

## 16. UTILITIES



## Utilities

### Electricity

The Cayman Islands remains heavily reliant on imported oil for its energy demands, getting approximately 99 percent of its energy from this source.

Private companies own and operate the two electricity plants. Both Caribbean Utilities Co. Ltd (CUC) in Grand Cayman and Cayman Brac Power & Light Co. Ltd use primarily diesel generating units.

Approximately 99 percent of the households in the Cayman Islands used electricity as the main type of lighting (please see Table 16.02.a). A significant proportion (94%) of the households use electricity from public service providers and about 5 percent use electricity from private generators. Electricity from renewable energy sources seemed almost non-existent according to the Survey of Living Conditions (SLC).

Home Gas Ltd is the sole LPG<sup>1</sup> or propane provider. Propane is mainly used for cooking (please see Table 16.02.b).

### Water

For water the traditional sources of supply have been private wells and/or catchment in cisterns, but these have been supplanted by piped water supply for most households.

As shown in Table 16.04, approximately 84 percent of the households had mains (city water or desalinated) as their main source of water supply. Cisterns, rain or water trucks was the main water source for 7.2 percent of the households, while 7.6 percent of households used "wells" as their main source of water.

According to the National Assessment of Living Conditions (NALC) the frequency of water supply does not appear to be a problem in the Cayman Islands except for Cayman Brac/Little Cayman.<sup>2</sup>

### Sewerage

As of 2007, the disposal of sewerage appears not to be a problem in the Cayman Islands as 72 percent of the households had a septic tank or cesspool, while 13.1 percent of the households had mains as their type of sewerage system (please see Table 16.08).

---

<sup>1</sup> LPG - Liquefied Petroleum Gas

<sup>2</sup> Source: Cayman Islands National Assessment of Living Conditions 2006/2007. Volume 1, Main Report, page 134.

**16.01a Electricity Production in Grand Cayman<sup>1</sup>, 1996 - 2008**

Year	Capacity (Mws)	Production (Mwhrs)	Consumption (Mwhrs)			Total	Percent Change
			Domestic	Industrial Commercial	Public Lighting		
1996	71.8	309,717	124,580	153,756	3,113	281,449	4.7
1997	88.4	347,766	140,344	168,662	3,286	312,292	11.0
1998	97.2	381,121	158,877	181,293	3,293	343,463	10.0
1999	94.8	390,370	168,153	191,527	3,322	363,002	5.7
2000	115.1	426,465	179,451	203,122	3,409	385,982	6.3
2001	115.1	449,300	189,667	213,880	3,502	407,049	5.5
2002	115.1	466,136	200,389	221,005	4,238	425,632	4.6
2003	123.1	489,693	211,237	228,498	4,533	444,268	4.4
2004*	95.4	433,379	183,142	191,521	4,069	378,732	-14.8
2005	106.8	463,158	200,330	222,434	5,020	427,784	13.0
2006	120.6	535,692	228,160	258,034	5,287	491,481	14.9
2007	136.6	584,370	249,426	279,424	5,391	534,241	8.7
2008	136.6	596,782	251,698	290,288	5,702	547,688	2.5

**Note:**

\*Decline in capacity in 2004 was due to Hurricane Ivan.

Source: Caribbean Utilities Co. Ltd (CUC), Grand Cayman

**16.01b Electricity Production in the Sister Islands<sup>1</sup>, 1996 - 2008**

Year	<i>Thousands kwhrs</i>		
	Cayman Brac	Little Cayman	Total
1996	8,427	1,848	10,275
1997	9,942	2,196	12,138
1998	10,980	2,510	13,490
1999	11,366	2,780	14,147
2000	11,573	2,842	14,414
2001	12,638	2,914	15,552
2002	12,896	3,090	15,986
2003	13,681	2,950	16,631
2004	14,097	3,054	17,151
2005	15,244	3,238	18,482
2006*	15,815	3,485	19,300
2007*	15,707	3,617	19,324
2008*	14,536	3,319	17,855

**Notes:**

\* Relates to electricity sales and not production.

<sup>1</sup> Tables 16.01.a and 16.01.b exclude electricity from private generators.

Source: Cayman Brac Light & Power, Cayman Brac and Energy Regulatory Authority

**16.02a Type of Lighting Most Used , 2007**

<b>Type of Lighting</b>	<b>Households %</b>
Electricity (CUC, Brac Power)	93.7
Electricity-Private Generators	4.9
Other	0.8
Not Stated	0.6
<b>Total</b>	<b>100</b>

**Note:**

No households reported "solar" as the type of lighting most used in spring 2007.

Source: Survey of Living Conditions (SLC), 2007

**16.02b Type of Cooking Fuel Most Used, 2007**

<b>Type of Cooking Fuel</b>	<b>Households %</b>
Gas/LPG/Cooking Gas	41.8
Electricity	56.7
Other	0.5
Not Stated	0.9
<b>Total</b>	<b>100</b>

Source: Survey of Living Conditions (SLC), 2007

**16.03a Water Supply in Grand Cayman, 1999 - 2008**

	<i>Million US Gallons</i>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Desalinated Water</b>										
Cayman Water Company	361.9	402.2	496.5	537.1	562.0	612.6	628.6	821.4	860.7	821.9
Water Authority	507.6	578.3	593.9	601.8	630.4	668.6	737.0	811.5	855.1	874.4
<b>Ground Water</b>										
East End	5.0	7.1	5.7	5.4	5.4	7.9	7.0	6.7	5.0	6.9
<b>All Potable Water</b>	<b>874.5</b>	<b>987.6</b>	<b>1,096.1</b>	<b>1,144.3</b>	<b>1,197.8</b>	<b>1,289.1</b>	<b>1,372.6</b>	<b>1,639.6</b>	<b>1,720.8</b>	<b>1,703.2</b>
<b>Distributed by</b>										
Pipeline	863	965.8	1,073.7	1,120.3	1,178.4	1,259.6	1349.5	1619.6	1,701.7	1,680.2
Truck	11.5	21.8	22.4	24.0	19.4	29.5	23.1	20.0	17.2	17.4
<b>Non-Potable Water</b>										
Cayman Water Company	39.5	48.7	52.2	-	35.7	31.7	28.6	51.9	37.8	38.6

Source: Water Authority and Cayman Water Company

**16.03b Water Supply in Cayman Brac, 1999 - 2008**

	<i>Million US Gallons</i>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Distributed by</b>										
Pipeline	11.6	10.6	11.3	9.6	11.1	12.5	14.3	15.9	13.6	13.2
Truck	5.3	6.5	6.6	7.1	6.9	11.1	9.6	9.8	11.8	13.9
<b>Total</b>	<b>16.9</b>	<b>17.1</b>	<b>17.9</b>	<b>16.7</b>	<b>18.0</b>	<b>23.6</b>	<b>23.9</b>	<b>25.7</b>	<b>25.4</b>	<b>27.1</b>

Source: Water Authority and Cayman Water Company

**16.04 Main Source of Water Supply, 2007**

<b>Main Source of Water Supply</b>	<b>Households %</b>
Mains (city water or desalinated)	84.2
Cistern, Rain or Truck	7.2
Well	7.6
Other	0.2
Not Stated	0.9
<b>Total</b>	<b>100</b>

Source: Survey of Living Conditions (SLC), 2007

**16.05 Desalinated Water Consumption by Consumer Group, 1999 - 2008**

	<i>Million US Gallons</i>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b><u>Water Authority Users</u></b>										
Single Residential	329.7	373.7	392.8	409.4	427.8	455.9	533.7	589.2	623.3	650.2
Multi-Residential	25.8	24.0	24.5	23.2	23.9	20.7	14.5	15.7	18.6	18.3
Commercial & Industrial	113.1	126.5	128.4	122.7	125.5	132.1	136.3	149.2	149.0	142.2
Public Authority	33.0	38.8	34.5	33.4	40.0	38.8	36.4	44.0	52.0	53.2
Truckers	5.8	15.2	13.7	13.2	13.2	21.1	16.1	13.3	12.2	10.5
<b>Total</b>	<b>507.4</b>	<b>578.2</b>	<b>593.9</b>	<b>601.9</b>	<b>630.4</b>	<b>668.6</b>	<b>737.0</b>	<b>811.4</b>	<b>855.1</b>	<b>874.4</b>

Source: Water Authority and Cayman Water Company

**Cayman Water Co. Users**

Residential	86.7	97.8	104.0	103.7	107.5	122.7	157.9	173.7	202.9	211.1
Commercial/industrial	268.8	296.8	305.9	295.7	393.1	419.9	370.3	510.8	516.2	534.6
Irrigation	39.5	48.5	52.2	39.0	35.7	31.7	28.6	51.9	37.8	38.6
Public Authority	5.7	7.6	11.4	11.0	6.2	7.6	8.9	12.8	45.7	26.0
Truckers	0.7	0.6	0.5	1.3	0.7	0.0	0.0	0.0	-	-
<b>Total</b>	<b>401.4</b>	<b>451.3</b>	<b>474.0</b>	<b>450.7</b>	<b>543.2</b>	<b>581.9</b>	<b>565.7</b>	<b>749.2</b>	<b>802.6</b>	<b>810.3</b>

Source: Water Authority and Cayman Water Company

**16.06 Trucked Water By Source, 1999 - 2008**

	<i>Million US Gallons</i>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b><u>Reservoirs</u></b>										
Cayman Water Company	0.6	0.6	0.5	1.3	0.7	-	-	-	-	-
East End	5.1	7.1	5.7	5.4	5.4	7.9	7.0	6.7	5.0	6.9
Red Gate Water Works	5.8	14.1	16.2	17.3	13.3	21.6	16.1	13.3	12.2	10.5
<b>Total</b>	<b>11.5</b>	<b>21.8</b>	<b>22.4</b>	<b>24.0</b>	<b>19.4</b>	<b>29.5</b>	<b>23.1</b>	<b>20.0</b>	<b>17.2</b>	<b>17.4</b>

Source: Water Authority and Cayman Water Company

## 16.07

## Sewage, 1999 - 2008

## Grand Cayman

	<i>Million US Gallons</i>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Sewage treated	421.4	440.0	450.0	494.2	534.5	508.0	474.4	582.1	650.8	680.0
Septage	3.8	3.9	3.1	3.9	3.9	5.5	6.6	7.0	8.5	8.0
Number of connections	263	276	281	282	290	265	280	311	301	322

Source: Water Authority and Cayman Water Company

## 16.08

## Type of Sewage System, 2007

<b>Sewage System</b>	<b>Households %</b>
Mains (West Bay Road)	13.1
Sewerage Treatment Plant	10.1
Septic Tank or Cesspool	72.0
Deep Well	2.1
Not Stated	2.7
<b>Total</b>	<b>100</b>

Source: Survey of Living Conditions (SLC), 2007