

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

Electricity generated and available for distribution November 2005

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 $\begin{tabular}{ll} Table A-Selected key figures regarding electricity generated and available for distribution for November 2005 \end{tabular}$

Estimates	November 2005	% change between November 2004 and November 2005	% change between September to November 2004 and September to November 2005	% change between January to November 2004 and January to November 2005
Electricity available for distribution (Gigawatt-hours)	18 556	+1,3	+1,2	+0,4
Index of the physical volume of electricity production (2000=100)	115,8	+1,1	+0,4	-0,0

Seasonally adjusted estimates	November 2005	% change between October and November 2005	% change between June to August 2005 and September to November 2005
Electricity available for distribution (Gigawatt-hours)	18 848	+0,3	+2,6
Index of the physical volume of electricity production (2000=100)	117,4	+1,6	+2,3

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

Consumption of electricity increases

The estimated volume of electricity consumed (available for distribution) for the three months ending November 2005, after seasonal adjustment, increased by 2,6% (+1 451 Gigawatt-hours) compared with the previous three months ending August 2005 (see table B). Furthermore, the estimated consumption of electricity for November 2005 increased by 1,3% (+242 Gigawatt-hours) compared with November 2004 (see table 7a). The estimated consumption of electricity for the three months ending November 2005 increased by 1,2% (+676 Gigawatt-hours) as compared to the corresponding three months of 2004 (see table C).

Production of electricity increases

The estimated production of electricity for the three months ending November 2005, after seasonal adjustment, increased by 2,3% (+1 404 Gigawatt-hours) compared with the previous three months ending August 2005 (see table B). The estimated production of electricity for November 2005 increased by 1,1% (+219 Gigawatt-hours) compared with November 2004 (see table 7a). Production of electricity reported by Eskom increased by 1,7% (+317 Gigawatt-hours) during this period.

Table B - Percentage change in the seasonally adjusted quantity of electricity generated and available for distribution between the current quarter and the previous quarter

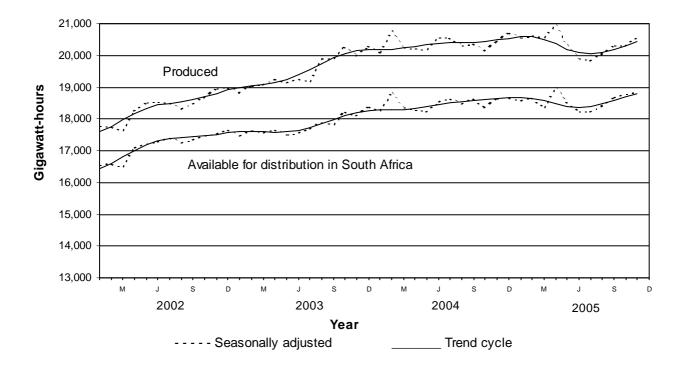
	Seasonally	Seasonally	Percentage	Quantity
	adjusted	adjusted	change	difference
	quantity	quantity	between	between
	June to	September to	June to	June to
	August	November	August 2005	August 2005
	2005	2005	and	and
	İ	ĺ	September to	September to
	İ	ĺ	November	November
	İ	ĺ	2005	2005
	Gigawatt-hours	Gigawatt-hours		Gigawatt-hours
Electricity produced	+59 800	+61 204	+2,3	+1 404
Electricity available for distribution in South Africa	+54 869	+56 320	+2,6	+1 451

Table C - Percentage change between the current quarter and the corresponding quarter of the previous year

	Actual quantity		Actual quantity		change between	Quantity difference between	
	September November		Septembe: November		November	September November	to
	2004	ļ	2005	ļ	2004 and	2004 and	ļ
				!	-	1	to
					November 2005	November 2005	
	Gigawatt-ho	urs	Gigawatt-	hours		Gigawatt-hou	ırs
Electricity produced	61 25	9	61	485	+0,4	+226	
Purchased outside South Africa (import)	1 87	2	2	387	+2,7	+515	į
Consumed in power stations and	ļ						ļ
auxiliary systems	4 49			391	-2,4		ļ
Sold outside South Africa (export)	3 24	2	3 -	414	+0,5	+172	
Electricity available for distribution in South Africa	55 39	0	56	066	+1,2	+676	

Figure 1 below shows the seasonally adjusted and trend patterns for electricity produced and available for distribution in South Africa between January 2002 and November 2005. There was a gradual upward movement in the trend cycles until the end of 2003. From March 2004, the increase in electricity produced was less marked and has shown a declining trend between February and July 2005. The trend of electricity available for distribution in South Africa has shown a similar pattern. An increasing trend in both electricity produced and electricity available for distribution is evident since August 2005.

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



P J Lehohla Statistician-General

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Notes

Forthcoming issues	Issue	Expected release date
	December 2005	02 February 2006
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 November 2005 was 100%.	y on electricity generated and available for distribution for

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

Month	2	2000	2	2001	:	2002	2	2003	2	2004		20	05
January	15	512	16	064	16	191	17	095	17	850		18	149
February	15	224	14	871	15	215	16	168	17	278		17	169
March	16	225	16	320	16	551	17	655	18	477		18	487
April	15	399	15	515	16	362	16	905	17	524		18	132
May	17	064	16	929	17	852	18	159	18	909		19	224
June	16	818	16	788	18	016	18	331	19	336		18	983
July	17	759	18	021	18	956	19	183	20	156		19	657
August	17	214	17	300	18	064	18	713	19	265		19	191
September	16	180	16	277	17	125	17	526	18	362		18	383
October	16	709	16	794	17	741	18	479	18	714		19	127
November	16	161	15	960	17	234	17	790	18	314	1/	18	556
December	15	395	15	224	16	713	17	456	17	754			
 Year	195	660	196	063	206	020	213	460	221	939			

^{1/} Preliminary

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

	2000 	2001 	2002	2003	2004	2005	% change between current and previous month
January	15 839	16 401	16 535	17 466	18 266	18 589	-0,4
February	16 621	16 206	16 583	17 627	18 789	18 669	+0,4
March	16 210	16 235	16 459	17 553	18 342	18 363	-1,6
April	16 161	16 174	17 070	17 660	18 296	18 940	+3,1
May	16 383	16 265	17 183	17 487	18 229	18 555	-2,0
June	16 156	16 138	17 297	17 581	18 552	18 234	-1,7
July	16 428	16 651	17 512	17 727	18 628	18 214	-0,1
August	16 382	16 492	17 278	17 927	18 486	18 421	+1,1
September	16 321	16 472	17 357	17 808	18 643	18 675	+1,4
October	16 431	16 532	17 454	18 188	18 395	18 797	+0,7
November	16 468	16 243	17 526	18 082	18 605	18 848	+0,3
December	16 385	16 129	17 629	18 384	18 655		j

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

Base : 2000=100

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

^{1/} Preliminary

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

Month	2000	2001	2002	2003	2004	2005	% change between current and previous month
January	94,5	100,9	101,0	107,1	114,4	117,2	-0,5
February	99,8	98,8	100,9	108,4	117,9	117,2	-0,0
March	101,0	98,7	100,0	108,4	115,2	117,0	-0,2
April	101,0	98,4	103,9	109,7	115,2	119,3	+2,0
May	102,1	99,0	105,3	108,9	115,0	115,6	-3,1
June	100,6	96,9	105,6	109,7	117,2	113,5	-1,8
July	99,3	102,4	106,5	109,9	117,5	113,4	-0,1
August	100,1	102,6	104,6	113,5	115,7	114,3	+0,8
September	99,4	100,9	105,3	113,2	116,1	115,6	+1,1
October	100,3	99,8	106,4	115,4	115,1	115,6	-0,0
November	101,0	99,1	108,1	113,6	116,0	117,4	+1,6
December	100,5	98,3	108,0	115,7	117,8		j

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

Month	2000	2001	2002	2003	2004	2005
January	683	569	670	705	828	729
February	529	488	643	637	811	714
March	6	665	783	706	863	533
April	24	774	733	547	641	598
May	20	629	658	569	547	849
June	2	797	704	518	560	813
July	599	479	702	792	607	856
August	476	282	721	424	618	883
September	495	507	637	266	590	686
October	506	713	454	272	536	836
November	601	636	477	583	746	1/ 865
December	778	708	691	720	679	
Year	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	197	616	558	578	1 037	1 030
February	169	470	478	508	977	901
March	196	498	529	607	1 027	968
April	155	463	525	619	951	991
May	213	508	578	805	944	1 083
June	193	496	601	798	1 057	1 096
July	363	543	614	944	1 140	1 102
August	389	569	605	1 030	1 049	1 144
September	458	581	628	1 051	1 048	1 134
October	540	630	626	1 116	1 112	1 161
November	525	598	600	1 025	1 082	1/ 1 119
December	609	547	608	1 055	1 029	
 Year	4 007	6 519	6 950	 10 136	12 453	

^{1/} Preliminary.

Table 7a - Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa

Description	 Novembe 2004		 Octo 200			ember 005	% change between November 2004 and November 2005	Difference between November 2004 and November 2005
Total - All producers								
Electricity produced	20	105	20	928	20	324	+1,1	+219
Purchased outside South Africa (import)	į ·	746		836		865	+16,0	+119
Consumed in power stations and								
auxiliary systems	1	455		475	_	515	, -	
Sold outside South Africa (export)	1	082	1	161	1	119	+3,4	+37
Electricity available for distribution in South Africa	18	314	19	127	18	556	+1,3	+242
ESKOM								
Electricity produced	19	122	20	068	19	439	+1,7	+317
Purchased outside South Africa (import)	į ·	746		836		865	+16,0	+119
Consumed in power stations								j
and auxiliary systems	1 :	348	1	388	1	426	+5,8	+78
Sold outside South Africa (export)	1	082	1	161	1	119	+3,4	+37
Electricity available for distribution in South Africa	17	438	18	355	17	759	+1,8	+321

^{1/} Preliminary.

Table 7b - Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa (concluded)

Description	January to Novembe 2004		January to November 2005		November 2004	and January to	2004
Total - All producers							
Electricity produced			224				101
Purchased outside South Africa (import)	7	347	8	362	+13,8	+1	015
Consumed in power stations and							
auxiliary systems					-1,6		268
Sold outside South Africa (export)					+2,7		305
Electricity available for distribution in South Africa	204	185	205	058	+0,4	+	873
Electricity produced	214	568	214	015	-0,3	_	553
Purchased outside South Africa (import)	7	347	8	362	+13,8	+1	015
Consumed in power stations							i
and auxiliary systems	15	799	15	477	-2,0	-	322
Sold outside South Africa (export)	11	424	11	729	+2,7	+	305
Electricity available for distribution in South Africa	194	694	195	173	+0,2	+	479

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

Month	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal
2004	21 491	7 510	4 502	9 625	42 264
2004					
January	1 782	516	384	839	3 416
February	1 741	599	369	772	3 373
March	1 826	643	385	791	3 496
April	1 693	567	317	740	3 293
May	1 792	656	354	822	3 570
June	1 734	648	353	837	3 971
July	1 905	693	383	892	3 642
August	1 904	676	371	841	3 559
September	1 771	647	378	772	3 455
October	1 786	646	400	801	3 583
November	1 783	646	411	769	3 450
December	1 774	573	397	749	3 456
2005					
January	1 795	616	424	765	3 599
February	1 516	585	380	727	3 406
March	1 650	633	437	747	3 642
April	1 583	627	335	742	3 534
May	1 871	667	358	779	3 558
June	1 860	672	359	761	3 536
July	1 895	690	380	793	3 713
August	1 991	659	375	785	3 666
September	1 837	672	385	735	3 531
October	1 831	666	424	746	3 712
November 2/	1 790	631	390	700	3 589
ear to date	19 619	7 118	4 247	8 280	39 486

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

Month	North West	Gaute	eng	Mpumala	anga	Limpopo	Total So	outh	Africa
2004	28 18	7 54	970	25	925	9 791		204	267
2004									
January	2 389	9 4	335	2	087	788		16	537
February	2 230) 4	144	2	097	727		16	052
March	2 443	3 4	454	2	161	798		16	997
April	2 218	3 4	296	2	065	761		15	950
May	2 418	3 4	749	2	308	839		17	508
June	2 303	3 4	940	2	104	816		17	706
July	2 504	1 5	488	2	206	859		18	572
August	2 430) 4	898	2	178	878		17	735
September	2 398	3 4	575	2	029	833		16	857
October	2 413	L 4	576	2	213	817		17	233
November	2 326	5 4	375	2	222	828		16	811
December	2 11'	7 4	140	2	255	847		16	309
 2005									
January	2 172	2 4	402	2	206	858		16	837
February	2 05'	7 4	052	2	285	815		15	823
March	2 173	L 4	494	2	378	854		17	006
April	2 089	9 4	489	2	676	676		16	751
May	2 17:	3 4	730	2	581	909		17	626
June	2 068	3 4	760	2	449	899		17	364
July	2 042	2 5	057	2	498	925		17	993
August	1 936	5 4	866	2	319	932		17	530
September	1 996	5 4	493	2	373	860		16	882
October	2 050) 4	776	2	703	861		17	769
November 2/	2 070	9 4	672	2	467	821		17	130
 Year to date	22 824	1 50	791	26	935	9 410		188	711

^{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.
- 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.
- 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

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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

- 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

9 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.

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).

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

18 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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