

GHANA WATER COMPANY LIMITED



ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2018

**A.D. & ASSOCIATES
(CHARTERED ACCOUNTANTS)**

Ghana Water Company Limited
Report and financial statements
For the year ended 31 December 2018

Contents	Pages
Corporate Information	1
Directors' report	2-3
Business model and Strategy	4-22
Independent auditor's report	23-25
Statement of Comprehensive Income	26
Statement of Financial Position	27
Statement of Cash Flows	28
Statement of Changes in Equity	29
Notes to the Financial Statements	30-58

Ghana Water Company Limited
Corporate Information
For the year ended 31 December 2018

Directors:

Hon. Alexander Afenyo-Markin
Ing. Dr. Clifford A. Braimah
Hon. Kwame Amporfo Twumasi
Mr. Michael Ayesu
Mr. Joseph Obeng-Poku
Dr. Forster Kum-Ankamah Sarpong
Ms. Maria Aba Lovelace-Johnson
Naba Sigri Bewong
Mr. Clement Alosebuno Kaba
Mrs. Serena Kwakye-Mintah
Mr. Alex K.B. Bonney

Secretary:

Mrs. Jemimah Toseafa

Principal place of business:

28th February Road
Near Independence Square
Box M 194
Accra - Ghana

Auditors:

A.D. & Associates
No.60 Mango Tree Avenue
West Ridge
Accra

Bankers:

GCB Bank
Societe Generale Bank
ADB Bank Limited
National Investment Bank Limited
Cal Bank Limited
Ecobank Ghana Limited

Ghana Water Company Limited

Directors' report

For the year ended 31 December 2018

The Board of Directors has the pleasure of presenting this annual report together with the audited financial statements of Ghana Water Company Limited for the year ended 31 December 2018, which disclose the state of affairs of the company.

1. Principal activity

The principal activities include planning and development of water systems and sale of water in urban communities in the country.

2. Statement of Directors' responsibilities

The Companies Act, 1963 (Act 179) requires the directors to prepare financial statements for each financial year, which give a true and fair view of the state of affairs of the company and of the profit or loss for that year.

In preparing the financial statements, the Directors confirm that suitable accounting policies have been used and applied consistently, and reasonable and prudent judgment and estimates have been made in the preparation of the financial statements for the year ended 31 December 2018. The directors confirm that the financial statements have been prepared on a going concern basis.

The directors are responsible for ensuring that the company keeps accounting records which disclose with reasonable accuracy the financial position of the company and which enable them to ensure that the financial statements comply with the Companies Act, 1963 (Act 179). They are also responsible for safeguarding the assets of the company and hence for taking steps for the prevention and detection of fraud and other irregularities. This responsibility includes: designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error, selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Ghana Water Company Limited
Directors' report
For the year ended 31 December 2018

3. Financial results

The financial results for the year ending to 31 December 2018 are set out below:

	2018	2017
	GH¢	GH¢
The Loss brought forward in the Income Surplus at the beginning of the year	(51,138,975)	(42,414,395)
Profit / (Loss) for the year after charging all expenses including depreciation	(667,931,738)	(692,231,664)
Prior year adjustment	11,928,552	(17,040,854)
Transfer from Revaluation Surplus	<u>703,698,260</u>	<u>700,547,938</u>
Loss at the year end	<u>(3,443,901)</u>	<u>(51,138,975)</u>

4. Going concern

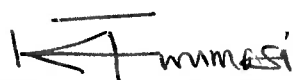
The company's management has made an assessment of its ability to continue as a going concern and is satisfied that it has the resources to continue in business for the foreseeable future. Furthermore, management is not aware of any material uncertainties that cast significant doubt about the company's ability to continue as a going concern. Therefore, the financial statements continue to be prepared on the going concern basis.

5. Auditors

The auditors, Messrs' A.D. & Associates, have expressed their willingness to accept re-appointment pursuant to Section 134 (5) of the Companies Act, 1963 (Act 179).

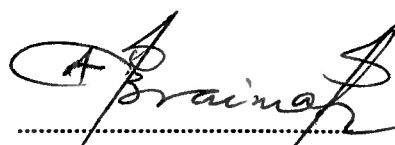
6. Other matters

The Directors confirm that no matters have arisen since 31 December 2018, which materially affect the financial statements of the company for the year ended on that date.



Director

Date: 02/03/2020



Director

Date 02/03/2020

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

VISION, MISSION AND CORE VALUES

Vision

To be a world class water company.

Mission

GWCL is committed to meet the increasing demand for better service delivery through efficient and effective management of our core business of production, transmission, distribution of water and customer management in the urban areas of Ghana.

Our Core Values

- Quality and excellent customer service
- Speed and urgency in service delivery
- Continuous improvement and innovation
- Health and safety of stakeholders
- High ethical and professional standards
- Commitment and dedication to operations

Business model and Strategy

For the year ended 31 December 2018

1 PROFILE GHANA WATER COMPANY LTD

The Urban water sector in Ghana has over the last ten years gone through a couple of evolutions. The major ones included the management contract between Aqua Vitens Rand Ltd (AVRL) of Vitens International, Netherlands and Rand Water Services of South Africa in June 2006. This contract expired in May 2011.

After the exit of AVRL a special purpose vehicle Ghana Urban Water Ltd (GUWL) a subsidiary of Ghana Water Company Ltd was established by the Government of Ghana to continue managing the operations till a long term decision was taken.

In August of 2014, a new policy direction for the water sector was announced by the Government; the dissolution of GUWL and GWCL absorbing the operational activities erstwhile performed by GUWL. GUWL the Operator and GWCL, the asset holder has now merged to form the new Ghana Water Company Ltd which has responsibilities of both operations and asset management.

GWCL is the sole government owned water utility company. It is responsible for the production, transmission and distribution of water in urban areas in Ghana.

The Company as of 2018 managed 90 water systems. Thirty-five (35) of these systems are bore-hole and fifty-four (54) are surface whilst one (1) has both surface and bore-hole water facilities. These systems serve about 11.0 million people nation-wide. It operates in 15 Regional offices and 90 district offices. The company has 4 special business units.

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

OPERATIONS' REVIEW

Our Key Figures

Summary of Key Figures

	unit	2018 Target	2017	2018	%Var (Target-18)
Customers					
Number of customers as at 31 Dec	x 1,000	660	629.3	675.8	2.4%
Average water tariff	Gh ¢/m³	6.28	6.244	6.209	-1.1%
Operations					
Raw water abstracted	M m³	322.9	333.3	338.5	4.8%
Water produced	M m³	307.5	314.8	319.4	3.8%
Water Sold	M m³	167.8	142.1	148.8	-11.3%
process loss	%	5.00	5.5	5.7	0.7%
Average daily production	1000 m³	842.6	862.4	875.0	3.8%
Daily capacity utilization	%	97.0			-3.8%
Financial					
Total income	M GH ¢	1069.2	921.5	934.0	-12.6%
Water revenue	M GH ¢	1054.2	887.1	923.9	-12.4%
Total collection	M GH ¢	1011.6	668.9	718.9	-28.9%
Collection ratio(govt+private)	%	95.0	75.17	78.12	-16.9%
Private Collection Ratio	%	97.0	89.13	90.0	-7.0%
Non-revenue water	%	45.4	54.9	53.4	8.0%
Depreciation	M GH ¢	43.9	711.6	755.6	-711.7%
Operating cost/water produced	GH ¢/m³	3.11	2.597	2.641	15.2%
operating cost/authorised consumption	GH ¢/m³	5.70	5.754	5.668	0.6%
Electricity cost/m3	GH ¢/m³	1.018	0.994	0.846	16.9%
Chemical cost/m3	GH ¢/m3	0.194	0.153	0.135	30.3%
operating ratio	%	89.5	88.7	90.3	0.77%
Gross Profit	M GH ¢	112.0	(97.24)	279.5	149.5%
Operating surplus /(deficit)	M GH ¢	4.3	(3.92)	102.16	2250.8%
Net Surplus/(deficit)	M GH ¢	0.146	(10.31)	73.20	50056.6%
Employees					
Staff as at 31 December	fte	3900.0	3800.0	4328.0	11.0%
Labour productivity	Gh ¢	274,161	242,512	215,804	-21.3%
Staff/1000 connections	#	5.91	6.0	6.4	8.4%

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

Water Production

We recorded a total volume of 319.4Mm³ for the year 2018 showing an increase of 1.45% (4.57Mm³) over that for 2017. The production performance is 3.84% (11.81Mm³) higher than the target for the year. The following factors contributed to the improvement in water production for 2018;

1. Stable power in most of the Head works and Borehole sites.
2. Effective and efficient maintenance approach to the electromechanical equipment.
3. Availability of spare parts.
4. Continuous increase of production at the Jambusi treatment plant due to available capacity and extension in distribution mains in Upper West Region.
5. The use of polymer at Mampong Head works which made treatment efficient by reducing the frequency of backwashing.

However, the following major challenges were encountered during the year.

- Frequent pipe burst on the 12 and 10 AC transmission pipelines in Bolgatanga which affected production at Veia/Gowrie. Plans for replacement are far advanced.
- Many bulk meters have remained faulty over the period, examples are the flow meters at the Tahal and China Gezhouba and the Euromag meters in the Northern region
- Consistent Power outages in Veia/Gowrie and Zuarungu pumping station. The Company is still in discussion with ECG to find a lasting solution to the power outages whilst very weak sessions of pipelines are being replaced.
- Dried intakes at some Head-works accounted for low production at Eastern Region
- Galamsey activities subsided but is gradually coming up again especially in the Eastern region resulting in poor raw water quality.
- Some boreholes have depleted yield especially those at Zuarungu.

The details of the production report are in table 1 below:

Table 1

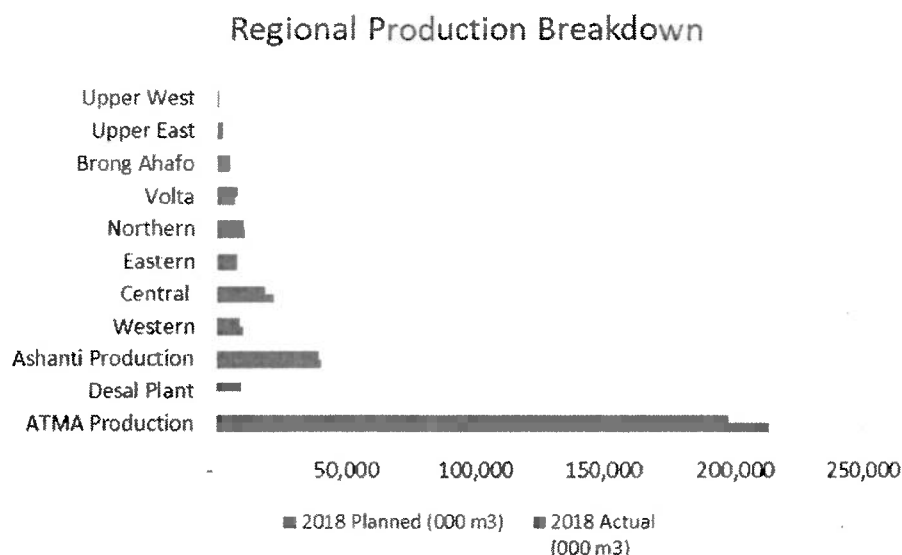
Region	Production				
	2018 Actual (000 m ³)	2017 Actual (000 m ³)	2018 Planned (000 m ³)	Variance (000 m ³)	Relative Contribution
ATMA Production	212,809	209,186	197,252	15,557	66.6%
Desal Plant	-	-	9,500	(9,500)	0.0%
Ashanti Production	39,963	41,499	38,988	975	12.5%
Western	10,588	10,016	9,119	1,469	3.3%
Central	22,001	20,451	18,445	3,556	6.9%
Eastern	7,975	7,773	7,940	35	2.5%
Northern	10,991	10,682	10,440	551	3.4%
Volta	7,247	7,577	8,004	(758)	2.3%
Brong Ahafo	4,941	4,709	4,946	(6)	1.5%
Upper East	2,221	2,239	2,162	59	0.7%
Upper West	625	662	750	(125)	0.2%
TOTAL	319,361	314,794	307,548	11,813	100.0%

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

Figure 1



ATMA Production recorded the highest water production of 66.6% followed by Ashanti (12.5%). Thus ATMA and Ashanti contributed over 79.0% of the total water produced.

Quality of Water Produced

Water Quality Assessment and Chemicals Usage Report

Results of water quality assessment of the raw water, treated water, distributed water and consumption of water treatment chemicals for 2018 are summarized below.

Water Treatment Chemicals Consumption

The consumption and cost of water treatment chemicals applied to ensure delivery of safe drinking water during the period under review are summarized in tables 2 and 3 below. The usage of the major water treatment chemicals is high due to the onset of the rainy season.

Total quantity of 11,758,603.65kg of Aluminium Sulphate, 1,411,269.52kg of Hydrated Lime, 816,143.59Kg of Chlorine Gas, 1,443,984.04Kg of Calcium Hypochlorite, 400.00 units of Chlorine Tablets, 13,015.07Kg of Potassium Permanganate, 3,940Kg of Soda Ash, 2,900.00Kg of Activated Carbon and 984,562.90Kg of Polyelectrolytes were used to treat water during the period under review translating into a total cost of GH¢ 43,163,842.07 respectively. Details can be found in Table 2 and Table 3 below.

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

Table 1: TOTAL CONSUMPTION OF WATER TREATMENT CHEMICALS FOR 2018

REGION	WATER TREATMENT CHEMICALS CONSUMPTION FOR JANUARY - DECEMBER, 2018									Total (GHS)
REGION	Aluminium Sulphate(Kg)	Lime (Kg)	Gas (Kg)	Hypochlorite(Kg)	Tablets(Kg)	Soda Ash (Kg)	KMnO (Kg)	AC (Kg)	Polymer (Kg)	
WEIJA	6,769,323.13	505,864.00	445,675.00	144,809.88	300.00					
Kpong	0.00	194,110.10	137,501.78	132,631.50						
ASHANTI	511,312.38	78,275.10	67,192.34	143,379.53			599.00	1,150.00	984,562.90	
WESTERN	1,192,609.00	227,027.88	23,155.13	93,983.63		500.00	0.00	800.00		
CENTRAL	1,704,485.60	211,605.10	56,931.19	756,686.43		3,440.00	12,416.07	950.00		
EASTERN	385,502.60	22,626.98	32,240.67	75,751.54						
NORTHERN	875,212.50	68,101.70	33,588.57	39,519.00						
VOLTA	20,260.00	30,890.33	16,339.08	17,432.49	100.00					
BRONG AHAFO	149,824.50	44,628.59	0.00	30,757.47						
UPPER EAST	112,520.00	18,117.25	0.00	8,422.57						
UPPER WEST	37,553.95	10,022.50	3,519.82	410.00						
Total (Kg)	11,758,603.65	1,411,269.52	816,143.59	1,443,984.04	400.00	3,940.00	13,015.07	2,900.00	984,562.90	

TABLE 2: TOTAL COST OF WATER TREATMENT CHEMICALS FOR 2018

REGION	WATER TREATMENT CHEMICALS CONSUMPTION AND COST FOR (JANUARY - DECEMBER), 2018									Total (GHS)
REGION	Alum (GHS)	Lime (GHS)	Gas (GHS)	Hypochlorite (GHS)	Tablets(GHS)	Soda Ash (GHS)	KMnO (GHS)	AC (GHS)	Polymer (GHS)	
WEIJA	9,950,905.00	738,561.44	3,012,763.00	832,656.78	1,494.00	0.00	0.00	0.00	0.00	14,536,380.22
Kpong	0.00	293,400.75	929,512.02	763,781.13	0.00	0.00	0.00	0.00	0.00	1,976,693.89
ASHANTI	751,629.19	114,281.64	454,220.22	824,432.29	0.00	0.00	16,532.40	15,640.00	9,550,260.13	11,726,985.87
WESTERN	1,753,125.23	331,460.70	156,528.70	540,405.84	0.00	590.00	0.00	10,880.00	0.00	2,793,390.47
CENTRAL	2,505,593.83	308,943.45	384,654.87	4,350,946.99	0.00	6,742.40	342,683.57	12,920.00	0.00	7,912,685.11
EASTERN	566,688.82	33,035.39	217,946.61	435,571.38	0.00	0.00	0.00	0.00	0.00	1,253,242.50
NORTHERN	1,286,562.38	98,428.48	227,058.74	227,234.25	0.00	0.00	0.00	0.00	0.00	1,840,283.85
VOLTA	29,782.20	45,099.89	110,452.21	100,236.84	498.00	0.00	0.00	0.00	0.00	286,069.14
BRONG AHAFO	220,242.02	65,157.74	207,920.50	0.00	0.00	0.00	0.00	0.00	0.00	493,320.25
UPPER EAST	165,404.40	26,451.19	56,996.55	0.00	0.00	0.00	0.00	0.00	0.00	248,792.14
UPPER WEST	55,204.30	14,632.85	23,793.98	2,357.50	0.00	0.00	0.00	0.00	0.00	95,988.63
Cost (GHS)	17,285,147.37	2,060,453.50	5,781,987.70	8,077,623.01	1,992.00	7,722.40	359,215.97	39,440.00	9,550,260.13	43,163,842.07

Raw Water Quality

Table 4 shows the maximum, minimum and mean values of the four critical operational raw water quality indicators per each region in comparison with maximum acceptable levels of no health effects.

Most of our source waters were quite stable and treatable during the period under review. However, there were significant deterioration in raw water quality (high values recorded for turbidity, colour and some trace elements) from the most affected sources. The most affected systems were Osino and Bunso in the Eastern Region, Odaso in the Ashanti Region and Daboase in the Western. The most affected systems were Bunso and Osino on the Birim River, Daboase on the Pra River, Odaso on the Oda River.

In some of the regions, sampling targets for raw water were missed due to lack of plant control test kits for process control monitoring from most of the Water Treatment Systems (See table 4). The Sampling Compliance Target Achieved was 80%. This was 15% short of the 95% target.

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

TABLE 3: RAW WATER QUALITY MONITORING

RAW WATER QUALITY MONITORING JANUARY - DECEMBER, 2018								REMARKS
REGION	PARAMETER (No Health Effect Levels)	No of Samples Required	Actually Analysed	95% Analysed	Degree of Health Effect Levels			
					MINIMUM	MAXIMUM	MEAN	
R01A:ATMA	pH[6.5-8.5]	8640	8312	96%	6.8	7.5	7.3	Raw water sources were treatable during the year under review.
	Colour[5 HU]	8640	8312	96%	8	350	125	
	Turbidity[5NTU]	8640	8312	96%	2.0	35.6	129.9	
	Iron [0.3mg/L]	120	100	83%	0.10	0.35	0.09	
R02:ASHANTI	pH[6.5-8.5]	10800	8384	78%	6.5	8.0	7.4	Source waters were treatable. However, Some of the treatment plants lack adequate logistics to perform plant control tests
	Colour[5 HU]	10800	8384	78%	70	1270	650	
	Turbidity[5NTU]	10800	8384	78%	25	671	130	
	Iron [0.3mg/L]	736	532	72%	0.74	3.24	1.35	
R03:WESTERN	pH[6.5-8.5]	8640	7928	92%	6.7	7.6	6.9	Some of the treatment plants lack adequate logistics to perform plant control tests. Raw water quality deteriorated in some of the systems due to mining activities
	Colour[5 HU]	8640	7928	92%	75	4000	650	
	Turbidity[5NTU]	8640	7928	92%	20	1102	90	
	Iron [0.3mg/L]	744	480	65%	0.10	8.26	2.58	
R04:CENTRAL	pH[6.5-8.5]	6480	5888	91%	6.0	7.5	7.2	some of the plants lack adequate logistics to perform plant control test
	Colour[5 HU]	6480	5888	91%	7.0	950.0	438.4	
	Turbidity[5NTU]	6480	5888	91%	8.0	759.0	149.2	
	Iron [0.3mg/L]	960	744	78%	0.40	5.90	2.13	
R05:EASTERN	pH[6.5-8.5]	15120	9078	60%	6.6	7.6	7.2	Raw Water Quality from most of the sources remained fairly stable and treatable. Some of the plants lack adequate logistics to perform plant control test hence only 60% of sampling met
	Colour[5 HU]	15120	9078	60%	23	2628	1028	
	Turbidity[5NTU]	15120	9078	60%	5	674	129	
	Iron [0.3mg/L]	312	260	83%	0.34	10.80	2.86	
R06:NORTHERN	pH[6.5-8.5]	3920	3275	84%	6.6	8.1	7.4	Some of the plants lack adequate logistics to perform plant control test kits to monitor production in process
	Colour[5 HU]	3920	3275	84%	7	390	340	
	Turbidity[5NTU]	3920	3275	84%	5	350	169	
	Iron [0.3mg/L]	216	196	91%	1.30	4.50	2.92	
R07:VOLTA	pH[6.5-8.5]	6204	5296	85%	6.3	7.5	7.2	48% of the plants lack adequate logistics to perform plant control test
	Colour[5 HU]	6204	5296	85%	5	42	28	
	Turbidity[5NTU]	6204	5296	85%	0.10	25.00	6.90	
	Iron [0.3mg/L]	408	312	76%	0.01	2.00	0.27	
R08:B. AHAFO	pH[6.5-8.5]	3288	2240	68%	6.4	7.9	7.1	Some of the plants lack adequate logistics to perform plant control test hence only 68% of sampling met
	Colour[5 HU]	3288	2240	68%	5	450	262	
	Turbidity[5NTU]	3288	2240	68%	1	40	12	
	Iron [0.3mg/L]	144	112	78%	0.04	2.56	1.24	
R09:U.EAST	pH[6.5-8.5]	1644	1520	92%	6.9	7.4	7.0	Fairly Satisfactory performance
	Colour[5 HU]	1644	1520	92%	80	400	138	
	Turbidity[5NTU]	1644	1520	92%	2.8	77	69	
	Iron [0.3mg/L]	72	48	67%	0.02	0.10	0.06	
R09:U.WEST	pH[6.5-8.5]	840	760	90%	7.0	7.1	7.1	System Produces for only 12 hours per day due to limited distribution network for the coverage area
	Colour[5 HU]	840	760	90%	60	200	130	
	Turbidity[5NTU]	840	760	90%	16	60	40	
	Iron [0.3mg/L]	48	34	71%	0.20	4.80	2.34	

National Summary of Weighted Raw Water Compliance

Table 5 below shows the National Summary of Weighted Raw Water Compliance. The major parameters analysed are pH, Colour and Turbidity.

TABLE 4

OPERATIONAL PARAMETERS	Target number	Actually Analyzed	Compliance Target => 95%
pH[6.5-8.5]	64736	51921	80
Colour[15 HU]	64736	51921	80
Turbidity[5NTU]	64736	51921	80

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

Treated Water Quality Analysis

Tables 6 and 7 show the five key operational indicators (core parameters) for the various regions, the nationwide sampling frequencies and the weighted percentage compliance targets of treated water quality during the period under review. The compliance indices are the product of the percentage of samples actually collected and analyzed and the percentage of samples that met the requirements of the Ghana Drinking Water Quality Standards.

All the regions were not able to meet the treated water sampling targets within the period under review due to several operational challenges such as power outages, down times, lack of adequate plant control test kits, inadequate human resources and other operational challenges. The sampling Compliance Index achieved was only 0.76 due to the challenges enumerated above. However, the quality compliance targets from all the regions were satisfactory, 99% (See Tables 5 and 6 respectively). The most challenging issues for most of our treatment plants were pH adjustment and post chlorination because most of the lime and chlorine dozers were not functioning properly. Some treatment plants continued to have manual and improvised dosing systems making water treatment chemical dosing discontinuous and intermittent, and therefore pH and residual chlorine levels are not appropriately raised to meet the desired levels as stipulated in the Ghana Standards for drinking water in some of the systems. Most of the borehole systems also do not receive any form of treatment hence low pH levels and zero residual chlorine values are recorded.

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

Table 5

TREATED WATER QUALITY MONITORING COMPLIANCE (JANUARY - DECEMBER) 2018								
REGION	PARAMETER	Target number	No. of Samples Actually Analyzed	Complying	95% Compliance Target Analyzed	Complying	Compliance Index (0.95)	REMARKS
R01A	pH[6.5-8.5]	17280	15912	15912	92%	100%	0.92	Satisfactory performance for the water quality compliance target. Sampling Targets could not be met from the due to several operational challenges such as power outages and lack of adequate logistics
	Colour[5 HU]	17280	15912	15912	92%	100%	0.92	
	Turbidity[5NTU]	17280	15912	15912	92%	100%	0.92	
	R-Chlorine[0.5mg/L]	17280	15912	15912	92%	100%	0.92	
	E-Coli[0 cfu/100mL]	2160	2032	2032	94%	100%	0.94	
ATMA	pH[6.5-8.5]	21600	19320	19320	89%	100%	0.89	Sampling Targets could not be met from the Ashanti Production Region due to lack of adequate plant control monitoring test kits from most of the systems
	Colour[5 HU]	21600	19320	19320	89%	100%	0.89	
	Turbidity[5NTU]	21600	19320	19320	89%	100%	0.89	
	R-Chlorine[0.5mg/L]	21600	19320	19097	89%	99%	0.88	
	E-Coli[0 cfu/100mL]	5040	4112	4112	82%	100%	0.82	
R02	pH[6.5-8.5]	17280	11247	11247	65%	100%	0.65	Western region could not meet the sampling targets due to Lack of plant control test kits in some of the systems, lack of reliable means of transport and other operational challenges during the time under review. However, all plants performed satisfactorily
	Colour[5 HU]	17280	11247	11247	65%	100%	0.65	
	Turbidity[5NTU]	17280	11247	11247	65%	100%	0.65	
	R-Chlorine[0.5mg/L]	17280	11247	11027	65%	98%	0.64	
	E-Coli[0 cfu/100mL]	4320	3000	3000	69%	100%	0.69	
WESTERN	pH[6.5-8.5]	12800	12224	12224	96%	100%	0.96	All the plants performed satisfactorily. However, Sampling targets were not met due to lack of plant control test kits and other operational challenges
	Colour[5 HU]	12800	12224	12224	96%	100%	0.96	
	Turbidity[5NTU]	12800	12224	12059	96%	99%	0.94	
	R-Chlorine[0.5mg/L]	12800	12224	12025	96%	98%	0.94	
	E-Coli[0 cfu/100mL]	3600	3360	3360	93%	100%	0.93	
R04	pH[6.5-8.5]	30480	16120	15912	53%	99%	0.52	During the period under review, treated water quality was generally satisfactory. Sampling targets were not met due to, lack of adequate plant control test kits in some of the systems lack of adequate personnel and other operational challenges
	Colour[5 HU]	30480	16120	15912	53%	99%	0.52	
	Turbidity[5NTU]	30480	16120	15912	53%	99%	0.52	
	R-Chlorine[0.5mg/L]	30480	16120	15689	52%	97%	0.51	
	E-Coli[0 cfu/100mL]	5400	5040	5040	93%	100%	0.93	
CENTRAL	pH[6.5-8.5]	6480	5300	5300	82%	100%	0.82	All the plants performed satisfactorily. Sampling targets were not met due to power outages and other operational challenges
	Colour[5 HU]	6480	5300	5241	82%	99%	0.81	
	Turbidity[5NTU]	6480	5300	5300	82%	100%	0.82	
	R-Chlorine[0.5mg/L]	6480	5300	5217	82%	98%	0.81	
	E-Coli[0 cfu/100mL]	2160	1000	1000	46%	100%	0.46	
R06	pH[6.5-8.5]	12408	12020	12020	97%	100%	0.97	All the plants performed satisfactorily. Sampling targets were not met due to lack of adequate human resources and plant control test kits in some of the systems
	Colour[5 HU]	12408	12020	12020	97%	100%	0.97	
	Turbidity[5NTU]	12408	12020	12020	97%	100%	0.97	
	R-Chlorine[0.5mg/L]	12408	12020	12020	97%	100%	0.97	
	E-Coli[0 cfu/100mL]	3600	2600	2600	72%	100%	0.72	
VOLTA	pH[6.5-8.5]	6480	5880	5789	91%	99%	0.89	The systems performed satisfactorily during the period under review. Sampling targets were not met as a result of lack of adequate personnel and plant control test kits for some of the systems
	Colour[5 HU]	6480	5880	5789	91%	99%	0.89	
	Turbidity[5NTU]	6480	5880	5789	91%	98%	0.89	
	R-Chlorine[0.5mg/L]	6480	5880	5708	91%	97%	0.88	
	E-Coli[0 cfu/100mL]	2160	1200	1200	56%	100%	0.56	
B. AHAFO	pH[6.5-8.5]	6576	5192	5078	79%	98%	0.77	The systems performed satisfactorily. Sampling targets were not met due to several operational challenges such as high down times etc.
	Colour[5 HU]	6576	5192	5024	79%	97%	0.76	
	Turbidity[5NTU]	6576	5192	5066	79%	98%	0.77	
	R-Chlorine[0.5mg/L]	6576	5192	5024	79%	97%	0.76	
	E-Coli[0 cfu/100mL]	2160	1520	1520	70%	100%	0.70	
U.EAST	pH[6.5-8.5]	6576	3320	3217	50%	97%	0.49	The system performed satisfactorily. Plant operates for only 12 hours per day due to limited distributed networks hence Sampling targets could not be met
	Colour[5 HU]	6576	3320	3208	50%	99%	0.50	
	Turbidity[5NTU]	6576	3320	3199	50%	96%	0.49	
	R-Chlorine[0.5mg/L]	6576	3320	3178	50%	96%	0.48	
	E-Coli[0 cfu/100mL]	2160	580	580	27%	100%	0.27	
R10	pH[6.5-8.5]	6576	3320	3217	50%	97%	0.49	The system performed satisfactorily. Plant operates for only 12 hours per day due to limited distributed networks hence Sampling targets could not be met
	Colour[5 HU]	6576	3320	3208	50%	99%	0.50	
	Turbidity[5NTU]	6576	3320	3199	50%	96%	0.49	
	R-Chlorine[0.5mg/L]	6576	3320	3178	50%	96%	0.48	
	E-Coli[0 cfu/100mL]	2160	580	580	27%	100%	0.27	
U.WEST	pH[6.5-8.5]	6576	3320	3217	50%	97%	0.49	The system performed satisfactorily. Plant operates for only 12 hours per day due to limited distributed networks hence Sampling targets could not be met
	Colour[5 HU]	6576	3320	3208	50%	99%	0.50	
	Turbidity[5NTU]	6576	3320	3199	50%	96%	0.49	
	R-Chlorine[0.5mg/L]	6576	3320	3178	50%	96%	0.48	
	E-Coli[0 cfu/100mL]	2160	580	580	27%	100%	0.27	

TABLE 6: SUMMARY OF TREATED WATER QUALITY COMPLIANCE INDEX, 2018

OPERATIONAL PARAMETERS	Target number	Actually Analyzed	Number Complying	Compliance Target => 95%	Sampling Compliance Index (0.95)
pH[6.5-8.5]	131384	101343	100941	100	0.77
Colour[15 HU]	131384	101343	100953	100	0.77
Turbidity[5NTU]	131384	101343	100758	99	0.77
R-Chlorine[0.5mg/L]	131384	101343	99877	99	0.76
E-Coli[0 cfu/100mL]	30600	22924	22924	100	0.75
National Average	111227	85660	85091	99	0.76

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

1.1.1 Distribution Water Quality

Tables 8 and 9 show the five key operational indicators (core parameters) for the regions and nationwide showing the sampling frequencies and the weighted percentage compliance targets of Distribution Water Quality for the period under review. The compliance indices are the product of the percentage of samples actually collected and analyzed from the distribution systems and the percentage of samples that met the requirements of the Ghana Drinking Water Quality Standards. The performance indicators express the relationship between the mandated sampling frequencies and the results of the water quality analysis.

All the regions could not meet their sampling targets due to lack of capacity to carry out their works satisfactorily. Lack of adequate staffing, poor laboratory set-ups, equipment, transportation, consumables and other operational challenges. Sampling Compliance Index achieved was only **0.68** due to the various challenges enumerated above. However, the Quality Compliance Target achieved was satisfactory (**99%**).

TABLE 7

NATIONAL DISTRIBUTION WATER QUALITY MONITORING COMPLIANCE (JANUARY - DECEMBER), 2018							REMARKS
REGION	PARAMETER	Target number	Actual number	Complying	95% Compliance Target	Compliance Index (0.95)	
R01 ATMA	pH (5-8.5)	12180	9884	9884	81%	98%	Distribution Water Quality from the ATMA regions were satisfactory. However sampling targets could not be met due to logistical constraints (81%). Sampling needs to be improved to achieve targets
	Colour (5 HU)	12180	9884	9884	81%	97%	
	Turbidity (5 NTU)	12180	9884	9712	81%	96%	
	Free Chlorine (0.5mg/L)	12180	9884	9557	81%	97%	
	Total Coliform (cfu/100ml)	12180	9884	9884	81%	100%	
R02 ASHANTI	pH (5-8.5)	7200	5512	5318	77%	96%	Distribution Water Quality from the Ashanti region was satisfactory. Sampling Target was not met due to various operational challenges such as logistical constraints.
	Colour (5 HU)	7200	5512	5401	77%	96%	
	Turbidity (5 NTU)	7200	5512	5244	77%	95%	
	Free Chlorine (0.5mg/L)	7200	5512	5244	77%	95%	
	Total Coliform (cfu/100ml)	7200	5512	5512	77%	100%	
R03 WESTERN	pH (5-8.5)	6840	4480	4283	65%	86%	Distribution Water Quality from the Western region were satisfactory. Sampling Targets were not met due to various operational challenges such as logistical and human resources constraints.
	Colour (5 HU)	6840	4480	4311	65%	96%	
	Turbidity (5 NTU)	6840	4480	4219	65%	94%	
	Free Chlorine (0.5mg/L)	6840	4480	4219	65%	94%	
	Total Coliform (cfu/100ml)	6840	4480	4480	65%	100%	
R04 CENTRAL	pH (5-8.5)	6120	3140	3019	53%	86%	Generally, performance was satisfactory. Sampling targets were not met due to various operational challenges.
	Colour (5 HU)	6120	3140	3011	53%	96%	
	Turbidity (5 NTU)	6120	3140	3052	53%	96%	
	Free Chlorine (0.5mg/L)	6120	3140	2975	53%	95%	
	Total Coliform (cfu/100ml)	6120	3140	3140	53%	100%	
R05 EASTERN	pH (5-8.5)	2480	1880	1869	76%	95%	Generally, the quality of the water from the distribution network was satisfactory although there were some few challenges. Residual chlorine levels in the network were better and appreciable.
	Colour (5 HU)	2480	1880	1869	76%	95%	
	Turbidity (5 NTU)	2480	1880	1841	76%	96%	
	Free Chlorine (0.5mg/L)	2480	1880	1801	76%	96%	
	Total Coliform (cfu/100ml)	2480	1880	1880	76%	100%	
R06 NORTHERN	pH (5-8.5)	2480	1480	1422	60%	96%	Distribution Water Quality from the Northern Region was satisfactory. Sampling Target was not met due to various operational challenges such as logistical and human resources constraints.
	Colour (5 HU)	2480	1480	1411	60%	95%	
	Turbidity (5 NTU)	2480	1480	1401	60%	95%	
	Free Chlorine (0.5mg/L)	2480	1480	1403	60%	95%	
	Total Coliform (cfu/100ml)	2480	1480	1480	60%	100%	
R07 VOLTA	pH (5-8.5)	1680	1368	1309	81%	96%	Distribution Water Quality from the Volta Region was satisfactory. Sampling Targets were not met due to various operational challenges and lack of adequate WQA personnel in the region.
	Colour (5 HU)	1680	1368	1311	81%	96%	
	Turbidity (5 NTU)	1680	1368	1202	81%	95%	
	Free Chlorine (0.5mg/L)	1680	1368	1301	81%	95%	
	Total Coliform (cfu/100ml)	1680	1368	1368	81%	100%	
R08 S. AHAPFO	pH (5-8.5)	2880	1680	1598	58%	95%	Distribution Water Quality was generally satisfactory. Sampling Targets were not met due to various operational challenges and power outages.
	Colour (5 HU)	2880	1680	1603	58%	95%	
	Turbidity (5 NTU)	2880	1680	1622	58%	97%	
	Free Chlorine (0.5mg/L)	2880	1680	1680	58%	95%	
	Total Coliform (cfu/100ml)	2880	1680	1680	58%	100%	
R09 U.EAST	pH (5-8.5)	1080	768	735	71%	95%	Satisfactory performance
	Colour (5 HU)	1080	768	744	71%	97%	
	Turbidity (5 NTU)	1080	768	740	71%	95%	
	Free Chlorine (0.5mg/L)	1080	768	739	71%	95%	
	Total Coliform (cfu/100ml)	1080	768	768	71%	100%	
R10 U.WEST	pH (5-8.5)	560	488	466	87%	95%	Satisfactory performance
	Colour (5 HU)	560	488	470	87%	96%	
	Turbidity (5 NTU)	560	488	462	87%	95%	
	Free Chlorine (0.5mg/L)	560	488	463	87%	95%	
	Total Coliform (cfu/100ml)	560	488	488	87%	100%	

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

TABLE 8: AVERAGE NATIONAL DISTRIBUTION WATER QUALITY COMPLIANCE INDEX

OPERATIONAL PARAMETERS	Target number	Actually Analyzed	Number Complying	Compliance Target 95% =>	Sampling Compliance Index (0.95)
pH[6.5-8.5]	43500	30680	29706	97	0.68
Colour[15 HU]	43500	30680	29737	97	0.68
Turbidity[5NTU]	43500	30680	29535	96	0.68
R-Chlorine[0.5mg/L]	43500	30680	29281	95	0.67
E-Coli[0 cfu/100mL]	43500	30680	30680	100	0.71
National Average	43500	30680	29788	97	0.68

Summary of The Treated and Distributed Water Quality Compliance Per Region

TABLE 9

NATIONAL SUMMARY OF TREATED WATER COMPLIANCE PER REGION FOR 2018 (JANUARY - DECEMBER)

REGION	pH [6.5-8.5]	Colour [5 HU]	Turbidity [5NTU]	R-Chlorine [0.5mg/L]	E-Coli[0 cfu/100mL]
R01A ATMA	100%	100%	100%	100%	100%
R02 SHANTI	100%	100%	100%	99%	100%
R03 WESTERN	100%	100%	100%	98%	100%
R04 CENTRAL	100%	100%	99%	98%	100%
R05 EASTERN	99%	99%	99%	97%	100%
R06 NORTHERN	100%	99%	100%	98%	100%
R07 VOLTA	100%	100%	100%	100%	100%
R08 BRONG AHAFO	98%	98%	98%	97%	100%
R09 UPPER EAST	97%	99%	96%	96%	100%
R10 UPPER WEST	99%	96%	96%	100%	100%

NATIONAL SUMMARY OF DISTRIBUTED WATER COMPLIANCE PER REGION FOR, 2018 (JANUARY - DECEMBER)

REGION	pH [6.5-8.5]	Colour [5 HU]	Turbidity [5NTU]	R-Chlorine [0.1 mg/L]	E-Coli[0 cfu/100mL]
R01A ATMA	98%	97%	98%	97%	100%
R02 SHANTI	96%	98%	95%	95%	100%
R03 WESTERN	96%	96%	94%	94%	100%
R04 CENTRAL	96%	96%	96%	95%	100%
R05 EASTERN	99%	99%	98%	96%	100%
R06 NORTHERN	96%	95%	95%	95%	100%
R07 VOLTA	96%	96%	95%	95%	100%
R08 BRONG AHAFO	95%	95%	97%	95%	100%
R09 UPPER EAST	96%	97%	95%	95%	100%
R10 UPPER WEST	95%	96%	95%	95%	100%

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

National Weighted Distribution Water Quality Compliance

Table 10: Shows the five critical operational water quality indicators and percentage compliance for both treated water at the stations and distributed water quality with respect to the Ghana Drinking Water Quality Standards as well as the set targets for sampling frequency per region. Results indicated that the quality of treated and distributed water was generally satisfactory.

The most challenging issue for most of our treatment plants was pH adjustment because most of the lime dozers were not functioning properly. Some treatment plants continued to use manual and improvised dosing systems making lime dosing discontinuous and therefore not appropriately raising pH levels stipulated in the Ghana Standards. Areas served with borehole systems which do not receive any form of treatment recorded low pH levels and zero residual chlorine values.

Challenges

1. Lack of adequate plant control test equipment in most of the systems:- This is impacting negatively on water treatment and water quality monitoring on the plants and distribution systems. Important data is being lost and the situation needs to be addressed.
2. Poor laboratory set-ups and inadequate facilities for most of the laboratories in the regions.
3. Inadequate staffing in the WQA department both at the head office and in the regions.
4. Limited budget for Water Quality Operations.
5. Lack of effective means of transportation for WQA operations in some of the regions
6. Generally, colour and turbidity challenges were experienced in some of the regions due to pipe burst.
7. Lack of shelter for filter beds in most of the water treatment systems: - The filter beds in some of the systems are not provided with shelters (housed). They are exposed to the sunlight and other sources of contamination. This is leading to rapid algae proliferation on the filter beds, poor filter performance and frequent rehabilitations.

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

Distribution Operations

Water distribution improved satisfactorily. The increase in production made more water available for distribution. GWCL continued to ration water in areas where water demand exceeded supply to ensure a more equitable distribution.

Improvement in distribution efficiency was also made possible through stocking the districts with the needed materials to facilitate prompt response to faults.

Energy Consumption

For the year 2018, the cost of power is GHs 270.1 million which is an equivalent of 321.5 million kilowatts hour. The cost of power constituted about 26.4 %(without depreciation) of the total operating cost, a decrease of 11.8% compared to 2017. The decrease is as a result of decrease in energy tariffs by PURC, prudent energy management practices, installation and use of capacitor banks at our major head works (water treatment installations) to improve upon the power factor and also the non-operation of the desalination plant. The major strategies deployed in the prudent energy practices include the installation and replacement of obsolete pumps and motors with energy efficient ones.

TABLE 10

Years	water produced (Mm3)	energy consumed (Mkwh)	Energy consumed per m3 produced (kwh/m3)	Energy Cost (Mghs)	Energy cost per m3 (ghs/m3)
2012	255.0	180.4	0.7075	54.9	0.2153
2013	250.1	189.4	0.7573	64.8	0.2591
2014	248.0	171.4	0.6910	114.6	0.4620
2015	297.0	275.6	0.9278	157.6	0.5306
2016	285.6	302.63	1.0596	310.48	1.0871
2017	314.8	345.05	1.0961	326.75	1.0380
2018	319.4	321.48	1.0066	270.09	0.8457

The overall performance in terms of energy use for the last seven years is shown in the charts below. It can be seen that the production efficiency dropped over the previous year and has improved marginally in 2018 due to the efficiency measures adopted as discussed above. The reduction in energy cost is a combination of prudent usage and reduction in tariff in 2018.

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

FIGURE 2

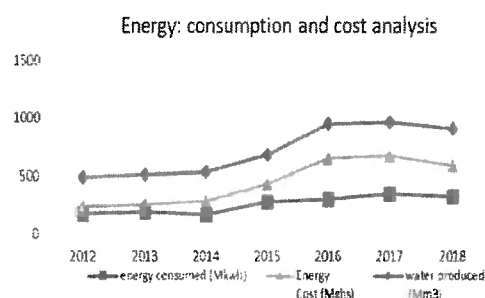
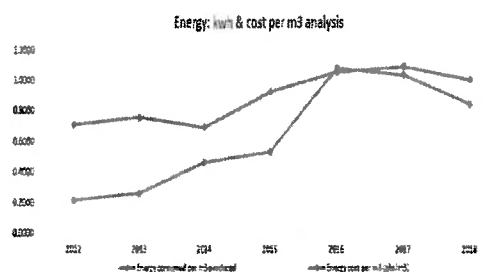


FIGURE 3



Regional Energy Analysis

The average cost of electricity per cubic meter of water produced in 2018 was highest in the Upper West Region with 3.1514 Ghc/m3 followed by Volta region with 1.4849 Ghc/m3.

For the Upper West Region this is attributed to the huge new plant installed at Jambusi whose operation is not optimised yet due to limited distribution capacity. A process of massive pipeline extension has started and it's hopeful that more water will be supplied in subsequent years.

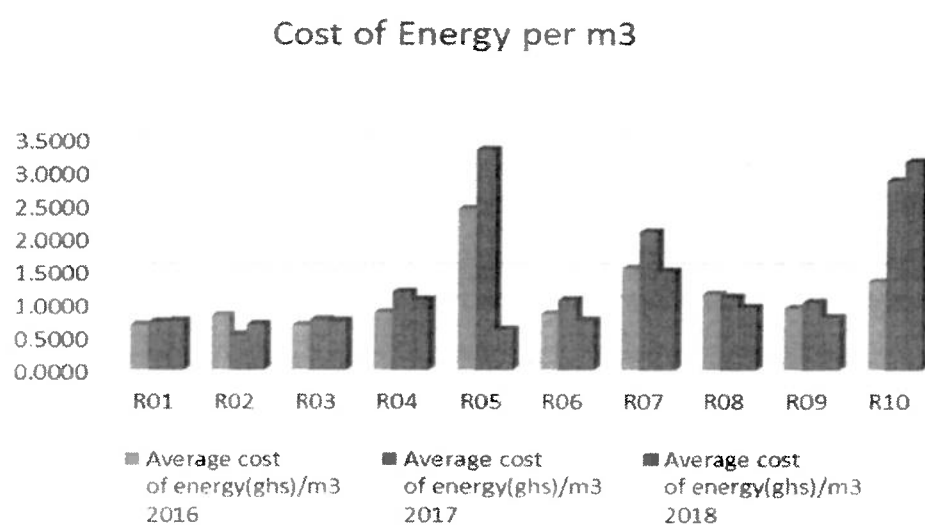
On the whole apart from the Upper West Region most regions over the years have seen an improvement in energy use. See table 12 and figure 4 for details.

TABLE 11

Regions	Average cost of energy(ghs)/m3 2016	Average cost of energy(ghs)/m3 2017	Average cost of energy(ghs)/m3 2018
R01	0.6810	0.7253	0.7391
R02	0.8228	0.5290	0.6912
R03	0.6804	0.7589	0.7395
R04	0.8661	1.1733	1.0576
R05	2.4286	3.3303	0.6071
R06	0.8422	1.0557	0.7492
R07	1.5293	2.0789	1.4849
R08	1.1471	1.0994	0.9449
R09	0.9303	1.0207	0.7942
R10	1.3246	2.8645	3.1514

Ghana Water Company Limited
Business model and Strategy
For the year ended 31 December 2018

FIGURE 4



Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

COMMERCIAL ACTIVITIES

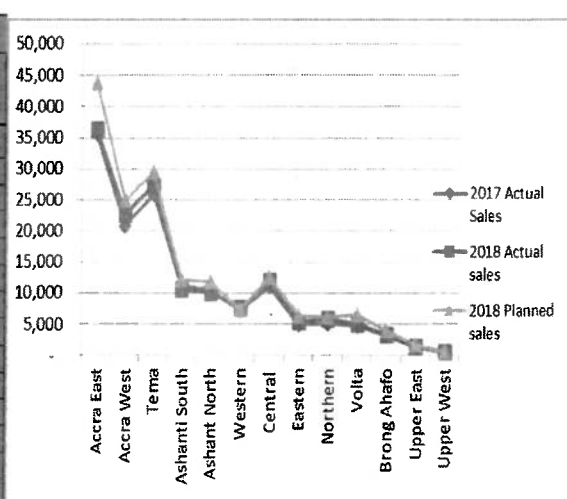
Water Sales Performance

A total volume of 148.8 Mm³ was sold in the year 2018. This is 11.3% (19.05 Mm³) below the target for the year and 4.6% (6.5 Mm³) higher than that of 2017. The major reason for the non-achievement of the sales target was partly due to numerous customer meters being inefficient due to over age, over 30% of customers being on estimated rates, frequent leakages and burst especially in the ATMA regions preventing the product water from reaching the customers and finally customers becoming more conscious of their consumption. The details of the sales performance are shown in table 13 below.

TABLE 12

Region	Sales			%Var
	2017 Actual Sales	2018 Actual sales	2018 Planned sales	18 Actual - 18 Plan
Accra East	35,677	36,489	43,884	-16.9%
Accra West	20,731	22,670	25,000	-9.3%
Tema	25,928	27,316	29,630	-7.8%
Ashanti South	11,214	10,754	12,081	-11.0%
Ashanti North	10,589	9,994	11,867	-15.8%
Western	7,152	7,699	7,296	5.5%
Central	11,084	12,011	12,596	-4.6%
Eastern	4,899	5,431	6,310	-13.9%
Northern	5,108	5,953	6,264	-5.0%
Volta	4,794	5,142	6,564	-21.7%
Brong Ahafo	3,190	3,349	3,985	-16.0%
Upper East	1,430	1,428	1,730	-17.4%
Upper West	518	565	638	-11.3%
Total	142,314	148,800	167,845	-11.3%

FIGURE 5



Billing Performance

The total water revenue was 923.9 million Ghana Cedis for 2018, an increase of 4.2% above that of 2017 (GH¢ 887.1 Million), and short of the target by 12.4%. The main reason for the increase in Billing as against the previous year was due to the fact that the company deployed more meters (though not exhaustive), implementation of the e-billing project and general performance improvement. The company however could not meet the 2018 sales target as explained in section 2.1 above.

Ghana Water Company Limited

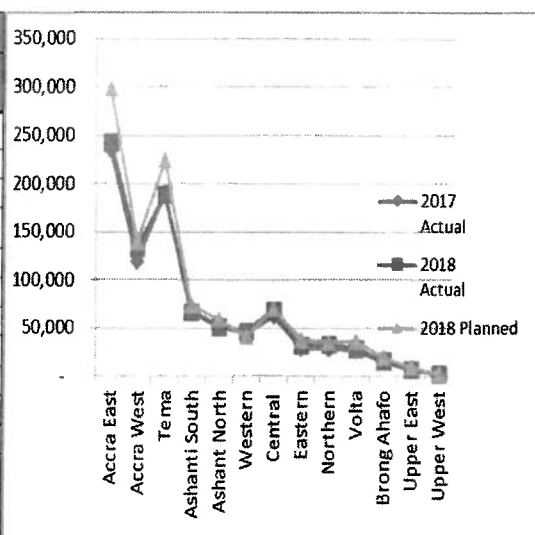
Business model and Strategy

For the year ended 31 December 2018

TABLE 13

Region	Billing			Var
	2017 Actual	2018 Actual	2018 Planned	
Accra East	236,078	243,570	298,315	-18.4%
Accra West	120,516	133,743	140,661	-4.9%
Tema	191,019	189,864	225,125	-15.7%
Ashanti South	69,840	67,255	75,352	-10.7%
Ashanti North	51,488	51,180	59,742	-14.3%
Western	44,187	47,496	40,804	16.4%
Central	62,876	69,465	70,118	-0.9%
Eastern	29,326	32,599	38,033	-14.3%
Northern	28,853	33,390	35,489	-5.9%
Volta	26,922	28,566	37,218	-23.2%
Brong Ahafo	15,384	16,110	20,422	-21.1%
Upper East	7,905	7,765	9,591	-19.0%
Upper West	2,675	2,890	3,308	-12.6%
Total	887,069	923,893	1,054,176	-12.4%

FIGURE 6



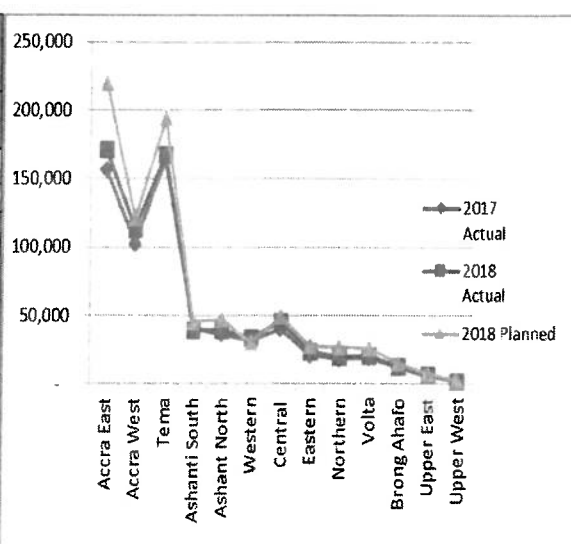
Collection Performance

Private collection for 2018 was GH¢ 699.6 million. The collection shows an increase of 7.4% when compared to that of 2017 and a decrease of 14.1% when compared to the 2018 target. Table 15 below shows the private collection performance.

TABLE 14

Region	Private Collections 1000 GH¢			Var
	2017 Actual	2018 Actual	2018 Planned	
Accra East	156,704	171,916	219,933	-21.8%
Accra West	102,569	112,989	121,167	-6.8%
Tema	164,877	167,889	193,836	-13.4%
Ashanti South	40,552	39,681	45,823	-13.4%
Ashanti North	35,973	39,790	46,856	-15.1%
Western	31,513	34,200	29,972	14.1%
Central	40,548	45,874	49,160	-6.7%
Eastern	20,688	24,093	28,016	-14.0%
Northern	18,618	20,179	27,298	-26.1%
Volta	18,937	20,974	26,068	-19.5%
Brong Ahafo	12,235	13,141	15,573	-15.6%
Upper East	6,307	6,653	7,859	-15.4%
Upper West	2,093	2,228	3,082	-27.7%
Total	651,614	699,607	814,644	-14.1%

FIGURE 7



Ghana Water Company Limited

Business model and Strategy

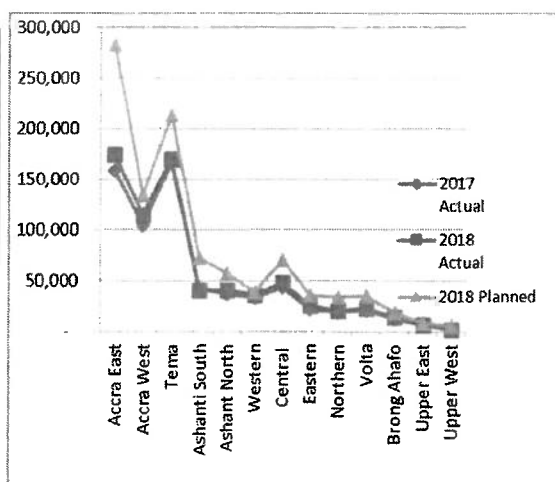
For the year ended 31 December 2018

The total collection for 2018 was GH¢ 718.9 million. The total collection shows an increase of 7.4% when compared to that of 2017 and a decrease of 28.9% when compared to the 2018 target. Table 16 below shows the total collection performance.

TABLE 15

Region	Total Collections 1000 GH¢			Var
	2017 Actual	2018 Actual	2018 Planned 18 Plan	
Accra East	159,124	175,128	283,665	-38.3%
Accra West	104,078	114,324	134,017	-14.7%
Tema	166,945	170,287	214,011	-20.4%
Ashanti South	41,373	40,854	72,408	-43.6%
Ashanti North	37,151	40,949	56,755	-27.8%
Western	33,525	35,815	39,470	-9.3%
Central	43,468	48,672	70,493	-31.0%
Eastern	21,916	25,396	36,288	-30.0%
Northern	19,179	20,755	34,214	-39.3%
Volta	21,112	23,017	35,398	-35.0%
Brong Ahafo	12,879	14,320	19,504	-26.6%
Upper East	6,558	7,005	9,238	-24.2%
Upper West	2,193	2,365	6,091	-61.2%
Total	669,503	718,887.768	1,011,552	-28.9%

FIGURE 8



The reason for the non-achievement of the total collection target is due to the non-achievement of the sales target and non-payment of MDA bills.

Collection Ratio

The Private Collection Ratio (without MDAs) was 90.0% which is 0.4% higher than that of same period of 2017. The total collection ratio for year ending 2018 was 78.1% as against 75.6% achieved in 2017. The total collection ratio has always been low because the cross debt facility which allows for 100% MDA collection has been abolished. MDAs now pay for their own bills but this is not working well. The task force put in place to sensitize MDAs to promptly pay their bills is gradually yielding positive results. Table 17 below shows how the regions performed.

Table 16

Total Collection Ratio			
Region		2017 Performance	2018 Performance
R01B	Accra East	67.6%	72.4%
R01C	Accra West	86.8%	86.0%
R01D	Tema	88.0%	89.9%
R02A	Ashanti South	59.5%	61.0%
R02B	Ashanti North	72.5%	80.6%
R03	Western Region	76.3%	76.1%
R04	Central Region	69.6%	71.0%
R05	Eastern Region	75.0%	78.2%
R06	Northern Region	66.7%	64.0%
R07	Volta Region	79.0%	80.8%
R08	Brong Ahafo Region	84.6%	90.5%
R09	Upper East Region	84.8%	92.4%
R10	Upper West Region	82.4%	82.4%
Total		75.6%	78.1%

Private Collection Ratio			
Region		2017 Performance	2018 Performance
R01B	Accra East	86.0%	91.3%
R01C	Accra West	92.6%	91.5%
R01D	Tema	93.7%	95.2%
R02A	Ashanti South	91.1%	87.7%
R02B	Ashanti North	81.8%	88.8%
R03A	Western Region	90.3%	92.0%
R04A	Central Region	89.3%	91.9%
R05	Eastern Region	90.3%	91.6%
R06	Northern Region	82.8%	79.9%
R07	Volta Region	94.8%	96.7%
R08	Brong Ahafo Region	97.2%	99.5%
R09	Upper East Region	94.7%	101.1%
R10	Upper West Region	94.8%	94.5%
Total		89.6%	90.0%

Ghana Water Company Limited

Business model and Strategy

For the year ended 31 December 2018

KEY PERFORMANCE INDICATORS

To optimize our financial and operational performances, we monitor key performance indicators (KPIs) as highlighted below:

Financial KPIs

	2018 GHS	2017 GHS	% CHANGE
Revenue	914,660,496	885,468,804	3.3%
Profit/(Deficit) before interest	(642,972,357)	(665,640,736)	3.4%
Profit/(Deficit) for the year	35,362,026	8,316,276	-325.2%
Cost of Operations	1,233,880,257	1,146,570,888	7.6%
Gearing (Debt to Equity ratio)	10%	7%	

Financial Highlights

Decrease in Loss before finance cost:

By GHS 29,191,693

Upturn in results for the year

Loss of GHS 668,336,233

3.5% decrease in loss from prior year

Healthy Gearing ratio of:

10%

Operational KPIs

	2018	2017	%Change
Volume of water produced	319.4 million cubic meters	314.8 million cubic meters	1.5%
Volume of water sold	148.8 million cubic meters	142.3 million cubic meters	4.6%
Number of customers	675,761	640,970	5.43%

Operational Highlights

Increase water produced

319.4 million Cubic

Increase number of customers

675,761

Ghana Water Company Limited

Independent auditor's report

For the year ended 31 December 2018

Opinion

We have audited the financial statements of Ghana Water Company Limited which comprise the statement of financial position as of 31 December 2018, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects the financial position of the company as at 31 December 2018 and its financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the company in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the financial statements and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Responsibilities of Management and Those Charged with Governance

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Ghana Water Company Limited

Independent auditor's report

For the year ended 31 December 2018

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicated with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ghana Water Company Limited

Independent auditor's report

For the year ended 31 December 2018

We also provided those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence and to communicate with them all relationships and other matters that may reasonably be brought to bear on our independence and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

The Ghana Companies Act, 1963 (Act 179) requires that in carrying out our audit, we consider and report on the following matters. We confirm that:

- i. We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;
- ii. In our opinion proper books of accounts have been kept by Ghana Water Company Limited so far as appears from our examination of those books; and
- iii. The statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows of Ghana Water Company Limited are in agreement with the books of accounts.


A.D. & Associates

Chartered Accountants

P. O. Box CT 1506

Cantonment -Accra, Ghana

Licence Number: ICAG/F/020

Engagement Partner:

George Gyedu-Adomako

Practising Cert. No. ICAG/P/1460

Name of the Auditor:

Alex Kwaku Dey

Practising Cert. No. ICAG/P/1301

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Ghana Water Company Limited

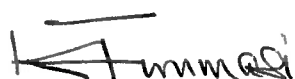
Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2018

	Notes	2018 <u>GHS</u>	2017 <u>GHS</u>
Revenue	3	914,660,494	885,468,803
Cost of operations:	4		
Production cost	4a	656,221,508	619,496,309
Transmission/boostering cost	4b	46,675,861	33,365,814
Distribution cost	4c	366,520,852	240,947,209
Commercial/marketing cost	4d	<u>164,462,047</u>	<u>252,761,556</u>
Total cost of operations		<u>1,233,880,268</u>	<u>1,146,570,888</u>
Gross profit / (loss)		(319,219,774)	(261,102,085)
Other income	5	19,366,996	32,341,577
General administration and other costs	6	<u>(342,715,084)</u>	<u>(436,880,230)</u>
Profit/ (loss) before finance cost		(642,567,862)	(665,640,738)
Finance cost	7	<u>(25,363,876)</u>	<u>(26,590,926)</u>
Profit/(loss) for the year		(667,931,738)	(692,231,664)
Transfer from revaluation surplus	17	<u>703,698,260</u>	<u>700,547,938</u>
Total comprehensive income for the year		<u>35,766,522</u>	<u>8,316,274</u>

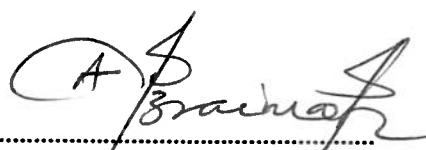
Ghana Water Company Limited
Statement of Financial Position
For the year ended 31 December 2018

	Notes	2018 <u>GHS</u>	2017 <u>GHS</u>
Non-current assets			
Property, plant & equipment	8	12,508,886,282	13,116,171,257
Investment property	9	<u>475,372</u>	<u>489,314</u>
Total		<u>12,509,361,654</u>	<u>13,116,660,571</u>
Current assets			
Inventories	10	141,630,424	95,492,621
Accounts receivables	11	926,631,311	753,061,569
Investments	12	1,066,721	838,737
Bank and cash balances	13	<u>56,597,929</u>	<u>42,034,195</u>
Total		<u>1,125,926,385</u>	<u>891,427,122</u>
Total assets		<u>13,635,288,039</u>	<u>14,008,087,693</u>
Equity and liabilities			
Equity and reserves			
Stated capital	14	1,250,000	1,250,000
Government deposit for shares	15	193,226,221	193,226,221
Development financing	16	1,772,403,020	2,011,949,588
Capital surplus	17	9,477,880,450	10,181,578,710
Income surplus/(deficit)		<u>(3,443,901)</u>	<u>(51,138,975)</u>
Total equity and reserves		<u>11,441,315,790</u>	<u>12,336,865,544</u>
Long term liabilities			
Long term loans	18	914,336,727	679,521,462
Provision for defined benefit obligations	19	<u>20,163,823</u>	<u>16,048,606</u>
Total long term liabilities		<u>934,500,550</u>	<u>695,570,068</u>
Current liabilities			
Current portion of long term loans	18	212,801,959	158,151,252
Accounts payables	20	<u>1,046,669,740</u>	<u>817,500,829</u>
Total current liabilities		<u>1,259,471,699</u>	<u>975,652,081</u>
Total liabilities		<u>2,193,972,249</u>	<u>1,671,222,149</u>
Total equity and liabilities		<u>13,635,288,039</u>	<u>14,008,087,693</u>



Director

Date: 02/03/2020



Director

Date: 02/03/2020

Ghana Water Company Limited
Statement of Cash Flows
For the year ended 31 December 2018

	2018 GHS	2017 GHS
OPERATING ACTIVITIES		
Cashflow from operating activities:		
Operating profit/(loss)	35,766,522	8,316,274
Adjustments for non-cash items:		
Provision for long service awards	4,115,217	0
Depreciation charges	758,722,153	755,586,560
Exchange loss on borrowing	24,319,601	30,275,667
Prior year adjustment	11,928,552	(17,040,854)
Transfer from revaluation surplus	(703,698,260)	(700,547,938)
Operating cash flow before movements in working capital	<u>131,153,785</u>	<u>76,589,709</u>
Movement in working capital		
Change in inventories	(46,137,803)	(52,200,515)
Change in accounts receivables	(173,569,742)	(156,832,651)
Change in accounts payables	<u>229,168,911</u>	<u>213,709,739</u>
Net cash flow from operating activities	<u>140,615,151</u>	<u>81,266,282</u>
INVESTING ACTIVITIES		
Purchase of property, plant & equipment	(332,096,247)	224,845,804
Proceeds from sale of property, plant & equipment	<u>180,673,011</u>	0
Net cashflow used in investing activities	<u>(151,423,236)</u>	<u>224,845,804</u>
FINANCING ACTIVITIES		
Provident fund loan repayment	(37,362,324)	(8,500,000)
Loan received (provident fund)	36,087,399	8,000,000
Societe generale - medium term loan	(676,508)	0
Other long term loans	267,097,804	0
Development financing received from Government of Ghana (GOG)	<u>(239,546,568)</u>	<u>121,566,738</u>
Net cash flow from financing activities	<u>25,599,803</u>	<u>121,066,738</u>
Net increase/ (decrease) in cash and cash equivalents	14,791,718	(22,512,784)
Cash and cash equivalents at 1 January 2018	<u>42,872,932</u>	<u>65,385,716</u>
Cash and cash equivalents at 31 December 2018	<u>57,664,650</u>	<u>42,872,932</u>
Analysis of cash and cash equivalent as shown in the statement of financial position		
	2018 GHS	2017 GHS
Cash and bank balances	56,597,929	42,034,195
Short term investments	<u>1,066,721</u>	<u>838,737</u>
	<u>57,664,650</u>	<u>42,872,932</u>

Ghana Water Company Limited

Statement of changes in equity

For the year ended 31 December 2018

	Stated capital		Government deposit for	Development financing	Capital surplus		Income surplus	Total
	GHS	GHS			GHS	GHS		
Year ended 31 December 2018								
At 1 January 2018	1,250,000	193,226,221		2,011,949,588	10,181,578,710	(51,138,975)	12,336,865,544	
Additions/(reductions)	0	0		(239,546,568)	0	0	(239,546,568)	
Prior year adjustment	0	0		0	0	11,928,552	11,928,552	
Transfers	0	0		0	(703,698,260)	0	(703,698,260)	
Total comprehensive income for the year	0	0		0	0	35,766,522	35,766,522	
At 31 December, 2018	1,250,000	193,226,221		1,772,403,020	9,477,880,450	(3,443,901)	11,441,315,790	
Year ended 31 December 2017								
At 1 January 2017	1,250,000	193,226,221		1,890,382,850	0	(42,414,395)	2,042,444,676	
Additions	0	0		121,566,738	10,882,126,648	0	11,003,693,386	
Prior year adjustment	0	0		0	0	(17,040,854)	(17,040,854)	
Transfers	0	0		0	(700,547,938)	0	(700,547,938)	
Total comprehensive income for the year	0	0		0	0	8,316,274	8,316,274	
At 31 December, 2017	1,250,000	193,226,221		2,011,949,588	10,181,578,710	(51,138,975)	12,336,865,544	

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

1. Corporate information

Ghana Water Company Limited (GWCL) was established on 1 July 1999 as a state-owned limited liability company under the Statutory Corporations (Conversion to Companies) Act 461 of 1993 as amended by LI 1648. The address of its registered office and principal place of business is 28th February Road, Accra.

GWCL is principally responsible for the planning and development of water systems and sale of water in urban communities in the country.

2. Summary of significant accounting policies

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

2.1 Basis of preparation

The financial statements of the company have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Additional information required by the Companies Code, 1963, (Act 179) is included where appropriate.

The financial statements have been prepared on a historical cost basis, except for certain properties and financial instruments that are measured at revalued amounts or fair values, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

2.2 Key accounting judgements, estimates and assumptions

The preparation of financial statements in conformity with IFRSs requires the management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. All estimates and underlying assumptions are based on historical experience and various other factors that management believes are reasonable under the circumstances.

The result of these estimates form the basis of judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Areas involving a higher degree of judgment or complexity or areas where assumptions and estimations are significant to the financial statements are;

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

a Contingencies

Judgment of management is required for estimating the possible outflow of resources, if any, in respect of contingencies/claims/litigations against the company as it's not possible to predict the outcome of pending matters with accuracy.

b Allowance for uncollected account receivables and advances

Trade receivables do not carry any interest and are stated at their nominal value as reduced by appropriate allowances for estimated trade irrecoverable amounts. Individual trade receivables are written-off when management deems them not collectible.

Impairment is made on each amount, which are the present value of the shortfall over the expected life of the financial assets.

c Defined benefit plan

The cost of defined benefit plan and other post-employment benefits and the present value of such obligations are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in future. These include the determination of the discount rate, future salary increments, mortality rates and attrition rate. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

d Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities rounded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the Discounted Cash Flow (DCF) model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values.

Judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

2.3 Accounting standards update

At the date of authorisation of these financial statements, The Company had not applied the following new and revised IFRS Standards that have been issued but are not yet effective.

IFRS 16	Leases
IFRS 17	Insurance contract
Amendments to IFRS 9	Prepayment features with negative compensation
Amendments to IAS 28	Long term interests in associates and joint ventures
Annual improvements to IFRS standards 2015-2017 cycle	Amendments to IFRS 3 business combinations, IFRS 11 joint arrangements, IAS 12 Income taxes and IAS 23 borrowing costs
IFRS 10 Consolidated financial statements and IAS 28 (amendments)	Sale or contribution of assets between an investor and its associate or joint venture
IFRIC 23	Uncertainty over income tax treatments

The directors expect the adoption of IFRS 16 and 9 to have a material impact on the financial statement of the future periods. At the end of the reporting period, the directors were yet to do an assessment of the impact of these standards on the financial statements.

2.4 Revenue recognition

Revenue represents the fair value of the income receivable in the ordinary course of business for goods and services provided. Where relevant, this includes an estimate of the sales value of units supplied to customers between the date of the last meter reading and the period end, exclusive of value added tax.

The company recognizes revenue generally at the time of delivery and when collection of the resulting receivable is reasonably assured. When the company considers that the criteria for revenue recognition are not met for a transaction, revenue recognition would be delayed until such time as the transaction becomes fully earned or collectability is reasonably assured. Payments received in advance of revenue recognition are recorded as deferred income.

2.5 Employee Benefits

In the current year, the company has applied IAS 19 Employee Benefits (as revised in 2011) and the related consequential amendments for the first time.

IAS 19 (as revised in 2011) changes the accounting for defined benefit plans and termination benefits. The most significant change relates to the accounting for changes in defined benefit obligations and plan assets.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

The amendments require the recognition of changes in defined benefit obligations and in the fair value of plan assets when they occur, and hence eliminate 'the corridor' approach permitted under the previous version of IAS 19 and accelerate the recognition of past service costs. All actuarial gains and losses are recognized immediately through other comprehensive income in order for the net pension asset or liability recognized in the statement of financial position to reflect the full value of the plan deficit or surplus. Furthermore, the interest cost and expected return on plan under IAS 19 (as revised in 2011), which is calculated by applying the discount rate to the net defined benefit liability or asset.

Specific transitional provisions are applicable to first time application of IAS 19 (as revised in 2011). The company has applied relevant transitional provisions and restated the comparative amounts on a retrospective basis.

2.6 Property, plant and equipment

Structures, Machinery and Equipment and Motor Vehicles, after initial recognition as Property, plant and equipment are stated in the balance sheet at cost less accumulated depreciation and impairment. Cost is defined as the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, when applicable, the amount attributed to that asset when initially recognized.

The cost of the asset usually remains unchanged until it is derecognized unless an expenditure incurred on the asset meets the recognition criteria. If the recognition criteria are met, the expenditure is added to the carrying amount of the property, plant and equipment. If the recognition criteria are not met, the expenditure is expensed when incurred.

The current annual depreciation rates for each class of property, plant and equipment are as follows:

Structures	1.3% - 2.5%
Machinery and equipment	3.3% - 20%
Motor vehicles	12.5% - 20%
Land is not depreciated.	

Useful lives, components and residual amounts are reviewed annually. Such a review takes into consideration the nature of the assets, their intended use including but not limited to the closure of facilities and the evolution of the technology and competitive pressures that may lead to technical obsolescence.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

Depreciation of property, plant and equipment is allocated to the appropriate headings of expenses by function in the income statement.

Useful lives of property, plant and equipment

The Company reviews the estimated useful lives of property, plant and equipment at the end of each reporting period. During the current year, the useful life policy was reviewed by the consultant, PricewaterhouseCoopers by management of the various sub categories and made revisions in accordance with best practice as follows.

Summary of asset sub types	GWCL policy (years)	Revised policy (years)
Calculator Cash and Type	5	3
Communication Equipment	5	5
Computer and Peripherals	5	3
Computer Servers and Software	n/a	5
Domestic Furniture	10	10
Fridge and Air Conditioner	5	5
Office Furniture	10	10
Photocopier and Stencil	5	3

De-minimis policy

Upon the recommendation of the consultant PWC, GWCL has adopted a lower minimum threshold value for its assets of US\$500 or GHC 3,000. Consequently, only assets with values over us\$500 were revalued.

Cost of borrowing

Borrowing costs incurred during the cost of construction are capitalized if the assets under construction are significant and if their construction requires a substantial period to complete (typically more than one year). The capitalization rate is determined on the basis of the short-term basis of the borrowing rate for the period of construction.

Premiums capitalized for leasehold land or building are amortized over the length of the lease. Government grants are recognized as deferred income which is released to the income statement when they are not related to the assets, are credited to the income statement when they are received, if there is reasonable assurance that the terms of grant will be met.

Components

IFRS has a specific requirement for "component" depreciation, as described in IAS 16, Property, Plant and Equipment. Each significant part of an item of property, plant and equipment is depreciated separately. Significant parts of an asset that have similar useful lives and patterns of consumption can be grouped together.

All components are depreciated to their recoverable amount over their useful lives, which may differ among components. The remaining carrying amount of the component is derecognised on replacement and the cost of the replacement part is capitalised.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

2.7 Impairment

The utility industry is distinguished by the significant capital investment required, exposure to commodity prices and heavy regulation. The required investment in fixed assets leaves the industry exposed to adverse economic conditions and therefore impairment charges. Utilities' assets are tested for impairment whenever indicators of impairment exist. The normal measurement rules for impairment apply.

Impairment indicators

Examples of external impairment triggers relevant for the utilities industry include falling retail prices, rising fuel costs, overcapacity and increased or adverse regulation or tax changes.

Impairment indicators can also be internal in nature. Evidence that an asset or cash-generating unit (CGU) has been damaged or has become obsolete is an impairment indicator; for example a power plant destroyed by fire is, in accounting terms, an impaired asset. Other indicators of impairment are a decision to sell or restructure a CGU or evidence that business performance is less than expected. Performance of an asset or group of assets that is below that expected by management in operational and financial plans is also an indicator of impairment.

Management is alert to indicators of impairment on a CGU basis; for example, a fire at an individual generating station would be an indicator of impairment for that station as a separate CGU. Management may also identify impairment indicators on a regional, country or other asset grouping basis, reflective of how they manage their business. Once an impairment indicator has been identified, the impairment test must be performed at the individual CGU level, even if the indicator was identified at a regional level.

Cash-generating units

A CGU is the smallest group of assets that generates cash inflows largely independent of other assets or groups of assets. In identifying whether cash inflows from an asset or groups of assets are largely independent of the cash inflows from other assets (or groups of assets), an entity considers various factors, including how management monitors the entity's operations or how management makes decisions about continuing or disposing of the entity's assets and operations.

2.8 Loans and borrowings

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate method.

Gains and losses are recognized in the income statement when the liabilities are derecognized as well as through the amortization process.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

2.9 Financial instruments

The standard addresses the accounting principles for the financial reporting of financial assets and financial liabilities, including classification, measurement, impairment, derecognition and hedge accounting. It will be mandatory for the accounting period beginning on 1 January 2018.

The Company has performed a review of the business model corresponding to the different portfolios of financial assets and of the characteristics of these financial assets. Consequently, debt instruments whose cash flows are solely payments of principal and interest ("SPPI") will be designated either at amortised cost or at fair value through Other Comprehensive Income depending the objectives of the business model. The existing investments in equity instruments at the date of the initial application will generally be designated at fair value through Other Comprehensive Income by election. This election generates a reclassification between equity components, with no net impact on the total company equity.

There is no expected impact on the company's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and the Company does not have any such liabilities.

The impact of the new impairment model has also been reviewed. This analysis requires the identification of the credit risk associated with the counterparties and considering that the majority of Company's financial assets are trade receivables, integrates some statistical data reflecting the past experience of losses incurred due to default.

Furthermore, the Company has updated the definitions of its hedging relationships in line with the risk management activities and policies, with a specific attention to the identification of the components in the pricing of the commodities.

Changes in accounting policies resulting from IFRS 9 has been applied retrospectively as at 1 January 2018, but with no restatement of comparative information for prior years. Consequently, the Company will recognise any difference between the carrying amount under IFRS 9 in the opening retained earnings (or other equity components) of the accounting period including the date of initial application.

The total estimated adjustment (net of tax) to the opening equity at the date initial application is not material.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

2.10 Leases

This standard will replace IAS 17 and sets out the principles for the recognition, measurement, presentation and disclosure of leases.

The main effect on the Company is that IFRS 16 introduces a single lessee accounting model and requires a lessee and will therefore result in an increase of total property, plant and equipment and total financial debt. All things being equal, under the new standard Trading operating profit would increase due to the replacement of the operating lease expense with amortization of the lease assets. This increase would be partially or entirely offset by higher interest expense resulting in an insignificant impact on net profit. The Company is currently finalizing the precise impact of this new standard.

This standard is mandatory for the accounting period beginning on 1 January 2019. The Company has applied an early adoption of the standard beginning on 1 January 2018 under the full retrospective approach.

2.11 Borrowing costs

The cost of an item of property, plant and equipment may include borrowing costs incurred for the purpose of acquiring or constructing it. IAS 23 (revised) requires such borrowing costs to be capitalised if the asset takes a substantial period of time to get ready for its intended use. Examples of borrowing costs given by the standard are interest expense calculated using the effective interest method (described in IAS 39, Financial Instruments: Recognition and Measurement); finance charges in respect of finance leases recognised in accordance with IAS 17, Leases, and/or exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

Borrowing costs is capitalised while acquisition or construction is actively underway. These costs include the costs of specific funds borrowed for the purpose of financing the construction of the asset, and those general borrowings that would have been avoided if the expenditure on the qualifying asset had not been made.

The general borrowing costs attributable to an asset's construction is calculated by reference to the entity's weighted-average cost of general borrowings.

2.13 Cash and cash equivalents

For the purposes of the cash flow statement, cash and cash equivalents comprise cash at banks and in hand, short-term fixed deposits with an original maturity of three months or less, bank overdrafts which are repayable on demand. All of the component of the cash and cash equivalent form an integral part of the company's cash management. Cash and cash equivalents are measured subsequently at amortised cost.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

2.14 Foreign currencies

The functional currency of the company is the currency of their primary economic environment.

Individual companies, transactions in foreign currencies are recorded at the rate of exchange at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated at year-end rates. Any resulting exchange differences are taken to the income statement, except when deferred in other comprehensive income as qualifying cash flow hedges.

Differences arising from these translations are recognised in general and administration expenses or other comprehensive income.

Foreign currency translation

The company's financial statements are presented in Ghana cedis (GHS) which is also the company's functional currency. Items included in the financial statements of the company are measured using that functional currency.

Transactions and balances

Transactions in foreign currencies are initially recorded at the functional currency rate prevailing at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rate of exchange ruling at the reporting date. All differences are taken to the income statement.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate as at the date of the initial transaction and are not subsequently restated. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018	2017
	GHS	GHS
3. REVENUE		
Sale of water to private customers	733,668,451	702,605,507
Sale of water to government institutions	<u>180,992,043</u>	<u>182,863,296</u>
	<u>914,660,494</u>	<u>885,468,803</u>
 4. COST OF PRODUCTION		
4a. PRODUCTION COST		
Personnel cost	44,304,461	39,821,830
Water treatment chemical cost	35,515,085	49,000,481
Electricity	203,452,194	251,863,193
Fuel and lubricant	1,919,277	1,713,437
Material cost	650,567	168,973
Lab. analytical chemicals reagents	177,214	22,299
Hiring of equipment	107,449	141,430
Overheads	5,708,299	4,601,914
Repairs and maintenance	101,681,722	86,165,638
Depreciation	<u>262,705,240</u>	<u>185,997,114</u>
SUB TOTAL	<u>656,221,508</u>	<u>619,496,309</u>
 4b. TRANSMISSION/BOOSTER STATIONS COST		
Personnel cost	4,024,004	3,159,461
Water treatment chemical cost	83,675	94,686
Electricity	18,925,882	18,046,532
Fuel and lubricant	168,441	19,826
Material cost	47,412	58,850
Lab. analytical chemicals reagents	23,767	21,032
Hiring of equipment	70,000	41,790
Overheads	409,991	376,196
Repairs and maintenance	517,436	445,965
Depreciation	<u>22,405,253</u>	<u>11,101,476</u>
SUB TOTAL	<u>46,675,861</u>	<u>33,365,814</u>

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018	2017
	GHS	GHS
4c. DISTRIBUTION COSTS		
Personnel cost	45,409,855	40,684,842
Water treatment chemical cost	0	0
Electricity	629,555	581,937
Fuel and lubricant	3,712,715	3,097,803
Material cost	28,621,926	26,275,315
Hiring of equipment	667,672	761,482
Overheads	5,746,965	4,845,707
Repairs and maintenance	20,526,167	18,420,840
Depreciation	<u>261,205,997</u>	<u>146,279,283</u>
SUB TOTAL	<u>366,520,852</u>	<u>240,947,209</u>

4d. COMMERCIAL/MARKETING

Personnel cost	63,463,846	56,384,913
Electricity	201,748	228,302
Fuel and lubricant	1,823,626	1,239,872
Material cost	263,029	353,843
Hiring of equipment	8,750	6,840
Overheads	32,069,989	55,974,535
Repairs and maintenance	1,625,087	944,387
Depreciation	<u>65,005,972</u>	<u>137,628,864</u>
SUB TOTAL	<u>164,462,047</u>	<u>252,761,556</u>

5. OTHER INCOME

Bank interest	1,261,750	1,111,323
Drilling	628,430	310,976
Base and central workshop	2,034,175	1,152,727
Central stores	5,910	3,540
New service connection	3,011,006	5,488,244
Reconnection fees	297,011	649,381
Meter rent	11,833	40,229
Guest house rent	594,857	475,767
Transport hire	217,930	325,412
Investment income	202,477	100,657
Sundry income	<u>11,101,617</u>	<u>22,683,321</u>
	<u>19,366,996</u>	<u>32,341,577</u>

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018 GHS	2017 GHS
5a. SUNDRY INCOME		
This is mainly made up of receipts from the sale of obsolete stocks, tender documents and laboratory services performed for other companies.		
6. GENERAL ADMINISTRATION		
Personnel cost	75,570,683	61,472,783
Water treatment chemical cost	6,645	165,047
Electricity	2,607,795	1,927,685
Fuel and lubricant	4,996,647	4,917,815
Material cost	1,073,411	791,439
Lab. analytical chemicals reagents	658,186	533,650
Hiring of equipment	85,445	76,532
Overheads	56,749,472	43,440,992
Repairs and maintenance	9,703,931	7,726,829
Depreciation	147,400,083	274,579,429
Levies and charges	13,277,016	9,178,694
Bank charges	1,626,952	1,433,668
Audit fee	524,000	360,000
Exchange loss	24,319,601	30,275,667
Employee benefits expense	4,115,217	0
	<u>342,715,084</u>	<u>436,880,230</u>

6a. OVERHEADS

This is mainly made up of office supplies, communication & postage, transport expense, private security cost, medicals and entertainment expenses.

7. FINANCE COSTS

Interest on loans	<u>25,363,876</u>	<u>26,590,926</u>
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Notes to the financial statements

For the year ended 31 December 2018

8. PROPERTY PLANT AND EQUIPMENT

VALUATION

COST

Description	At 01/01/2018 GHS	Additions GHS	Disposals/ transfers GHS	At 31/12/2018 GHS
Structures	16,408,124,026	234,193,219	(3,612)	16,642,313,633
Machinery and equipment	742,596,908	96,125,938	(1,985,973)	836,736,873
Motor vehicles	177,487,171	1,777,090	(2,083,080)	177,181,181
Construction in progress	1,691,793,078	0	(179,765,772)	1,512,027,306
	<u>19,020,001,183</u>	<u>332,096,247</u>	<u>(183,838,437)</u>	<u>19,168,258,993</u>

Depreciation

	At 01/01/2018 GHS	Charge for the year GHS	Disposals/ transfers GHS	At 31/12/2018 GHS
Structures	5,500,329,368	702,961,978	0	6,203,291,346
Machinery and equipment	265,093,782	41,271,535	0	306,365,317
Motor vehicles	138,406,776	14,474,698	(3,165,426)	149,716,048
	<u>5,903,829,926</u>	<u>758,708,211</u>	<u>(3,165,426)</u>	<u>6,659,372,711</u>
Net book value 31/12/2018				<u>12,508,886,282</u>

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

COST				
Description	At 01/01/2017	Additions	Capital surplus	At 31/12/2017
	GHS	GHS	GHS	GHS
Structures	1,174,116,885	1,645,539	15,232,361,602	16,408,124,026
Machinery and equipment	323,447,619	33,681,772	385,467,517	742,596,908
Motor vehicles	25,758,652	11,260,572	140,467,947	177,487,171
Construction in progress	1,513,535,157	178,257,921	0	1,691,793,078
	<u>3,036,858,313</u>	<u>224,845,804</u>	<u>15,758,297,066</u>	<u>19,020,001,183</u>
Depreciation				
	At 01/01/2017	Charge for the year	Capital surplus	At 31/12/2017
	GHS	GHS		GHS
Structures	170,632,746	695,354,225	4,634,342,397	5,500,329,368
Machinery and equipment	84,338,871	33,368,692	147,386,219	265,093,782
Motor vehicles	16,614,282	26,849,701	94,942,793	138,406,776
	<u>271,585,899</u>	<u>755,572,618</u>	<u>4,876,671,409</u>	<u>5,903,829,926</u>
Net book value				<u>13,116,171,257</u>
31/12/2017				

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018	2017
	GHS	GHS
9. INVESTMENT PROPERTY		
Opening balance	546,341	11,328
Revaluation adjustments - cost	<u>0</u>	<u>535,013</u>
	546,341	546,341
Accumulated depreciation	(57,027)	(9,061)
Revaluation adjustments - acc depn	0	(34,024)
Depreciation charge for the year	<u>(13,942)</u>	<u>(13,942)</u>
Net book value	<u>475,372</u>	<u>489,314</u>

Investment properties are properties held to earn rentals and/or for capital appreciation and are not occupied by the Company. Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, the Company measures its investment properties using the cost model as set out in IAS 16 Property, Plant and Equipment - cost less accumulated depreciation and less accumulated impairment losses. Currently, investment property has been stated using the revalued cost.

An investment property is derecognized upon the disposal or when the investment property is permanently withdrawn from use and no future economic benefit are expected from the disposal. Any gain or loss arising from derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the profit or loss in the period in which the property is derecognized.

10. INVENTORY

At 31 December	<u>141,630,424</u>	<u>95,492,621</u>
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Inventories comprise chemicals, pipes and accessories, fuel and lubricants, stationery, spare parts and general stores. No inventory was written off during the year.

Inventories are stated at the lower of cost and net realisable value. All inventories are valued using the weighted average cost method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018	2017
	GHS	GHS
11. RECEIVABLES		
Trade receivables - private customers	427,196,936	374,463,443
Provision for doubtful debts	<u>(154,142,531)</u>	<u>(140,279,921)</u>
	273,054,405	234,183,522
Trade receivables - government	632,335,395	496,711,149
Staff loans and advances	9,684,760	12,252,839
Other debtors and prepayment	<u>11,556,751</u>	<u>9,914,059</u>
	<u>926,631,311</u>	<u>753,061,569</u>

The company makes a provision for doubtful debts of 30% and 40% on City and Rural Private Customers respectively. The Company does not charge specific provisions. The provision rates are based on the recoverability trends of these customers, No provision is made for Government Customers.

12. INVESTMENT

Investment in treasury bills and fixed deposits	<u>1,066,721</u>	<u>838,737</u>
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13. BANK AND CASH

	GHS	GHS
Cash in hand	56,300,925	41,904,759
Cash at bank	<u>297,004</u>	<u>129,436</u>
	<u>56,597,929</u>	<u>42,034,195</u>

14. STATED CAPITAL

(a) The number of Authorised Shares of the Company is 200,000,000,000 Shares of no par value.

(b) Stated capital is made up as follows:

	No. of shares	Amount GHS
Issued for cash and fully paid	1,250,000	1,250,000

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

	2018	2017
	GHS	GHS
15. GOVERNMENT DEPOSIT FOR SHARES		
At 31 December	<u>193,226,221</u>	<u>193,226,221</u>

This represents loans forgiven by the Government under the HIPC initiative and will be converted to equity in due course.

16. DEVELOPMENT FINANCING

Balance at 1st January	2,011,949,588	1,890,382,850
Additions in the year	<u>(239,546,568)</u>	<u>121,566,738</u>
Balance at 31st December	<u>1,772,403,020</u>	<u>2,011,949,588</u>

The Development Financing represent Drawdowns from foreign donors for execution of water supply projects which are paid through Ministry of Finance. Capitalised China Gezhouba Project account for the funds transfer and the Drawdowns for the additions.

17. CAPITAL SURPLUS

Balance at 1st January	10,181,578,710	10,882,126,648
Transfer to retained earnings	<u>(703,698,260)</u>	<u>(700,547,938)</u>
Balance at 31st December	<u>9,477,880,450</u>	<u>10,181,578,710</u>

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

18. LONG TERM LOANS

	Balance at 01/01/18	Repayments	Additions	Exchange difference	Balance At 31/12/18
	GHS	GHS	GHS	GHS	GHS
IDA 160 GH	1,135,802			103,994	1,239,796
IDA 499 GH	5,947,161			544,518	6,491,679
ADB ICS GH/PU/74/002 SL	2,663,790			243,895	2,907,685
ADB ICS GH/PU/74/002	1,633,756			149,586	1,783,342
Italian gov't	4,329,542			396,410	4,725,952
CFD 52/241/02	2,298,038			93,718	2,391,756
OECD NO GH 7	152,605,918			17,473,960	170,079,878
Austrian gov't	65,080,019			2,654,097	67,734,116
Nordic fund No. 106	25,380,207			1,818,175	27,198,382
ADF/GHA WSR	24,646,346			841,248	25,487,594
Kpong WS expansion project	539,860,770			0	539,860,770
Wa WS expansion project	0	0	267,097,804	0	267,097,804
Provident fund - medium term	10,000,000	(3,860,068)	4,000,000	0	10,139,932
Societe generale - medium	676,508	(1,353,017)	676,509	0	0
Provident fund - medium term	1,414,857	(33,502,256)	32,087,399	0	0
	<u>837,672,714</u>	<u>(38,715,341)</u>	<u>303,861,712</u>	<u>24,319,601</u>	<u>1,127,138,686</u>
Current portion	<u>158,151,252</u>				<u>212,801,959</u>
Long term portion	<u>679,521,462</u>				<u>914,336,727</u>

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

IDA 160 GH

This loan facility with effective date of 28/08/1969 was procured to improve and expand Water Supply Systems of Accra and construction of Sewerage Systems in Accra representing USD 1,881,212.00 secured from International Development Agency (IDA 160 GH). This debt is for a period of 20 years. Interest Rate is at 6.5% p.a.

IDA 499 GH

This loan facility with effective date of July 1974 was procured for further expansion and development of the Water Supply System in and adjacent ATMA representing USD 7,745,634.00 secured from International Development Agency (IDA 499 GH). This debt is for a period of 20 years with semi-annual repayment. Interest Rate is at 7.5% p.a.

ADB ICS GH/PU/74/002 SL

This loan facility representing USD 2,437,013.00 secured from Africa Development Bank. Interest Rate is at 6%.

ADB ICS GH/PU/74/002

This loan facility representing USD 4,019,687.00 was procured for Civil Engineering Works for the new 20m gd capacity water treatment plant at Weijsa secured from Africa Development Bank. This debt is for a period of 20 years. Interest Rate is at 6%.

ITALIAN GOV'T

This loan facility with effective date of June 1985 was procured for Kpong, Tema and Accra Water pipeline Project representing USD 4,900,000.00 secured from Italian Government. This debt is for a period of 20 years with a 5-year grace period. Servicing charge for the loan is 1.5%

CFD 52/241/02

This loan facility with effective date of 21/12/1993 was procured for Customer Management Project ATMA representing FRF 6,000,000.00 or 914,694.00 Euros secured from CFD. This debt is for a period of 20 years with a 5-year grace period. Interest Rate is at 2.75 p.a (Semi-annually).

OECF NO GH 7

This loan facility with effective date of March 2004 was procured under Water Sector Rehabilitation Project (WSRP) for Workshop tool, communication equipment, vehicles and headworks representing 5,444,000.00 Chinese yen secured from OECF. This debt is for a period of 20 years. Interest Rate is at 2.6 p.a (Semi-annually).

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

AUSTRIAN GOV'T

This loan facility with effective date of 16/05/1990 was procured to improve Water Sector Rehabilitation Project (WSRP) at Western and Central regions representing ATS 260,000,000.00 or 18,895,074.00 Euros secured from Austrian Government. This debt is for a period of 20 years with a 10-year grace period. Interest Rate is at 2.5% p.a

NORDIC FUND NO. 106

This loan facility was signed on 10/09/1995 with effect from 2006 was procured under Water Sector Rehabilitation Project (WSRP) for Teshie-Nungua Main Extension representing SDR 5,000,000.00 secured from Government of Finland. This debt is for a period of 20 years semi-annually with a 10-year grace period. Interest Rate for 1995-2005 was 1% and 2006-2035 is 2%.

ADF/GHA WSR

This loan facility with effective date of 26/06/1989 was procured to improve Weijsa and Kpong Plant/Staff training/Supply of equipment and plant representing FUA 7,000,000.00 Approx. 5,994,410.00 Euros secured from ADF-F/GHA/WSR/88/9. This debt is for a period of 40 years with a 10-year grace period. Servicing charge for the loan is 0.75%.

KPONG WATER SUPPLY EXPANSION PROJECT (CHINA GEZHOUBA)

This loan facility was signed on 20/09/2010 procured for Kpong Water Supply Expansion Project representing USD276,250,000 secured from Exim Bank of China. This debt is for a period of 16 years with 1-year grace period. Interest Rate is at 2% p.a.

WA WATER SUPPLY EXPANSION PROJECT (JAMBUSI)

This loan facility is an onlending agreement made between the Republic of Ghana represented by the Minister of Finance and Ghana Water Company Ltd. dated 28 August 2015. The Loan Agreement was signed on 25 June 2012 between GOG and MOF and the Export Import Bank of Korea representing US\$55,500,000 to be used exclusively for the "Implementation of Wa Water Supply System Development Project in Ghana".

PROVIDENT FUND-MEDIUM TERM

This loan facility of GHC 10,000,000.00 to be received in 5 installments was procured for Kpong Bottling Plant. The 1st installment of GHC 2,000,000.00 received in December 2016 secured from GWCL Staff Provident Fund. This debt is for a period of 4 years. Interest Rate is at 17% p.a.

PROVIDENT FUND-MEDIUM TERM

This loan facility with effective date of 30/04/2013 was procured for the Aboadze Thermal Plant representing GHC5,000,000.00 with an accrued Interest of GHC4,914,856.87 and GHC7,500,00.00 procured for Staff One Month Salary Advance with an interest of GHC 584,693.13 secured from GWCL Staff Provident Fund. This debt is for a period of 4 years with 18 Months grace period. Interest Rate is at 17% p.a

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

	2018	2017
	GHS	GHS
19. EMPLOYEES BENEFIT OBLIGATIONS		
Balance at 1st January	16,048,606	16,048,606
Charge for the year - 2017	2,696,918	0
Charge for the year - 2018	<u>1,418,299</u>	<u>0</u>
At 31 December	<u>20,163,823</u>	<u>16,048,606</u>

The company pays its employees a long service benefits. The benefit is paid when employees reach predetermined milestones. The method of accounting and frequency of valuation are similar to that used for defined benefit schemes. The actuarial valuation to determine the liability is performed annually. The actuarial valuation carried out for the year under review apparently covered year 2017 which hitherto did not undergo any valuation.

Principal assumptions used

The actuary certify to the reasonableness of the actuarial assumptions below;

Mortality: The RP 2000 mortality table

Salary scale: Salaries are assumed to increase at an annual average rate of 10%

Inflation rate: An average inflation rate of 13.0%

Discount rate: A discount rate 19.5% is assumed (15 Year Treasury Bond)

Asset Return/ Investment yield: An investment yield rate of 15% is assumed (that is the average 1 year Treasury bill rate -15%)

Retirement age: Retirement age is set at age 60

Discount Rate	Salary Increase	DBO (GHS)	Current Service Cost (GHS)	Current Service Cost as a % of Monthly Salaries	Number of Employees	Monthly Salaries (GHS)
X19.64%	x 10%					
Base	Base	20,163,823	860,882	7.20%	4,227	11,838,956
0.8	0.5	18,887,879	799,185	6.75%	4,227	11,838,956
0.8	1	24,174,924	1,060,588	8.96%	4,227	11,838,956
0.8	1.5	32,006,302	1,471,777	12.43%	4,227	11,838,956
1	0.5	16,214,473	673,130	5.69%	4,227	11,838,956
1	1	20,163,823	860,882	7.27%	4,227	11,838,956
1	1.5	25,810,001	1,144,277	9.67%	4,227	11,838,956
1.2	0.5	14,216,775	582,037	4.92%	4,227	11,838,956
1.2	1	17,264,436	722,096	6.10%	4,227	11,838,956
1.2	1.5	21,483,051	925,635	7.82%	4,227	11,838,956

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

	2018	2017
	GHS	GHS
20. PAYABLES		
Accounts payable	884,946,956	745,388,698
Others	<u>161,722,784</u>	<u>72,112,131</u>
	<u>1,046,669,740</u>	<u>817,500,829</u>

21. Fair value of financial assets not carried at fair value

The following describes the methodologies and assumptions used to determine fair values for those financial instruments which are not already recorded at fair value in the financial statements (i.e. held to maturity and loans and receivables).

Assets for which fair value approximate carrying values

For financial assets that have a short-term maturity (less than three months), cash and bank balances, and other assets, the carrying amounts approximate to their fair values.

The fair values of fixed rate financial assets carried at amortised cost are estimated by comparing market interest rates when they were initially recognised with current market rates for similar financial instruments. The estimated fair value of fixed interest bearing deposits is based on discounted cash flows using prevailing money-market interest rates for debts with similar credit risk and maturity.

(i) Financial instruments not measured at fair value

The Directors consider the carrying amounts of the financial assets and liabilities below to approximate their fair values because the duration of the financial assets/liabilities are less than one year.

	Carrying amount	Carrying amount	Fair value	Fair value
	2018	2017	2018	2017
	GHS	GHS	GHS	GHS
Financial assets				
Bank and cash Balances	56,597,929	42,034,195	56,597,929	42,034,195
Financial investments	1,066,721	838,737	1,066,721	838,737
Loans and advances to employees	9,684,760	12,252,839	9,684,760	12,252,839
Other assets (excluding prepayments)	905,389,800	730,894,672	905,389,800	730,894,672

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

(ii) Loans and advances to employees

Loans and advances are net of charges for impairment. The estimated fair value of loans and advances represents the discounted amount of estimated future cash flows expected to be received. Expected cash flows are discounted at current market rates to determine fair value. The carrying amount approximates their fair value.

(iii) Financial investments

The fair value for loans and receivables and held-to-maturity assets is based on market prices or broker/dealer price quotations. Where this information is not available, fair value is estimated using quoted market prices for securities with similar credit, maturity and yield characteristics.

Fair value hierarchy

IFRS 7 specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources; unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair value hierarchy:

- **Level 1** - Quoted prices (unadjusted) in active markets for identical assets or liabilities. This level includes listed equity securities and debt instruments on exchanges (for example, The Ghana Stock Exchange).
- **Level 2** - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices). This level includes the majority of Bank of Ghana's securities and other derivative contracts.
- **Level 3** - inputs for the asset or liability that are not based on observable market data (unobservable inputs). This level includes equity investments and debt instruments with significant unobservable components. As at 31 December 2018, the Company did not hold any level 3 financial assets and/or liabilities. This hierarchy requires the use of observable market data when available. The Company considers relevant observable market prices in its valuation where possible.

Financial risk management objective and policy

The company's activities expose it to a variety of financial risks, including credit risk and the effects of changes in equity market prices. The company's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on its financial performance.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

Risk management is carried out by the Finance and Audit committee of the company. The committee identifies, evaluates but does not hedge its financial risks. The Board provides written principles for overall risk management, as well as written policies covering specific areas such as credit risk and investing excess liquidity.

Credit risk

The Company has exposure to credit risk, which is the risk that a counterparty will default in payments when due. The product (water) which is a social commodity is sold on credit.

GWCL is exposed to credit risk when customers/consumers default on contractual obligations which could cause financial loss to the Company. To mitigate credit risk, customers are given a three (3) month credit period after which defaulters' water systems are disconnected until outstanding bills are paid in full. The company has the right to off-set where the customer is also a supplier of the company, as is with Electricity Corporation of Ghana (ECG) and Volta River Authority (VRA). Payments points, which operate also during weekends, are located in every vicinity. To increase payments points, GWCL also outsources to private companies. Internal audit makes regular reviews to assess the degree of compliance with the Company procedures on credit.

Price Risk

GWCL's price is approved by Public Utility Regulatory Commission (PURC). Approval is based on social and economic factors pertinent at the time. As proposed tariffs are usually reduced by PURC, the company is in constant dialogue with them to approve an economic tariff that significantly covers operating and other costs of the company which will ultimately improve the bottom-line.

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. Liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities.

The management of the company monitors the planned cash inflow and outflow. An important factor in the company's liquidity risk management is an access to a wide range of funding through the sale of water to its customers and consumers and interest earned on short term investment. Management aims at maintaining flexibility in financing sources by having undrawn committed facilities available.

The following policies and procedures are in place to mitigate the company's exposure to liquidity risk;

- Liquidity risks are monitored and reviewed by management. Exposures identified are reported to the Board of Directors for action.
- Maintaining undrawn committed facilities, accessing when the need arises.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

	2018	2017
Current ratio	<u>0.89</u>	<u>0.91</u>

The company currently has a current ratio under 1 implying it would not be able to pay off its obligations if they become due at this point.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: foreign exchange rates (currency risk), market interest rates (interest rate risk) and market prices (price risk).

The company market risk policy sets out the assessment and determination of what constitutes market risk for the company. Compliance with the policy is monitored and exposures and breaches are reported to the company risk committee. The policy is reviewed regularly for pertinence and for changes in the risk environment.

Currency risk

Currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The company imports raw materials i.e. water treatment chemicals, pumps, motors etc. and as such would have to pay for them in foreign currency. Hence there is a significant exposure to foreign exchange risk.

Interest rate risk

Interest rate risk is the risk that the value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

Floating rate instruments expose the company to cash flow interest risk, whereas fixed interest rate instruments expose the company to fair value interest risk.

The company's interest risk policy requires it to manage interest rate risk by maintaining an appropriate mix of fixed and variable rate instruments. The policy also requires it to manage the maturities of interest bearing financial assets and interest bearing financial liabilities.

The Company does not currently have any policy in place to manage gap between fixed and variable rate instruments and their maturities. All financial instruments currently bear a variable interest rate.

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

Operational risks

Operational risk is the risk of loss arising from system failure, power outages, human error, fraud or external events. When controls fail to perform, operational risks can cause damage to reputation, have legal or regulatory implications or can lead to financial loss. The company cannot expect to eliminate all operational risks, but by initiating a rigorous control framework and by monitoring and responding to potential risks, the company is able to manage the risks. Controls include effective segregation of duties, access controls, authorization and reconciliation procedures, staff education and assessment processes, including the use of internal audit. Business risks such as changes in environment, technology and the industry are monitored through the company's strategic planning and budgeting process. The presence of an Internal Audit function also ensures that controls are in place and processes and procedures work effectively and efficiently to address risks.

Capital management

The Company manages its capital to ensure that it is able to continue as going concern while maximizing the return to stakeholders through the optimization of the debt and equity balance.

The capital structure of the Company consists of debts (Long Term Loan) and equity of the company (comprising stated capital and retained earnings).

The company has a target gearing ratio of 30%: determined as the proportion of debt to equity. The Gearing Ratio as at 31 December 2018 was 8% and December 2017: 6%.

22. Contingencies and commitments

(a) Legal proceedings and regulations

There are no contingencies associated with the company's compliance or lack of compliance with regulations.

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

(b) Capital commitments

At the reporting date, the company had the following capital commitments:

Project Name	Description	Capital Commitment (Estimated cost to completion)
Kumawo Konongo , Kwahu Ridge Water Supply	Construction of 7.4MGD water into the Konongo & Kumawu water supply system + the rehabilitation of the Kwahu Ridge water supply system	\$6,300,000
Akim Oda ,Akwatia and Winneba Water Supply Project	Construction of 7.3MGD WTP for the Akim Oda & Akwatia water supply system + the Rehabilitation of the Winneba water supply system	\$23,090,984
Kpong Water Supply Expansion Project	Construction of 40MGD WTP at Kpong to inject water into the GAMA water supply area namely the Eastern part of Accra,	\$ 6,825,000
Wa Water Supply Expansion	Construction of 3.3MGD WTP at Jambousie to feed into the Wa water supply system	\$16,650,000
Cape Coast Water Supply GNWP	The interconnection of Brimsu and Sekyere Heman Water supply systems to improve upon water supply in Cape Coast	\$400,000
Greater Accra Metropolitan Area(GAMA) Sanitation and Water Project	Pipeline improvement works to increase access to improved water supply in GAMA with emphasis on low income communities	\$30,000,000
Sogakope-Lome Transboundary Water Project	Updating of feasibility study and ESIA & the preparation of tender documents for the project	€ 2,121,013

Ghana Water Company Limited
Notes to the financial statements
For the year ended 31 December 2018

23. Related party transactions

This relates to intercompany dealings and transactions with key management personnel. Details of transactions with related parties are detailed below:

a) The following balances were outstanding at the end of the period:

	Amounts owed by related parties		Amounts owed to related parties	
	2018 GHS	2017 GHS	2018 GHS	2017 GHS
(I)MDAs & NEDCO	<u>632,335,395</u>	<u>496,711,149</u>	<u>66,172,340</u>	<u>43,914,151</u>
(II)LONG SERVICE AWARD			<u>20,163,823</u>	<u>16,048,606</u>

The amounts outstanding are unsecured and will be set-off. No expense has been recognised in the current or prior years for bad or doubtful debts in respect of the amounts owed by the related parties.

b) Transactions with directors and key management personnel

Directors and key management personnel refer to those personnel with authority and responsibility for planning, directing and controlling the business activities of the Company. These personnel are the Directors of the Company.

The remuneration of directors during the year was as follows:

	2018 GHS	2017 GHS
Short-term benefits	<u>1,809,517</u>	<u>1,601,847</u>
	<u>1,809,517</u>	<u>1,601,847</u>

The remuneration of directors is determined by the board of directors.

c) Transactions with board of directors

	2018 GHS	2017 GHS
Total board allowances including monthly allowances	<u>225,202</u>	<u>98,500</u>

The board allowance for 2018 and 2017 are not comparable due to the fact that the current board of directors was inaugurated on September 2017 (four months).

Ghana Water Company Limited

Notes to the financial statements

For the year ended 31 December 2018

24. Events after the reporting period

The Directors confirm that no event has occurred between the year-end and date of signing this report that requires disclosure or could materially affect the financial statements.

25. Income surplus

The additions to the Income Surplus was as a result of the Prior year adjustment which was due to overstated depreciation charge in 2017 on some fully depreciated Vehicles which were given one or two years' additional life after the 2016 revaluation of fixed assets depending upon their years in use after the expiration of their policy life.