

# Electricity, gas and water supply industry, 2019

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# **Table of contents**

1.	Introduction	1
1.1	Aim and collection unit	
1.2	Scope and coverage	1
1.3	Data items	1
1.4	Reference period	1
1.5	Current prices	2
1.6	Reliability of data	2
2.	Summary of findings	3
2.1	Income	3
Tabl	e A – Income in the electricity, gas and water supply industry, 2010–2019	3
Tabl	e B – Profit margin in the electricity, gas and water supply industry, 2010–2019	4
2.2	Employment	5
Tabl	e C – Employment as at the end of June in the electricity, gas and water supply industry, 2010–2019	5
Figu	re 1 – Income and employment by type of service (% contribution) in the electricity, gas and water supply industry, 2019	6
	re 2 – Gender ratios in the electricity, gas and water supply industry, 2019	
Tabl	e D – Average salaries and wages in the electricity, gas and water supply industry, 2010–2019	8
2.3	Value added	9
	re 3 – Electricity, gas and water supply industry value added, annual percentage change (constant 2015 prices), 2011–2020	
Figu	re 4 – Percentage contribution of the electricity, gas and water supply industry to total value added (current prices), 2011–2020	9
2.4	Capital expenditure on new assets	10
Tabl	e E – Capital expenditure on new assets in the electricity, gas and water supply industry, 2010–2019	10
2.5	Electricity generated and electricity available for distribution	11
Tabl	e F – Electricity generated and electricity available for distribution in the generation, transmission and distribution of electricity, 2010–2019	11

3. Tables	12
Table 1 – Principal statistics in the electricity, gas and water supply industry, 2016 and 2019	12
Table 2 – Principal statistics by type of service in the electricity, gas and water supply industry, 2019	
Table 3 – Income in the electricity, gas and water supply industry, 2016 and 2019	
Table 4 – Income by type of service in the electricity, gas and water supply industry, 2019	14
Table 5 – Expenditure in the electricity, gas and water supply industry, 2016 and 2019	
Table 6 – Expenditure by type of service in the electricity, gas and water supply industry, 2019	15
Table 7– Capital expenditure on new assets by type of asset in the electricity, gas and water supply industry, 2016 and 2019	16
Table 8 – Capital expenditure on new assets by type of service in the electricity, gas and water supply industry, 2019	16
Table 9 – Employment by type of service in the electricity, gas and water supply industry as at the end of June, 2016 and 2019	17
Table 10 – Employment in the electricity, gas and water supply industry as at the end of June, 2016 and 2019	17
Table 11 – Employment by type of service and employee in the electricity, gas and water supply industry as at the end of June 2019	18
Table 12 – Electricity available for distribution in the electricity, gas and water supply industry, 2016 and 2019	19
Table 13 – Electricity distributed by type of customer in the electricity, gas and water supply industry, 2016 and 2019	
Table 14 – Purchases for generation, transmission and distribution of electricity in the electricity, gas and water supply industry, 2016 and 2019	
Table 15 – Purchases of gas in the electricity, gas and water supply industry, 2016 and 2019	
Table 16 – Gas distributed in the electricity, gas and water supply industry, 2016 and 2019	
Table 17 – Gas distributed by type of customer in the electricity, gas and water supply industry, 2016 and 2019	
Table 18 – Sales of water by type of customer in the electricity, gas and water supply industry, 2016 and 2019	
Table 19 – Purchases in the water supply industry, 2016 and 2019	
Table 20 – Income from sales of goods and services rendered; salaries and wages; and employment by province in the electricity, gas and water supply industry,	
2016	25
Table 21 – Income from sales of goods and services rendered; salaries and wages; and employment by province in the electricity, gas and water supply industry,	
2019	
Table 22 – Information and communication technology (ICT) usage by type of service in the electricity, gas and water supply industry, 2019	26
Explanatory notes	27
Table 23 – Size groups for the electricity, gas and water supply industry, 2019	27
Glossary	29

#### 1. Introduction

#### 1.1 Aim and collection unit

This publication presents estimates in respect of the electricity, gas and water supply industry, 2019. The survey aims to provide financial, production, employment and related information for the electricity, gas and water supply industry in South Africa.

The last survey was conducted in 2016 (Report No. 41-01-02 (2016)).

The statistical unit for the collection of information is an enterprise. An enterprise is a legal unit (or a combination of legal units) that includes and directly controls all functions necessary to carry out its activities. Each industry is classified to an industry that reflects its predominant activity.

### 1.2 Scope and coverage

The 2019 electricity, gas and water supply industry LSS covers enterprises registered for value-added tax (VAT) that are mainly engaged in the following activities classified according to the January 1993 edition of the Standard Industrial Classification of all Economic Activities (SIC), Fifth edition, Report No. 09-90-02:

- o Generation, transmission and distribution of electricity (SIC 4111).
  - Generation (SIC 41111).
  - Distribution of purchased electric energy only (SIC 41112).
  - Generation and/ or distribution for own use (SIC 41113).
- o Manufacturing and distribution of gaseous fuels through mains (SIC 41200).
- o Collection, purification and distribution of water (SIC 42000).

## The following activities are excluded:

- o Municipalities (included in SIC 91300).
- o Enterprises which manufacture and distribute liquefied petroleum gas (LPG) (included in SIC 33210, SIC 61410, SIC 62399 and SIC 63500).
- o Enterprises which are engaged in sanitation and other waste water treatment (included in SIC 94000).
- o Enterprises which are involved in the collection, purification and distribution of water as a secondary activity or for own use.

#### 1.3 Data items

The following categories of data items were collected: industrial classification, trading income, expenditure, profit or loss, inventories, capital expenditure on new assets, sales, services, employment, purchases, client base, salaries and wages, and information and communication technology usage.

# 1.4 Reference period

The questionnaires were completed for the financial year ended on any date between 1 July 2018 and 30 June 2019, according to the usual reporting schedule of the enterprise, with the following exception:

• Employment as on 30 June 2019.

### 1.5 Current prices

The rand values are at current prices.

## 1.6 Reliability of data

All estimates compiled for this industry are subject to non-sampling errors only, because a complete enumeration of enterprises contributing to the top 99,5% of the industry turnover was conducted. Adjustment factors were applied to compensate for the units contributing to the bottom 0,5% of industry turnover. The following are some of the likely sources of non-sampling errors: sampling frame not up to date, wrong definitions and classification, phrasing of questions, non-response, processing and estimation. Every effort is made to minimise non-sampling errors by the careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. Non-sampling errors occur in both sample surveys and censuses.

## 1.7 Confidentiality

According to section 17 of the Statistics Act, 1999 (Act No. 6 of 1999), completed questionnaires remain confidential to Statistics South Africa (Stats SA). Individual business information is never disclosed. Results are presented in aggregated form only.

## 2. Summary of findings

#### 2.1 Income

Table A – Income in the electricity, gas and water supply industry, 2010–2019

<b>T</b>	2010		2	013	2	016	2019		
Type of service	R million	% contribution							
Generation, transmission and distribution of electricity	86 332	80,5	151 409	82,9	201 316	83,2	238 958	82,0	
Manufacturing and distribution of gaseous fuels through mains	6 009	5,6	9 143	5,0	11 946	4,9	13 786	4,7	
Collection, purification and distribution of water	14 847	13,9	22 074	12,1	28 711	11,9	38 817	13,3	
Total	107 188	100,0	182 626	100,0	241 973	100,0	291 561	100,0	

(Source: Report No. 41-01-02)

The total income for the electricity, gas and water supply industry in 2019 was R291,6 billion. The total income represents an increase of 6,4% per annum over the income reported in the corresponding survey of 2016 (R242,0 billion). Comparing 2016 and 2019, large increases were reported for 'generation, transmission and distribution of electricity' (+R37,6 billion) and 'collection, purification and distribution of water' (+R10,1 billion).

Between 2010 and 2019, 'generation, transmission and distribution of electricity' gained the biggest percentage share (1,5 percentage points) in total income (from a percentage contribution of 80,5% in 2010 to 82,0% in 2019). 'Manufacturing and distribution of gaseous fuels through mains' lost the biggest percentage share (-0,9 of a percentage point) over the same period (from 5,6% in 2010 to 4,7% in 2019).

Table B - Profit margin in the electricity, gas and water supply industry, 2010-2019

	Net profit/loss after tax			Turnover				Profit margin				
Type of service	2010	2013	2016	2019	2010	2013	2016	2019	2010	2013	2016	2019
	R million								%			
Generation, transmission and distribution of electricity	3 811	6 929	4 612	-21 470	79 943	144 957	194 396	231 718	4,8	4,8	2,4	-9,3
Manufacturing and distribution of gaseous fuels through mains	1 261	2 121	3 187	2 907	5 972	9 006	11 244	13 646	21,1	23,6	28,3	21,3
Collection, purification and distribution of water	1 312	2 852	4 364	7 550	13 597	20 986	26 807	36 465	9,6	13,6	16,3	20,7
Total	6 384	11 902	12 163	-11 014	99 512	174 949	232 447	281 828	6,4	6,8	5,2	-3,9

(Source: Report No. 41-01-02)

The profit margin for the electricity, gas and water supply industry was -3,9% in 2019, the lowest of the four survey years shown in the table. In 2019, 'generation, transmission and distribution of electricity' had the lowest profit margin at -9,3%. 'Manufacturing and distribution of gaseous fuels through mains' had the highest profit margin in 2019 (21,3%).

## 2.2 Employment

Table C - Employment as at the end of June in the electricity, gas and water supply industry, 2010-2019

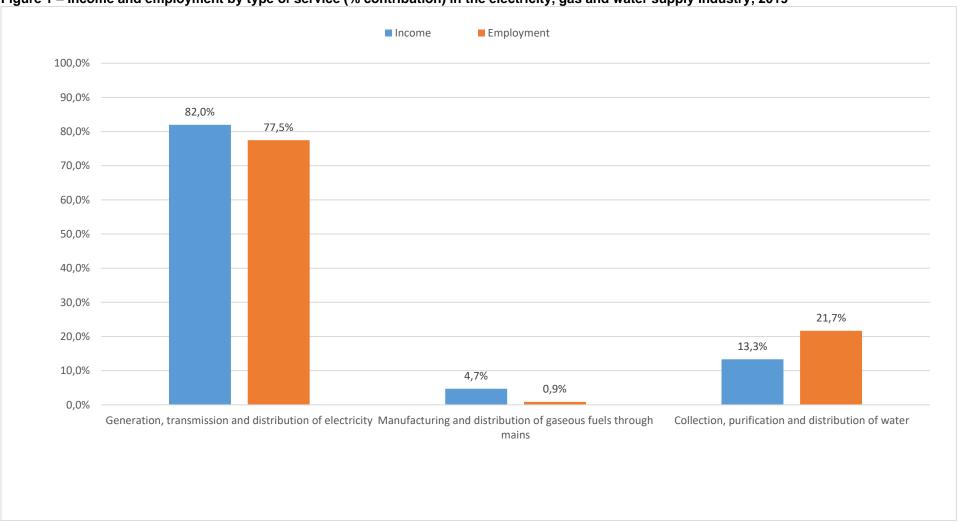
Type of service	2010			13		16	2019		
Type of service	Number	% contribution	Number	% contribution	Number	% contribution	Number	% contribution	
Generation, transmission and distribution of electricity	39 756	77,6	46 060	78,8	46 286	80,1	43 219	77,5	
Manufacturing and distribution of gaseous fuels through mains	415	0,8	432	0,7	304	0,5	496	0,9	
Collection, purification and distribution of water	11 066	21,6	11 993	20,5	11 194	19,4	12 081	21,7	
Total	51 237	100,0	58 485	100,0	57 784	100,0	55 796	100,0	

(Source: Report No. 41-01-02)

The total number of persons employed in the electricity, gas and water supply industry as at end of June 2019 was 55 796. This represents a growth rate of -1,2% between 2016 and 2019. Over the same period there was a decrease in employment of 3 067 in 'generation, transmission and distribution of electricity'.

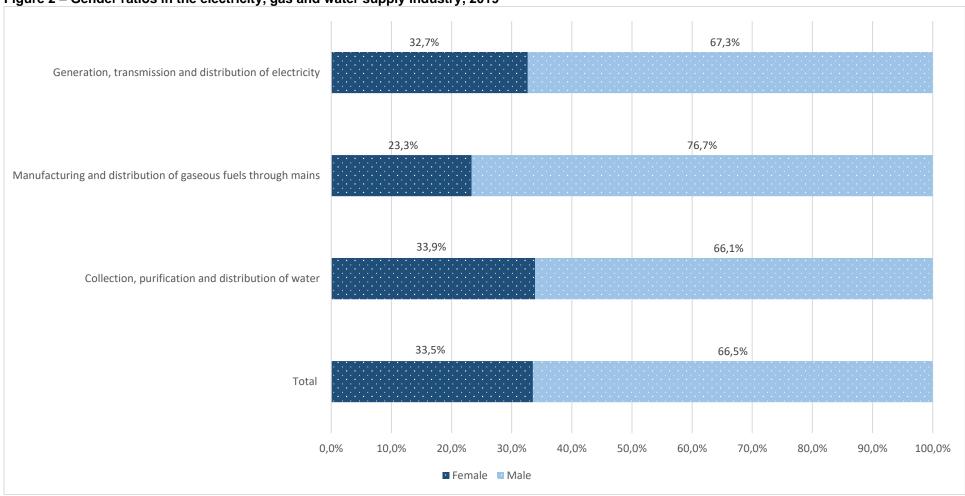
Formal employment in the electricity, gas and water supply industry increased from 51 237 in 2010 to 55 796 in 2019 (a gain of 4 559 jobs). 'Generation, transmission and distribution of electricity' gained the biggest number of persons employed over this period (+3 463 persons employed), followed by 'collection, purification and distribution of water' (+1 015) and 'manufacturing and distribution of gaseous fuels through mains' (+81).

Figure 1 – Income and employment by type of service (% contribution) in the electricity, gas and water supply industry, 2019



The type of service with the highest proportion of employment compared with its proportion of income was 'collection, purification and distribution of water' (21,7% of employment and 13,3% of income), followed by 'generation, transmission and distribution of electricity' (77,5% of employment and 82,0% of income).

Figure 2 - Gender ratios in the electricity, gas and water supply industry, 2019



The proportion of females out of the total persons employed in the electricity, gas and water supply industry in 2019 was 33,5%. The sector with the highest proportion of females employed was 'collection, purification and distribution of water' (33,9%), while 'manufacturing and distribution of gaseous fuels through mains' had the highest proportion of males employed (76,7%).

Table D - Average salaries and wages in the electricity, gas and water supply industry, 2010-2019

		2010			2013			2016			2019	
Type of service	Salaries and wages	Total employees	Average salaries and wages	Salaries and wages	Total employees	Average salaries and wages	Salaries and wages	Total employees	Average salaries and wages	Salaries and wages	Total employees	Average salaries and wages
	R million	Number	Rand	R million	Number	Rand	R million	Number	Rand	R million	Number	Rand
Generation, transmission and distribution of electricity	14 775	39 756	371 642	18 639	46 060	404 668	25 577	46 286	552 591	28 880	43 219	668 312
Manufacturing and distribution of gaseous fuels through mains	173	415	416 867	244	432	564 815	284	304	932 724	363	496	732 407
Collection, purification and distribution of water	2 456	11 066	221 941	3 274	11 993	272 993	4 803	11 194	429 065	4 621	12 081	382 483
Total	17 404	51 237	339 676	22 157	58 485	378 849	30 664	57 784	530 662	33 864	55 796	606 994

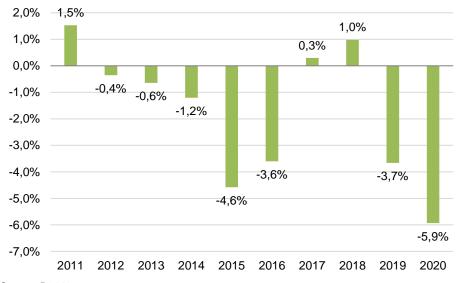
(Source: Report No. 41-01-02)

The average salaries and wages in the electricity, gas and water supply industry in 2019 was R606 994. The type of service with the highest average salaries and wages in 2019 was 'manufacturing and distribution of gaseous fuels through mains' (R732 407), followed by 'generation, transmission and distribution of electricity' (R668 312).

Total average salaries and wages increased from R339 676 in 2010 to R606 994 in 2019, an annualised growth rate of 6,7%. The highest annualised growth rate between surveys in the electricity, gas and water supply industry was 11,9% between 2013 and 2016.

#### 2.3 Value added

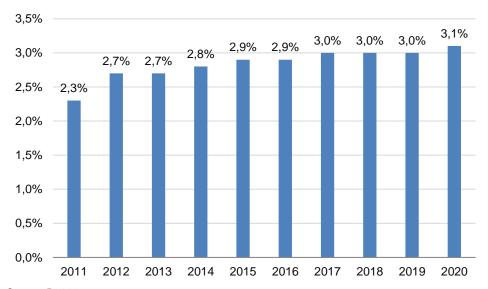
Figure 3 – Electricity, gas and water supply industry value added, annual percentage change (constant 2015 prices), 2011–2020



Source: P0441

Between 2011 and 2020 the annual growth rate of the electricity, gas and water supply industry ranged between 1,5% and -5,9%, based on value added at constant prices. Over the same period the annual growth rate averaged -1,7%.

Figure 4 – Percentage contribution of the electricity, gas and water supply industry to total value added (current prices), 2011–2020



Source: P0441

Between 2011 and 2015 the contribution of the electricity, gas and water supply industry to total value added increased from 2,3% to 2,9%. Thereafter it increased by 0,2 of a percentage point to 3,1% in 2020.

## 2.4 Capital expenditure on new assets

Table E – Capital expenditure on new assets in the electricity, gas and water supply industry, 2010–2019

	2010		20	13	20	16	2019		
Type of service	R million	% contribution							
Generation, transmission and distribution of electricity	11 407	90,1	57 697	95,7	67 898	90,5	43 344	87,3	
Manufacturing and distribution of gaseous fuels through mains	94	0,7	193	0,3	116	0,2	256	0,5	
Collection, purification and distribution of water	1 162	9,2	2 418	4,0	7 028	9,4	6 052	12,2	
Total	12 663	100,0	60 308	100,0	75 042	100,0	49 652	100,0	

(Source: Report No. 41-01-02)

The capital expenditure on new assets in 2019 (R49,7 billion) represents a growth rate of -12,9% per annum over the expenditure reported in the corresponding survey of 2016 (R75,0 billion). The biggest decrease was reported in 'generation, transmission and distribution of electricity' (-R24,6 billion), followed by 'collection, purification and distribution of water' (-R0,9 billion).

In 2019, the largest contributor to capital expenditure on new assets was 'generation, transmission and distribution of electricity' (R43,3 billion or 87,3%), followed by 'collection, purification and distribution of water' (R6,1 billion or 12,2%) and 'manufacturing and distribution of gaseous fuels through mains' (R0,3 billion or 0,5%).

Between 2010 and 2019, 'collection, purification and distribution of water' gained the biggest percentage share (+3,0 percentage points) in capital expenditure on new assets (from a percentage contribution of 9,2% in 2010 to 12,2% in 2019). 'Generation, transmission and distribution of electricity' lost the biggest percentage share (-2,8 percentage points) over the same period (from 90,1% in 2010 to 87,3% in 2019).

# 2.5 Electricity generated and electricity available for distribution

Table F – Electricity generated and electricity available for distribution in the generation, transmission and distribution of electricity, 2010–2019

O comment of a least that	2010	2013	2016	2019					
Source / use of electricity	Gigawatt-hours (GWh)								
Total electricity generated	239 474	244 364	226 507	234 783					
Electricity supplied from other countries (imports)	10 048	7 696	9 757	7 420					
Electricity consumed in power stations and pump storage systems	(3 934)	(4 650)	(4 768)	(6 201)					
Electricity supplied to other countries (exports)	(13 226)	(13 791)	(13 540)	(12 576)					
Total electricity available for distribution	232 362	233 619	217 956	223 428					

(Source: Report No. 41-01-02)

Comparing the survey years, electricity generated increased from 239 474 GWh in 2010 to 244 364 GWh in 2013, decreased to 226 507 GWh in 2016, and increased to 234 783 GWh in 2019. Total electricity available for distribution followed a similar pattern.

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## 3. Tables

Table 1 – Principal statistics in the electricity, gas and water supply industry, 2016 and 2019

	Total income			Total val	ue of openir	ng inventory	Total value of closing inventory			
Type of service	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
	V.		% change	R million		% change	R million		% change	
Generation, transmission and distribution of electricity	201 316	238 958	5,9	16 232	24 822	15,2	18 003	27 053	14,5	
Manufacturing and distribution of gaseous fuels through mains	11 946	13 786	4,9	90	114	8,1	87	121	11,5	
Collection, purification and distribution of water	28 711	38 817	10,6	290	276	-1,6	317	321	0,4	
Total	241 973	291 561	6,4	16 613	25 212	14,9	18 407	27 494	14,3	

Table 1 – Principal statistics in the electricity, gas and water supply industry, 2016 and 2019 (concluded)

	Total expenditure			Net profit be	efore tax	Total employees			
Type of service	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised % change	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised % change	
	R million			R milli	ion	R million			
Generation, transmission and distribution of electricity	195 911	270 506	11,4	7 176	-29 318	46 286	43 219	-2,3	
Manufacturing and distribution of gaseous fuels through mains	7 750	9 745	7,9	4 193	4 048	304	496	17,7	
Collection, purification and distribution of water	24 330	31 246	8,7	4 408	7 616	11 194	12 081	2,6	
Total	227 991	311 496	11,0	15 776	-17 654	57 784	55 796	-1,2	

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

Table 2 – Principal statistics by type of service in the electricity, gas and water supply industry, 2019<sup>2</sup>

Type of service	Total income	Total value of opening inventory	Total value of closing inventory	Total expenditure	Net profit before tax	Total capital expenditure	Total employees
		Number					
Generation, transmission and distribution of electricity	238 958	24 822	27 052	270 506	-29 318	43 344	43 219
Manufacturing and distribution of gaseous fuels through mains	13 786	114	121	9 745	4 048	256	496
Collection, purification and distribution of water	38 817	276	321	31 246	7 616	6 052	12 081
Total	291 561	25 212	27 494	311 496	-17 654	49 652	55 796

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

Table 3 – Income in the electricity, gas and water supply industry, 2016 and 2019

Income item	2016 <sup>1</sup>	2019 <sup>2</sup>	<b>2016</b> <sup>1</sup>	2019 <sup>2</sup>	Annualised
income item	R mi	llion	% cont	% change	
Sales of goods and services rendered	231 800	281 517	95,8	96,6	6,7
Government subsidies	1 787	2 133	0,7	0,7	6,1
Other income	8 387	7 910	3,5	2,7	-1,9
Total	241 973	291 561	100,0	100,0	6,4

Revised figures.Preliminary figures.

Table 4 – Income by type of service in the electricity, gas and water supply industry, 2019<sup>2</sup>

Type of service	Sales of goods and services rendered	Government subsidies	Interest received	Rental, leasing and hiring income	Other income	Total income
			R mi	llion		
Generation, transmission and distribution of electricity	231 423	1 469	2 371	292	3 403	238 958
Manufacturing and distribution of gaseous fuels through mains	13 645	0	119	0	22	13 786
Collection, purification and distribution of water	36 449	664	1 001	16	687	38 817
Total	281 517	2 133	3 491	309	4 112	291 561

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

Table 5 – Expenditure in the electricity, gas and water supply industry, 2016 and 2019

lta	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
Item	R mil	R million		% contribution		
Purchases	110 861	133 280	48,6	42,8	6,3	
Salaries and wages	30 664	33 868	13,4	10,9	3,4	
Subcontractors and labour brokers	4 913	9 597	2,2	3,1	25,0	
Depreciation and amortisation	24 307	38 163	10,7	12,3	16,2	
Customs and excise duties	5 123	7 877	2,2	2,5	15,4	
Interest	25 861	41 221	11,3	13,2	16,8	
Losses on financial and other assets	2 346	5 871	1,0	1,9	35,8	
Repair and maintenance	12 326	16 299	5,4	5,2	9,8	
Other expenditure	11 591	25 321	5,1	8,1	29,8	
Total	227 991	311 496	100,0	100,0	11,0	

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

Table 6 – Expenditure by type of service in the electricity, gas and water supply industry, 2019<sup>2</sup>

Type of service	Purchases	Salaries and wages	Subcontractors and labour brokers	Depreciation and amortisation	Customs and excise duties
			R million		
Generation, transmission and distribution of electricity	110 074	28 884	5 940	36 653	7 877
Manufacturing and distribution of gaseous fuels through mains	6 071	363	2 547	151	0
Collection, purification and distribution of water	17 135	4 621	1 110	1 359	0
Total	133 280	33 868	9 597	38 163	7 877

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

Table 6 – Expenditure by type of service in the electricity, gas and water supply industry, 2019<sup>2</sup> (concluded)

Type of service	Interest	Losses on financial and other assets	Repair and maintenance	Other expenditure	Total
			R million		
Generation, transmission and distribution of electricity	40 509	3 073	15 625	21 872	270 506
Manufacturing and distribution of gaseous fuels through mains	98	16	97	401	9 745
Collection, purification and distribution of water	615	2 782	576	3 048	31 246
Total	41 221	5 871	16 299	25 321	311 496

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

Table 7- Capital expenditure on new assets by type of asset in the electricity, gas and water supply industry, 2016 and 2019

Type of coast	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised
Type of asset	R mi	llion	% cont	% change	
Land, buildings and construction works	59 468	38 112	79,2	76,8	-13,8
Plant and machinery	11 875	8 225	15,8	16,6	-11,5
Computers and other equipment	181	184	0,2	0,4	0,5
Motor vehicles, fleet and other transport equipment	204	213	0,3	0,4	1,5
Computer software	225	251	0,3	0,5	3,7
Other capital expenditure	3 089	2 666	4,1	5,4	-4,8
Capital expenditure on assets	75 042	49 652	100,0	100,0	-12,9

Table 8 – Capital expenditure on new assets by type of service in the electricity, gas and water supply industry, 2019<sup>2</sup>

Type of service	Land, buildings and construction works	Plant and machinery	Computers and other equipment	Motor vehicles, fleet and other transport equipment	Computer software	Other capital expenditure	Total capital expenditure on assets
				R million			
Generation, transmission and distribution of electricity	36 026	5 093	151	189	251	1 634	43 344
Manufacturing and distribution of gaseous fuels through mains	53	33	2	3	0	165	256
Collection, purification and distribution of water	2 033	3 099	31	22	1	867	6 052
Total	38 112	8 225	184	213	251	2 666	49 652

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

Table 9 - Employment by type of service in the electricity, gas and water supply industry as at the end of June, 2016 and 2019

Type of service	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised
	Nun	nber	% со	% change	
Generation, transmission and distribution of electricity	46 286	43 219	80,1	77,5	-2,3
Manufacturing and distribution of gaseous fuels through mains	304	496	0,5	0,9	17,7
Collection, purification and distribution of water	11 194	12 081	19,4	21,7	2,6
Total	57 784	55 796	100,0	100,0	-1,2

Table 10 - Employment in the electricity, gas and water supply industry as at the end of June, 2016 and 2019

table to Employment in the electricity, gas and water supply industry	nadot y do at the ond of cano, 2010 and 2010						
	Gender	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
	Gender	Nun	nber	%		% change	
Full time	Female	18 295	17 979	31,7	32,2	-0,6	
	Male	38 315	35 920	66,3	64,4	-2,1	
	Total	56 610	53 899	98,0	96,6	-1,6	
	Female	444	712	0,8	1,3	17,0	
Part time	Male	730	1 185	1,3	2,1	17,5	
	Total	1 174	1 897	2,0	3,4	17,3	
	Female	18 739	18 691	32,4	33,5	-0,1	
Total	Male	39 045	37 105	67,6	66,5	-1,7	
	Total	57 784	55 796	100,0	100,0	-1,2	
Employees from labour brokers		145	295			26,7	

Revised figures.
 Preliminary figures.

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

Table 11 – Employment by type of service and employee in the electricity, gas and water supply industry as at the end of June 2019<sup>2</sup>

		Full time			Part time	Total		Employees
Type of service	Female	Male	Total	Female	Male	Total	TOTAL	from labour
				Number				brokers
Generation, transmission and distribution of electricity	14 376	28 309	42 685	245	289	534	43 219	294
Manufacturing and distribution of gaseous fuels through mains	115	354	469	1	26	27	496	1
Collection, purification and distribution of water	3 488	7 257	10 745	466	870	1 336	12 081	0
Total	17 979	35 920	53 899	712	1 185	1 897	55 796	295

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

Table 12 - Electricity available for distribution in the electricity, gas and water supply industry, 2016 and 2019

	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019²		
Source / use of electricity	Gigawatt-h	hours (GWh) % contribution to electricity generated			Annualised % change	
Coal	201 141	204 652	89,0	87,2	0,6	
Heavy furnace	959	1 003	0,4	0,4	1,5	
Nuclear material	12 305	11 685	5,4	5,0	-1,7	
Diesel	4 108	1 208	1,8	0,5	-33,5	
Water (hydroelectricity)	783	1 257	0,3	0,5	17,1	
Wind	2 126	6 609	0,9	2,8	45,9	
Sun (solar electricity)	2 151	3 742	0,9	1,6	20,3	
Electricity generated from pump storage stations	2 934	4 629	1,3	2,0	16,4	
Total electricity generated	226 507	234 784	100,0	100,0	1,2	
Electricity supplied from other countries (imports)	9 757	7 420			-8,7	
Electricity consumed in power stations and pump storage systems	4 768	6 201			9,2	
Electricity supplied to other countries (exports)	13 540	12 576			-2,4	
Total electricity available for distribution <sup>3</sup>	217 956	223 428			0,8	

<sup>1</sup> Revised figures.
2 Preliminary figures.
3 Electricity available for distribution equals: Total electricity generated + Electricity supplied from other countries (imports) - Electricity consumed in power stations and pump storage systems - Electricity supplied to other countries (exports).

Table 13 – Electricity distributed by type of customer in the electricity, gas and water supply industry, 2016 and 2019

Time of quaternary	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
Type of customer⁴	R mi	Ilion	% со	ntribution	% change	
Redistributors <sup>5</sup> (mainly municipalities)	77 002	96 624	39,9	41,9	7,9	
Residential	18 749	21 872	9,7	9,5	5,3	
Commercial	14 112	17 858	7,3	7,7	8,2	
Industrial	40 150	45 026	20,8	19,5	3,9	
Mining	24 028	26 793	12,5	11,6	3,7	
Agriculture	7 494	8 762	3,9	3,8	5,3	
Railway electric traction	2 770	3 147	1,4	1,4	4,3	
International (exported)	8 100	8 316	4,2	3,6	0,9	
Other type of customer	403	2 330	0,2	1,0	79,4	
Total electricity distributed	192 808	230 727	100,0	100,0	6,2	

<sup>&</sup>lt;sup>1</sup> Revised figures.

<sup>2</sup> Preliminary figures.

<sup>4</sup> Eskom's classification was used for the customer categories.

<sup>5</sup> Electricity redistributors are enterprises that buy electricity from generators for re-sale; these are mainly municipalities.

Table 14 – Purchases for generation, transmission and distribution of electricity in the electricity, gas and water supply industry, 2016 and 2019

	Unit	2016 <sup>1</sup>	2019²	Annualised	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised
		Quantity		% change	R m	% change	
Water	Thousands m <sup>3</sup>	321 867	383 468	6,0	2 092	2 716	9,1
Coal	Metric tons	116 459 102	120 523 968	1,2	44 180	53 725	6,7
Diesel	Litres	1 335 564 081	531 061 814	-26,5	3 340	5 883	20,8
Other inputs <sup>6</sup>					3 954	4 669	5,7
Other purchases <sup>7</sup>							
Electricity					37 035	41 879	4,2
Other purchases					679	1 202	21,0
Total purchases					91 280	110 074	6,4

<sup>&</sup>lt;sup>1</sup> Revised figures.

<sup>2</sup> Preliminary figures.

<sup>6</sup> Other inputs include nuclear material, natural gas and liquid petroleum fuel products.

<sup>7</sup> Other purchases include chemicals, environmental levy and electricity purchases.

Table 15 – Purchases of gas in the electricity, gas and water supply industry, 2016 and 2019

Type of go	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
Type of gas	Gigaj	oules	% change	R million		% change	
Purchases of gas in South Africa							
Natural gas	4 270 392	5 331 328	7,7	293	366	7,7	
Methane-rich gas	27 411 300	21 281 360	-8,1	917	834	-3,1	
Synthetic gas	126 697	276 868	29,8	10	32	45,8	
Total purchases of gas	31 808 389	26 889 556	-5,4	1 220	1 231	0,3	
Purchases of gas from other countries							
Natural gas imported	153 558 795	155 483 336	0,4	3 339	4 621	11,4	
Total purchases	185 367 184	182 372 892	-0,5	4 559	5 852	8,7	

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

Table 16 - Gas distributed in the electricity, gas and water supply industry, 2016 and 2019

Turns of mass	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
Type of gas <sup>8</sup>	Gigajoules		% change	R million		% change	
Natural gas	156 542 682	163 624 877	1,5	9 135	11 503	8,0	
Methane-rich gas	27 652 468	21 477 810	-8,1	1 931	1 658	-5,0	
Synthetic gas	131 094	277 357	28,4	7	18	36,1	
Total gas distributed	184 326 244	185 380 044	0,2	11 073	13 179	6,0	

Table 17 – Gas distributed by type of customer in the electricity, gas and water supply industry, 2016 and 2019

Time of anatomor	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised	
Type of customer	Gigajoules		% change	R million		% change	
Redistributors <sup>9</sup>	11 003 562	12 499 097	4,3	736	957	9,1	
Households	263 945	270 180	0,8	33	48	13,0	
Commercial users and farmers	51 094 896	48 004 493	-2,1	3 838	4 316	4,0	
Industrial users	121 963 841	124 873 274	0,8	6 474	7 749	6,2	
Total gas distributed	184 326 244	185 647 044	0,2	11 081	13 070	5,7	

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

<sup>&</sup>lt;sup>8</sup> Gas refers to gaseous fuels distributed through mains or pipeline network and includes natural gas, methane-rich gas and synthetic gas.

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

<sup>&</sup>lt;sup>9</sup> Gas redistributors are enterprises that buy gas from gas producers for re-sale.

Table 18 - Sales of water by type of customer in the electricity, gas and water supply industry, 2016 and 2019

Time of quoteman	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised
Type of customer	R m	illion	% cont	% change	
Redistributors <sup>10</sup> (mainly municipalities)	16 195	21 411	70,0	67,8	9,8
Households	2 968	4 336	12,8	13,7	13,5
Commercial users	1 576	2 312	6,8	7,3	13,6
Industry	405	465	1,7	1,5	4,8
Mining	932	986	4,0	3,1	1,9
Agricultural users (farmers)	312	514	1,3	1,6	18,1
Other customers	760	1 572	3,3	5,0	27,4
Total water distributed	23 147	31 596	100,0	100,0	10,9

<sup>&</sup>lt;sup>1</sup> Revised figures.
<sup>2</sup> Preliminary figures.
<sup>10</sup> Water redistributors are water service providers, water boards which buy water from other water boards for redistribution when they cannot meet their own demand, and companies contracted by municipalities to supply water on their behalf.

Table 19 – Purchases in the water supply industry, 2016 and 2019

Input	2016 <sup>1</sup>	2019 <sup>2</sup>	2016 <sup>1</sup>	2019 <sup>2</sup>	Annualised
	R million		% contribution		% change
Fuel	44	97	0,3	0,6	30,0
Bulk/ raw water	10 990	13 939	84,9	81,3	8,2
Water treatment chemicals	780	735	6,0	4,3	-1,9
Parts and spares	150	205	1,2	1,2	11,0
Other purchases and transfers-in	983	2 159	7,6	12,6	30,0
Total purchases and transfer-in of goods	12 946	17 135	100,0	100,0	9,8

Table 20 – Income from sales of goods and services rendered; salaries and wages; and employment by province in the electricity, gas and water supply industry, 2016<sup>1</sup>

Province	Sales of goods	Sales of goods and services		and wages	Employment		
Province	R million	% contribution	R million	% contribution	Number	% contribution	
Western Cape	21 679	9,4	2 631	8,6	5 066	8,8	
Eastern Cape	9 551	4,1	1 115	3,6	2 873	5,0	
Northern Cape	8 423	3,6	502	1,6	1 255	2,2	
Free State	11 306	4,9	1 887	6,2	3 857	6,7	
KwaZulu-Natal	27 355	11,8	2 114	6,9	4 890	8,5	
North West	16 483	7,1	964	3,1	2 325	4,0	
Gauteng	100 861	43,5	13 710	44,7	21 503	37,2	
Mpumalanga	20 860	9,0	6 127	20,0	11 962	20,7	
Limpopo	15 280	6,6	1 613	5,3	4 049	7,0	
Total	231 798	100,0	30 664	100,0	57 781	100,0	

<sup>&</sup>lt;sup>1</sup> Revised figures.

<sup>&</sup>lt;sup>1</sup> Revised figures. <sup>2</sup> Preliminary figures.

Table 21 – Income from sales of goods and services rendered; salaries and wages; and employment by province in the electricity, gas and water supply industry, 2019<sup>2</sup>

Province	Sales of goods	and services	Salaries	and wages	Empl	oyment
Province	R million	% contribution	R million	% contribution	Number	% contribution
Western Cape	27 255	9,7	3 298	9,8	4 997	9,0
Eastern Cape	14 070	5,0	1 466	4,4	3 083	5,5
Northern Cape	13 002	4,7	613	1,8	1 311	2,3
Free State	13 742	4,9	2 158	6,4	4 000	7,2
KwaZulu-Natal	34 050	12,2	2 623	7,8	4 500	8,1
North West	21 173	7,6	1 169	3,5	2 204	4,0
Gauteng	114 907	41,1	12 674	37,7	20 370	36,5
Mpumalanga	23 236	8,3	7 528	22,4	11 430	20,5
Limpopo	18 143	6,5	2 096	6,2	3 901	7,0
Total	279 579	100,0	33 626	100,0	55 796	100,0

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

Table 22 – Information and communication technology (ICT) usage by type of service in the electricity, gas and water supply industry, 2019<sup>2</sup>

Type of service	Use computer	Use internet	Use internet banking	Have website	Receive orders through the internet	Place orders through the internet	IT outsourced
	% of enterprises						
Generation, transmission and distribution of electricity	100,0	100,0	94,6	65,5	18,8	39,9	75,9
Manufacturing and distribution of gaseous fuels through mains	100,0	100,0	100,0	100,0	0,0	0,0	100,0
Collection, purification and distribution of water	100,0	100,0	100,0	62,2	13,2	27,9	72,2
Total	100,0	100,0	98,2	75,9	10,7	22,6	82,7

<sup>&</sup>lt;sup>2</sup> Preliminary figures.

#### **Explanatory notes**

**Background** 

The results presented in this publication have been derived from the 2019 electricity, gas and water supply industry large sample survey. This is a periodic survey which measures economic activity in the electricity, gas and water supply sector of the South African economy. This survey is based on a sample of private and public enterprises operating in the electricity, gas and water supply industry.

The sample was drawn from Stats SA's business register. The business register is based mainly on the value-added tax (VAT) database of the South African Revenue Service (SARS). Enterprises are legally bound to register for VAT.

Value-added tax (VAT)

All figures exclude value-added tax (VAT).

Reference period

The information was collected from enterprises for their financial year, which ended on any date between 01 July 2018 and 30 June 2019.

Purpose of the survey

Results of the survey are mainly used within Stats SA for benchmarking the gross domestic product (GDP) and its components. These statistics are also used by government to policy advisors in monitoring the performance and contribution of individual industries to the South African economy and the effectiveness of industry policies. The private sector uses the data to analyse comparative business and industry performance.

Classification by industry

The 1993 edition of the *Standard Industrial Classification of all Economic Activities* (SIC), Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 *International Standard Industrial Classification of all Economic Activities* (ISIC) with suitable adaptations for local conditions. Statistics in this publication are presented at SIC group (five-digit) level. Each enterprise is classified to an industry, which reflects its predominant activity.

Statistical unit

The statistical unit for the collection of the information is an enterprise. An enterprise is a legal unit (or a combination of legal units) that includes and directly controls all functions necessary to carry out its production activities.

Size groups

The enterprises are divided into four size groups according to the value of turnover on Stats SA's business register. Large enterprises are those with an annual turnover of R306 million and above. Table 23 presents Department of Trade, Industry and Competition (DTIC) cut-off points adjusted by a factor of 6,0.

Table 23 – Size groups for the electricity, gas and water supply industry, 2019

Size group	Turnover
Large	R306 000 000 ≤ Turnover
Medium	R78 000 000 ≤ Turnover < R306 000 000
Small	R30 600 000 ≤ Turnover < R78 000 000
Micro	Turnover < R30 600 000

Survey methodology and design

The survey of enterprises in electricity, gas and water supply industry was conducted by post, email, fax, telephone and personal visits.

The top 99,5% units by turnover were completely enumerated and a raising factor was used to account for the bottom 0,5% of the turnover removed from the sampling frame. Turnover as recorded on the business register was used as the measure of size for stratification. The collection rate was 86,5%.

Collection rate

Collection rate = ((collected + finalised investigations)/ sample size) x 100

**Turnover collection** 

rate

Turnover collection rate = ((weighted collected enterprises BR turnover + weighted finalised investigations BR turnover)/population turnover)\*100. The turnover collection rate was 98,9%.

Weighting methodology

For those strata not completely enumerated, the weights to produce estimates are the inverse ratio of the sampling fraction, modified to take account of non-response in the survey. Stratum estimates were calculated and then aggregated with the completely enumerated stratum to form division estimates.

**Revisions to previous results** 

Revisions were made to previous results due to new information obtained after the publications.

**Abbreviations** 

BR Business Register

DTIC Department of Trade, Industry and Competition

GDP Gross domestic product

ISIC International Standard Industrial Classification of All Economic Activities

IT Income tax

RSE Relative standard error

SARS South African Revenue Service

SE Standard error

SIC Standard Industrial Classification of all Economic Activities

SNA System of National Accounts

Stats SA Statistics South Africa VAT Value-added tax

Non-sampling errors

Inaccuracies may occur because of imperfections in reporting by enterprises and errors made in the collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling errors. Every effort is made to minimise non-sampling errors by careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. Non-sampling errors occur in both sample surveys and censuses.

**Rounding of figures** 

The figures in the tables have, where necessary, been rounded to the nearest final digit shown. There may therefore be slight discrepancies between the sums of constituent items and corresponding totals.

**Glossary** 

Casual employees Employees who fall neither within the 'permanent employees' category nor the 'temporary employees category. Such

employees are typically working daily or hourly.

Commercial customers (users) Include business enterprises in wholesale trade, retail trade, motor trade, repair of motor vehicles, motor cycles, personal and

household goods, hotels and restaurants, transport, storage and communication and financial intermediation, insurance, real

estate and business services.

Collection, purification and distribution of water

Collection, purification and distribution of water includes:

Collection, purification and distribution of water not elsewhere classified.

**Employees** Persons employed by a business or organisation and who received payment (in salaries, wages, commission, piece rates or

payments in kind) for the last pay period ended on or before 30 June 2019.

**Enterprise**A legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its activities.

Full-time employees Full-time employees are those (permanent, temporary or casual) who normally work the agreed hours i.e. 40 hours or more per

week.

Gas is gaseous fuels distributed through mains or pipeline network and includes natural gas, methane-rich gas and synthetic

gas.

Industrial customers (users)

Industrial customers or users are business enterprises which are involved in the manufacturing or production of goods as a

predominant activity.

**Industry**An industry consists of a group of enterprises engaged in the same or similar kinds of economic activity. Industries are defined

in the System of National Accounts (SNA) in the same way as in the Standard Industrial Classification of all Economic Activities

(SIC), Fifth Edition, Report No. 09-90-02 of January 1993.

plus closing value of inventories

*minus* total expenditure

minus opening value of inventories

minus company tax.

Other expenditure Other expenditure includes:

· depreciation and amortisation;

customs duties;

excise duties;

interest;

losses on financial and other assets;

repair and maintenance;

telecommunication services; and

other.

Other income Other income includes:

government subsidies and incentives;

interest;

· rental, leasing and hiring income;

· excise duties; and

other income.

Part-time employees Part-time employees are those (permanent, temporary or casual) who usually work less than 40 hours per week.

**Profit margin** Profit margin is derived as:

Net profit or loss after tax divided by turnover multiplied by 100.

Permanent employees Employees appointed on an open-ended contract with no stipulated termination date or a fixed-term contract for periods of

more than one year.

**Rental, leasing and hiring income** Rental, leasing and hiring income includes:

leasing and hiring of motor vehicles and other transport equipment;

• leasing and hiring of plant, machinery, equipment and vehicles;

• rental of land, buildings and other structures; and

other rental, leasing and hiring income.

**Stratum** A stratum is constructed by concatenating the SIC classification and size group variables.

**Turnover** Turnover includes:

- the value of sales;
- amounts received for services rendered;
- rent and/or lease payments received for land and buildings; and
- rent, leasing and hiring received for machinery, vehicles and other equipment.

Total electricity available for distribution

Electricity available for distribution includes:

- total electricity generated
- plus electricity supplied from other countries (imports)
- minus electricity consumed in power stations and pump storage systems
- minus electricity supplied to other countries (exports).

Unit of electricity

A gigawatt-hour **(GWh)** of electricity is equal to one million kilowatt-hours. A kilowatt-hour is the basic unit of electrical energy equal to one kilowatt of power supplied to or taken from an electric circuit steadily for one hour. One kilowatt-hour equals one thousand watt-hours. A gigawatt-hour is also equal to one thousand megawatt-hours.

Unit of gas

A gigajoule **(GJ)** is the derived unit of energy in the International System of Units (SI) equal to one billion joules (10<sup>9</sup> J). A joule is the basic unit of energy and it is the work done to produce one watt continuously for one second.

Unit of water

A cubic metre  $(m^3)$  is the SI derived unit of volume. It is the volume of a cube with edges of one metre in length. One cubic metre is equal to exactly 1 000 litres (an alternative name is the kilolitre).

Water redistributors

Water redistributors are water service providers including municipalities and water boards which buy water from other water boards for redistribution when they cannot meet their own demand, and companies contracted by municipalities to supply water on their behalf.