

Key figures as at the end of July 2000

Actual estimates

	July 2000	% change between July 1999 and July 2000	% change between May 1999 to July 1999 and May 2000 to July 2000	% change between January 1999 to July 1999 and January 2000 to July 2000
Electricity consumed (Gigawatt-hours)	17 759	+4,2%	+3,8%	+3,5%
Index of the physical volume of electricity production	121,6	+3,6%	+6,0%	+4,1%

adjusted

Seasonally estimates

	July 2000	% change between June 2000 and July 2000	% change between February 2000 to April 2000 and May 2000 to July 2000
Electricity consumed (Gigawatt-hours)	16 301	+0,6%	-0,1%
Index of the physical volume of electricity production	111,7	-2,0%	+0,4%

Key findings as at the end of July 2000

Consumption of electricity decreases

The consumption of electricity for the three months ended July 2000 decreased by 0,1% (-43 Gigawatt-hours) after seasonal adjustment, compared with the previous three months. However, the consumption of electricity for July 2000 increased by 4,2% compared with July 1999. Furthermore, the consumption of electricity in South Africa for the first seven months of 2000 increased by 3,5% (3 863 Gigawatt-hours) compared with the first seven months of 1999.

Production of electricity increases

The production of electricity in South Africa for the three months ended July 2000, after seasonal adjustment, increased by 0,4% (+168 Gigawatt-hours) compared with the previous three months. Furthermore, the production of electricity for July 2000 increased by 3,6% compared with July 1999. The production of electricity for the first seven months of 2000 increased by 4,1% compared with the first seven months of 1999.

The seasonally adjusted import figures of electricity for the three months ended July 2000 decreased by 4,9% (-29 Gigawatt-hours) compared with the previous three months. This was due to the fact that power lines from neighbouring countries were out of order for the period March to June after severe flooding. However, the seasonally adjusted export figures of electricity to neighbouring countries for the three months ended July 2000 increased by 9,7% or 63 Gigawatt-hours compared with the previous three months.

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Notes

Forthcoming issues

Issue

Expected release date

August 2000	5 October 2000
September 2000	2 November 2000
October 2000	7 December 2000
November 2000	4 January 2001
December 2000	1 February 2001

Purpose of the survey

The Generation and Consumption of Electricity Survey is a countrywide survey covering a sample of electricity undertakings and establishments conducting activities concerned with the generation or transmission and distribution of electricity in the South African economy. The information received is used to estimate key economic statistics and calculate production indices in order to compile estimates of the Gross Domestic Product (GDP) and its components, which are used to formulate and monitor government policy.

Table 1 - Electricity consumed in South Africa: 1995 to 2000 (Gigawatt-hours) 1/

Month	1995	1996	1997	1998	1999	2000
Actual figures						
J	13 782	14 155	15 009	15 403	15 153	15 512
F	12 858	13 710	14 088	14 459	14 360	15 224
M	14 145	14 361	15 155	15 714	15 791	16 225
A	13 350	14 006	15 247	14 923	15 063	15 399
M	14 687	15 315	16 423	16 261	16 327	17 064
J	14 998	15 325	16 474	16 280	16 393	16 818
J	15 440	16 862	17 187	16 867	17 051	17 759
A	14 994	16 151	16 303	16 417	16 708	
S	13 939	14 698	15 503	15 536	15 937	
O	14 306	15 356	16 005	15 957	16 322	
N	14 070	14 792	15 235	15 136	15 831	
D	13 534	14 207	14 878	14 563	15 184	
YEAR	170 103	178 938	187 507	187 516	190 120	
Seasonally adjusted figures						
J	14 090	14 461	15 290	15 737	15 486	15 890
F	14 147	15 047	15 416	15 771	15 625	16 542
M	14 146	14 323	15 101	15 674	15 747	16 188
A	14 113	14 781	16 063	15 697	15 825	16 245
M	14 281	14 803	15 832	15 647	15 726	16 422
J	14 173	14 525	15 701	15 585	15 773	16 209
J	14 086	15 402	15 723	15 437	15 635	16 301
A	14 064	15 196	15 353	15 528	15 819	
S	14 119	14 890	15 687	15 662	16 055	
O	14 151	15 184	15 780	15 679	16 032	
N	14 425	15 187	15 641	15 528	16 226	
D	14 394	15 163	15 932	15 608	16 240	

1/ As indicated by electricity available for distribution

Table 2 - Indices of the physical volume of electricity production: 1995 to 2000 (Base 1995=100)

Month	1995	1996	1997	1998	1999	2000
Actual indices						
J	97,5	100,6	108,3	109,6	106,9	104,4
F	90,7	98,5	101,5	102,8	100,5	102,9
M	99,8	103,6	109,5	110,6	109,4	113,9
A	93,9	100,5	109,6	105,5	101,7	108,2
M	102,6	109,9	117,8	115,4	110,6	119,9
J	105,2	110,1	118,3	115,4	111,6	118,4
J	108,7	121,1	124,1	119,9	117,4	121,6
A	105,6	115,8	118,0	111,9	114,9	
S	98,5	105,7	112,9	109,1	109,4	
O	101,4	110,7	115,8	112,6	111,9	
N	99,9	107,3	110,0	106,2	108,4	
D	96,2	102,7	106,7	101,3	102,4	
YEAR	100,0	107,2	112,7	110,0	108,8	
Seasonally adjusted indices						
J	99,8	102,9	110,7	112,0	109,3	106,8
F	99,6	107,8	110,8	112,0	109,4	111,9
M	100,0	103,8	109,7	110,6	109,2	113,6
A	99,2	106,2	115,8	111,3	107,3	114,2
M	99,7	106,4	113,7	111,0	106,3	115,2
J	99,5	104,6	113,0	110,6	107,3	114,0
J	99,3	110,7	113,7	109,9	107,7	111,7
A	99,1	109,0	111,2	105,6	108,5	
S	99,5	106,5	113,5	109,5	109,7	
O	100,2	109,1	113,8	110,4	109,5	
N	102,1	109,7	112,5	108,7	111,1	
D	102,1	109,3	114,0	108,4	109,7	

Table 3 - Electricity produced and consumed in power stations, purchased and sold outside South Africa and consumed in South Africa

Description	Gigawatt-hours					
	Year 1999	July	June	July	January - July	
		2000	1999	2000	1999	
Total - All producers						
Electricity produced						
Actual figures	203 012	18 920	18 410	18 261	122 786	117 927
Seasonally adjusted figures		17 389	17 744	16 764	-	-
Purchased outside South Africa	6 673	599	2	515	1 863	3 258
Consumed in power stations and auxiliary systems	15 299	1 396	1 401	1 344	9 159	8 923
Sold outside South Africa	4 266	363	193	381	1 486	2 124
Electricity consumed in South Africa 1/						
Actual figures	190 120	17 759	16 818	17 051	114 001	110 138
Seasonally adjusted figures		16 301	16 209	15 635	-	-
Eskom						
Electricity produced						
Actual figures	192 391	18 034	17 522	17 340	116 802	111 687
Seasonally adjusted figures		16 541	16 903	15 886	-	-
Purchased outside South Africa	6 673	599	2	515	1 863	3 258
Consumed in power stations and auxiliary systems	14 144	1 297	1 297	1 246	8 511	8 254
Sold outside South Africa	4 266	363	193	381	1 486	2 124
Electricity consumed in South Africa 1/						
Actual figures	180 654	16 973	16 034	16 228	108 666	104 567
Seasonally adjusted figures		15 549	15 469	14 850	-	-

1/ As indicated by electricity available for distribution
* Revised

Explanatory Notes

Introduction

- 1 Statistics South Africa (Stats SA) conducts a monthly sample survey of the electricity industry covering electricity undertakings and establishments (branches). This statistical release contains information regarding the number of electricity units produced and consumed in South Africa and the number of units purchased and sold outside South Africa on a monthly basis. Both actual and seasonally adjusted figures are published.
- 2 This statistical release reflects indices of the physical volume of electricity production. In accordance with international practice, the indices have to be rebased every five years to a new base year. The indices in this statistical release have been calculated on the basis of 1995=100. Rebased indices were published in the October 1997 Statistical release P4141 - Generation and Consumption of Electricity on 4 December 1997.
- 3 In order to improve timeliness of the publication, 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.

Scope of the survey

- 4 This survey covers electricity undertakings and establishments conducting activities concerned with the generation or transmission and distribution of electricity, including electrical power installations which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

Classification

- 5 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. Each statistical unit is classified to an industry which reflects the predominant activity of the electricity undertaking or establishment.

Statistical unit

- 6 The basic 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. Each statistical unit is classified to an industry (cf. paragraph 6).

Survey methodology and design

- 7 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 category one cases) 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 kilowatt is excluded from the sample.
- 8 The survey is conducted by mail each month collecting information from a sample of 23 electricity undertakings or establishments.

Monthly production indices	9 The calculation of the monthly production indices is based on the number of electricity units produced.
Benchmarking	<p>10 The index of physical volume of electricity production should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities as measured by the monthly Generation and Consumption of Electricity sample survey is based on information received from a sample of electricity undertakings and establishments which is weighted according to the original sample design in order to represent the population of electricity undertakings and establishments. It is necessary to adjust the level of activities as measured by the monthly sample survey to the level of activities as measured periodically by the Census of Electricity, Gas and Steam. This procedure, whereby the latest results of an economic census are used to compile more accurate level estimates for a certain year, is known as benchmarking.</p> <p>11 The results of the 1995 Census of Electricity, Gas and Steam served as benchmarks to verify or adjust the level of the monthly physical volume of electricity production indices collected through the monthly sample survey. The level adjustments were done on the volume indices for July of the relevant census year (the 1995 census year covered the period 1 January 1995 to 31 December 1995 and, therefore, the benchmarking was done using the index of July 1995 as reference point). The results, due to benchmarking, were published in the October 1997 statistical release P4141 - Generation and Consumption of Electricity on 4 December 1997.</p>
Seasonal adjustment	12 Seasonally adjusted estimates of all items are generated each month, using the X-11 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 recognised. 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.
Trend cycle	13 The trend is the long-term pattern or movement of a time series. The X-11 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates.
Related publications	<p>14 Users may also wish to refer to the following publications which are available from Stats SA -</p> <ul style="list-style-type: none"> • Bulletin of Statistics. • SA Statistics.
Unpublished statistics	15 In some cases Stats SA can also make available statistics which are not published. The statistics can be made available as computer printouts, on diskette or CD. Generally a charge is made for providing unpublished statistics.
Rounding-off of figures	16 The figures in the tables have, where necessary, been rounded off to the nearest digit shown. There may, therefore, be slight discrepancies between the sums of the constituent items and the totals shown.

Pre-release policy

17 Stats SA has adopted the confidential pre-release policy in respect of selected economic indicators and specific government departments. The policy accords with practice among leading statistical agencies. The statistical integrity of the indices and strict observance of the release time has been assured by the following procedure:

In respect of this statistical release, an official representative from the Office of the President, the Department of Trade and Industry, the Department of Finance and the South African Reserve Bank will receive a copy of the release on a strictly confidential basis two hours in advance of the public issue.

Stats SA pre-release policy may be inspected at its Website, www.statssa.gov.za

Technical notes

Response rates

The response rate for July 2000 is 100%.

Glossary

Electricity undertaking

An electricity undertaking is an undertaking concerned with the generation or transmission and distribution of electricity, including electrical power installations which as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

Establishment (branch)

An establishment (branch) is defined as the smallest economic unit which operates as a separate entity for which comprehensive financial records are kept.

Index of physical volume of electricity production

The index of physical volume of electricity production or a production index is a statistical measure of the change in the volume of production. The production index of electricity is the ratio between the volume of production of electricity in a given period and the volume of production of electricity in the base period. The base period is 1995. The production in the base period is set at 100.

Industry

An industry consists of a group of undertakings or establishments engaged in the same or similar kinds of economic activity. Industries are defined in the 1993 System of National Accounts (1993 SNA) in the same way as in the Standard Industrial Classification of all Economic Activities (SIC), Fifth Edition, Report No. 09-90-02.

Unit of electricity

One unit of electricity is equal to 1 kilowatt-hour (kWh). One gigawatt-hours (gWh) of electricity is equal to one thousand kilowatt-hours.

For more 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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Advanced release calendar

An advanced release calendar is disseminated on <http://www.statssa.gov.za>

Stats SA products

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Central Regional Library, Pietersburg
Central Reference Library, Nelspruit
Central Reference Collection, Kimberley
Central Reference Library, Mmabatho

Stats SA also provides a subscription service.

Electronic services

A large range of data are available via on-line services, diskette, CD and computer printouts. For more details about our electronic data services, contact (012) 310 8600.

You can visit us on the Internet at: <http://www.statssa.gov.za>

Enquiries

Telephone number: (012) 310 8095/8390/8351 (user enquiries)
(012) 310 8249/310 8663 (technical enquiries)
(012) 310 8161 (publications)
(012) 310 8490 (library)

Fax number: (012) 310 8332

e-mail: Corrieb@statssa.pwv.gov.za
Mosesmn@statssa.pwv.gov.za

Postal address: Private Bag X44, Pretoria, 0001