



The South Africa I know, the home I understand

Statistical release

P4141

Electricity generated and available for distribution (Preliminary)

September 2015

**Embargoed until:
5 November 2015
13:00**

Enquiries:

Nicolai Claassen
Tel: (012) 310 8249

Forthcoming issue:

October 2015

Expected release date:

3 December 2015

Contents

Electricity generated (produced) in South Africa: results for September 2015	2
Table A – Key growth rates in the volume of electricity generated	2
Figure 1 – Electricity generated in South Africa	2
Electricity distributed (consumed) in South Africa: results for September 2015	3
Table B – Key growth rates in the volume of electricity distributed	3
Figure 2 – Electricity distributed in South Africa: year-on-year percentage change	3
Tables.....	4
Table 1 – Index of the volume of electricity generated (Base: 2010=100)	4
Table 2 – Year-on-year percentage change in the volume of electricity generated	4
Table 3 – Seasonally adjusted index of the volume of electricity generated.....	4
Table 4 – Volume of electricity distributed in South Africa (gigawatt-hours)	5
Table 5 – Year-on-year percentage change in electricity distributed in South Africa.....	5
Table 6 – Seasonally adjusted volume of electricity distributed in South Africa	5
Table 7 – Volume of electricity by category (gigawatt-hours).....	6
Table 8 – Year-to-date volume of electricity by category: year-on-year percentage change and difference.....	6
Table 9 – Volume of electricity delivered to provinces (gigawatt-hours)	6
Survey information	7
Technical notes.....	8
Glossary.....	9
Technical enquiries	9
General information.....	10

Electricity generated (produced) in South Africa: results for September 2015

Table A – Key growth rates in the volume of electricity generated

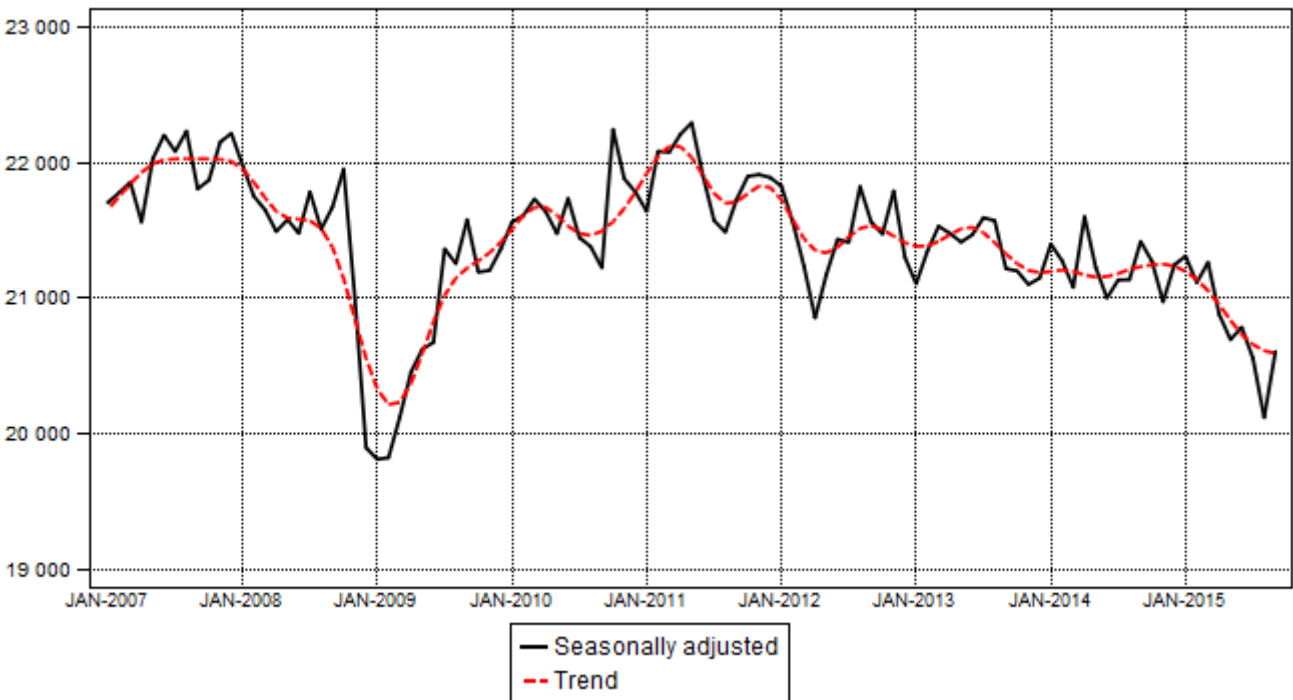
	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
Year-on-year % change, unadjusted	-3,3	-2,5	-1,1	-2,7	-4,9	-3,7
Month-on-month % change, seasonally adjusted	-1,8	-0,9	0,4	-1,0	-2,1	2,4
3-month % change, seasonally adjusted ¹	-0,4	-1,3	-2,1	-2,0	-2,2	-1,7

¹ Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity generation (production) decreased by 3,7% year-on-year in September 2015. Seasonally adjusted electricity generation increased by 2,4% in September 2015 compared with August 2015. This followed month-on-month changes of -2,1% in August 2015 and -1,0% in July 2015. Seasonally adjusted electricity generation decreased by 1,7% in the third quarter of 2015 compared with the second quarter of 2015.

Figure 1 – Electricity generated in South Africa

Gigawatt-hours



Electricity distributed (consumed) in South Africa: results for September 2015

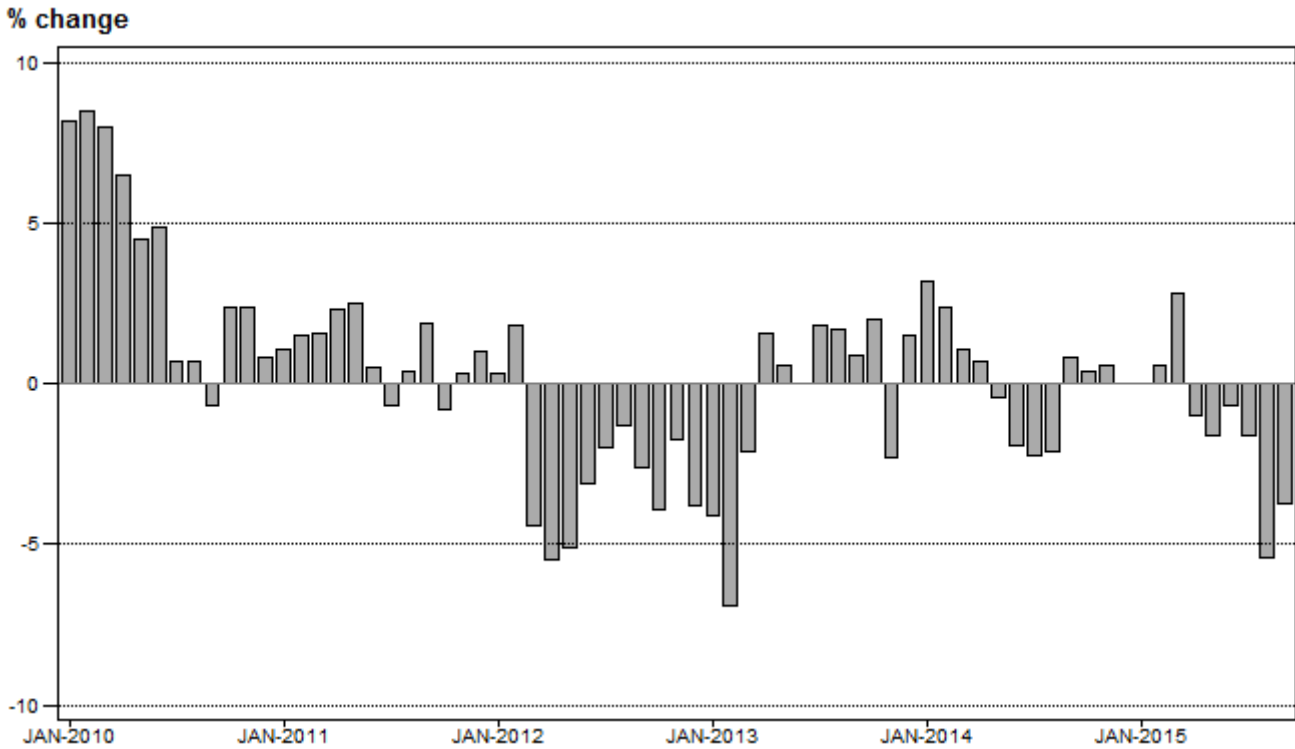
Table B – Key growth rates in the volume of electricity distributed

	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
Year-on-year % change, unadjusted	-1,0	-1,6	-0,7	-1,6	-5,4	-3,7
Month-on-month % change, seasonally adjusted	-1,4	-1,6	-0,1	-0,6	-3,6	3,0
3-month % change, seasonally adjusted ¹	0,2	-0,7	-2,0	-2,4	-3,2	-2,6

¹ Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity distribution (consumption) decreased by 3,7% year-on-year in September 2015. Seasonally adjusted electricity distribution increased by 3,0% month-on-month in September 2015, following month-on-month changes of -3,6% in August 2015 and -0,6% in July 2015. Seasonally adjusted electricity distribution decreased by 2,6% in the third quarter of 2015 compared with the second quarter of 2015.

Figure 2 – Electricity distributed in South Africa: year-on-year percentage change



PJ Lehohla
Statistician-General

Tables

Table 1 – Index of the volume of electricity generated (Base: 2010=100)

Month	2009	2010	2011	2012	2013	2014	2015 ¹
Jan	89,7	97,6	98,1	99,2	96,2	97,7	97,4
Feb	83,5	91,1	93,3	93,8	90,5	90,3	89,6
Mar	93,7	101,3	103,0	99,3	99,6	98,8	99,8
Apr	90,7	96,2	98,9	92,9	96,7	96,0	92,8
May	98,6	102,3	105,9	100,3	101,2	100,1	97,6
Jun	98,8	103,8	104,6	102,2	102,2	99,8	98,7
Jul	106,4	106,6	106,8	105,7	106,4	104,1	101,3
Aug	102,7	103,2	103,7	105,4	104,2	102,2	97,2
Sep	98,5	97,0	99,4	98,7	97,3	98,4	94,8
Oct	99,6	104,6	103,1	101,1	99,9	100,3	
Nov	96,8	100,0	100,1	99,5	96,3	95,6	
Dec	94,6	96,3	96,7	94,0	93,4	93,8	
Total	96,1	100,0	101,1	99,3	98,7	98,1	

¹ Latest month is preliminary.

Table 2 – Year-on-year percentage change in the volume of electricity generated

Month	2010	2011	2012	2013	2014	2015	2015 year-to-date
Jan	8,8	0,5	1,1	-3,0	1,6	-0,3	-0,3
Feb	9,1	2,4	0,5	-3,5	-0,2	-0,8	-0,5
Mar	8,1	1,7	-3,6	0,3	-0,8	1,0	0,0
Apr	6,1	2,8	-6,1	4,1	-0,7	-3,3	-0,8
May	3,8	3,5	-5,3	0,9	-1,1	-2,5	-1,2
Jun	5,1	0,8	-2,3	0,0	-2,3	-1,1	-1,2
Jul	0,2	0,2	-1,0	0,7	-2,2	-2,7	-1,4
Aug	0,5	0,5	1,6	-1,1	-1,9	-4,9	-1,9
Sep	-1,5	2,5	-0,7	-1,4	1,1	-3,7	-2,1
Oct	5,0	-1,4	-1,9	-1,2	0,4		
Nov	3,3	0,1	-0,6	-3,2	-0,7		
Dec	1,8	0,4	-2,8	-0,6	0,4		
Total	4,1	1,1	-1,8	-0,6	-0,6		

Table 3 – Seasonally adjusted index of the volume of electricity generated

Month	Base: 2010=100				Month-on-month % change			
	2012	2013	2014	2015	2012	2013	2014	2015
Jan	100,8	97,5	98,9	98,5	-0,3	-0,9	1,2	0,3
Feb	99,6	98,6	98,3	97,6	-1,2	1,1	-0,6	-0,9
Mar	98,1	99,5	97,4	98,3	-1,5	0,9	-0,9	0,7
Apr	96,4	99,2	99,8	96,5	-1,7	-0,3	2,5	-1,8
May	97,8	98,9	98,1	95,6	1,5	-0,3	-1,7	-0,9
Jun	99,0	99,2	97,0	96,0	1,2	0,3	-1,1	0,4
Jul	98,9	99,8	97,7	95,0	-0,1	0,6	0,7	-1,0
Aug	100,8	99,7	97,7	93,0	1,9	-0,1	0,0	-2,1
Sep	99,6	98,0	99,0	95,2	-1,2	-1,7	1,3	2,4
Oct	99,2	98,0	98,3		-0,4	0,0	-0,7	
Nov	100,7	97,5	96,9		1,5	-0,5	-1,4	
Dec	98,4	97,7	98,2		-2,3	0,2	1,3	

Table 4 – Volume of electricity distributed in South Africa (gigawatt-hours)

Month	2010	2011	2012	2013	2014	2015 ¹
Jan	19 396	19 616	19 676	18 860	19 457	19 463
Feb	18 181	18 455	18 783	17 493	17 917	18 028
Mar	20 186	20 518	19 623	19 202	19 415	19 961
Apr	19 102	19 539	18 466	18 762	18 895	18 706
May	20 435	20 938	19 869	19 991	19 907	19 581
Jun	20 800	20 914	20 274	20 270	19 891	19 759
Jul	21 307	21 162	20 743	21 119	20 661	20 324
Aug	20 540	20 617	20 345	20 689	20 253	19 160
Sep	19 256	19 619	19 100	19 271	19 428	18 707
Oct	20 371	20 198	19 413	19 795	19 876	
Nov	19 702	19 763	19 426	18 984	19 103	
Dec	18 996	19 189	18 456	18 733	18 728	
Total	238 272	240 528	234 174	233 169	233 531	

¹ Latest month is preliminary.

Table 5 – Year-on-year percentage change in electricity distributed in South Africa

Month	2011	2012	2013	2014	2015	2015 year-to-date
Jan	1,1	0,3	-4,1	3,2	0,0	0,0
Feb	1,5	1,8	-6,9	2,4	0,6	0,3
Mar	1,6	-4,4	-2,1	1,1	2,8	1,2
Apr	2,3	-5,5	1,6	0,7	-1,0	0,6
May	2,5	-5,1	0,6	-0,4	-1,6	0,2
Jun	0,5	-3,1	0,0	-1,9	-0,7	0,0
Jul	-0,7	-2,0	1,8	-2,2	-1,6	-0,2
Aug	0,4	-1,3	1,7	-2,1	-5,4	-0,9
Sep	1,9	-2,6	0,9	0,8	-3,7	-1,2
Oct	-0,8	-3,9	2,0	0,4		
Nov	0,3	-1,7	-2,3	0,6		
Dec	1,0	-3,8	1,5	0,0		
Total	0,9	-2,6	-0,4	0,2		

Table 6 – Seasonally adjusted volume of electricity distributed in South Africa

Month	Gigawatt-hours				Month-on-month % change			
	2012	2013	2014	2015	2012	2013	2014	2015
Jan	19 919	19 048	19 641	19 630	-0,8	-1,4	0,3	0,3
Feb	19 713	19 051	19 464	19 558	-1,0	0,0	-0,9	-0,4
Mar	19 449	19 273	19 201	19 727	-1,3	1,2	-1,4	0,9
Apr	19 191	19 265	19 660	19 452	-1,3	0,0	2,4	-1,4
May	19 356	19 512	19 455	19 149	0,9	1,3	-1,0	-1,6
Jun	19 526	19 565	19 242	19 137	0,9	0,3	-1,1	-0,1
Jul	19 374	19 768	19 335	19 019	-0,8	1,0	0,5	-0,6
Aug	19 394	19 756	19 353	18 332	0,1	-0,1	0,1	-3,6
Sep	19 344	19 492	19 630	18 885	-0,3	-1,3	1,4	3,0
Oct	19 260	19 612	19 668		-0,4	0,6	0,2	
Nov	19 743	19 295	19 439		2,5	-1,6	-1,2	
Dec	19 316	19 581	19 569		-2,2	1,5	0,7	

Table 7 – Volume of electricity by category (gigawatt-hours)

	May-15	Jun-15	Jul-15	Aug-15	Sep-15 ¹	Sep-15 year-on-year % change
Total - all producers						
Generated	21 107	21 360	21 917	21 033	20 498	-3,7
Inflow into South Africa	1 192	1 052	1 201	1 033	971	12,0
Consumed in power stations and auxiliary systems	1 557	1 514	1 613	1 517	1 492	-2,4
Outflow from South Africa	1 161	1 139	1 181	1 389	1 270	6,4
Distributed in South Africa	19 581	19 759	20 324	19 160	18 707	-3,7
Eskom						
Generated	19 706	20 026	20 482	19 639	19 079	-4,6
Inflow into South Africa	1 192	1 052	1 201	1 033	971	12,0
Consumed in power stations and auxiliary systems	1 481	1 418	1 513	1 441	1 423	-2,6
Outflow from South Africa	1 161	1 139	1 181	1 389	1 270	6,4
Distributed in South Africa	18 256	18 520	18 989	17 842	17 357	-4,7

¹ Preliminary.

Table 8 – Year-to-date volume of electricity by category: year-on-year percentage change and difference

	Jan – Sep 2014 (GWh)	Jan – Sep 2015 (GWh)	% change between Jan – Sep 2014 and Jan – Sep 2015	Difference between Jan – Sep 2014 and Jan – Sep 2015 (GWh)
Total - all producers				
Generated	191 994	188 031	-2,1	-3 963
Inflow into South Africa	7 942	9 874	24,3	1 932
Consumed in power stations and auxiliary systems	13 954	13 538	-3,0	-416
Outflow from South Africa	10 156	10 680	5,2	524
Distributed in South Africa	175 824	173 689	-1,2	-2 135
Eskom				
Generated	181 692	175 896	-3,2	-5 796
Inflow into South Africa	7 942	9 874	24,3	1 932
Consumed in power stations and auxiliary systems	13 276	12 854	-3,2	-422
Outflow from South Africa	10 156	10 680	5,2	524
Distributed in South Africa	166 199	162 237	-2,4	-3 962

Table 9 – Volume of electricity delivered to provinces (gigawatt-hours)

Province	May-15	Jun-15	Jul-15	Aug-15	Sep-15 ¹	Sep-15 year-on-year % change
Western Cape	1 922	1 884	1 967	1 943	1 848	-1,8
Eastern Cape	702	697	749	729	696	0,0
Northern Cape	453	461	479	475	479	-7,0
Free State	847	886	939	887	825	-2,9
KwaZulu-Natal	3 559	3 500	3 624	3 543	3 436	-3,7
North West	2 482	2 376	2 422	2 322	2 363	-1,1
Gauteng	4 865	5 295	5 576	5 099	4 715	-3,0
Mpumalanga	3 016	2 928	2 925	2 739	2 777	-6,6
Limpopo	1 209	1 168	1 119	1 141	1 160	-5,3
Total	19 053	19 197	19 800	18 878	18 299	-3,5

¹ Preliminary.

Survey information

Introduction	<p>1 Statistics South Africa (Stats SA) conducts a monthly survey covering electricity undertakings and establishments (branches) in the electricity industry. This statistical release contains monthly information regarding the volume of electricity units:</p> <ul style="list-style-type: none"> • generated and distributed in South Africa; • flowing into and out from South Africa as measured by the metering systems at the South African borders; and • delivered to provinces. <p>Both unadjusted and seasonally adjusted figures are published.</p> <p>2 In accordance with international practice, the indices are usually re-based every five years to a new base year. The current base period of the index is 2010.</p> <p>3 Some information for the current month may have been estimated due to late submission by respondents. These estimates will be revised in the next statistical release(s) as soon as actual information is available.</p>
Purpose of the survey	<p>4 The results of the monthly electricity survey are used to compile estimates of the gross domestic product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy.</p>
Scope of the survey	<p>5 This survey covers electricity undertakings and establishments conducting activities concerned with the generation and/or distribution of electricity (excluding the distribution of purchased electric energy). It includes electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.</p>
Classification	<p>6 The 1993 edition of the <i>Standard Industrial Classification of all Economic Activities</i> (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 <i>International Standard Industrial Classification of all Economic Activities</i> (ISIC) with suitable adaptations for local conditions. Each statistical unit is classified to an industry which reflects the predominant activity of the electricity undertaking or establishment.</p>
Collection rate	<p>7 The collection rate for the survey on electricity generated and available for distribution for September 2015 was 96%. The collection rate for August 2015 was 96%.</p>
Statistical unit	<p>8 The statistical unit for the collection of information is the electricity undertaking or establishment. The electricity undertaking or establishment is the smallest economic unit that functions as a separate entity (see point 5).</p>
Revised figures	<p>9 Normally revised figures are due to:</p> <ul style="list-style-type: none"> • late submission of data to Stats SA; and • revisions or corrections by respondents to previous reported data. <p>Data are edited at enterprise level.</p>
Related publications	<p>10 Users may also refer to the following publications available from Stats SA:</p> <ul style="list-style-type: none"> • <i>Bulletin of Statistics</i>; and • <i>South African Statistics</i>.
Rounding-off of figures	<p>11 Where figures have been rounded off, discrepancies may occur between sums of the component items and the totals.</p>
Historical data	<p>12 Historical electricity data are available on the Stats SA webpage. Click on the following link (Time series data) to access the data electronically</p>
Past publications	<p>13 Past electricity releases are available on the Stats SA webpage. Click on the following link (Past publications) to access the releases electronically.</p>

Technical notes

- Survey methodology and design**
- 1 All statistical units are stratified by type of economic activity according to the *Standard Industrial Classification of all Economic Activities (SIC)* and measure of size, where measure of size is the volume of electricity generated by the electricity undertaking or establishment. All large undertakings or establishments (size group one) are completely enumerated. A sample is drawn from medium and small size undertakings and establishments by systematically selecting undertakings or establishments within each size category. An electricity undertaking or establishment with a total generating capacity of less than 500 kilowatts is excluded from the sample.
 - 2 The survey is conducted by electronic filing, email, fax and telephone. Information is collected from a sample of 24 electricity undertakings or establishments. As from September 2013, Eskom supplied additional data for independent power producers (IPPs) that were not in the original sample of 24 establishments.
- Monthly index of electricity generated**
- 3 The calculation of the monthly index of electricity generated is based on the volume of electricity units produced.
- Benchmarking**
- 4 The index of the volume of electricity generated should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities, as measured by the monthly electricity survey, is based on information received from a sample of electricity undertakings and establishments. These levels are weighted according to the original sample and designed to represent the population of electricity undertakings and establishments.
- The results of the 1995 Census of electricity, gas and steam served as a benchmark to verify or adjust the level of the monthly index of the volume of electricity generated collected through the monthly survey. The level adjustments were done on the volume index for July of the relevant census year (the 1995 census year covered the period 1 January to 31 December 1995 and therefore, the benchmarking was done using the index of July 1995 as reference point).
- Seasonal adjustment**
- 5 Seasonally adjusted estimates of all items are generated each month, using the X-12-ARIMA Seasonal Adjustment Program developed by US Bureau of the Census Economic Research and Analyses Division, 1968. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognized. Seasonal adjustment does not aim to remove irregular or non-seasonal influences, which may be present in any particular month. Influences that are volatile or unsystematic can still make it difficult to interpret the movement of the series even after adjustment for seasonal variations. This means the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behaviour. The X12-ARIMA procedure for electricity generated and available for distribution is described in more detail on the Stats SA website at [Click to download Electricity seasonal adjustment August 2014.pdf](#)
- Trend cycle**
- 6 The trend is the long-term pattern or movement of a time series. The X-12-ARIMA Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates to estimate the underlying trend cycle.
- Month-on-month percentage change**
- 7 The month-on-month percentage change in a variable for any given month is the change between that month and the previous month, expressed as a percentage of the latter.
- Year-on-year percentage change**
- 8 The year-on-year percentage change in a variable for any given period is the change between that period and the corresponding period of the previous year, expressed as a percentage of the latter.

Glossary

Electricity undertaking	An undertaking concerned with the generation and distribution of electricity, including electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.	
Index of the volume of electricity generated	A statistical measure of the change in the volume of electricity generated in a given period and the volume of electricity generated in the base period. The base period is 2010. The production in the base period is set at 100.	
Industry	An industry is made up 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.	
Inflow into SA	Electricity flowing into South Africa as measured by the metering systems at the South African borders.	
Outflow from SA	Electricity flowing from South Africa as measured by the metering systems at the South African borders.	
Unit of electricity	One gigawatt-hour 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.	
Symbols and abbreviations	GDP	Gross domestic product
	GWh	Gigawatt-hour
	ISIC	International Standard Industrial Classification
	SIC	Standard Industrial Classification of all Economic Activities
	SA	South Africa
	Stats SA	Statistics South Africa
	*	Revised figures

Technical enquiries

Tsholofelo Ditinti Email: tsholofelod@statssa.gov.za

Nicolai Claassen Telephone number: (012) 310 8249
Email: nicolaic@statssa.gov.za

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.

Stats SA has copyright on this publication. Users may apply the information as they wish, provided that they acknowledge Stats SA as the source of the basic data wherever they process, apply, utilise, publish or distribute the data; and also that they specify that the relevant application and analysis (where applicable) result from their own processing of the data.

Stats SA products

A complete set of Stats SA publications is available at the Stats SA Library and the following libraries:

National Library of South Africa, Pretoria Division
National Library of South Africa, Cape Town Division
Natal Society Library, Pietermaritzburg
Library of Parliament, Cape Town
Bloemfontein Public Library
Johannesburg Public Library
Eastern Cape Library Services, King William's Town
Central Regional Library, Polokwane
Central Reference Library, Mbombela
Central Reference Collection, Kimberley
Central Reference Library, Mmabatho

Stats SA also provides a subscription service.

Electronic services

A large range of data is available via online services. For more detail about our electronic services, contact Stats SA's user information service at (012) 310 8600.

You can also visit us on the internet at: www.statssa.gov.za

General enquiries

User information services	Telephone number: (012) 310 8600 Email address: info@statssa.gov.za
Orders/subscription services	Telephone number: (012) 310 8044 Email address: magdaj@statssa.gov.za
Postal address	Private Bag X44, Pretoria, 0001

Produced by Stats SA