

Generation and consumption of electricity
Statistical release
P4141

November 2000
Embargo: 13:00
Date: 4 January 2001

Read the following [notice](#) with regard to the eleven official languages

This data in this statistical release adheres to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF), which sets out standards on coverage, periodicity and timeliness of data; access by the public; integrity; and quality of the disseminated data.

© Copyright, 2000

Users may apply or process this data, provided Statistics South Africa is acknowledged as the original source of the data; that it is specified that the application and/or analysis is the result of the user's independent processing of the data; and that neither the basic data nor any reprocessed version or application thereof may be sold or offered for sale in any form whatsoever.

P Lehohla
Statistician-General: Statistics South Africa

A complete set of Stats SA publications is available in the Stats SA Library,
and in the following public libraries:

State Library, Pretoria	Library of Parliament, Cape Town
South African Library, Cape Town	Bloemfontein Public Library
Natal Society Library, Pietermaritzburg	Johannesburg Public Library
Central Reference Library, Mmabatho	Central Regional Library, Pietersburg
Central Reference Library, Nelspruit	Central Reference Collection, Kimberley
Eastern Cape Library Services, King William's Town	

Contents

Notes

Tables

Table 1 Electricity consumed in South Africa: 1995 to 2000

Table 2 Indices of the physical volume of electricity production: 1995 to 2000

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

Additional information

Explanatory notes

Technical notes

Glossary

For more information

Key figures as at the end of November 2000

Actual estimates	November 2000	% change between November 1999 and November 2000	% change between September 1999 to November 1999 and September 2000 to November 2000	% change between January 1999 to November 1999 and January 2000 to November 2000
Electricity consumed (Gigawatt-hours)	16 161	+2,1%	+2,0%	+3,0%

Electricity imported (Gigawatt-hours)	601	-6,7%	-20,3%	-33,0%
Electricity exported (Gigawatt-hours)	525	+21,5 %	+12,6%	-13,8%
Index of the physical volume of electricity production (1995=100)	111,9	+3,2%	+3,2%	+3,8%

Seasonally adjusted estimates	November 2000	% change between October 2000 and November 2000	% change between June 2000 to August 2000 and September 2000 to November 2000
Electricity consumed (Gigawatt-hours)	16 527	+0,8%	+0,8%
Electricity imported (Gigawatt-hours)	559	+13,4%	+53,4%
Electricity exported (Gigawatt-hours)	422	-1,2%	+47,4%
Index of the physical volume of electricity production (1995=100)	114,3	+0,6%	+0,5%

Key findings as at the end of November 2000

Consumption of electricity increases

The consumption of electricity for the three months ended November 2000, after seasonal adjustment, increased by 0,8% (+375 Gigawatt-hours) compared with the previous three months. The consumption of electricity for November 2000 increased by 2,1% (+330 Gigawatt-hours) compared with November 1999. Furthermore, the consumption of electricity in South Africa for the first eleven months of 2000 increased by 3,0% (+5 325 Gigawatt-hours) compared with the first eleven months of 1999.

Production of electricity increases

The production of electricity in South Africa for the three months ended November 2000, after seasonal adjustment, increased by 0,5% (+225 Gigawatt-hours) compared with the previous three months. Furthermore, the production of electricity for November 2000 increased by 3,2% (+545 Gigawatt-hours) compared with November 1999. The production of electricity for the first eleven months of 2000 increased by 3,8% (+7 127 Gigawatt-hours) compared with the first eleven months of 1999.

Import of electricity increases

The seasonally adjusted import of electricity from neighbouring countries for the three months ended November 2000 increased from 983 Gigawatt-hours to 1 508 Gigawatt-hours compared with the previous three months. As from July 2000 powerlines are in operation which were out of order for the period March to June 2000 after severe flooding.

Export of electricity increases

The seasonally adjusted export of electricity to neighbouring countries for the three months ended November 2000 increased by 47,4% (+397 Gigawatt-hours) compared with the previous three months.

Notes

Forthcoming issues	Issue	Expected release date
	December 2000	1 February 2001
	January 2001	8 March 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	17 214
S	13 939	14 698	15 503	15 536	15 937	16 180
O	14 306	15 356	16 005	15 957	16 322	16 706
N	14 070	14 792	15 235	15 136	15 831	16 161
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	14 091	14 462	15 290	15 730	15 488	15 897
F	14 147	15 044	15 408	15 758	15 622	16 541
M	14 132	14 306	15 079	15 657	15 743	16 191
A	14 112	14 776	16 050	15 684	15 821	16 228
M	14 282	14 804	15 817	15 638	15 715	16 410
J	14 172	14 522	15 676	15 554	15 725	16 125
J	14 090	15 411	15 752	15 500	15 732	16 407
A	14 067	15 204	15 377	15 535	15 827	16 303
S	14 118	14 891	15 707	15 656	16 055	16 287
O	14 154	15 189	15 795	15 662	16 011	16 396
N	14 429	15 193	15 648	15 501	16 176	16 527
D	14 395	15 165	15 933	15 618	16 253	

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	119,0
S	98,5	105,7	112,9	109,1	109,4	111,8
O	101,4	110,7	115,8	112,6	111,9	116,4
N	99,9	107,3	110,0	106,2	108,4	111,9
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	110,8	112,0	109,4	106,9
F	99,6	107,8	110,8	111,9	109,4	111,9
M	100,0	103,7	109,6	110,5	109,2	113,6
A	99,2	106,1	115,6	111,2	107,1	114,0
M	99,7	106,4	113,6	111,1	106,3	115,2
J	99,5	104,6	112,8	110,4	107,0	113,6
J	99,3	110,7	113,7	110,1	108,0	112,0
A	99,1	109,0	111,4	105,8	108,8	112,8
S	99,5	106,6	113,7	109,7	109,9	112,3
O	100,1	109,1	113,7	110,2	109,2	113,6
N	102,1	109,7	112,5	108,5	110,7	114,3
D	102,1	109,3	114,0	108,6	109,8	

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

Gigawatt-hours						
Description	Year 1999	November	October	November	January - November	
		2000		1999	2000	1999
Total - all producers						
Electricity produced						
Actual figures	203 012	17 402	18 104	16 857	194 204	187 077
Seasonally adjusted figures		17 765	17 660	17 208	-	-
Purchased outside South Africa (import)	6 673	601	506	644	3 941	5 882
Consumed in power stations and auxiliary systems	15 299	1 318	1 363	1 238	14 482	14 082
Sold outside South Africa (export)	4 266	525	540	432	3 398	3 941
Electricity consumed in South Africa 1/						

Actual figures	190 120	16 161	16 706	15 831	180 262	174 936
Seasonally adjusted figures		16 527	16 396	16 176	-	-

Eskom						

Electricity produced						
Actual figures	192 391	16 499	17 200	15 963	184 670	177 335
Seasonally adjusted figures		16 862	16 781	16 313	-	-
Purchased outside South Africa (import)	6 673	601	506	644	3 941	5 882
Consumed in power stations and auxiliary systems	14 144	1 212	1 257	1 135	13 430	13 015
Sold outside South Africa (export)	4 266	525	540	432	3 398	3 941
Electricity consumed in South Africa 1/						
Actual figures	180 654	15 363	15 908	15 040	171 779	166 261
Seasonally adjusted figures		15 722	15 613	15 376	-	-

1/ As indicated by electricity available for distribution

* Revised

Additional information

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	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.
	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.
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	14	Users may also wish to refer to the following publications which are available from Stats SA - <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:
	18	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.
	19	Stats SA pre-release policy may be inspected at its Website, www.statssa.gov.za

Technical notes

Response rates	The response rate for November 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 million 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.

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.

Advanced release calendar

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

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, 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

This page was designed by [Zelma de Bruin](#)