Electricity, gas and water supply industry, 2016

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1. Introduction

This publication presents estimates in respect of the 2016 electricity, gas and water supply industry large sample survey (LSS). The data for the number of employees were provided for working proprietors and employees who received salaries and wages for the last pay period ended on or before 30 June 2016.

The last electricity, gas and water supply LSS was conducted in 2013 (Report No. 41-01-02 (2013)).

1.1 Scope and coverage

The 2016 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. 09-09-02:

- 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).
- Manufacturing and distribution of gaseous fuels through mains (SIC 41200).
- Steam and hot water supply (SIC 41300) [not included in the report due to non-response].
- 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.

1.2 Data items

The following categories of data items were collected: industrial classification, information and communication technology (ICT), details of employment, trading income, expenditure, profit or loss, details of services rendered, details of purchases and provincial distribution of selected statistics.

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1.3 Reference period

The questionnaires were completed for the financial year of the enterprise which ended on any date between 1 July 2015 and 30 June 2016, according to the usual reporting schedule of the enterprise.

Example

- 1 October 2014 30 September 2015
- o 1 January 2015 31 December 2015
- o 1 February 2015 31 January 2016
- 1 March 2015 29 February 2016
- 1 April 2015 31 March 2016

1.4 Current prices

The rand values are at current prices.

1.5 Reliability of data

All estimates compiled for this industry are subject only to non-sampling errors because a census of the industry was conducted.

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.

1.6 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.

1.7 Reporting unit

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.

2. Summary of findings

2.1 Income

Table A - Income in the electricity, gas and water supply industry, 2006-2016

	2006		20	10	20	13	2016	
Type of service	R million	% contribution						
Generation, transmission and distribution of electricity	45 722	77,5	86 332	80,5	151 409	82,9	201 316	83,2
Manufacturing and distribution of gaseous fuels through mains	3 500	5,9	6 009	5,6	9 143	5,0	11 946	4,9
Collection, purification and distribution of water	9 777	16,6	14 847	13,9	22 074	12,1	28 711	11,9
Total	58 999	100,0	107 188	100,0	182 626	100,0	241 973	100,0

Source: Report No. 41-01-02

The total income for the electricity, gas and water supply industry in 2016 was R242,0 billion. The total income represents an increase of 9,8% per annum over the income reported in the corresponding survey of 2013 (R182,6 billion). Comparing 2013 and 2016, a large increase was reported for 'generation, transmission and distribution of electricity' (+R49,9 billion).

Since 2006, 'generation, transmission and distribution of electricity' gained the biggest percentage share (+5,7 percentage points) in income when compared with the results of 2016 (from a percentage contribution of 77,5% in 2006 to 83,2% in 2016). 'Collection, purification and distribution of water' lost the biggest percentage share (-4,7 percentage points) in the same period (from 16,6% in 2006 to 11,9% in 2016).

Table B - Profit margin in the electricity, gas and water supply industry, 2006-2016

7.0	Net profit/loss after tax				Turnover				Profit margin			
Type of service	2006	2010	2013	2016	2006	2010	2013	2016	2006	2010	2013	2016
	R million								%			
Generation, transmission and distribution of electricity	5 044	3 811	6 929	4 612	40 220	79 943	144 957	194 126	12,5	4,8	4,8	2,4
Manufacturing and distribution of gaseous fuels through mains	594	1 261	2 121	3 187	3 488	5 972	9 006	11 244	17,0	21,1	23,6	28,3
Collection, purification and distribution of water	1 162	1 312	2 852	4 364	8 761	13 597	20 986	26 807	13,3	9,6	13,6	16,3
Total	6 800	6 384	11 902	12 163	52 469	99 512	174 948	232 178	13,0	6,4	6,8	5,2

Source: Report No. 41-01-02

The profit margin in the electricity, gas and water supply industry fell from 13,0% in 2006 to 5,2% in 2016. This was driven by 'generation, transmission and distribution of electricity', which dropped from 12,5% to 2,4% over the same period. The profit margins in 'manufacturing and distribution of gaseous fuels through mains' and 'collection, purification and distribution of water' increased between 2006 and 2016.

The highest profit margin by type of service was 'manufacturing and distribution of gaseous fuels through mains' at 28,3% in 2016. 'Generation, transmission and distribution of electricity' is the only type of service which had profit margins lower than the overall profit margin in all four years surveyed.

2.2 Employment

Table C - Employment in the electricity, gas and water supply industry, 2006-2016

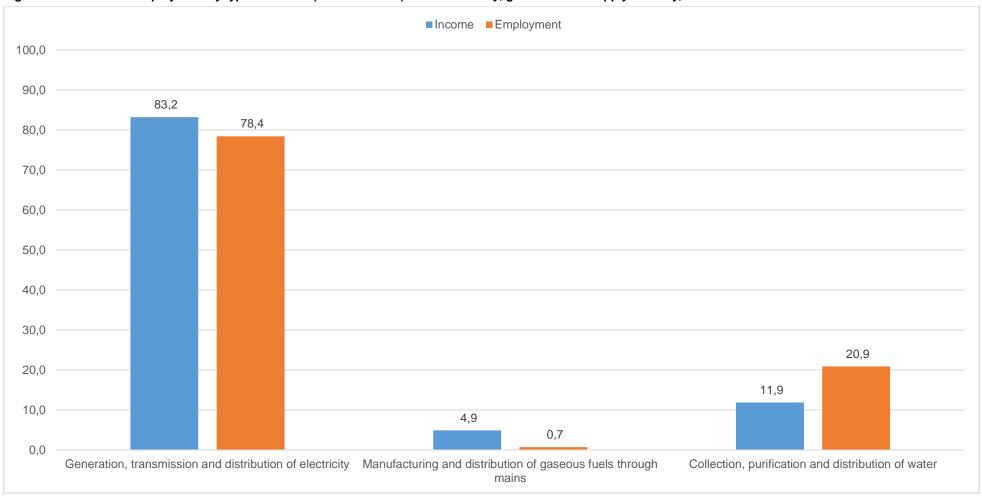
	2006		20	10	20	13	2016	
Type of service	Number	% contribution	Number	% contribution	Number	% contribution	Number	% contribution
Generation, transmission and distribution of electricity	31 990	76,0	39 756	77,6	46 060	78,8	46 287	78,4
Manufacturing and distribution of gaseous fuels through mains	311	0,7	415	0,8	432	0,7	423	0,7
Collection, purification and distribution of water	9 816	23,3	11 066	21,6	11 993	20,5	12 319	20,9
Total	42 117	100,0	51 237	100,0	58 485	100,0	59 029	100,0

Source: Report No. 41-01-02

The total number of persons employed in the electricity, gas and water supply industry as at the end of June 2016 was 59 029. 'Generation, transmission and distribution of electricity' employed the largest number of persons (46 287 or 78,4%), followed by 'collection, purification and distribution of water' (12 319 or 20,9%).

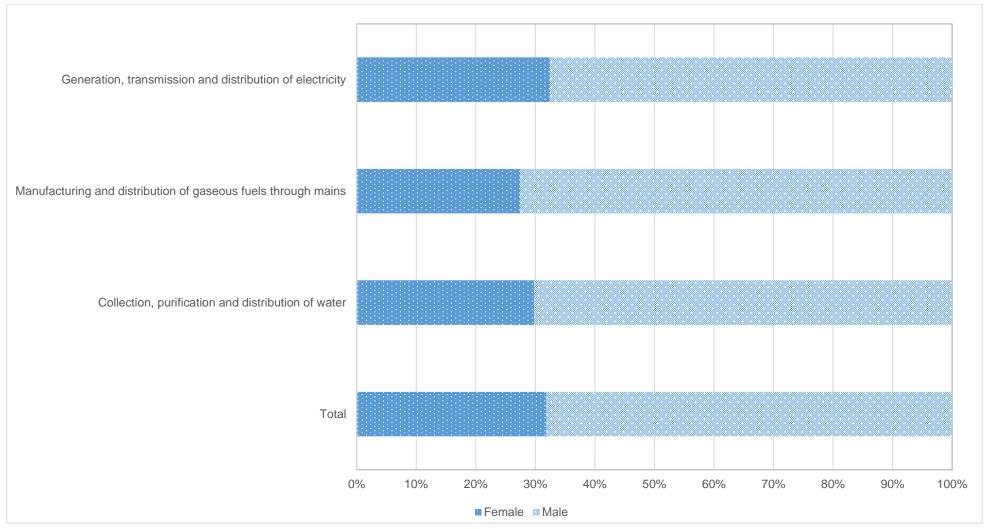
Formal employment increased from 42 117 in 2006 to 59 029 in 2016 (a gain of 16 912 jobs between 2006 and 2016). The highest growth in employment since 2006 was in 'generation, transmission and distribution of electricity' (+14 297) and 'collection, purification and distribution of water' (+2 503).

Figure 1 - Income and employment by type of service (% contribution) in the electricity, gas and water supply industry, 2016



The type of service with the highest proportion of employment compared with its proportion of income was 'collection, purification and distribution of water' (contributing 20,9% of employment and 11,9% of income). Although 'manufacturing and distribution of gaseous fuels through mains' contributed 4,9% of the total income of the electricity, gas and water supply industry in 2016, its contribution to employment was the most disproportionate at only 0,7%.

Figure 2 – Gender ratios in the electricity, gas and water supply industry, 2016



The proportion of females out of the total persons employed was 31,9%. The sector with the highest proportion of females employed was 'generation, transmission and distribution of electricity' (32,4%), whilst 'manufacturing and distribution of gaseous fuels through mains' had the highest proportion of males employed (72,6%).

Table D – Average salaries and wages in the electricity, gas and water supply industry, 2006–2016

	2006				2010			2013			2016		
Type of service	Salaries and wages	Total employees	Average salaries and wages										
	R million	Number	Rands										
Generation, transmission and distribution of electricity	7 755	31 990	242 420	14 775	39 756	371 642	18 639	46 060	404 678	25 581	46 287	552 665	
Manufacturing and distribution of gaseous fuels through mains	83	311	266 881	173	415	416 867	244	432	565 225	284	423	670 326	
Collection, purification and distribution of water	1 599	9 816	162 897	2 456	11 066	221 941	3 274	11 993	273 014	4 803	12 319	389 882	
Total	9 437	42 117	224 066	17 404	51 237	339 676	22 158	58 485	378 863	30 668	59 029	519 536	

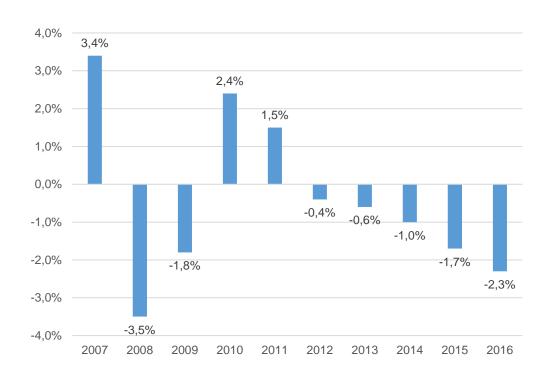
Source: Report No. 41-01-02

The average value of salaries and wages in the electricity, gas and water supply industry in 2016 was R519 536. The type of service with the highest average salaries and wages in 2016 was 'manufacturing and distribution of gaseous fuels through mains' (R670 326), followed by 'generation, transmission and distribution of electricity' (R552 665) and 'collection, purification and distribution of water' (R389 882).

Total average salaries and wages increased from R224 066 in 2006 to R519 536 in 2016, an annualised growth rate of 8,8%. The highest annualised growth rate for average salaries and wages between 2006 and 2016 was from 'manufacturing and distribution of gaseous fuels through mains' at 9,6%.

2.3 Electricity, gas and water supply industry value added

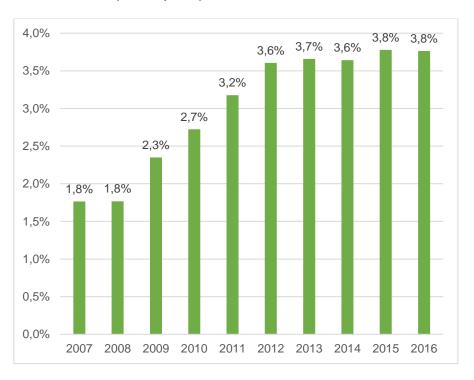
Figure 3 – Electricity, gas and water supply value added, annual percentage change (constant 2010 prices), 2007–2016



Source: P0441, GDP quarterly, annual and regional tables, 2017

Electricity, gas and water supply industry value added at constant 2010 prices decreased from R68 billion in 2006 to R65 billion in 2016. There were five years of consecutive negative annual growth during 2012–2016.

Figure 4 – Percentage contribution of electricity, gas and water supply value added (current prices), 2007–2016



Source: P0441, GDP quarterly, annual and regional tables, 2017

In the period 2007–2016, the average contribution of the electricity, gas and water supply industry to total value added was 3,0%. The contribution ranged from 1,8% in 2007 to 3,8% in 2016.

2.4 Capital expenditure on new assets

Table E - Capital expenditure on new assets in the electricity, gas and water supply industry, 2006-2016*

Type of convice	20	06	20	10	2016		
Type of service	R million	% contribution	R million	% contribution	R million	% contribution	
Generation, transmission and distribution of electricity	11 407	89,9	57 697	95,7	67 898	90,5	
Manufacturing and distribution of gaseous fuels through mains	94	0,7	193	0,3	116	0,2	
Collection, purification and distribution of water	1 182	9,3	2 418	4,0	7 028	9,4	
Total	12 683	100,0	60 308	100,0	75 042	100,0	

Source: Report No. 41-01-02

The capital expenditure on new assets in 2016 (R75,0 billion) represents an increase of 3,7% per annum over the expenditure reported in the corresponding survey of 2010 (R60,3 billion). Comparing 2010 and 2016, the largest increase was reported for 'generation, transmission and distribution of electricity' (+R10,2 billion).

Capital expenditure on new assets is dominated by 'generation, transmission and distribution of electricity', with its contribution to the total ranging between 89,9% in 2006 and 95,7% in 2010. The contribution of 'manufacturing and distribution of gaseous fuels through mains' fell from 0,7% in 2006 to 0,2% in 2016.

^{*}Capital expenditure was not collected in 2013.

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, 2006–2016

Source of electricity	2006	2006 2010 2013							
Source of electricity	Gigawatt-hours (GWh)								
Total electricity generated	233 249	239 474	244 364	237 006					
Electricity supplied from other countries (imports)	10 310	10 048	7 698	9 757					
Electricity consumed in power stations and pump storage systems	(3 814)	(3 934)	(4 650)	(5 384)					
Electricity supplied to other countries (exports)	(13 122)	(13 228)	(13 791)	(13 540)					
Total electricity available for distribution	226 623	232 360	233 621	227 839					

Total electricity generated increased from 233 249 GWh in 2006 to 244 364 GWh in 2013, but fell back to 237 006 GWh in 2016. Total electricity available for distribution followed a similar pattern.

Risenga Maluleke Statistician-General

Tables 3.

Table 1 – Principal statistics in the electricity, gas and water supply industry, 2013 and 2016

	Total income				ue of opening pening invent	•	Total value of closing inventory		
Type of service	2013*	2016**	Annualised	2013*	2016**	Annualised	2013*	2016**	Annualised
	R million		% change	R million		% change	R million		% change
Generation, transmission and distribution of electricity	151 409	201 316	10,0	10 034	16 232	17,4	12 220	18 003	13,8
Manufacturing and distribution of gaseous fuels through mains	9 143	11 946	9,3	63	90	12,9	68	87	8,4
Collection, purification and distribution of water	22 074	28 711	9,2	291	290	-0,1	362	317	-4,3
Total	182 626	241 973	9,8	10 388	16 613	16,9	12 651	18 407	13,3

Table 1 – Principal statistics in the electricity, gas and water supply industry, 2013 and 2016 (concluded)

	Total expenditure			Net	profit before	e tax	Total employees		
Type of service	2013*	2016**	Annualised	2013*	2016**	Annualised	2013*	2016**	Annualised
	R million		% change	R million		% change	R million		% change
Generation, transmission and distribution of electricity	144 445	195 911	10,7	9 151	7 176	-7,8	46 060	46 287	0,2
Manufacturing and distribution of gaseous fuels through mains	6 182	7 750	7,8	2 967	4 193	12,2	432	423	-0,7
Collection, purification and distribution of water	19 266	24 330	8,1	2 878	4 407	15,3	11 993	12 319	0,9
Total	169 893	227 991	10,3	14 996	15 776	1,7	58 485	59 029	0,3

^{*} Revised figures.
** Preliminary figures.

^{*} Revised figures.
** Preliminary figures.

Table 2 – Principal statistics by type of service in the electricity, gas and water supply industry, 2016

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	201 316	16 232	18 003	195 911	7 176	67 898	46 287
Manufacturing and distribution of gaseous fuels through mains	11 946	90	87	7 750	4 193	116	423
Collection, purification and distribution of water	28 711	291	317	24 330	4 407	7 028	12 319
Total	241 973	16 613	18 407	227 991	15 776	75 042	59 029

Table 3 - Income in the electricity, gas and water supply industry, 2013 and 2016

Income item	2013*	2016**	2013*	2016**	Annualised %
modile item	R mi	Illion	% conti	change	
Sales and services	174 948	231 934	95,8	95,9	9,9
Government subsidies	1 127	1 511	0,6	0,6	10,3
Other income	6 551	8 528	3,6	3,5	9,2
Total income	182 626	241 973	100,0	100,0	9,8

^{*} Revised figures.
** Preliminary figures.

^{*} Revised figures.

** Preliminary figures.

Table 4 – Income by type of service in the electricity, gas and water supply industry, 2016

Type of service	Sales of goods and services rendered	Government subsidies	Interest received	Rental, leasing and hiring income	Other income	Total income		
	R million							
Generation, transmission and distribution of electricity	193 899	971	3 431	227	2 788	201 316		
Manufacturing and distribution of gaseous fuels through mains	11 244	46	10	0	646	11 946		
Collection, purification and distribution of water	26 791	494	551	16	859	28 711		
Total	231 934	1 511	3 991	244	4 294	241 973		

Table 5 – Expenditure in the electricity, gas and water supply industry, 2013 and 2016

Evmanditura itam	2013*	2016**	2013*	2016**	Annualised %
Expenditure item	R million		% conti	ribution	change
Purchases	78 354	110 861	46,1	48,6	12,3
Salaries and wages	22 158	30 668	13,0	13,5	11,4
Subcontractors and labour brokers	5 649	4 909	3,3	2,2	-4,6
Motor vehicle running expenditure	827	991	0,5	0,4	6,2
Repair and maintenance	11 632	14 980	6,8	6,6	8,8
Custom and excise duties	8 053	8 225	4,7	3,6	0,7
Other expenditure	43 220	57 357	25,4	25,2	9,9
Total expenditure	169 893	227 991	100,0	100,0	10,3

^{*} Revised figures.

** Preliminary figures.

Table 6 – Expenditure by type of service in the electricity, gas and water supply industry, 2016

Type of service	Purchases	Salaries and wages	Subcontractors and labour brokers	Motor vehicle running expenditure	Interest	Losses on financial and other assets
			R mi	illion		
Generation, transmission and distribution of electricity	91 329	25 581	4 835	916	16 876	1 722
Manufacturing and distribution of gaseous fuels through mains	6 586	284	0	0	75	8
Collection, purification and distribution of water	12 946	4 803	74	75	454	349
Total	110 861	30 668	4 909	991	17 405	2 079

Table 6 – Expenditure by type of service in the electricity, gas and water supply industry, 2016 (concluded)

Type of service	Repair and maintenance	Customs and excise duties	Depreciation and amortisation	Other expenditure	Total
			R million		
Generation, transmission and distribution of electricity	14 388	8 225	19 916	12 123	195 911
Manufacturing and distribution of gaseous fuels through mains	69	0	139	589	7 750
Collection, purification and distribution of water	523	0	945	4 161	24 330
Total	14 980	8 225	21 000	16 873	227 991

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

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	55 305	11 537	259	290	178	329	67 898
Manufacturing and distribution of gaseous fuels through mains	0	113	1	0	2	0	116
Collection, purification and distribution of water	4 163	225	42	106	45	2 447	7 028
Total	59 468	11 875	302	396	225	2 776	75 042

Table 8 – Employment in the electricity, gas and water supply industry as at the end of June 2013 and 2016

Employment status	Gender	2013*	2016**	Annualised change %	
Employment status	Geridei	Nun	nber	Allifualised Change 76	
	Female	17 086	18 363	2,4	
Permanent	Male	39 795	39 430	-0,3	
	Total	56 881	57 793	0,5	
	Female	472	381	-6,9	
Temporary	Male	627	515	-6,4	
	Total	1 099	896	-6,6	
	Female	82	63	-8,5	
Casual	Male	423	277	-13,1	
	Total	505	340	-12,3	
	Female	17 640	18 807	2,2	
Total	Male	40 845	40 222	-0,5	
	Total	58 485	59 029	0,3	
Employees from labour brokers		175	145	-6,0	

^{*} Revised figures.

** Preliminary figures.

Table 9 – Employment by type of service in the electricity, gas and water supply industry as at the end of June 2013 and 2016

Type of service	2013*	2016**	2013*	2016**	Annualised %
Type of Service	Number of employees % contribution		of employees % contribution		change
Generation, transmission and distribution of electricity	46 060	46 287	78,8	78,4	0,2
Manufacturing and distribution of gaseous fuels through mains	432	423	0,7	0,7	-0,7
Collection, purification and distribution of water	11 993	12 319	20,5	20,9	0,9
Total	58 485	59 029	100,0	100,0	0,3

Table 10 – Employment by type of service and employee in the electricity, gas and water supply industry as at the end of June 2016

	Permanent		Temporary and casual			Total	Employees	
Type of service	Female	Male	Total	Female	Male	Total	Total	from labour
			Nun	nber of employ	ees			brokers
Generation, transmission and distribution of electricity	14 999	31 246	46 245	18	24	42	46 287	0
Manufacturing and distribution of gaseous fuels through mains	116	307	423	0	0	0	423	0
Collection, purification and distribution of water	3 248	7 877	11 125	426	768	1 194	12 319	145
Total	18 363	39 430	57 793	444	792	1 236	59 029	145

^{*} Revised figures.

** Preliminary figures.

Table 11 – Electricity available for distribution in the electricity, gas and water supply industry, 2013 and 2016

Oncome of all attributes	2013*	2016**	Annualis and OV also are
Source of electricity	Gigawatt-h	Annualised % change	
Coal	215 691	203 054	-2,0
Natural gas	8 410	7 573	-3,4
Nuclear material	11 954	12 305	1,0
Diesel	1 904	4 007	28,1
Water (hydroelectricity)	1 077	783	-10,1
Wind	18	2 126	390,6
Sun (solar electricity)	0	2 151	-
Electricity generated from pump storage stations	3 006	2 934	-0,8
Waste material (e.g. bagasse and wood waste)	2 304	2 073	-3,5
Total electricity generated	244 364	237 006	-1,0
Electricity supplied from other countries (imports)	7 698	9 757	8,2
Electricity consumed in power stations and pump storage systems	(4 650)	(5 384)	5,0
Electricity supplied to other countries (exports)	(13 791)	(13 540)	-0,6
***Total electricity available for distribution	233 621	227 839	-0,8

^{*} Revised figures.

^{**} Preliminary figures.

^{***} Electricity available for distribution includes: 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 12 - Sales of electricity in the electricity, gas and water supply industry, 2013 and 2016

Time of quotomor1	2013*	2016**	2013	2016	Annualised %
Type of customer ¹	R mi	llion	% contr	ibution	change
Redistributors ² (mainly municipalities)	51 989	74 439	36,5	39,1	12,7
Residential	15 997	17 175	11,2	9,0	2,4
Commercial	14 049	13 972	9,9	7,3	-0,2
Industrial	23 609	40 094	16,6	21,1	19,3
Mining	17 620	24 028	12,4	12,6	10,9
Agriculture	5 181	8 430	3,6	4,4	17,6
Railway electric traction	2 057	2 770	1,4	1,5	10,4
International (exported)	5 892	8 100	4,1	4,3	11,2
Other type of customer	6 120	1 452	4,3	0,8	-38,1
Total electricity distributed by type of customer	142 514	190 460	100,0	100,0	10,1

^{*} Revised figures.

** Preliminary figures.

1 Eskom's classification was used for the categories of customers.

2 Electricity redistributors are enterprises that buy electricity from generators for re-sale and they are mainly municipalities.

Table 13 – Purchases for generation, transmission and distribution of electricity in the electricity, gas and water supply industry, 2013 and 2016

Input	Unit	2013*	2016**	Annualised	2013*	2016**	Annualised
input	Quantity			% change	R mi	llion	% change
Water	Thousands m ³	337 375	321 867	-1,6	1 691	2 092	7,4
Coal	Metric ton	155 096 402	116 459 102	-9,1	35 876	44 351	7,3
Diesel	Litres	596 032 174	1 335 564 081	30,9	5 024	8 938	21,2
Other inputs ³					3 015	3 432	4,4
Other purchases ⁴					18 722	32 516	20,2
Total purchases					64 328	91 329	12,4

^{*} Revised figures

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

Input	Unit	Quantity	R million
Water	Thousands m ³	321 867	2 092
Coal	Metric ton	116 459 102	44 351
Diesel	Litres	1 335 564 081	8 938
Electricity	Gigawatt hours	40 693	32 176
Other inputs			3 432
Other purchases			340
Total purchases and transfer-in of goods			91 329

Table 15 – Sales of gas in the electricity, gas and water supply industry, 2013 and 2016

Type of gap ⁵	2013*	2016**	Annualised %	2013*	2016**	Annualised %	
Type of gas ⁵	Gigajoules		change	change R m		change	
Natural gas	140 586 831	156 542 682	3,6	7 057	9 135	9,0	
Methane-rich gas	28 632 386	27 652 468	-1,2	1 879	1 931	0,9	
Synthetic gas	968 866	131 094	-48,7	70	7	-52,9	
Total gas distributed in South Africa	170 188 083	184 326 244	2,7	9 006	11 073	7,1	

^{*} Revised figures

^{**} Preliminary figures

³Other inputs include nuclear material, natural gas and liquid petroleum fuel products.

⁴Other purchases include chemicals, environmental levy and electricity purchases.

^{**} Preliminary figures

⁵Gas refers to gaseous fuels distributed through mains or pipeline network and includes natural gas, methane-rich gas and synthetic gas.

Table 16 - Sales of gas by type of customer type in the electricity, gas and water supply industry, 2013 and 2016

Type of customer	2013*	2016**	Annualised %	2013*	2016**	Annualised %	
Type of customer	Gigajoules		change	R million		change	
Redistributors ⁶	10 167 539	11 003 562	2,7	594	736	7,4	
Households	207 967	263 945	8,3	26	33	8,3	
Commercial users and farmers	49 649 902	51 288 324	1,1	3 706	3 866	1,4	
Industrial users	110 162 675	121 770 413	3,4	4 680	6 438	11,2	
Total gas distributed by type of customer	170 188 083	184 326 244	2,7	9 006	11 073	7,1	

Table 17 - Purchases of gas in the electricity, gas and water supply industry, 2013 and 2016

-	2013*	2016**	Annualised %	2013*	2016**	Annualised %
Type of gas	Gigajo	Gigajoules		R million		change
Purchases of gas in South Africa						
Natural gas	3 364 717	4 270 392	8,3	231	293	8,3
Methane-rich gas	29 277 619	27 411 300	-2,2	1 724	917	-19,0
Synthetic gas	973 051	126 697	-49,3	34	10	-33,2
Total purchases of gas	33 615 387	31 808 389	-1,8	1 989	1 220	-15,0
Purchases of gas from other countries						
Natural gas imported	137 933 986	153 558 795	3,6	3 253	3 339	0,9
Total purchases	171 549 373	185 367 184	2,6	5 242	4 559	-4,5

^{*} Revised figures.
** Preliminary figures.

⁶Gas redistributors are enterprises that buy gas from gas producers for re-sale.

^{*} Revised figures.
** Preliminary figures.

Table 18 - Sales of water by customer type in the electricity, gas and water supply industry, 2013 and 2016

Type of austemor	2013*	2016**	2013*	2016**	Annualised %
Type of customer	R mi	Ilion	% cont	change	
Redistributors ⁷ (mainly municipalities)	11 149	15 948	63,8	69,3	12,7
Households	2 757	3 156	15,8	13,7	4,6
Commercial users	1 266	1 462	7,2	6,3	4,9
Industry	703	709	4,0	3,1	0,3
Mining	983	1 209	5,6	5,2	7,1
Agricultural users (farmers)	449	312	2,6	1,4	-11,5
Other customers	173	236	1,0	1,0	10,7
Total water distributed	17 480	23 032	100,0	100,0	9,6

^{*} Revised figures.

** Preliminary figures.

**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 for collection, purification and distribution of water in the electricity, gas and water supply industry, 2013 and 2016

lanut	2013*	2016**	2013*	2016**	Annualised %
Input	R mi	illion	% conti	change	
Fuel	31	42	0,3	0,3	11,1
Bulk/ raw water	7 637	10 980	86,3	84,8	12,9
Water treatment chemicals	394	580	4,4	4,5	13,8
Parts and spares	124	149	1,4	1,2	6,2
Other purchases and transfers-in	677	1 195	7,6	9,2	20,8
Total purchases and transfer-in of goods	8 863	12 946	100,0	100,0	13,5

Table 20 - Income from sales of goods and services rendered by province in the electricity, gas and water supply industry, 2013 and 2016

Province	2013*	2016**	2013*	2016**	Annualised %
	R millio	R million		% contribution	
Western Cape	14 639	21 679	8,4	9,3	14,0
Eastern Cape	6 136	9 551	3,5	4,1	15,9
Northern Cape	4 109	6 406	2,3	2,8	15,9
Free State	7 908	13 323	4,5	5,7	19,0
KwaZulu-Natal	22 949	27 355	13,1	11,8	6,0
North West	11 902	16 483	6,8	7,1	11,5
Gauteng	79 901	100 997	45,7	43,6	8,1
Mpumalanga	15 677	20 860	9,0	9,0	10,0
Limpopo	11 727	15 280	6,7	6,6	9,2
Total	174 948	231 934	100,0	100,0	9,9

^{*} Revised figures.
** Preliminary figures.

^{*} Revised figures.

** Preliminary figures.

Table 21 - Salaries and wages by province in the electricity, gas and water supply industry, 2013 and 2016

Province	2013*	2016**	2013*	2016**	Annualised %
Province	R mi	llion	% conti	change	
Western Cape	1 749	2 635	7,9	8,6	14,6
Eastern Cape	774	1 115	3,5	3,6	12,9
Northern Cape	251	502	1,1	1,6	26,0
Free State	1 102	1 887	5,0	6,2	19,6
KwaZulu-Natal	1 616	2 114	7,3	6,9	9,4
North West	467	964	2,1	3,1	27,4
Gauteng	9 571	13 711	43,2	44,7	12,7
Mpumalanga	5 356	6 127	24,2	20,0	4,6
Limpopo	1 272	1 613	5,7	5,3	8,3
Total	22 158	30 668	100,0	100,0	11,4

Table 22 - Employment by province in the electricity, gas and water supply industry for the last pay period ended on or before 30 June, 2013 and 2016

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Province	2013*	2016**	2013*	2016**	Annualised %
	R million		% cont	change	
Western Cape	5 116	5 066	8,7	8,6	-0,3
Eastern Cape	3 243	3 121	5,5	5,3	-1,3
Northern Cape	1 339	1 301	2,3	2,2	-1,0
Free State	3 743	3 960	6,4	6,7	1,9
KwaZulu-Natal	5 005	4 952	8,6	8,4	-0,4
North West	1 995	2 322	3,4	3,9	5,2
Gauteng	22 175	22 162	38,0	37,5	0,0
Mpumalanga	12 098	12 026	20,7	20,4	-0,2
Limpopo	3 771	4 119	6,4	7,0	3,0
Total	58 485	59 029	100,0	100,0	0,3

^{*} Revised figures.
** Preliminary figures.

^{*} Revised figures.
** Preliminary figures.

Table 23 – Information and communication technology (ICT) usage by type of service in the electricity, gas and water supply industry, 2016

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	93,3	62,2	17,8	33,3	73,3
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	58,9	12,8	27,6	60,2
Total	100,0	100,0	96,6	62,0	14,9	29,6	68,4

Explanatory notes

Background

The results presented in this publication have been derived from the 2016 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 census of private and public enterprises operating in electricity, gas and water supply industry.

The census was conducted 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 1 July 2015 and 30 June 2016.

Purpose of the survey

Results of the survey are used within Stats SA for compiling the gross domestic product (GDP) and its components. These statistics are also used by government policy advisers in monitoring the performance and contribution of individual industries to the South African economy and the effectiveness of industry policies, and by private sector users in analyses of 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. 09-09-02, 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 5-digit SIC level (group). 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 activities.

Size groups

The enterprises are divided into four size groups according to the value of turnover recorded for them on the Stats SA business register. Large enterprises are those with an annual recorded turnover of R153 million and above. Table 24 presents the size groups defined using the Department of Trade and Industry (DTI) cut-off points multiplied by three.

Table 24 – Size groups for the electricity, gas and water supply industry

Size Group	VAT Turnover
1	Turnover ≥ R153 000 000
2	R39 000 000 ≤ Turnover < R153 000 000
3	R15 300 000 ≤ Turnover < R39 000 000
4	Turnover < R15 300 000

Survey methodology and design

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

A census was conducted from a frame of approximately 200 enterprises. The enterprises were first stratified at 5-digit level according to the SIC and then by size of enterprise. Turnover as recorded on the business register was used as the measure of size for stratification.

Collection rate = ((collected units + finalised investigations) / sample size) x 100. The collection rate was 90,0%.

Turnover collection rate = ((weighted collected units BR turnover + weighted finalised investigations BR turnover) / population turnover) x 100. The turnover

collection rate was 99,7%.

Weighting methodology All the enterprises were each assigned a weight of one because all strata were completely enumerated (i.e. a census of the industry was conducted).

Revisions to 2013 results Revisions were made to previous results due to editing and new information obtained after the publications.

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-off of figures

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

Symbols and abbreviations

DTI Department of Trade and Industry

GDP Gross domestic product

ISIC International Standard Industrial Classification of All Economic Activities

IT Income tax

SARS South African Revenue Service

SIC Standard Industrial Classification of all Economic Activities

SNA System of National Accounts

Stats SA Statistics South Africa

VAT Value added tax

Nil or less than half the final digit shown

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.

Employees

Persons employed by the business or organisation who received payment (in salaries, wages, commission, piece rates or payments in kind) for the last pay period ended on or before 30 June 2016.

Gas

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.

Other expenditure

Other expenditure includes:

- o depreciation and amortisation;
- customs duties;
- excise duties:
- interest:
- losses on financial and other assets:
- repair and maintenance;
- telecommunication services; and
- o other.

Other income

Other income includes:

- government subsidies and incentives received;
- interest:
- rental, leasing and hiring income;
- customs duties;
- o excise duties; and
- o other.

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.

Statistical unit

A statistical unit is a unit of observation or measurement for which statistical data are collected and derived.

Stratum

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

Temporary employees

Temporary employees are employees appointed on a short-term contract basis with a stipulated termination date for periods not exceeding one year.

Turnover Turnover includes:

- value of sales of goods;
- amount received for services rendered;
- Income from rental, leasing and hiring.

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
- o 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 (10⁹ 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, not widely used anymore, 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.

General information

Stats SA publishes approximately 300 different statistical releases each year. It is not economically viable to produce them in more than one of South Africa's eleven official languages. Since the releases are used extensively, not only locally but also by international economic and social-scientific communities, Stats SA releases are published in English only.

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