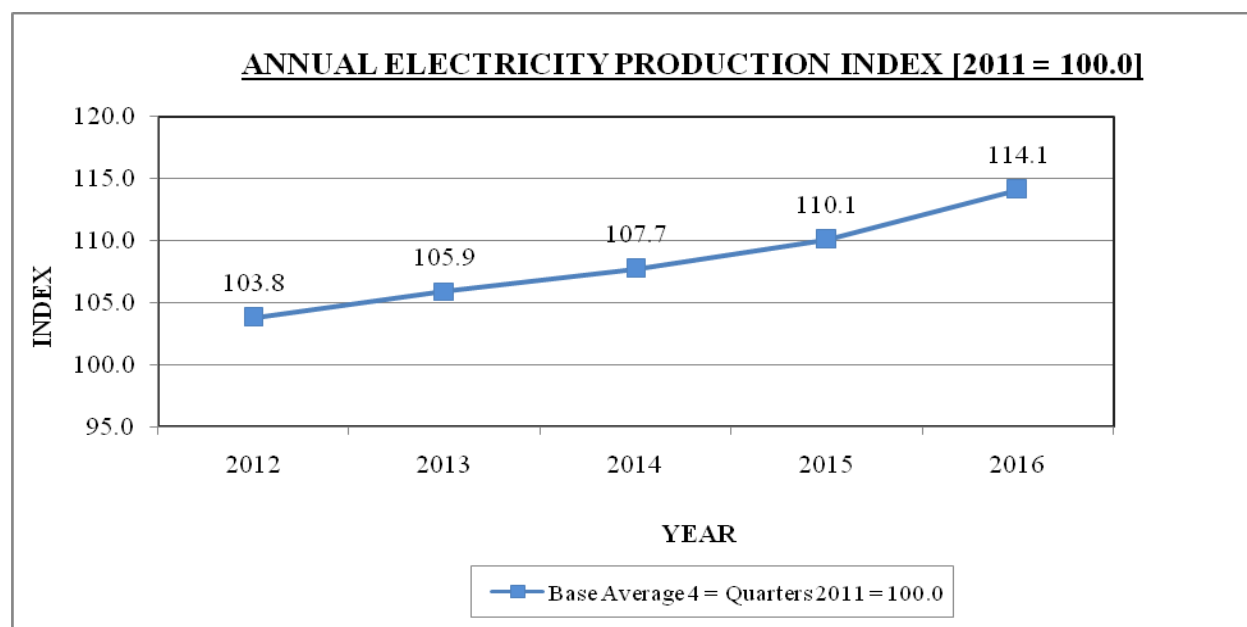
Source: Fiji Electricity Authority (FEA)

Note: na – Data was unavailable during these period.

⁴ This data is based on collections from bills paid to FEA and will therefore differ from the overall sales data given in Table 4: Macroeconomic Aggregates.

APPENDIX V: ANNUAL ELECTRICITY PRODUCTION INDEX⁵
[Base Average 4 Quarters 2011 = 100.0]

FSIC 2010	Weight	2012	2013	2014	2015	2016
35101	12.9	103.8	105.9	107.7	110.1	114.1



Source: Annual Industrial Production Index (IPI).

APPENDIX VI: QUARTERLY ELECTRICITY PRODUCTION INDEX⁵
[Base: Average 4 Quarters 2011 = 100.0]

FSIC 2010	Weight	PERIOD				
			Mar	Jun	Sep	Dec
35101	12.9	2012	103.5	106.0	106.0	99.6
		2013	107.5	108.0	99.6	108.5
		2014	113.5	111.0	96.9	109.5
		2015	117.3	106.5	100.6	116.1
		2016	116.4	112.3	108.2	119.4

Notes:

- The base year index is 2011 = 100.0 and Laspeyre's formula is used.
- The data above is inclusive of electricity generated by the Fiji Sugar Corporation (FSC) for its own consumption.

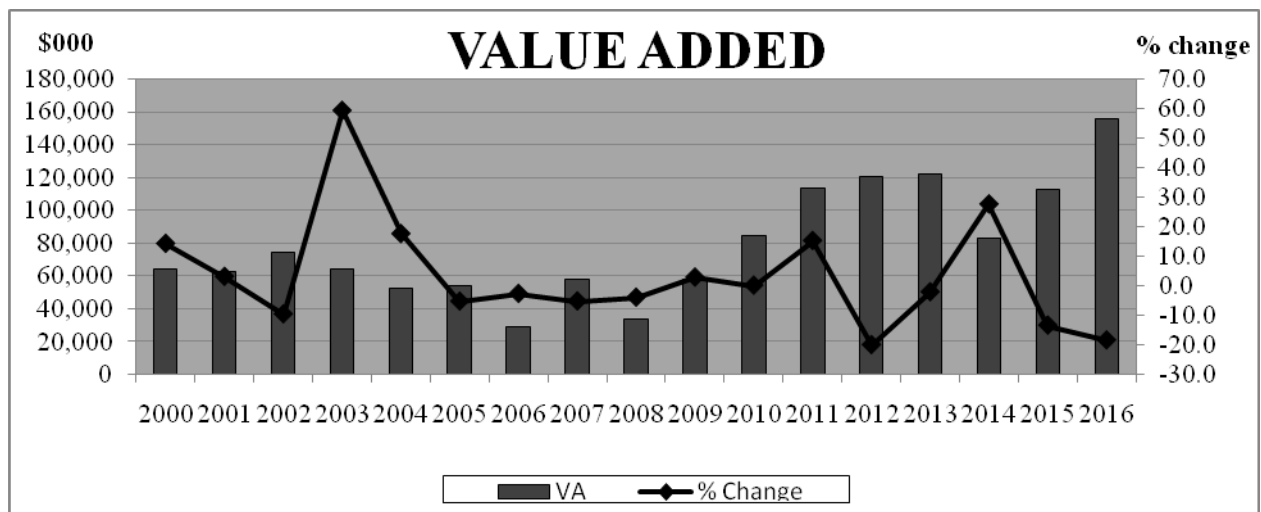
⁵ Out of a total weight of 100.0 in the IPI, Electricity has a weight of 12.9.

Source: Quarterly Industrial Production Index (IPI).

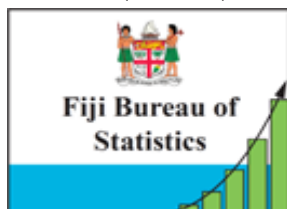
APPENDIX VII:

The table and the graph below provides data on VA from 1988 to 2016 in dollar terms and percentage change over the years.

YEAR	VA(000)	% Change
1988	45,681	14.4
1989	47,129	3.2
1990	42,625	-9.6
1991	67,986	59.5
1992	80,007	17.7
1993	75,813	-5.2
1994	73,819	-2.6
1995	70,013	-5.2
1996	67,296	-3.9
1997	69,257	2.9
1998	69,381	0.2
1999	80,034	15.4
2000	64,034	-20.0
2001	62,712	-2.1
2002	74,350	27.8
2003	64,419	-13.4
2004	52,561	-18.4
2005	53,983	2.7
2006	28,657	-47.0
2007	58,266	103.3
2008	33,365	-42.7
2009	57,671	72.9
2010	84,469	46.5
2011	113,732	34.6
2012	120,820	6.3
2013	122,409	1.3
2014	83,223	-47.1
2015	113,049	35.8
2016	155,634	37.6



APPENDIX VIII SAMPLE QUESTIONNAIRE



Ratu Sukuna House, Corner of MacArthur Street and Victoria Parade, Suva, Fiji

P O Box 2221
Government Buildings
Suva
FIJI

Telephone: [679] 331 5822
Fax No. [679] 330 3656
E-mail: info@statsfiji.gov.fj
Website: www.statsfiji.gov.fj

CONFIDENTIAL

DESPATCHED: 29/06/17

2016 CENSUS OF ELECTRICITY

Tax Identification Number

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Please correct any error appearing in this label

Dear Sir\Madam,

Enclosed is a copy of the 2016 Census of Electricity questionnaire.

COVERAGE AND SCOPE: It covers all establishments engaged in Electricity Activities Industry classified under the 2010 Fiji Standard Industrial Classification (refer note on page 2). If an establishment's electricity activities are combined with other types of business, please report only on the operations of the electricity activities.

PURPOSE: The census provides an important means of understanding the composition and structure of the industry and assessing the contribution of this sector to the economy. The results of the Census will be used by the Fiji Bureau of Statistics in the estimation of the National Income of Fiji and in the provision of other key indicators.

REFERENCE PERIOD: Reference period is the calendar year 2016. If your accounting year is different provide information approximating closest to the calendar year 2016. Limited liability companies are requested to submit a copy of their financial statements with the questionnaire.

COMPULSORY REQUIREMENT: The Census is conducted under the provisions of the Statistics Act (Cap 71). In accordance with Section 8 subsection 2 of this Act you are required to fill the questionnaire and return it to the undersigned on or before **28/07/17**. Failure to meet this deadline could result in legal action without further notice.

CONFIDENTIALITY OF INFORMATION: Information supplied will be used by the department for the preparation of statistics. Any release of information will be in accordance with the Statistics Act and only authorised persons will have access to individual information.

CONTACT PERSON FOR HELP AND ADVICE: Ms Sammi Prakash on email sprakash@statsfiji.gov.fj or telephone 331 5822 (ext: 386 245) or direct line 323 0845.

Epeli Waqavonovono [Mr]
Government Statistician

NOTE: Under the 2010 Fiji Standard Industrial Classification, Electricity includes the generation of bulk electric power, transmission from generating facilities to distribution centers and distribution to end users.

ORGANISATIONAL STRUCTURE

- 1 A business can have more than one establishment involved in similar or different activities at different locations. State the location, the type of activity engaged in and the Gross Turnover of each establishment during the year.

FORM OF OWNERSHIP

- 5 (1) Fiji owned:
This is an establishment operating in Fiji in which 51% or more equity is held locally.
- (2) Branch of an overseas company:
This is an establishment operating in Fiji which is controlled by or supervised by an overseas head office and which is an integral part of the foreign parent organisation. Branch has no equity share capital.
- (3) Subsidiary of an overseas company:
A company is a subsidiary of another if that other company owns this subsidiary wholly or holds more than half the nominal value of the equity share capital of this subsidiary company.

EQUITY PARTICIPATION

- 6 Give the proportion of the share capital held by residents of Fiji. Equity share capital held by companies or individuals on behalf of residents of Fiji should also be included.

NATURE OF WORK

- 7 In cases where establishments are involved in more than one activity at a single location, please state the major activity involved in.

OPERATING STATUS

- 8 If you are no longer in business, a **STATUTORY DECLARATION** must be attached the questionnaire with the words **“CLOSED BUSINESS”** written across the questionnaire and returned to the Fiji Bureau of Statistics. The Statutory Declaration must be signed by a Magistrate or a Barrister\Solicitor, Justice of Peace or a member of the Notary Public acting on your behalf. The Statutory Declaration must state the name of the business, nature of its activity and the date on which it ceased operation. If your business operated for part of the year 2016 please provide information for the duration your business operated.

QUESTIONNAIRE

Please answer all relevant questions with clear and correct figures. Estimates will be accepted where actual data are not available. Values, **excluding VAT**, are to be expressed in Fiji Dollars.

ORGANISATIONAL STRUCTURE

1	Does this business operate at more than one location?			
	Please tick the appropriate box: No Yes If yes, please give details below:			
	NAME OF ESTABLISHMENT\BRANCH (1)	PHYSICAL LOCATION OF BUSINESS (2)	MAIN TYPE OF BUSINESS OR ACTIVITY (3)	GROSS TURNOVER (4)
	Note: This return is required for the addressed establishment only. In case this is not possible, a combined return with similar main activities may be submitted. If the information can not be provided on this basis, please state the reasons:			
	Remark: Please comment here to assist in the interpretation of data supplied:			

ACCOUNTING PERIOD

2	Please state the accounting period: From \ 2016 To \ 2016			
---	---	--	--	--

LEGAL STATUS OF ORGANISATION

	Please tick appropriate box			
3	Sole Trader	1	Partnership	2
	[001] Private Limited Company	3	Public Limited Company	4
	Co-operative	5	Government Owned Trading Entity	6
	Statutory Board	7	Central Government	8
	Local Authority	9	Local Government	10
	Joint Venture and Consortia	11	Non-profit organization	12
	Trusts and Estates	13	Consulates and Foreign	14
	Branch of a Company	15	Societies and Associations	16
	Other Business Type (specify)			17

INTERNATIONAL TRADE

4	Please tick appropriate box	Yes	No
	Does the establishment import or export any type of goods or services		

FORM OF OWNERSHIP

	Please tick appropriate box			
5	[002] Fiji owned	1	Branch of an overseas company	2
	Subsidiary of an overseas company	3	Others (specify)	4

EQUITY PARTICIPATION

6	Please indicate in the appropriate box the equity capital held by Fiji Citizens.			
	(a) As at end of 2015 %	(b) As at end of 2016 %		

NATURE OF WORK

7	Please give a brief description of the main activity of the establishment\ s covered by this return:			
	003 FOR OFFICIAL USE ONLY			

OPERATING STATUS

8	Please state whether the establishment in question (tick appropriate box)			
	Operated during the whole of the accounting period specified	1		
	Operated during part of the accounting period specified (specify mths)	2		
	Had not commenced business during the accounting period specified	3		

ELECTRICITY SALES AND OTHER INCOME DERIVED DURING THE ACCOUNTING YEAR

9 This refers to the sale of electricity generated by the establishment. The value should be the actual selling value, net of any discount or rebate allowed to the buyer.

Include: (i) Sales of waste products, residues etc.
(ii) Excise dues should be included as part of the value of sales in the local market.

Exclude VAT charged on goods and services provided.

Do not include: Goods bought for resale in the same condition as purchased.

Local market sales: Exclude sales to local exporters for exports which should be shown as exports.

Please supply both the quantity and value of the goods produced by the establishment.

OTHER INCOME

13 a] Include all claims arising from business insurance. Examples of business insurance are insurance against the risk of buildings, properties and stocks. Exclude life, education or any other personal insurance.

b] Include all claims received arising from casualty insurance. Examples of casualty insurance are insurance against the risk of accidents and illness etc to employees. Claims for life, education or any other form of personal insurance are to be excluded.

15 Include rent received for building, plant and machinery, furniture and fixtures, transport vehicles and related equipment. Exclude rent received for land which should be included in question 16 a].

20 This is the resale value of goods bought, the goods being in the same condition as received and having undergone no intervening manufacturing process by your establishment.

21 State the total sales, if any, of electricity produced by your establishment.

ELECTRICITY SALES AND OTHER INCOME DERIVED DURING THE ACCOUNTING YEAR

9	DESCRIPTION OF PRODUCT		LOCAL MARKET SALES		TOTAL SALES
			QUANTITY AND UNITS (1)	VALUE (\$) (2)	VALUE (\$) (3)
a]	Commercial	004			
b]	Industrial	007			
c]	Domestic	010			
d]	Others	013			
	Total sales	016			

OTHER INCOME			VALUE (\$)
10	Surcharge	018	
11	Discount	019	
12	Subsidies and grants received	020	
13	Insurance claims received: a] Business insurance claims received	021	
	b] Casualty insurance claims received	022	
14	Profit or loss received from any other business in which you have an interest	023	
15	Rent received from : a] Building	024	
	b] Plant and machinery	025	
	c] Transport and related equipment	026	
16	Income from: a] Rent received from land	027	
	b] Interest received	028	
	c] Dividends received	029	
	d] Royalty received	030	
17	Bad and doubtful debts recovered	031	
18	Exchange gain	032	
19	Gain on sale of fixed assets	033	
20	Sales of goods not manufactured by your own establishment (see question 58)		
21	Commissions received	034	
22	Receipts from industrial services rendered to others:		
	a] Plant and equipment hire	035	
	b] Repairs and maintenance to: i] Plant, machinery and equipment	036	
	ii] Others – Street Lights	037	
	c] Transport and related services	038	
23	Service and licence fees	039	
24	Power pole rentals	040	
25	Training rebates	041	
26	Others (specify). Miscellaneous income	042	

	Total other income (Codes 018 - 042)	043	
27	VAT charged on goods and services provided	044	
28	GRAND TOTAL OF ALL INCOME RECEIVED (Codes 017 + 043 + 044)	045	

PURCHASES OF MATERIALS AND OPERATING EXPENDITURE

29 State in detail the total value and quantity of all purchases of material and supplies during the year for use in the generation process. In arriving at the value, deduct trade discounts received. The cost of transport should also be excluded unless it is accounted as part of the purchase price. Direct import by establishments should be reported at cost. Exclude any transport cost paid to outside firms which should be included in question 39.

Include all purchases of:

- a). Basic materials, components, semi-manufactured goods and so on that are physically incorporated in the establishment
- b). Auxiliary materials such as lubricants, packaging materials, small tools, par materials for repair and maintenance.
- c). Materials for producing machinery or other capital items for own use.
- d). Materials bought for carrying 'own construction' work reported in question 72.

Exclude all purchases of: Machinery and plant and other capital equipment purchased by you which should be included in question 72

Exclude VAT paid on supplies of goods and services.

FUEL, ELECTRICITY AND WATER

31-34 Expenditure on fuel represents the total value of fuel purchased by your establishment for use in the production of heat, power or electricity including gasoline and other fuels for vehicles. Exclude those that enter directly into the production process as they should be reported as raw materials.

35-36 State the total value of electricity and water purchased by your establishment for the production process.

OTHER EXPENDITURE

38 Repairs and maintenance costs paid to other firms covers the total costs of current repair and maintenance service provided by such firms on repairs done on vehicles, building, machinery and equipment of the establishment. Current repair and maintenance carried out by other establishments or by ancillary repair and maintenance unit which has been treated as an independent establishment should be included.

39 Cartage and haulage expense includes payment for the transportation of goods and materials within the country. It excludes cost of transport carried out by your own equipment and employees.

41 Contract and commission work done by other establishments on your materials covers payments made by the establishment for contract and commission work done on materials controlled by your establishment.

50 a) Include payment in respect of leased\rented land. If it is not possible to separate payments made for land building, please include expenditure in question 49.

b) Include interest on long-term debts and interest on all borrowing.

PURCHASES OF MATERIALS AND OPERATING EXPENDITURE									
Please state the value of all materials and supplies purchased during the year for use in the production process									
					VALUE (\$)				TOTAL
					IMPORTED		LOCALLY PRODUCED		
					PURCHASED		PURCHASED		
	DESCRIPTION OF MATERIALS AND SUPPLIES		UNIT of Qty (1)	QTY (2)	FROM ABROAD (3)	LOCALLY (4)	FROM MANFT (5)	FROM OTHERS (6)	(7)
29	Electricity	045							
30	Others (specify).	052							
	Spare parts	059							
		066							
		073							
	Total	080							

FUEL, ELECTRICITY AND WATER			VALUE (\$)
31	Petrol/Automotive diesel fuel		085
32	Industrial diesel fuel/Heavy fuel oil		086
33	Kerosene		087
34	Liquid petroleum gas		088
35	Electricity		089
36	Water		090
	Total (Codes 085 to 090)		091

OTHER EXPENDITURE			VALUE (\$)
37	Donations made		092
38	Repairs and maintenance costs on:		
	a) Motor vehicles		093
	b) Building		094
	c) Machinery and equipment		095
39	Cartage and haulage expenses paid to other firms		096
40	Travel expenses (e.g management, personal etc.) :		
	a) Air		097
	b) Water		098
	c) Land		099
41	Value of contract and commission work done		100
42	Audit and accounting		101
43	Legal fee		102
44	Advertising and promotion etc		103
45	Bank charges		104
46	Postage		105
47	Telephone and telecommunication		106
48	Office stationery and supplies		107
49	Rent paid for:		
	a) Building		108
	b) Plant and Machinery		109
50	Expenditure on:		
	a) Rent paid for land		110
	b) Interest paid		111
	c) Dividends paid		112
	d) Royalty paid		113
51	Management and consultation fee		114
52	Bad and doubtful debts written off		115
53	Business licenses, rates on property paid to central or local government etc		116
54	Insurance paid:		
	a) Business insurance		117
	b) Casualty insurance		118
55	Fiji National University [FNU] Levy		119
56	Exchange losses		120
57	Loss on sale of fixed assets		121
58	Depreciation claimed (to agree with question 73(7))		122
59	Cost of goods purchased for resale (see question 20)		123
60	All other costs and expenses		124
	Total other expenditure (Codes 092 to 124 excluding 112)		125

EMPLOYMENT AND COMPENSATION OF EMPLOYEES

- 61 Please note that the information in respect of employment is for the last payweek in June 2016 but the rest of the question requires data for the appropriate accounting year.

Gross wages and salaries includes overtime, sick and holiday pay, bonuses, payments under piece rate schemes, all allowances, severance and redundancy pay, sales commissions paid to own employees and directors fee etc.

Payment in kind is the cost to the employer for providing employees with housing, transport, clothing, food, drinks, fuels, etc free of charge or at a reduced rate.

Operatives includes all employees directly engaged in the activity of the establishment, eg those in fabrication, processing, assembling, shop messengers, warehouse men, packers and repair men etc. Casual workers should also be included here.

Others includes administrators, technical\clerical personnel, eg managers, clerks etc.

Expatriates are non-Fiji citizens who stayed in Fiji.

Working proprietors include all individual proprietors and partners who are actively engaged in the work of the establishment. Silent or inactive partners should be excluded unless they participate actively in the work of the establishment.

Unpaid family workers include persons living in the household of any of the proprietors of the owning establishment and working in the establishment without regular pay for at least a third of the normal working hours of the establishment.

STOCKS

- 64 Work-in-progress consists of unfinished output at the end of the reference year.
- 65 Finished goods bought for resale are stocks of goods bought for resale in the same condition as purchased.
- 66 The value of materials, fuel supplies and components are stocks of raw materials not used up in the production process.

LOANS AND ADVANCES

- 67 Please provide information relating to any loan or advances taken during the period.

NET EARNINGS AND TAXES PAID

- 68 This is the net profit of your establishment\enterprise from the profit and loss account. The following method would enable you to check if all the information from the trading, profit and loss account has been entered onto the questionnaire:

Income [Code 044 + 159]	\$
less Expenditure [Code 144]	\$
equals Profit (+)\Loss (-) [Code 178]	\$

EMPLOYMENT AND COMPENSATION OF EMPLOYEES						
61			NUMBER EMPLOYED (1)	GROSS WAGES AND SALARIES PAID (2)	EMPLOYER'S CONTRIBUTION TO FPNF ETC (3)	PAYMENT IN KIND (4)
a]	Fiji citizens		126			
b]	Expatriates		130			
	Total		134			
c]	Working without pay					
	i] Working proprietors		138			
	ii] Unpaid family workers		149			
	Total (Codes 135(1) + 139 + 140)		140			
d]	From the total number in employment given in code 141, please state:					
	Total Males	141		Total Females	142	

62	VAT paid on supplies of goods and services		143	
----	--	--	-----	--

63	GRAND TOTAL OF ALL EXPENDITURE INCURRED [Codes 084+091+125+135+136+137 + 143]		144	
----	---	--	------------	--

STOCKS					
Please give the value of stocks held by your establishment			VALUE OF STOCKS (\$)		
			OPENING (1)	CLOSING (2)	CHANGE (2)-(1)=(3)
64	Finished goods produced by the establishment and intended for sale	145			
65	Work-in-progress	148			
66	Finished goods bought for resale	151			
67	Materials, fuels, supplies and components	154			
	Total	157			

LOANS AND ADVANCES						
68	Opening Balance 01/01/16	Additions during the year	Principle Repayment during the year	Other Changes	Closing Balance 31/12/16	Total Interest Payable for the Year
	\$ [1]	\$ [2]	\$ [3]	\$ [4]	\$ [5=1+2-3+4]	\$ [6]
Locally	160					
Abroad	166					
Total	172					

NET EARNINGS AND TAXES PAID			Amount (\$)
69	Net profit/loss of your establishment/enterprise. If this does not agree with question 70, please give reasons – <i>The profit is at VEP (does not include VAT receivable)</i>		178
70	Taxable income of your establishment/enterprise		179
71	Amount, if any, of previous year losses that was deducted before arriving at the taxable income		180
72	Amount of Fiji Income Tax paid/payable by your establishment/enterprise.		181

FIXED CAPITAL ASSETS

73 (7) Please ensure that: The value given for depreciation should agree with the value given in question 58.

73 (5) Own Account Construction:

This is the cost of new fixed assets and additions to the existing fixed assets made by establishments own labour for its own use Cost should be equivalent to labour costs plus value of materials at cost.

73 (G) Valuables include:

- Precious stones and metals (e.g. diamonds, non-monetary gold, Platinum and silver);
- a. Antiques and other art objects (e.g. painting and sculptures); and
 - b. Other valuables (e.g. jewellery and collector items)

FIXED CAPITAL ASSETS			VALUE (\$)							
73			Opening book value	Purchase of new and second hand assets at cost		Land Development & Improvement	Category Transfer In/(out) of Assets	Sales of Capital Assets	Depreciation	Closing Book value
				Locally	from abroad					
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A]	Land	182								
B]	Non- residential Buildings	190								
	Residential Buildings	198								
C]	Other structures: Dams, tunnels Wind Mill	206								
D]	Plant & machinery	214								
E]	Furniture, fixtures and office equipment	222								
	ICT equipments	230								
	Other office equipment	238								
F]	Transport vehicles and related equipment	246								
G]	Research & Development	254								
H]	Valuables (Antiques, Artistic Originals Precious Metal, etc)	262								
I]	Others (specify)	270								
	Total	278								

ENVIRONMENT RELATED QUESTIONS

74	Please tick the appropriate source of water for the establishments			
	286	Metered Water	1	
		Rain Water	2	
		River / Creek	3	
		Bore Hole	4	
		Others (Please specify)	5	

75	Please tick the appropriate source of energy for the establishments If tick 2, please tick appropriate source below.			
	287	Electricity [FEA]	1	
		Electricity [Own Generation]	2	
		Solar		a
		Hydro		b
		Diesel / Thermal		c
		Windmill		d

76		Please indicate the method of solid waste disposal of the establishments		
	288	Collection by City / Town Council	1	
		Collection by Private Companies	2	
		Private Incineration	3	
		Private Dumpsite	4	
		Recycled	5	
		Others (Please specify)	6	

77		Please indicate the method of liquid waste disposal of the establishments		
	289	Connected to Sewerage Line	1	
		Septic Tank	2	
		Disposal in the sea / river	3	
		Others (Please specify)	4	

Person we should contact if any queries arise regarding this form:

Name: _____

Telephone: _____

Facsimile: _____

Email: _____

Signature: _____

Date: _____

Please indicate (√) or (x) in the boxes below:

- 1) The company hires a Chartered Accountant
- 2) The form has been filled by a Chartered Accountant

THANK YOU FOR COMPLETING THE QUESTIONNAIRE