

**Designing a Research & Practice Network for Natural Capital and
Environment Accounting in the Pacific**

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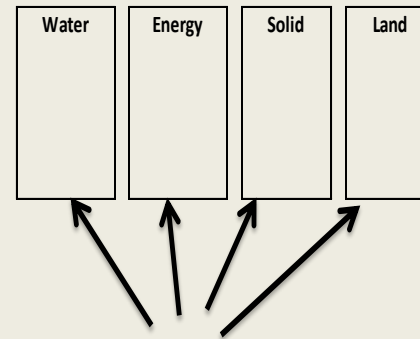
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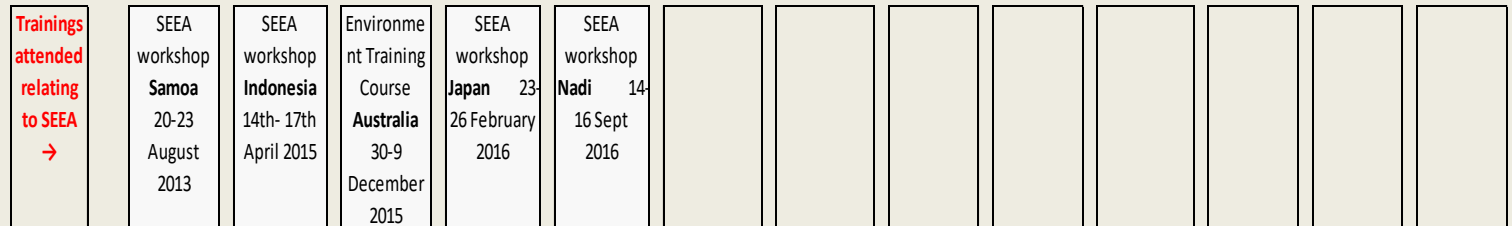
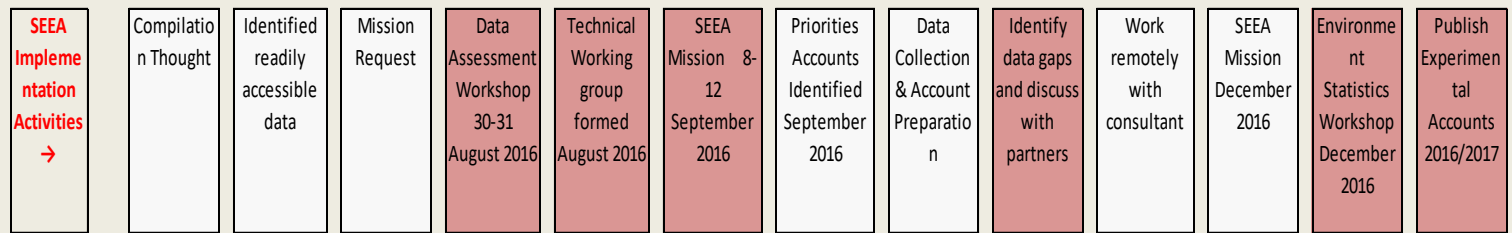
Presentation Outline

- 1. Fiji's Waste Account**
- 2. Fiji's Water Account**
- 3. Fiji's Energy Account**
- 4. Measuring Sustainable Tourism in Fiji**
- 5. Questions & Answers**

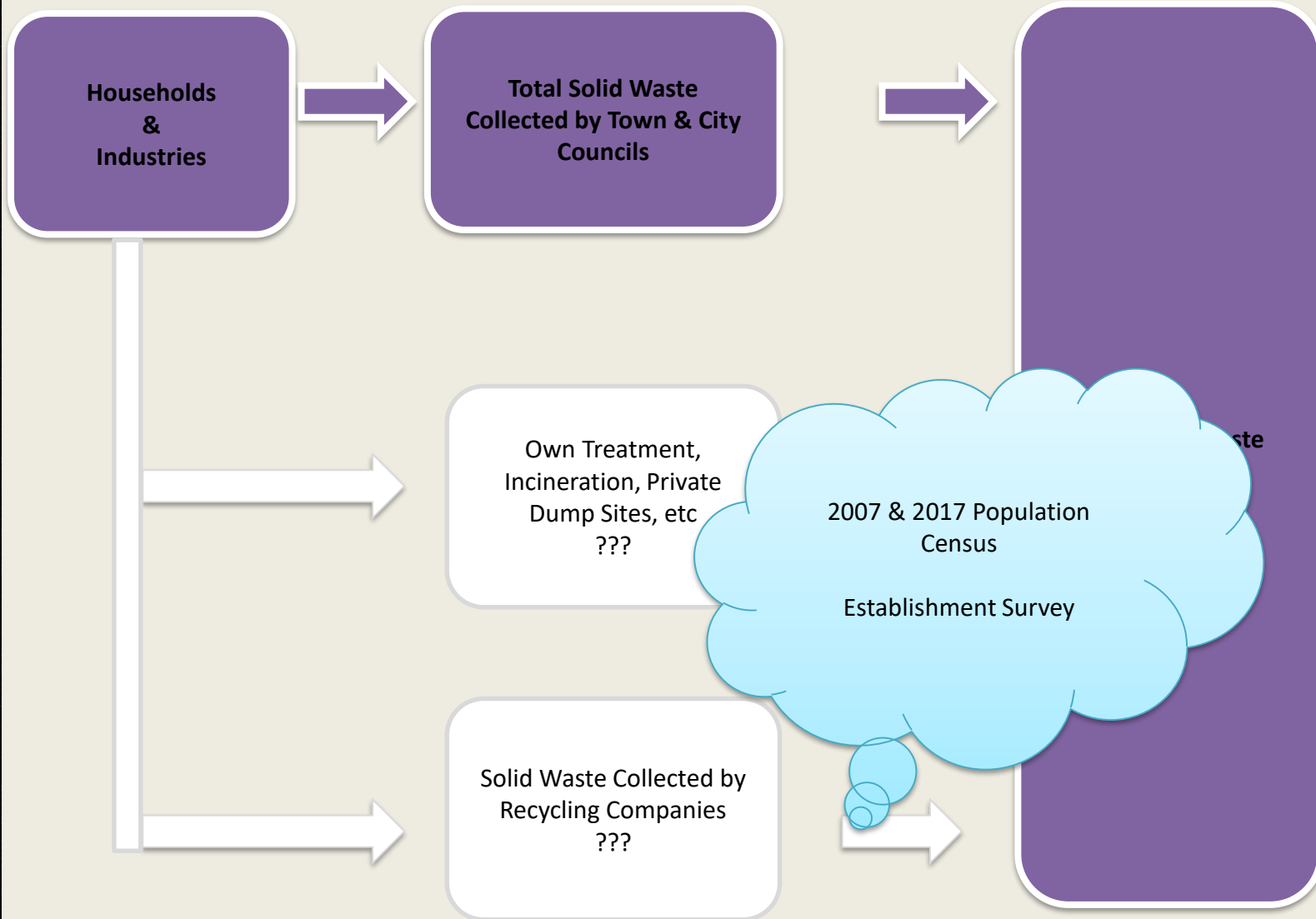
SEEA Journey



Create Awareness

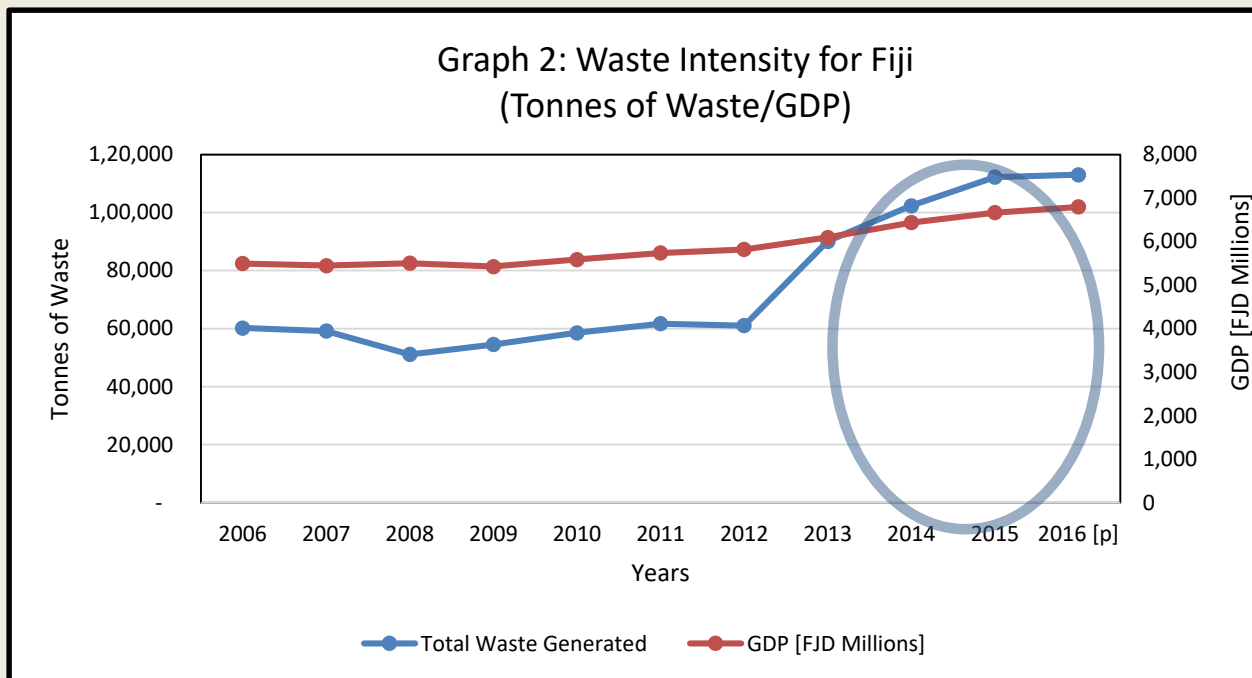


Fiji's Experimental Waste Account



Fiji's Experimental Waste Account

Total waste generated is increasing faster than GDP



80% General waste; 10% Green waste; 10% Special Waste

On average 54.4% and 45.6% of waste generated is collected by the town/city councils and private companies respectively. Of the total waste generated in this account 99.7% of the waste ends up in the landfill while 0.3% is recycled.

Fiji's Experimental Waste Account

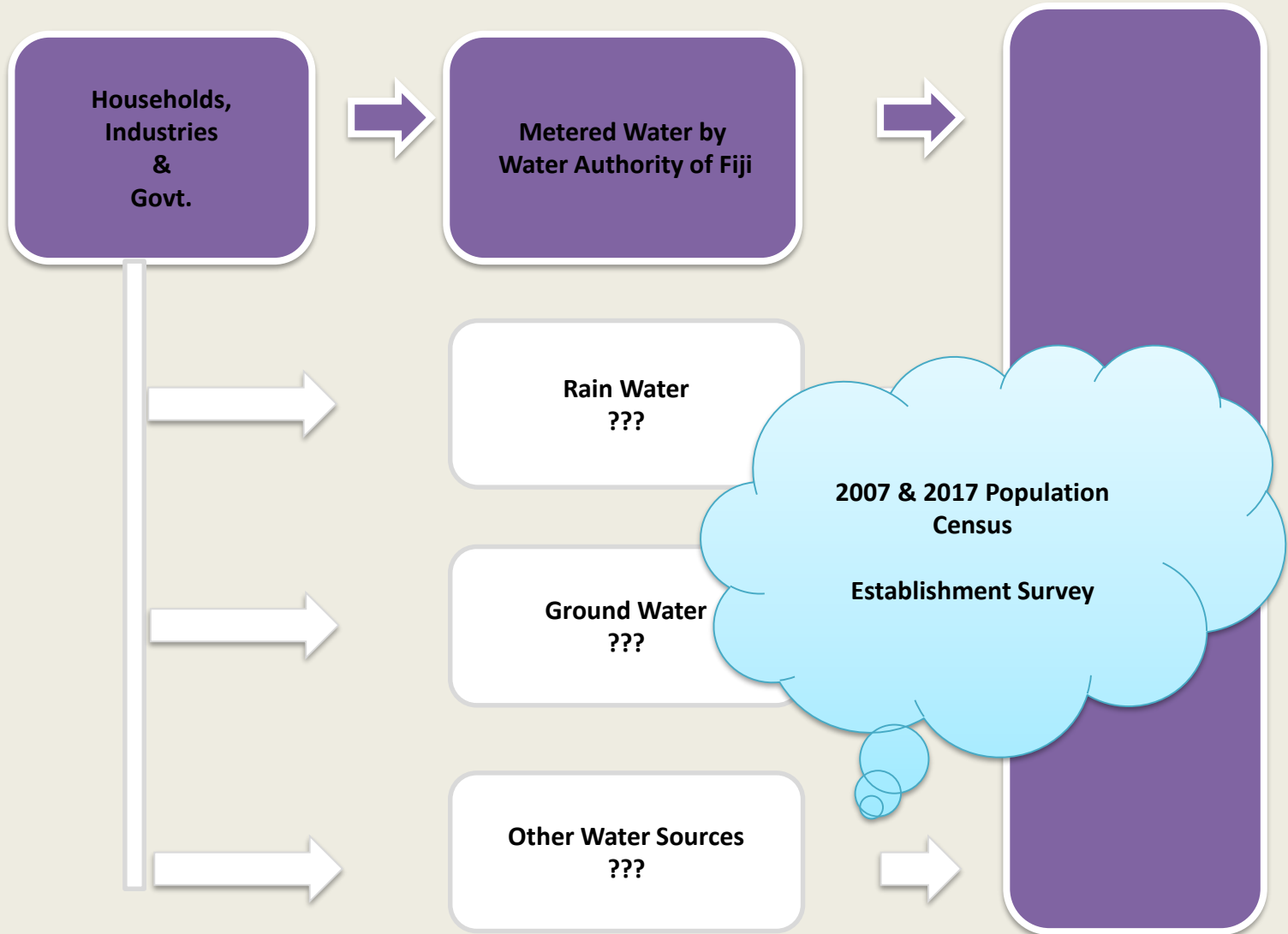
Quarter 2 2016

SUPPLY OF WASTE (Who Generates the Waste)					Who Collects the Waste				USE OF WASTE (What happens to the waste)						
	Industries	Household s	Imports	Environment	Total waste generated	Town/City Councils	Recycling Companies	Other Industries	Total Collection	Land Fill	Incineration	Recycling/ Reuse	Other Treatment	Export	TOTAL DISPOSAL
Waste Residuals															0
General Waste	16,846		0	0	16,846	9,434		7,412	16,846	16,846					16,846
Green waste	1,833		0	0	1,833	1,816		17	1,833		1,833				1,833
Special waste	3,292		0	0	3,292	63		3,229	3,292	3,292					3,292
TOTALS	21,970		0	0	21,970	11,313		10,658	21,970	21,970			0		21,970

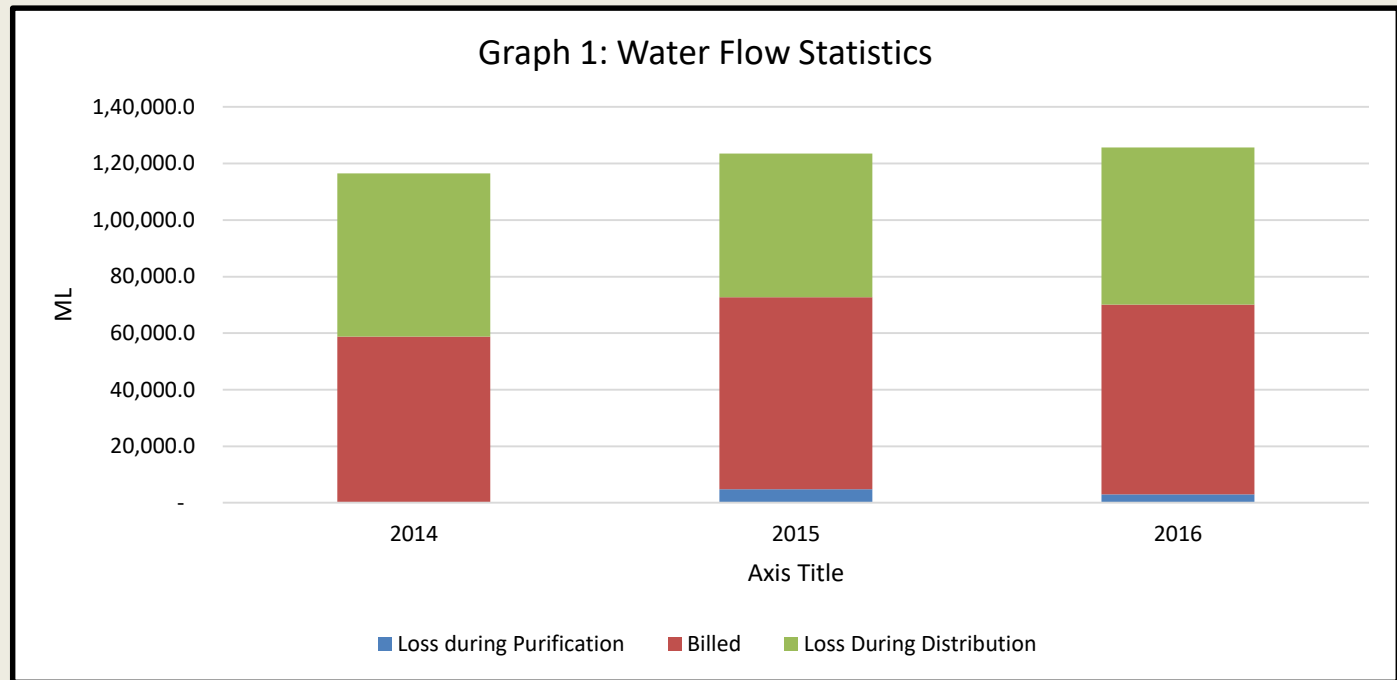


Year	Town/City Councils				Other Industries				Total Collection				Landfill				Recycle
	General Waste	Green waste	Special waste	Total	General Waste	Green waste	Special waste	Total	General Waste	Green waste	Special waste	Total	General Waste	Green waste	Special waste	Total	
2006	27,127	7,758	75	34,960	21,313	72	3,854	25,238	48,440	7,829	3,928	60,198	48,440	7,829	3,928	60,198	0
2007	27,293	7,431	56	34,780	21,443	69	2,901	24,412	48,735	7,500	2,957	59,192	48,735	7,500	2,957	59,192	0
2008	24,716	3,659	63	28,438	19,418	34	3,247	22,699	44,134	3,693	3,310	51,137	44,134	3,693	3,310	51,137	0
2009	25,377	5,493	70	30,940	19,937	51	3,612	23,600	45,314	5,544	3,682	54,540	45,314	5,544	3,682	54,540	0
2010	26,972	6,830	67	33,868	21,191	63	3,443	24,697	48,163	6,893	3,510	58,566	48,163	6,893	3,510	58,566	0
2011	28,319	7,100	75	35,494	22,249	66	3,872	26,186	50,568	7,165	3,947	61,680	50,568	7,165	3,947	61,680	0
2012	29,013	6,298	55	35,366	22,794	58	2,829	25,681	51,807	6,357	2,883	61,047	51,807	6,357	2,883	61,047	0
2013	41,695	8,948	126	50,769	32,758	83	6,500	39,340	74,453	9,030	6,626	90,109	74,202	9,030	6,626	89,858	251
2014	45,590	10,094	205	55,889	35,818	93	10,557	46,468	81,408	10,188	10,761	102,357	81,087	10,188	10,761	102,036	321
2015	50,129	10,755	225	61,109	39,384	99	11,617	51,101	89,513	10,854	11,843	112,210	89,117	10,854	11,843	111,814	396
2016 [p]	50,532	11,029	222	61,783	39,701	102	11,445	51,247	90,233	11,131	11,666	113,030	89,850	11,131	11,666	112,647	383

Fiji's Experimental Water Account



Fiji's Experimental Water Account

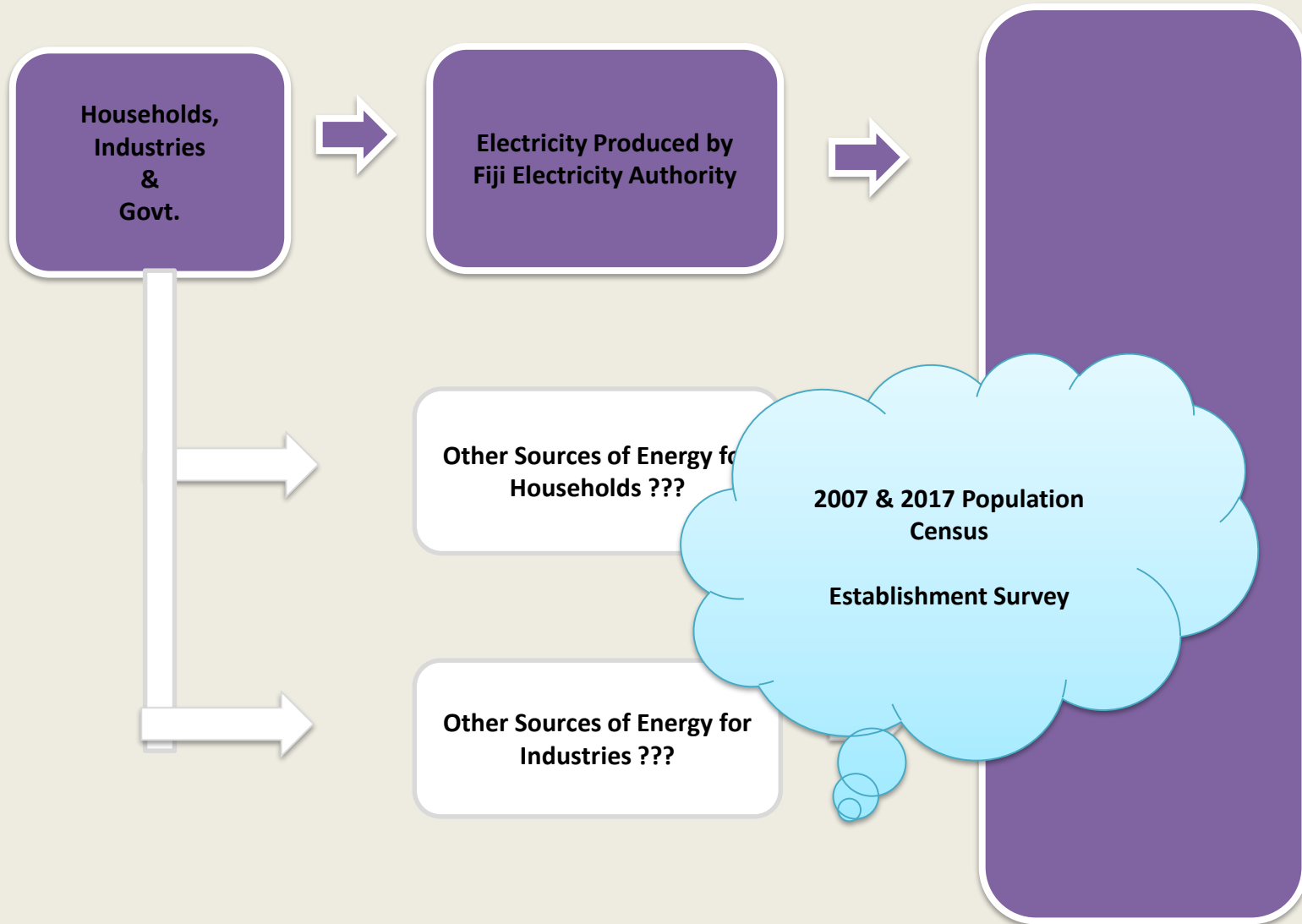


Not all water abstracted for tap water production was used by users. 44% was lost during distribution and almost 3% was lost in the purification process, leaving only 53% available to users.

Fiji's Experimental Water Account

2016	Commercial	Water supply	Sewerage	Households	Govt	Imports	Environment al Flows	Total Supply
<u>1. Source of Water</u>								
Inland Water Resources								
Surface water							125,726	125,726
Ground water							0	0
Soil water							0	0
Total							125,726	125,726
Other water sources								
Precipitation							0	0
Sea water							0	0
Total							0	0
Total abstracted water								
							125,726	125,726
<u>2. Abstracted Water</u>								
For distribution/distributed water		67,091						67,091
For own use								0
<u>3. Wastewater and reuse water</u>								
Wastewater								
Wastewater to treatment	17,960			46,152	2,980			67,091
Own treatment								0
Reused water produced								
For distribution								0
For own use								0
Total	17,960	0	0	46,152	2,980			67,091
<u>4. Return flows of water</u>								
To inland water resources								
Surface water								0
Ground water		55,599						55,599
Soil water								0
Total	0	55,599	0	0	0			55,599
To other sources								
Total return flows	0	55,599	67,091	0	0			122,690
of which: Losses in distribution		55,599						55,599
<u>5. Evaporation, transpiration, water incorporated into products</u>								
Evaporation		3,036						3,036
Transpiration								0
Water Incorporated into products								0
TOTAL	17,960	125,726	67,091	46,152	2,980	0	125,726	385,634

Fiji's Experimental Energy Account



Fiji's Experimental Energy Account

2014								
UNIT: PETAJOULES		Commerci al	Industrial	Domestic	Inventori es	Imports	Envrmnt	Total Supply
Natural inputs	Extraction of coal	-	-	-	-	-	-	-
	Electricity from renewal sources	-	-	-	-	-	-	-
	<i>Hydro</i>	-	-	-	-	-	1.4	1.4
	<i>Solar & Wind</i>	-	-	-	-	-	0.02	0.02
	Wood	-	-	-	-	-	-	-
Products	Fuel oil	-	-	-	-	4.1	-	4.1
	Gasoline	-	-	-	-	-	-	-
	Electricity	-	2.9	-	-	-	-	2.9
	Fuel wood	-	-	-	-	-	-	-
Residuals	Losses during extraction (coal)	-	-	-	-	-	-	-
	Losses during distribution (electr	-	0.2	-	-	-	-	0.2
	Losses during transformation	-	2.5	-	-	-	-	2.5
	Other losses (due to end use)	-	-	-	-	-	-	-
	gasoline	-	-	-	-	-	-	-
	electricity	1.3	0.8	0.8	-	-	-	2.9
	fuel wood	-	-	-	-	-	-	-
Total		1.3	6.4	0.8	-	4.1	1.5	14.1

Fiji's Sustainable Tourism

Key characteristics for tourism businesses

- Output by tourism characteristics and related industries
- Value Addition of the units
- Tourism Industry ratios
- Employment by Gender & type of employment
- Size of Businesses
- Ownership
- Environmental Flows used



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<http://www.statsfiji.gov.fj/statistics/economic-statistics/national-accounts-gdp-2>