

Dipalopalo tsa Aforika Borwa • Statistieke Suid-Afrika • Tistatistiki ta Afrika-Dzonga • Ukuqokelelwa kwamanani eNingizimu Afrika

Electricity generated and available for distribution January 2005

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Statistics South Africa 1 P4141

Table A – Selected key figures regarding electricity generated and available for distribution for January 2005

Estimates	January 2005	% change between January 2004 and January 2005	% change between November 2003 to January 2004 and November 2004 to January 2005		
Electricity available for distribution (Gigawatt-hours)	18 149	+1,7	+2,1		
Electricity imported (Gigawatt-hours)	729	-12,0	+1,1		
Electricity exported (Gigawatt-hours)	1 030	-0,7	+0,8		
Index of the physical volume of electricity production (2000=100)	113,5	+2,2	+2,2		

Seasonally adjusted
estimates

% change between between August to January December 2004 October 2004 2005 and and January 2005 November 2004 to January 2005 18 647 -0,4 +0,9 117,5 -0,5 +1,5

% change

Electricity available for distribution (Gigawatt-hours)

Index of the physical

volume of electricity production (2000=100)

Key findings regarding electricity generated and available for distribution for January 2005

Consumption of electricity increases

The estimated consumption of electricity for the three months ended January 2005, after seasonal adjustment, increased by 0,9% (+480 Gigawatt-hours) compared with the previous three months. The consumption of electricity for the three months ended January 2005, increased by 2,1% compared with the corresponding period ending January 2004 (see table C). Furthermore, the consumption of electricity for January 2005 increased by 1,7% (+299 Gigawatt-hours) compared with January 2004 (see table 7).

Production of electricity increases

As indicated in table B, the estimated production of electricity for the three months ended January 2005, after seasonal adjustment, increased by 1,5% (+920 Gigawatt-hours) compared with the previous three months. The production of electricity for January 2005 increased by 2,2% (+433 Gigawatt-hours) compared with January 2004.

Import and export of electricity decrease

As shown in table A, both the import and export of electricity decreased for January 2005 compared with January 2004 (-12,0% and -0,7% respectively). However, the import and export of electricity were higher during the three months up to January 2005 than during the corresponding three months up to January 2004.

Table B - Comparison between the current quarter and the previous quarter: Seasonally adjusted figures

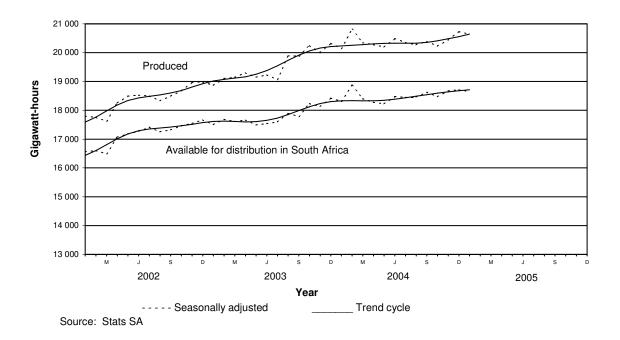
T. Control of the con	1	Seasonally	1	Seasonally	Percentage	1
	1	adjusted		adjusted	change	Difference
		quantity	-	quantity	between	between
		August to		November 2004	August to	August to
		October		to January	October 2004	October 2004
		2004		2005	and	and
					November 2004	November 2004
					to January	to January
					2005	2005
	G	igawatt-hours	5 0	Gigawatt-hours		Gigawatt-hours
Electricity produced		60 888		61 808	+1,5	920
Electricity available for distribution in South Africa	a	55 552		56 032	+0,9	480

Table C - Comparison between the current quarter and the corresponding quarter of the previous year: Actual figures

	1		l		Percentage	1		
	Actual		Actual		change	Differen	ice	-
	quantit	У	quantity	,	between	between		
	Novembe	r 2003	November	2004	November 200	3 November	2003	
	to Janu	ary	to Janua	ry	to January	to Janua	ıry	
	2004		2005		2004 and	2004 and	1	- 1
	1		l		November 200	4 November	2004	
	1		l		to January	to Janua	ry	
	1				2005	2005		
	Gigawatt	-hours	Gigawatt-	hours	:1	Gigawatt	-hour	s
Electricity produced		346	 59	623	+2,2	1	277	-
Purchased outside South Africa (import)		131		154	+1,1		23	i
Consumed in power stations and	1							Ī
auxiliary systems	4	265	4	419	+3,6		154	
Sold outside South Africa (export)	3	117	3	141	+0,8		24	
Electricity available for distribution in South Africa	1 53	096	54	217	+2,1	1	121	- 1

Figure 1 below shows the seasonally adjusted and trend patterns for electricity produced and available for distribution in South Africa between January 2002 and January 2005. There was a gradual upward movement in the trend cycles until the end of 2003. From January 2004, the increase in electricity produced was less marked, but it has picked up again slightly from June 2004 to date. The trend of electricity available for distribution in South Africa shows a similar pattern, but with slightly less increase over the last six months.

Figure 1 – Electricity produced and available for distribution in South Africa from 2002 to 2005



P J Lehohla Statistician-General

Contents

		Page
Notes		5
Tables		
Table 1	Total volume of electricity available for distribution in South Africa: 2000 to 2005	6
Table 2	Seasonally adjusted total volume of electricity available for distribution in South Africa: 2000 to 2005	6
Table 3	Indices of the physical volume of electricity production: 2000 to 2005	7
Table 4	Seasonally adjusted indices of the physical volume of electricity production: 2000 to 2005	7
Table 5	Total volume of electricity imported: 2000 to 2005	8
Table 6	Total volume of electricity exported: 2000 to 2005	8
Table 7	Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa	9
Table 8	Electricity distributed by Eskom by province for 2004 and 2005	10
Explana	tory notes	11
Glossary	<i>7</i>	13
General	information	14

Notes

Forthcoming issues	Issue	Expected release date
	February 2005	7 April 2005
Purpose of the survey	used to compile estimates of the	ctricity generated and available for distribution survey are e Gross Domestic Product (GDP) and its components, which of the economy and formulation of economic policy.
Response rate	The response rate for the surve January 2005 was 100%.	ey on electricity generated and available for distribution for
Name change of statistical release	, ,	ation the name of the monthly Statistical Release P4141: f electricity, changed to Electricity generated and available

Table 1 - Total volume of electricity available for distribution in South Africa: 2000 to 2005

Month	2	000	20	001	1	200	2	2	003	2	004		20	05
 January	15	512	16	064		6 1	 91	17	095	17	850	1/	18	149
February	15	224	14	871	1	5 2	15	16	168	17	278			
March	16	225	16	320	1	6 5	51	17	655	18	477			
April	15	399	15	515	1	6 3	62	16	905	17	524			
May	17	064	16	929	1	7 8	52	18	159	18	909			
June	16	818	16	788	1	8 0	16	18	331	19	336			
July	17	759	18	021	1	8 9	56	19	183	20	156			
August	17	214	17	300	1	8 0	64	18	713	19	265			
September	16	180	16	277	1	7 1:	25	17	526	18	362			
October	16	709	16	794	1	7 7	41	18	479	18	714			
November	16	161	15	960	1	7 2	34	17	790	18	314			
December	15	395	15	224	1	6 7	13	17	456	17	754			
Year	195	660	196	063	20	6 0	20	213	460	221	939			

^{1/} Preliminary.

Table 2 - Seasonally adjusted total volume of electricity available for distribution in South Africa: 2000 to 2005

Month	I		 				Percentage c	hange
1	1	2000	2001	2002	2003	2004	2005 current and	1
Ī	I	ĺ	ĺ	ĺ	İ	ĺ	previous mon	th
January	1	15 842	16 413	16 567	17 500	18 307	18 647	-0,4
February	1	16 622	16 211	16 599	17 687	18 866	1	
March	1	16 236	16 266	16 492	17 607	18 403	I	1
April	1	16 169	16 185	17 069	17 665	18 278	I	1
May	1	16 385	16 265	17 184	18 159	18 224	1	
June	1	16 147	16 128	17 267	17 537	18 479	I	1
July	1	16 388	16 593	17 413	17 595	18 443	I	1
August	1	16 371	16 479	17 254	17 899	18 455	I	1
September	1	16 313	16 454	17 320	17 781	18 627	I	1
October	1	16 437	16 540	17 466	18 233	18 470	I	1
November	1	16 476	16 262	17 540	18 126	18 671	I	1
December	1	16 398	16 157	17 669	18 428	18 714	1	

Table 3 - Indices of the physical volume of electricity production: 2000 to 2005

Base : 2000=100

Month	1	2000	2001	2002	2003	2004	1	2005
January		92 , 5	98 , 6	98,5	104,2	111,0	1/	113,5
February	1	91,2	90,1	91,8	98,5	107,2		
March	Ì	100,9	98,5	99,7	108,0	114,7		
April	Ì	95,9	93,6	99,0	104,7	110,1		
May	i	106,3	103,0	109,4	113,0	119,1		
June	Ì	104,9	101,1	110,2	114,5	122,0		
July	Ì	107,8	111,1	115,5	119,2	127,3		
August	Ì	105,5	108,0	109,9	119,1	121,3		
September	i	99,1	100,5	104,9	112,8	115,7		
October	i	103,1	102,7	109,6	118,9	118,7		
November	i	99,1	97,4	106,3	112,0	114,5		
December	i	93,8	92,1	101,7	109,3	111,6		
	-							
Year	i	100.0	99,7	104.7	111,2	116,1		

^{1/} Preliminary.

 $\textit{Table 4-Seasonally adjusted indices of the physical volume of electricity production: 2000 to 2005 \\$

Base : 2000=100

Month	 	2000 	2001 	2002 	2003	 2004 	 2005 	Percentage change between current and previous month
 January	1	94,6	101,1	101,3	107,4	114,6	117,5	-0,5
February	1	99,9	98,9	101,0	108,6	118,2		1
March	1	101,2	98,9	100,2	108,8	115,7		1
April	1	101,1	98,5	104,0	110,0	115,6		1
May	1	102,2	99,1	105,4	109,1	115,1		1
June	1	100,7	96,9	105,6	109,5	116,7		1
July	1	98,8	101,7	105,6	108,8	116,2		1
August	1	100,0	102,5	104,3	113,2	115,4		1
September	1	99,5	100,9	105,3	113,3	116,2		1
October	1	100,4	99,9	106,4	115,4	115,2		1
November	1	101,0	99,2	108,2	114,0	116,6		
December	1	100,6	98,5	108,2	115,9	118,1		1

Table 5 - Total volume of electricity imported: 2000 to 2005

Month	I	2000	2001	2002	2003	2004	2005
January	1	683	569	670	705	828	1/ 729
February	1	529	488	643	637	811	
March	1	6	665	783	706	863	
April	1	24	774	733	547	641	
May	İ	20	629	658	569	547	
June	1	2	797	704	518	560	
July	1	599	479	702	792	607	
August	1	476	282	721	424	618	
September	1	495	507	637	266	590	
October	İ	506	713	454	272	536	
November	İ	601	636	477	583	746	
December	İ	778	708	691	720	679	
	-						
Year	İ	4 719	7 247	7 873	6 739	8 026	

^{1/} Preliminary.

Table 6 - Total volume of electricity exported: 2000 to 2005

Month		2000	2001	2002	2003	2004	2005
 January	1	197	616	 558	578	1 037 1	/ 1 030
February	İ	169	470	478	508	977	
March	İ	196	498	529	607	1 027	
April	İ	155	463	525	619	951	
May	1	213	508	578	805	944	
June	1	193	496	601	798	1 057	
July	1	363	543	614	944	1 140	
August	İ	389	569	605	1 030	1 049	
September	İ	458	581	628	1 051	1 048	
October	İ	540	630	626	1 116	1 112	
November	i	525	598	600	1 025	1 082	
December	i	609	547	608	1 055	1 029	
	- i						
Year	i	4 007	6 519	6 950	10 136	12 453	

^{1/} Preliminary.

 $\begin{tabular}{lll} Table 7 - Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa \\ \end{tabular}$

Description	Janua: 20					% change between January 2004 and January 2005	between January 2004 and	
Total - All producers								
Electricity produced	19	495	19	590	19	928	+2.2	+4331
Purchased outside South Africa (import)		828		679		729	-12,0	-99
Consumed in power stations and								1
auxiliary systems	1	437	1	486	1	478	+2,9	+41
Sold outside South Africa (export)	1	037	1	029	1	030	-0,7	-7
Electricity available for distribution in South Africa	17	850	17	754	18	149	+1,7	+299
Eskom								
Electricity produced	18	640	18	585	19	085	+2,4	+445
Purchased outside South Africa (import)		828		679		729	12,0	-99
Consumed in power stations								1
and auxiliary systems	1	357	1	386	1	386	+2,1	+29
Sold outside South Africa (export)	_	037				030	-0,7	
Electricity available for distribution in South Africa	17	075	16	849	17	398	+1,9	+323

^{1/} Preliminary.

Table 8 - Electricity distributed by Eskom by province for 2004 and 2005 1/

Month			Northern Cape		
2004	21 492		4 502		
0004 7	1 700	516	204	0.20	2 416
	1 782	516	384	839	
February		599	369	772	
March	1 826	643	385	791	
April	1 693	567	317	740	
May	1 792	656	354	822	
June	1 734	648	353	837	
July		693	383	892	
August		676	371	841	
September		647	378	772	3 455
October	1 786	646	400	801	3 583
November	1 784	646	411	769	3 450
December	1 774	573	397	749	3 456
2005 - January 2,	/ 1 795	616	424	765	3 599
February	I				
March					
April	I				
May					
June	1				
July					
August	1				
September					
October	1				
November					
December					

Table 8 - Electricity distributed by Eskom by province for 2004 and 2005 1/ (concluded)

Month	North W		Caut		 Maumala		 Limpopo	 Couth	7 frigal
MOHEN	NOICH W			_	-	_			AIIICA
2004	28				25			204	267
									i
2004 - January	2	389	4	335	2	087	788	16	537
February	2	230	4	144	2	097	727	16	052
March	2	443	4	454	2	161	798	16	997
April	2	218	4	296	2	065	761	15	950
May	2	418	4	749	2	308	839	17	508
June	2	303	4	940	2	104	816	17	706
July	2	504	5	488	2	206	859	18	572
August	2	430	4	898	2	178	878	17	735
September		398		575		029	833		857
October		411		576		213	817		233
November	2	326		375		222	828		811
December	2	117	4	140	2	255	847	16	309
1									
2005 - January 2/	2	172	4	402	2	206	858	16	837
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									

^{1/} Wholesale energy as delivered by Eskom to the various provinces.

^{2/} Preliminary.

Explanatory notes

Introduction

- 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 generated and available for distribution in South Africa, the number of units purchased and sold outside South Africa and the number of units distributed by Eskom by province 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 on the basis of 2000=100. In accordance with international practice, the indices have to be rebased every five years to a new base year.
- 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

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

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

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 (see paragraph 5).

Survey methodology and design

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- 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 22 electricity undertakings or establishments.

Monthly production indices

The calculation of the monthly production indices is based on the number of electricity units produced.

Benchmarking

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 electricity generated and available for distribution survey is based on information received from a sample of electricity undertakings and establishments, which are weighted according to the original sample, designed 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.

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 December 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).

Seasonal adjustment

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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 behavior.

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 -

- Bulletin of Statistics.
- SA Statistics.

Unpublished statistics

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 figures

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 pre-release policy may be inspected at its website, www.statssa.gov.za.

Symbols and abbreviations

GDP Gross Domestic Product

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of all Economic Activities

Stats SA Statistics South Africa * Revised figures

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

2000. 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-hour (gWh) of

electricity is equal to one million kilowatt-hours.

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