



stats sa

Department:
Statistics South Africa
REPUBLIC OF SOUTH AFRICA

Private Bag X44, Pretoria, 0001, South Africa, ISIBalo House, Koch Street, Salvokop, Pretoria, 0002
www.statssa.gov.za, info@statssa.gov.za, Tel +27 12 310 8911

STATISTICAL RELEASE **P4141**

Electricity generated and available for distribution (Preliminary)

December 2025

**Embargoed until:
5 February 2026
13:00**

ENQUIRIES:
Nicolai Claassen
Tel: 072 310 5351

FORTHCOMING ISSUE:
January 2026

EXPECTED RELEASE DATE:
5 March 2026

Dipalopalo tsa Aforikaborwa • Dipalopalo tsa Aforika Borwa • Ezazibalo zaseNingizimu Afrika • Tshitatistika Afrika Tshipembe • Tinhlayo Afrika-Dzonga
Statistieke Suid-Afrika • Dipalopalo tsa Aforika Borwa • Telubalo zaseNingizimu Afrika • EzeeNkukacha maNani zoMzantsi Afrika • limbalobalo zeSewula Afrika

IMPROVING LIVES THROUGH DATA ECOSYSTEMS



Contents

Electricity generated (produced) in South Africa: results for December 2025	2
Table A – Key growth rates in the volume of electricity generated	2
Figure 1 – Electricity generated in South Africa	2
Electricity distributed (consumed) in South Africa: results for December 2025	3
Table B – Key growth rates in the volume of electricity distributed.....	3
Figure 2 – Electricity distributed in South Africa: year-on-year percentage change	3
Tables	4
Table 1 – Index of the volume of electricity generated (Base: 2019=100).....	4
Table 2 – Year-on-year percentage change in the volume of electricity generated	4
Table 3 – Seasonally adjusted index of the volume of electricity generated	4
Table 4 – Volume of electricity distributed in South Africa (gigawatt-hours).....	5
Table 5 – Year-on-year percentage change in electricity distributed in South Africa	5
Table 6 – Seasonally adjusted volume of electricity distributed in South Africa	5
Table 7 – Volume of electricity by category (gigawatt-hours)	6
Table 8 – Year-to-date volume of electricity by category: year-on-year percentage change and difference	6
Table 9 – Volume of electricity delivered to provinces (gigawatt-hours).....	6
Explanatory notes	7
Technical notes	8
Glossary	9
Technical enquiries	9
General information	10

Electricity generated (produced) in South Africa: results for December 2025

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

	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
Year-on-year % change, unadjusted	-2,3	-3,1	-5,7	-5,2	-7,3	-7,9
Month-on-month % change, seasonally adjusted	0,0	-1,2	-1,3	-0,7	-1,3	-1,4
3-month % change, seasonally adjusted ¹	0,7	-1,0	-1,8	-2,8	-3,0	-3,2

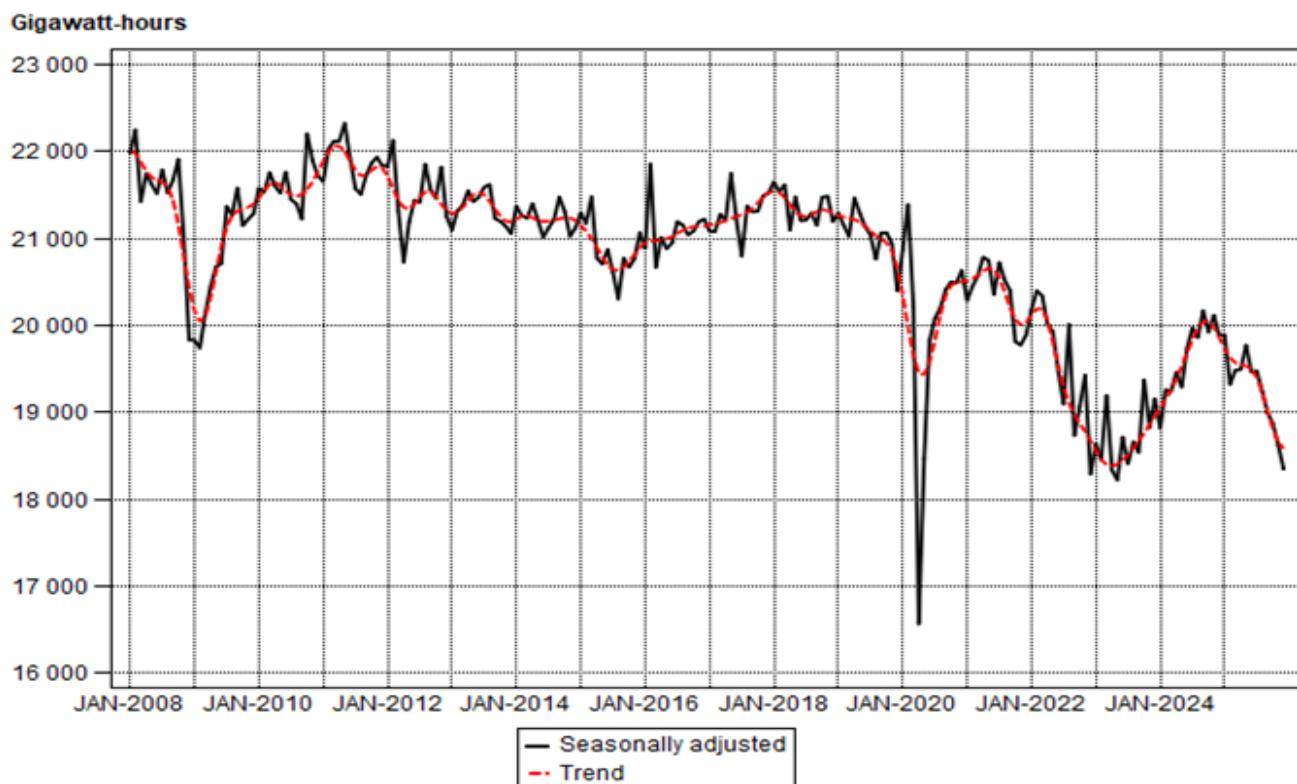
¹ Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity generation (production) decreased by 7,9% year-on-year in December 2025.

Seasonally adjusted electricity generation decreased by 1,4% in December 2025 compared with November 2025, following month-on-month changes of -1,3% in November 2025 and -0,7% in October 2025. Seasonally adjusted electricity generation decreased by 3,2% in the fourth quarter of 2025 compared with the third quarter of 2025.

Total electricity generation was 2,0% lower in 2025 compared with 2024. The 2,0% decrease in annual electricity generation followed an increase of 4,9% in 2024 and a decrease of 4,4% in 2023.

Figure 1 – Electricity generated in South Africa



Electricity distributed (consumed) in South Africa: results for December 2025

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

	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
Year-on-year % change, unadjusted	-4,4	-4,9	-7,9	-7,2	-7,7	-7,1
Month-on-month % change, seasonally adjusted	0,5	-1,2	-2,6	-0,6	-0,4	0,3
3-month % change, seasonally adjusted ¹	0,3	-1,7	-2,5	-3,7	-3,8	-2,9

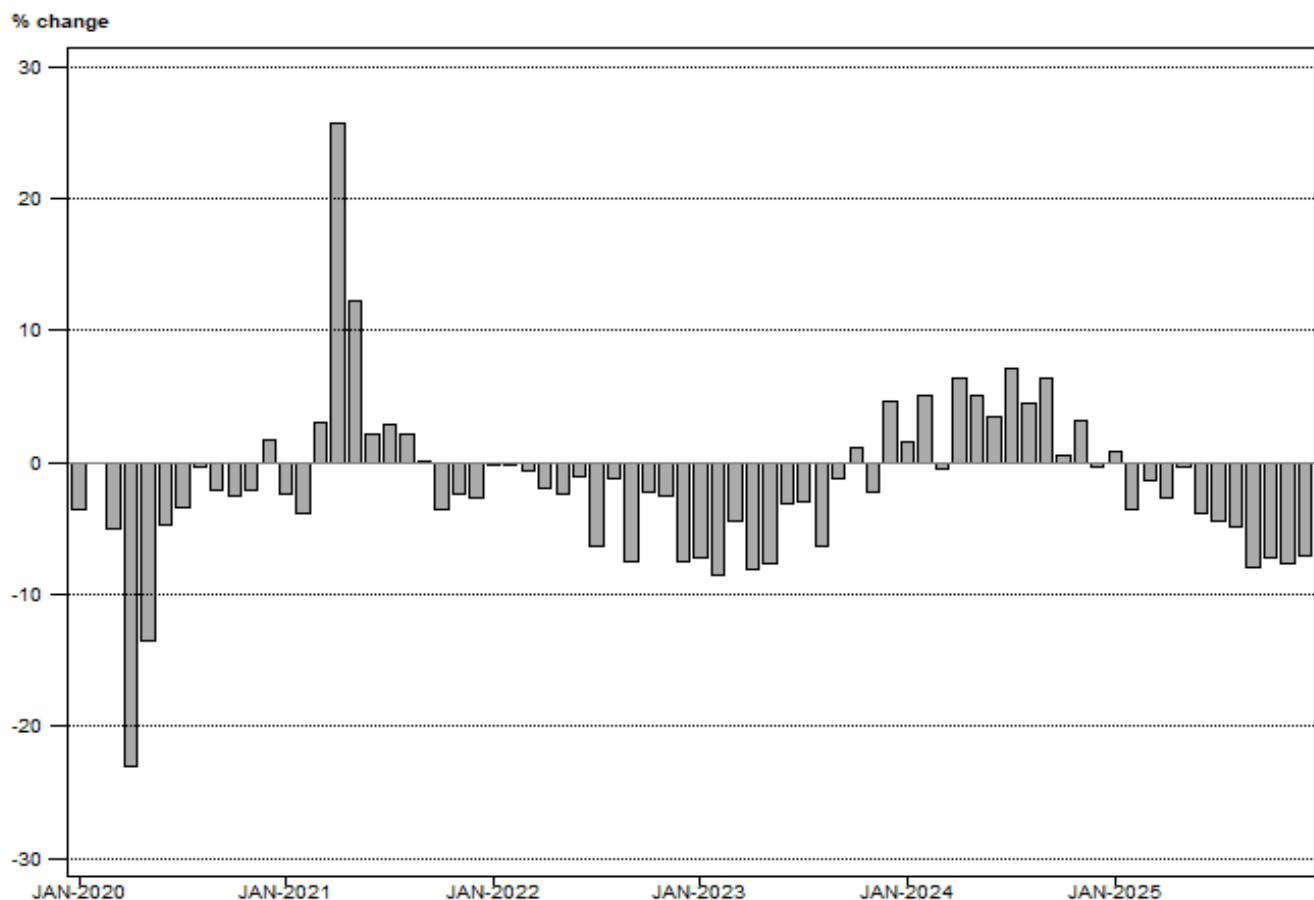
¹ Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity distribution (consumption) decreased by 7,1% year-on-year in December 2025.

Seasonally adjusted electricity distribution increased by 0,3% month-on-month in December 2025, following month-on-month changes of -0,4% in November 2025 and -0,6% in October 2025. Seasonally adjusted electricity distribution decreased by 2,9% in the fourth quarter of 2025 compared with the third quarter of 2025.

Total electricity distribution was 4,2% lower in 2025 compared with 2024. The 4,2% decrease in annual electricity distribution followed an increase of 3,5% in 2024 and a decrease of 4,0% in 2023.

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



Risenga Maluleke
Statistician-General

PP: 

Tables

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

Month	2019	2020	2021	2022	2023	2024	2025
Jan	99,5	97,1	93,9	93,0	85,7	86,4	91,3
Feb	91,3	92,2	88,2	87,9	79,4	82,7	82,9
Mar	99,5	95,5	97,2	96,2	90,8	91,0	92,1
Apr	98,5	76,1	95,5	91,9	84,1	89,1	89,2
May	105,0	91,1	102,2	97,9	89,4	94,6	96,9
Jun	104,3	98,3	101,4	97,4	93,8	99,0	97,7
Jul	107,2	102,4	105,7	97,7	94,3	102,5	100,1
Aug	102,2	99,7	101,7	99,5	93,1	99,3	96,2
Sep	98,7	95,7	95,7	87,9	87,0	94,7	89,3
Oct	102,5	99,7	96,2	92,5	94,1	96,8	91,8
Nov	98,2	95,7	92,3	90,5	87,8	93,9	87,0
Dec	93,3	94,3	90,8	83,3	87,0	90,1	83,0
Total	100,0	94,8	96,7	93,0	88,9	93,3	91,5

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

Month	2020	2021	2022	2023	2024	2025	2025 year-to-date
Jan	-2,4	-3,3	-1,0	-7,8	0,8	5,7	5,7
Feb	1,0	-4,3	-0,3	-9,7	4,2	0,2	3,0
Mar	-4,0	1,8	-1,0	-5,6	0,2	1,2	2,4
Apr	-22,7	25,5	-3,8	-8,5	5,9	0,1	1,8
May	-13,2	12,2	-4,2	-8,7	5,8	2,4	1,9
Jun	-5,8	3,2	-3,9	-3,7	5,5	-1,3	1,3
Jul	-4,5	3,2	-7,6	-3,5	8,7	-2,3	0,8
Aug	-2,4	2,0	-2,2	-6,4	6,7	-3,1	0,2
Sep	-3,0	0,0	-8,2	-1,0	8,9	-5,7	-0,4
Oct	-2,7	-3,5	-3,8	1,7	2,9	-5,2	-0,9
Nov	-2,5	-3,6	-2,0	-3,0	6,9	-7,3	-1,5
Dec	1,1	-3,7	-8,3	4,4	3,6	-7,9	-2,0
Total	-5,2	2,0	-3,8	-4,4	4,9	-2,0	

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

Month	Base: 2019=100				Month-on-month % change			
	2022	2023	2024	2025	2022	2023	2024	2025
Jan	95,9	88,5	89,4	94,5	1,5	1,8	-1,8	0,0
Feb	96,9	87,6	91,5	91,8	1,0	-1,0	2,3	-2,9
Mar	96,6	91,2	91,4	92,6	-0,3	4,1	-0,1	0,9
Apr	95,0	87,1	92,4	92,6	-1,7	-4,5	1,1	0,0
May	94,7	86,5	91,6	93,9	-0,3	-0,7	-0,9	1,4
Jun	92,5	88,9	93,7	92,5	-2,3	2,8	2,3	-1,5
Jul	90,7	87,4	94,9	92,5	-1,9	-1,7	1,3	0,0
Aug	95,1	88,6	94,3	91,4	4,9	1,4	-0,6	-1,2
Sep	89,0	88,1	95,8	90,2	-6,4	-0,6	1,6	-1,3
Oct	90,6	92,0	94,6	89,6	1,8	4,4	-1,3	-0,7
Nov	92,3	89,4	95,6	88,4	1,9	-2,8	1,1	-1,3
Dec	86,9	91,0	94,5	87,2	-5,9	1,8	-1,2	-1,4

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

Month	2020	2021	2022	2023	2024	2025
Jan	18 449	18 007	17 978	16 673	16 932	17 069
Feb	17 496	16 830	16 821	15 370	16 138	15 559
Mar	17 982	18 527	18 416	17 600	17 506	17 257
Apr	14 384	18 083	17 719	16 280	17 323	16 848
May	17 263	19 377	18 907	17 443	18 313	18 262
Jun	18 672	19 058	18 851	18 247	18 889	18 172
Jul	19 541	20 089	18 826	18 252	19 552	18 684
Aug	19 048	19 465	19 231	17 998	18 800	17 872
Sep	18 225	18 240	16 871	16 663	17 723	16 331
Oct	18 891	18 214	17 797	17 984	18 094	16 795
Nov	18 162	17 726	17 291	16 897	17 426	16 079
Dec	17 985	17 504	16 183	16 934	16 871	15 681
Total	216 098	221 120	214 891	206 341	213 567	204 609

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

Month	2021	2022	2023	2024	2025	2025 year-to-date
Jan	-2,4	-0,2	-7,3	1,6	0,8	0,8
Feb	-3,8	-0,1	-8,6	5,0	-3,6	-1,3
Mar	3,0	-0,6	-4,4	-0,5	-1,4	-1,4
Apr	25,7	-2,0	-8,1	6,4	-2,7	-1,7
May	12,2	-2,4	-7,7	5,0	-0,3	-1,4
Jun	2,1	-1,1	-3,2	3,5	-3,8	-1,8
Jul	2,8	-6,3	-3,0	7,1	-4,4	-2,2
Aug	2,2	-1,2	-6,4	4,5	-4,9	-2,6
Sep	0,1	-7,5	-1,2	6,4	-7,9	-3,2
Oct	-3,6	-2,3	1,1	0,6	-7,2	-3,6
Nov	-2,4	-2,5	-2,3	3,1	-7,7	-3,9
Dec	-2,7	-7,5	4,6	-0,4	-7,1	-4,2
Total	2,3	-2,8	-4,0	3,5	-4,2	

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

Month	Gigawatt-hours				Month-on-month % change			
	2022	2023	2024	2025	2022	2023	2024	2025
Jan	18 515	17 203	17 479	17 653	1,6	2,0	-1,2	-0,3
Feb	18 458	16 832	17 704	17 133	-0,3	-2,2	1,3	-2,9
Mar	18 483	17 654	17 568	17 334	0,1	4,9	-0,8	1,2
Apr	18 233	16 751	17 843	17 384	-1,4	-5,1	1,6	0,3
May	18 223	16 841	17 684	17 626	-0,1	0,5	-0,9	1,4
Jun	17 878	17 285	17 857	17 155	-1,9	2,6	1,0	-2,7
Jul	17 515	16 962	18 103	17 242	-2,0	-1,9	1,4	0,5
Aug	18 434	17 215	17 928	17 034	5,2	1,5	-1,0	-1,2
Sep	17 128	16 926	18 007	16 591	-7,1	-1,7	0,4	-2,6
Oct	17 531	17 699	17 779	16 490	2,4	4,6	-1,3	-0,6
Nov	17 689	17 271	17 815	16 419	0,9	-2,4	0,2	-0,4
Dec	16 865	17 697	17 710	16 471	-4,7	2,5	-0,6	0,3

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

	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Dec-25 year-on- year % change
Total - all producers						
Generated	20 253	18 796	19 323	18 325	17 477	-7,9
Inflow into South Africa	529	333	302	509	792	2,1
Consumed in power stations and auxiliary systems	1 585	1 512	1 497	1 426	1 336	-4,3
Outflow from South Africa	1 324	1 286	1 334	1 329	1 253	-15,1
Distributed in South Africa	17 872	16 331	16 795	16 079	15 681	-7,1
National electricity supplier						
Generated	17 517	16 262	16 345	15 578	14 454	-11,8
Inflow into South Africa	529	333	302	509	792	2,1
Consumed in power stations and auxiliary systems	1 489	1 437	1 415	1 355	1 264	-4,2
Outflow from South Africa	1 324	1 286	1 334	1 329	1 253	-15,1
Distributed in South Africa	15 234	13 872	13 898	13 403	12 730	-11,4

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

	Jan – Dec 2024 (GWh)	Jan – Dec 2025 (GWh)	% change between Jan – Dec 2024 and Jan – Dec 2025	Difference between Jan – Dec 2024 and Jan – Dec 2025 (GWh)
Total - all producers				
Generated	235 834	231 066	-2,0	-4 768
Inflow into South Africa	9 755	6 519	-33,2	-3 236
Consumed in power stations and auxiliary systems	18 493	18 051	-2,4	-442
Outflow from South Africa	13 528	14 927	10,3	1 399
Distributed in South Africa	213 567	204 609	-4,2	-8 958
National electricity supplier				
Generated	204 807	200 082	-2,3	-4 725
Inflow into South Africa	9 755	6 519	-33,2	-3 236
Consumed in power stations and auxiliary systems	17 403	17 088	-1,8	-315
Outflow from South Africa	13 528	14 927	10,3	1 399
Distributed in South Africa	183 629	174 589	-4,9	-9 040

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

Province	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Dec-25 year-on-year % change
Western Cape	1 704	1 530	1 546	1 515	1 564	1,4
Eastern Cape	784	717	737	683	634	-5,4
Northern Cape	486	452	471	445	465	-11,4
Free State	933	807	839	802	830	-11,8
KwaZulu-Natal	3 260	3 125	3 189	2 999	3 055	-2,3
North West	1 437	1 358	1 394	1 304	1 246	-24,5
Gauteng	4 917	4 270	4 404	4 274	3 839	0,0
Mpumalanga	2 499	2 306	2 440	2 358	2 364	-6,1
Limpopo	1 458	1 383	1 404	1 340	1 321	-25,2
Total	17 481	15 949	16 423	15 721	15 317	-7,6

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.

2 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

3 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

4 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

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 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

6 The preliminary collection rate for the survey on electricity generated and available for distribution for December 2025 was 80,8%. The revised collection rate for November 2025 was 88,5%.

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

8 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
Dec-25	Additional information from respondents	Nov-25
Jan-26	Additional information from respondents	Dec-25
Feb-26	Additional information from respondents	Jan-26
Mar-26	Additional information from respondents	Feb-26
Apr-26	Additional information from respondents	Mar-26
May-26	Additional information from respondents	Apr-26
Jun-26	Additional information from respondents	May-26
Jul-26	Additional information from respondents	Jun-26
Aug-26	Additional information from respondents	Jul-26
Sep-26	Additional information from respondents	Aug-26
Oct-26	Additional information from respondents	Sep-26
Nov-26	Additional information from respondents	Oct-26
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 **10** 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 **11** 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 **1** 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.

2 The survey is conducted by email and telephone. Information is collected from a sample of 24 enterprises. As from September 2013, the national electricity supplier provided additional data for independent power producers (IPPs) that were not in the original sample of 24 enterprises. As from January 2015, the national electricity supplier provided additional data from IPPs involved in electricity wheeling.

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 **4** 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.

Seasonal adjustment **5** 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 **6** 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 **8** 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

Electricity wheeling	Electricity wheeling refers to the process of transporting electricity from a generator to an end-user (customer) using an existing transmission or distribution network.																
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.																
Independent power producer	An independent power producer (IPP) is a private enterprise that generates electricity and sells it to the national electricity supplier or an end-user (customer).																
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 <i>Standard Industrial Classification of All Economic Activities</i> (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	<table> <tr> <td>GDP</td><td>Gross domestic product</td></tr> <tr> <td>GWh</td><td>Gigawatt-hour</td></tr> <tr> <td>IPPs</td><td>Independent Power Producers</td></tr> <tr> <td>ISIC</td><td>International Standard Industrial Classification of All Economic Activities</td></tr> <tr> <td>SIC</td><td>Standard Industrial Classification of All Economic Activities</td></tr> <tr> <td>SA</td><td>South Africa</td></tr> <tr> <td>Stats SA</td><td>Statistics South Africa</td></tr> <tr> <td>*</td><td>Revised figures</td></tr> </table>	GDP	Gross domestic product	GWh	Gigawatt-hour	IPPs	Independent Power Producers	ISIC	International Standard Industrial Classification of All Economic Activities	SIC	Standard Industrial Classification of All Economic Activities	SA	South Africa	Stats SA	Statistics South Africa	*	Revised figures
GDP	Gross domestic product																
GWh	Gigawatt-hour																
IPPs	Independent Power Producers																
ISIC	International Standard Industrial Classification of All Economic Activities																
SIC	Standard Industrial Classification of All Economic Activities																
SA	South Africa																
Stats SA	Statistics South Africa																
*	Revised figures																

Technical enquiries

Tsholofelo Ditinti	Telephone number: (012) 310 6990 / 076 583 4844 Email: tsholofelod@statssa.gov.za
Nicolai Claassen	Telephone number: (012) 310 8007 / 072 310 5351 Email: nicolaic@statssa.gov.za

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 locally and by international economic and social-scientific communities, Stats SA releases are published in English.

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.

Advance release calendar

An advance release calendar is disseminated on 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, Qonce
Central Regional Library, Polokwane
Central Reference Library, Mbombela
Central Reference Collection, Kimberley
Central Reference Library, Mmabatho

Stats SA also provides a subscription service.

Electronic services

A large range of data is available via online services. For more details about our electronic data services, contact Stats SA's user information service at (012) 310 8600.

You can visit us on the internet at: www.statssa.gov.za.

General enquiries

User information services	Telephone number: (012) 310 8600 Email address: info@statssa.gov.za
Orders/subscription services	Telephone number: (012) 310 8619 Email address: millies@statssa.gov.za
Postal address	Private Bag X44, Pretoria, 0001

Produced by Stats SA