

Generation and consumption of electricity P4141

February 2001

Embargo: 13:00

Date: 5 April 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, 2001

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

Table 1	Electricity consumed in South Africa: 1995 to 2001
Table 2	Indices of the physical volume of electricity production: 1995 to 2001
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 February 2001

Actual estimates	February 2001	% change between February 2000	% change between December 1999 to	% change between January 2000 to

		and February 2001	February 2000 and December 2000 to February 2001	February 2000 and January 2001 to February 2001
Electricity consumed (Gigawatt-hours)	14 871	-2,3%	+0,9%	+0,6%
Electricity imported (Gigawatt-hours)	488	-7,8%	-8,4%	-12,8%
Electricity exported (Gigawatt-hours)	470	+178,1%	+145,3%	+196,7%
Index of the physical volume of electricity production (1995=100)	101,6	-1,3%	+2,9%	+2,7%

Seasonally adjusted estimates	February 2001	% change between January 2001 and February 2001	% change between September 2000 to November 2000 and December 2000 to February 2001
Electricity consumed (Gigawatt-hours)	16 113	-1,1%	-0,7%

Electricity imported (Gigawatt-hours)	599	+0,7%	+22,9%
Electricity exported (Gigawatt-hours)	634	-18,9%	+59,0%
Index of the physical volume of electricity production (1995=100)	110,4	-2,9%	-0,7%

Key findings as at the end of February 2001

Consumption of electricity decreases

The consumption of electricity for the three months ended February 2001, after seasonal adjustment, decreased by 0,7% (-331 Gigawatt-hours), compared with the previous three months. Furthermore, the consumption of electricity for February 2001 decreased by 2,3% (-353 Gigawatt-hours) compared with February 2000.

Production of electricity decreases

The production of electricity for the three months ended February 2001, after seasonal adjustment decreased by 0,7% (-310 Gigawatt-hours) compared with the previous three months. Furthermore, the production of electricity for February 2001 decreased by 1,3% (-198 Gigawatt-hours) compared with February 2000.

Import of electricity increases

The seasonally adjusted import of electricity for the three months ended February 2001 increased by 22,9% (+348 Gigawatt-hours) compared with the previous three months. However, the import of electricity for February 2001 decreased by 7,8% (-41 Gigawatt-hours) compared with February 2000.

Export of electricity increases

The seasonally adjusted export of electricity for the three months ended February 2001 increased by 59,0% (+744 Gigawatt-hours) compared with the previous three months. Furthermore, the export of electricity increased by 178,1% (from 169 Gigawatt-hours for February 2000 to 470 Gigawatt-hours for February 2001). The increase from 169 Gigawatt-hours for February 2000 to

470 Gigawatt-hours for February 2001 in exports to neighbouring countries was mainly due to the aluminium smelter commissioned in Mozambique towards the end of the year 2000.

Notes

Forthcoming issues	Issue	Expected release date
	March 2001	3 May 2001
	April 2001	7 June 2001
	May 2001	5 July 2001
	June 2001	2 August 2001
	July 2001	6 September 2001
	August 2001	4 October 2001
	September 2001	1 November 2001
	October 2001	6 December 2001
	November 2001	3 January 2002
	December 2001	7 February 2002
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.

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	<p>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:
	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 February 2001 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.

Table 1 - Electricity consumed in South Africa: 1995 to 2001 (Gigawatt-hours) 1/

Month	1996	1997	1998	1999	2000	2001
Actual figures						
J	14 155	15 009	15 403	15 153	15 512	16 064
F	13 710	14 088	14 459	14 360	15 224	14 871
M	14 361	15 155	15 714	15 791	16 225	
A	14 006	15 247	14 923	15 063	15 399	
M	15 315	16 423	16 261	16 327	17 064	
J	15 325	16 474	16 280	16 393	16 818	
J	16 862	17 187	16 867	17 051	17 759	
A	16 151	16 303	16 417	16 708	17 214	
S	14 698	15 503	15 536	15 937	16 180	
O	15 356	16 005	15 957	16 322	16 709	
N	14 792	15 235	15 136	15 831	16 161	
D	14 207	14 878	14 563	15 184	15 395	
YEAR	178 938	187 507	187 516	190 120	195 660	
Seasonally adjusted figures						
J	14 459	15 275	15 709	15 427	15 821	16 288
F	15 026	15 397	15 779	15 638	16 567	16 113
M	14 313	15 086	15 657	15 745	16 188	

A	14 765	16 029	15 650	15 789	16 194
M	14 794	15 805	15 618	15 708	16 401
J	14 526	15 685	15 566	15 746	16 149
J	15 429	15 785	15 555	15 801	16 483
A	15 216	15 390	15 557	15 853	16 327
S	14 903	15 718	15 677	16 074	16 302
O	15 191	15 793	15 672	16 024	16 410
N	15 185	15 631	15 489	16 160	16 502
D	15 161	15 930	15 574	16 212	16 482

1/ As indicated by electricity available for distribution

Table 2 - Indices of the physical volume of electricity production: (1995 to 2001 Base : 1995=100)

Month	1996	1997	1998	1999	2000	2001
Actual indices						
J	100,6	108,3	109,6	106,9	104,4	111,3
F	98,5	101,5	102,8	100,5	102,9	101,6
M	103,6	109,5	110,6	109,4	113,9	
A	100,5	109,6	105,5	101,7	108,2	
M	109,9	117,8	115,4	110,6	119,9	
J	110,1	118,3	115,4	111,6	118,4	
J	121,1	124,1	119,9	117,4	121,6	
A	115,8	118,0	111,9	114,9	119,0	
S	105,7	112,9	109,1	109,4	111,8	
O	110,7	115,8	112,6	111,9	116,4	
N	107,3	110,0	106,2	108,4	111,9	
D	102,7	106,7	101,3	102,4	105,8	
YEAR	107,2	112,7	110,0	108,8	112,9	
Seasonally adjusted indices						
J	102,9	110,7	112,1	109,2	106,7	113,7
F	107,8	110,8	112,0	109,3	111,8	110,4
M	103,7	109,6	110,4	109,1	113,5	
A	106,1	115,6	111,1	107,1	114,0	
M	106,4	113,6	111,0	106,2	115,1	
J	104,6	112,8	110,4	107,1	113,7	
J	110,7	113,7	110,1	108,0	112,0	
A	109,1	111,5	106,0	109,0	113,0	
S	106,6	113,7	109,7	110,0	112,4	
O	109,1	113,7	110,2	109,3	113,6	
N	109,7	112,5	108,5	110,7	114,3	
D	109,4	114,1	108,6	109,9	113,7	

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

Gigawatt-hours

DESCRIPTION	Year 2000	February	January	February	January - February	
		2001		2000	2001	2000
TOTAL - All Producers						
Electricity produced						
Actual figures	210 670	15 810	17 313	16 008	33 123	32 247
Seasonally adjusted figures		17 198	17 709	17 416	-	-
Purchased outside South Africa (import)	4 719	488	569	529	1 057	1 212
Consumed in power stations and auxiliary systems	15 719	957	1 202	1 145	2 159	2 357
Sold outside South Africa (export)	4 007	470	616	169	1 086	366
Electricity consumed in South Africa 1/						
Actual figures	195 660	14 871	16 064	15 224	30 935	30 736
Seasonally adjusted figures		16 113	16 288	16 567	-	-
Eskom						
Electricity produced						
Actual figures	200 357	15 004	16 462	15 239	31 466	30 664
Seasonally adjusted figures		16 332	16 850	16 587	-	-
Purchased outside South Africa (import)	4 719	488	569	529	1 057	1 212
Consumed in power stations and auxiliary systems	14 581	865	1 106	1 078	1 971	2 201
Sold outside South Africa (export)	4 007	470	616	169	1 086	366
Electricity consumed in South Africa 1/						
Actual figures	186 485	14 156	15 309	14 521	29 465	29 308
Seasonally adjusted figures		15 350	15 533	15 814	-	-

1/ As indicated by electricity available for distribution

* Revised

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 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](#)