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## STATISTICAL RELEASE P4141

# Electricity generated and available for distribution (Preliminary)

April 2024

**Embargoed until:** 6 June 2024 13:00

**ENQUIRIES:** Nicolai Claassen Tel: 072 310 5351 FORTHCOMING ISSUE: May 2024

**EXPECTED RELEASE DATE:** 

4 July 2024



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## Electricity generated (produced) in South Africa: results for April 2024

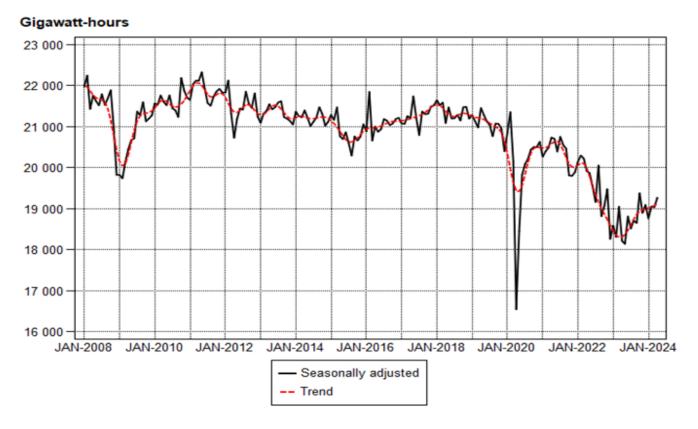
Table A - Key growth rates in the volume of electricity generated

	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Year-on-year % change, unadjusted	-3,0	4,4	0,8	4,2	0,0	5,7
Month-on-month % change, seasonally adjusted	-2,5	1,0	-1,8	1,6	-0,1	1,2
3-month % change, seasonally adjusted <sup>1</sup>	1,6	2,7	0,0	-0,1	-1,0	1,0

<sup>&</sup>lt;sup>1</sup> Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity generation (production) increased by 5,7% year-on-year in April 2024. Seasonally adjusted electricity generation increased by 1,2% in April 2024 compared with March 2024. This followed month-on-month changes of -0,1% in March 2024 and 1,6% in February 2024. Seasonally adjusted electricity generation increased by 1,0% in the three months ended April 2024 compared with the previous three months.

Figure 1 - Electricity generated in South Africa



## Electricity distributed (consumed) in South Africa: results for April 2024

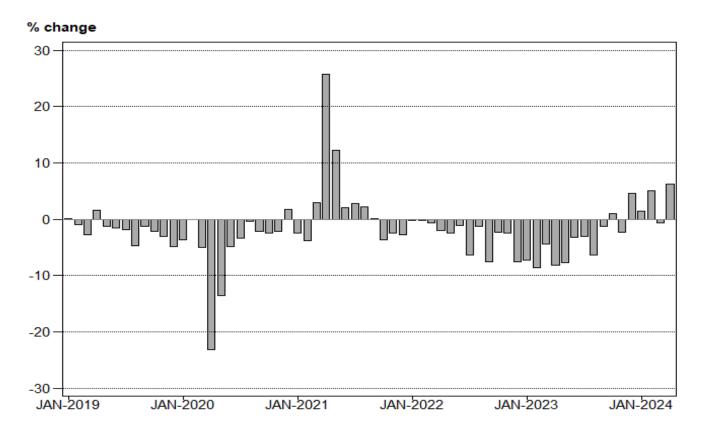
Table B - Key growth rates in the volume of electricity distributed

	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Year-on-year % change, unadjusted	-2,3	4,6	1,5	5,0	-0,7	6,2
Month-on-month % change, seasonally adjusted	-2,2	1,9	-1,2	0,5	-0,7	1,8
3-month % change, seasonally adjusted <sup>1</sup>	0,7	2,6	0,8	1,1	-0,6	0,4

<sup>&</sup>lt;sup>1</sup> Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity distribution (consumption) increased by 6,2% year-on-year in April 2024. Seasonally adjusted electricity distribution increased by 1,8% month-on-month in April 2024, following month-on-month changes of -0,7% in March 2024 and 0,5% in February 2024. Seasonally adjusted electricity distribution increased by 0,4% in the three months ended April 2024 compared with the previous three months.

Figure 2 – Electricity distributed in South Africa: year-on-year percentage change





## **Tables**

Table 1 - Index of the volume of electricity generated (Base: 2019=100)

Month	2018	2019	2020	2021	2022	2023	2024
Jan	101,5	99,5	97,1	93,9	93,0	85,7	86,4
Feb	93,1	91,3	92,2	88,2	87,9	79,4	82,7
Mar	102,5	99,5	95,5	97,2	96,2	90,8	90,8
Apr	96,8	98,5	76,1	95,5	91,9	84,1	88,9
May	105,5	104,9	91,1	102,2	97,9	89,4	
Jun	104,2	104,3	98,3	101,4	97,3	93,7	
Jul	107,9	107,1	102,3	105,7	97,6	94,3	
Aug	104,6	102,1	99,7	101,7	99,5	93,1	
Sep	99,2	98,7	95,7	95,7	87,9	87,0	
Oct	104,5	102,5	99,7	96,2	92,5	94,0	
Nov	100,9	98,2	95,7	92,2	90,5	87,8	
Dec	97,1	93,3	94,3	90,8	83,3	87,0	
Total	101,5	100,0	94,8	96,7	93,0	88,9	

Table 2 – Year-on-year percentage change in the volume of electricity generated

Month	2019	2020	2021	2022	2023	2024	2024 year-to-date
Jan	-2,0	-2,4	-3,3	-1,0	-7,8	0,8	0,8
Feb	-1,9	1,0	-4,3	-0,3	-9,7	4,2	2,4
Mar	-2,9	-4,0	1,8	-1,0	-5,6	0,0	1,6
Apr	1,8	-22,7	25,5	-3,8	-8,5	5,7	2,6
May	-0,6	-13,2	12,2	-4,2	-8,7		
Jun	0,1	-5,8	3,2	-4,0	-3,7		
Jul	-0,7	-4,5	3,3	-7,7	-3,4		
Aug	-2,4	-2,4	2,0	-2,2	-6,4		
Sep	-0,5	-3,0	0,0	-8,2	-1,0		
Oct	-1,9	-2,7	-3,5	-3,8	1,6		
Nov	-2,7	-2,5	-3,7	-1,8	-3,0		
Dec	-3,9	1,1	-3,7	-8,3	4,4		
Total	-1,5	-5,2	2,0	-3,8	-4,4		

Table 3 – Seasonally adjusted index of the volume of electricity generated

Manth		Base: 20	019=100	·	Month-on-month % change				
Month	2021	2022	2023	2024	2021	2022	2023	2024	
Jan	96,3	95,7	88,3	89,1	-1,7	1,3	1,7	-1,8	
Feb	96,9	96,4	87,0	90,5	0,6	0,7	-1,5	1,6	
Mar	97,3	96,1	90,5	90,4	0,4	-0,3	4,0	-0,1	
Apr	98,5	94,6	86,6	91,5	1,2	-1,6	-4,3	1,2	
May	98,4	94,4	86,2		-0,1	-0,2	-0,5		
Jun	96,9	92,8	89,4		-1,5	-1,7	3,7		
Jul	98,6	91,0	88,0		1,8	-1,9	-1,6		
Aug	97,7	95,3	88,9		-0,9	4,7	1,0		
Sep	97,2	89,4	88,6		-0,5	-6,2	-0,3		
Oct	94,1	90,6	92,1		-3,2	1,3	4,0		
Nov	94,1	92,6	89,8		0,0	2,2	-2,5		
Dec	94,5	86,8	90,7		0,4	-6,3	1,0		

Table 4 – Volume of electricity distributed in South Africa (gigawatt-hours)

Month	2019	2020	2021	2022	2023	2024
Jan	19 132	18 444	18 002	17 974	16 664	16 920
Feb	17 493	17 491	16 825	16 815	15 362	16 129
Mar	18 930	17 976	18 522	18 408	17 592	17 465
Apr	18 711	14 379	18 078	17 709	16 271	17 275
May	19 943	17 254	19 371	18 897	17 433	
Jun	19 609	18 664	19 049	18 838	18 232	
Jul	20 224	19 533	20 082	18 814	18 239	
Aug	19 105	19 038	19 459	19 220	17 981	
Sep	18 605	18 216	18 230	16 857	16 648	
Oct	19 367	18 883	18 203	17 784	17 970	
Nov	18 539	18 153	17 713	17 281	16 886	
Dec	17 678	17 979	17 496	16 173	16 923	
Total	227 336	216 010	221 030	214 770	206 201	

Table 5 - Year-on-year percentage change in electricity distributed in South Africa

Month	2020	2021	2022	2023	2024	2024 year-to-date
Jan	-3,6	-2,4	-0,2	-7,3	1,5	1,5
Feb	0,0	-3,8	-0,1	-8,6	5,0	3,2
Mar	-5,0	3,0	-0,6	-4,4	-0,7	1,8
Apr	-23,2	25,7	-2,0	-8,1	6,2	2,9
May	-13,5	12,3	-2,4	-7,7		
Jun	-4,8	2,1	-1,1	-3,2		
Jul	-3,4	2,8	-6,3	-3,1		
Aug	-0,4	2,2	-1,2	-6,4		
Sep	-2,1	0,1	-7,5	-1,2		
Oct	-2,5	-3,6	-2,3	1,0		
Nov	-2,1	-2,4	-2,4	-2,3		
Dec	1,7	-2,7	-7,6	4,6		
Total	-5,0	2,3	-2,8	-4,0		

Table 6 – Seasonally adjusted volume of electricity distributed in South Africa

Manuelle		Gigawa	tt-hours		Month-on-month % change			
Month	2021	2022	2023	2024	2021	2022	2023	2024
Jan	18 439	18 482	17 165	17 437	-1,5	1,5	1,9	-1,2
Feb	18 400	18 365	16 702	17 518	-0,2	-0,6	-2,7	0,5
Mar	18 519	18 378	17 533	17 391	0,6	0,1	5,0	-0,7
Apr	18 605	18 183	16 687	17 712	0,5	-1,1	-4,8	1,8
May	18 587	18 172	16 780		-0,1	-0,1	0,6	
Jun	18 142	17 938	17 359		-2,4	-1,3	3,5	
Jul	18 727	17 568	17 056		3,2	-2,1	-1,7	
Aug	18 751	18 470	17 249		0,1	5,1	1,1	
Sep	18 574	17 199	17 017		-0,9	-6,9	-1,3	
Oct	17 904	17 521	17 698		-3,6	1,9	4,0	
Nov	18 115	17 716	17 316		1,2	1,1	-2,2	
Dec	18 212	16 838	17 640		0,5	-5,0	1,9	

Table 7 – Volume of electricity by category (gigawatt-hours)

	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Apr-24 year-on- year % change
Total - all producers						
Generated	18 307	18 180	17 410	19 119	18 717	5,8
Inflow into South Africa	965	981	881	822	927	14,9
Consumed in power stations and auxiliary systems	1 390	1 390	1 331	1 525	1 495	9,8
Outflow from South Africa	959	852	830	951	874	0,8
Distributed in South Africa	16 923	16 920	16 129	17 465	17 275	6,2
Eskom						
Generated	15 792	15 603	14 835	16 618	16 292	5,4
Inflow into South Africa	965	981	881	822	927	14,9
Consumed in power stations and auxiliary systems	1 311	1 290	1 237	1 434	1 412	11,2
Outflow from South Africa	959	852	830	951	874	0,8
Distributed in South Africa	14 487	14 442	13 648	15 055	14 933	5,8

Table 8 – Year-to-date volume of electricity by category: year-on-year percentage change and difference

	Jan – Apr 2023 (GWh)	Jan – Apr 2024 (GWh)	% change between Jan – Apr 2023 and Jan – Apr 2024	Difference between Jan – Apr 2023 and Jan – Apr 2024 (GWh)
Total - all producers				
Generated	71 552	73 426	2,6	1 874
Inflow into South Africa	3 454	3 611	4,5	157
Consumed in power stations and auxiliary systems	5 424	5 741	5,8	317
Outflow from South Africa	3 692	3 507	-5,0	-185
Distributed in South Africa	65 889	67 789	2,9	1 900
Eskom				
Generated	61 901	63 348	2,3	1 447
Inflow into South Africa	3 454	3 611	4,5	157
Consumed in power stations and auxiliary systems	5 065	5 373	6,1	308
Outflow from South Africa	3 692	3 507	-5,0	-185
Distributed in South Africa	56 597	58 078	2,6	1 481

## Table 9 – Volume of electricity delivered to provinces (gigawatt-hours)

Province	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Apr-24 year-on-year % change
Western Cape	1 541	1 623	1 543	1 635	1 592	12,2
Eastern Cape	660	674	662	704	718	13,6
Northern Cape	598	529	508	526	439	1,4
Free State	834	834	798	865	878	11,7
KwaZulu-Natal	3 140	3 087	2 959	3 219	3 152	5,0
North West	1 681	1 698	1 595	1 773	1 661	-7,8
Gauteng	3 900	4 027	3 896	4 196	4 327	8,9
Mpumalanga	2 568	2 516	2 340	2 506	2 496	2,3
Limpopo	1 766	1 719	1 626	1 802	1 728	6,3
Total	16 688	16 708	15 928	17 227	16 991	5,4

#### **Explanatory notes**

#### Introduction

- 1 Statistics South Africa (Stats SA) conducts a monthly survey covering enterprises in the electricity industry. This statistical release contains monthly information regarding the volume of electricity units:
  - generated and distributed in South Africa;
  - flowing into and out from South Africa as measured by the metering systems at the South African borders; and
  - delivered to provinces.

Both unadjusted and seasonally adjusted figures are published.

In accordance with international practice, the indices are usually re-based every five years to a new base year. The current base period of the index is 2019.

#### Purpose of the survey

The results of the monthly electricity survey are used to compile estimates of the gross domestic product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy.

#### Scope of the survey

This survey covers enterprises conducting activities concerned with the generation and/or distribution of electricity (excluding the distribution of purchased electric energy). It includes electrical power installations, which, as subsidiary divisions of enterprises, produce electricity for regular use by these enterprises.

#### 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 enterprise is classified to an industry which reflects the predominant activity. Statistics in this publication are presented at SIC group (five-digit) level.

#### **Collection rate**

The collection rate for the survey on electricity generated and available for distribution for April 2024 was 96%. The collection rate for March 2024 was 100%.

#### Statistical unit

7 The statistical unit for the collection of information is an enterprise, defined as a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

## Revised figures

Revised figures are mainly due to late submission of data to Stats SA, or respondents reporting revisions or corrections to their figures. The reasons for routine revisions are outlined in the following schedule. Any unscheduled revisions will be promptly indicated in relevant tables to maintain transparency and accuracy. It is important to note that seasonally adjusted figures are revised monthly.

Statistical release	Reason for revision	Period subject to revision
Apr-24	Additional information from respondents	Mar-24
May-24	Additional information from respondents	Apr-24
Jun-24	Additional information from respondents	May-24
Jul-24	Additional information from respondents	Jun-24
Aug-24	Additional information from respondents	Jul-24
Sep-24	Additional information from respondents	Aug-24
Oct-24	Additional information from respondents	Sep-24
Nov-24	Additional information from respondents	Oct-24
Dec-24	Additional information from respondents	Nov-24
Jan-25	Additional information from respondents	Dec-24
Feb-25	Additional information from respondents	Jan-25
Mar-25	Additional information from respondents	Feb-25
New base year in 2027/28 - periodic, approximately four- to five-year intervals		

### Rounding-off of figures

**9** Where figures have been rounded off, discrepancies may occur between sums of the component items and the totals.

#### Historical data

Historical electricity data are available on the Stats SA webpage. Click on the following link (Time series data) to access the data electronically.

#### Past publications

Past electricity releases are available on the Stats SA webpage. Click on the following link (Past publications) to access the releases electronically.

#### **Technical notes**

# 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 enterprise. All large enterprises (size group one) are completely enumerated. A sample is drawn from medium and small size enterprises by systematically selecting enterprises within each size category. An enterprise with a total generating capacity of less than 500 kilowatts is excluded from the sample.
- The survey is conducted by email and telephone. Information is collected from a sample of 24 enterprises. As from September 2013, Eskom supplied additional data for independent power producers (IPPs) that were not in the original sample of 24 enterprises.

# Monthly index of electricity generated

3 The calculation of the monthly index of electricity generated is based on the volume of electricity units produced.

#### **Benchmarking**

The index of the volume of electricity generated should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities, as measured by the monthly electricity survey, is based on information received from a sample of enterprises conducting activities concerned with the generation and/or distribution of electricity (excluding the distribution of purchased electric energy). These levels are weighted according to the original sample and designed to represent the population of enterprises conducting activities concerned with the generation and/or distribution of electricity.

The results of the 1995 Census of electricity, gas and steam served as a benchmark to verify or adjust the level of the monthly index of the volume of electricity generated collected through the monthly survey. The level adjustments were done on the volume index for July of the relevant census year (the 1995 census year covered the period 1 January to 31 December 1995 and therefore, the benchmarking was done using the index of July 1995 as reference point).

#### Seasonal adjustment

Seasonally adjusted estimates are generated each month using the X-12 Seasonal Adjustment Program developed by the United States Census Bureau. 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. The X12-ARIMA procedure for electricity generated and available for distribution is described in more detail on the Stats SA website:

Click to download Electricity seasonal adjustment February 2022.

## Trend cycle

The trend is the long-term pattern or movement of a time series. The X-12-ARIMA Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates to estimate the underlying trend cycle.

## Month-on-month percentage change

7 The month-on-month percentage change in a variable for any given month is the change between that month and the previous month, expressed as a percentage of the latter.

## Year-on-year percentage

change

The year-on-year percentage change in a variable for any given period is the change between that period and the corresponding period of the previous year, expressed as a percentage of the latter.

### **Glossary**

**Enterprise** 

The enterprise is a legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Index of the volume of electricity generated

A statistical measure of the change in the volume of electricity generated in a given period and the volume of electricity generated in the base period. The base period is 2019. The production in the base period is set at 100.

Industry

An industry is made up of enterprises engaged in the same or similar kinds of economic activity. Industries are defined in the System of National Accounts (SNA) in the same way as in the Standard Industrial Classification of All Economic Activities (SIC), Fifth Edition, Report No. 09-90-02 of January 1993.

Inflow into SA

Electricity flowing into South Africa as measured by the metering systems at the South African borders.

**Outflow from SA** 

Electricity flowing from South Africa as measured by the metering systems at the South African borders.

Unit of electricity

One gigawatt-hour of electricity is equal to one million kilowatt-hours. A kilowatt-hour is the basic unit of electrical energy equal to one kilowatt of power supplied to or taken from an electric circuit steadily for one hour. One kilowatt-hour equals one thousand watt-hours.

Symbols and abbreviations

GDP Gross domestic product

GWh Gigawatt-hour

IPPs Independent Power Producers

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of All Economic Activities

SA South Africa

Stats SA Statistics South Africa
\* Revised figures

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#### **General 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 12 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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Stats SA also provides a subscription service.

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