

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)

June 2020

Embargoed until: 6 August 2020 13:00

ENQUIRIES: Nicolai Claassen 064 500 3082 FORTHCOMING ISSUE: July 2020

EXPECTED RELEASE DATE: 3 September 2020





Contents

Electricity generated (produced) in South Africa: results for June 2020	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 June 2020	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: 2015=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
Survey information	7
Technical notes	8
Glossary	9
Technical enquiries	9
General information	10

Electricity generated (produced) in South Africa: results for June 2020

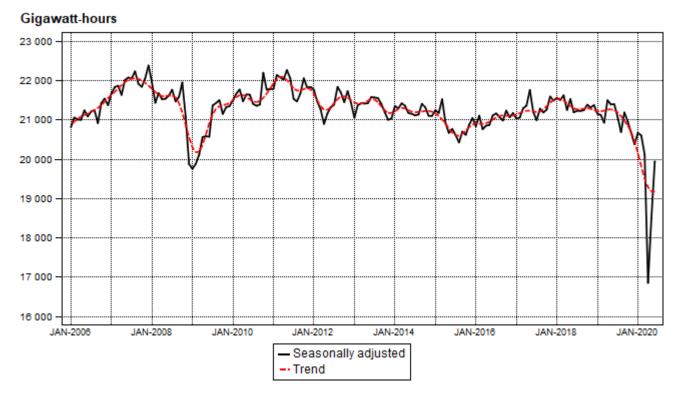
Table A - Key growth rates in the volume of electricity generated

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Year-on-year % change, unadjusted	-2,5	1,0	-4,0	-22,8	-13,2	-5,8
Month-on-month % change, seasonally adjusted	1,4	-0,3	-2,3	-16,3	9,8	7,8
3-month % change, seasonally adjusted ¹	-1,8	-1,9	-1,0	-6,7	-10,0	-10,0

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

Electricity generation (production) decreased by 5,8% year-on-year in June 2020. Seasonally adjusted electricity generation increased by 7,8% in June 2020 compared with May 2020. This followed month-on-month changes of 9,8% in May 2020 and -16,3% in April 2020. Seasonally adjusted electricity generation decreased by 10,0% in the second quarter of 2020 compared with the first quarter of 2020.

Figure 1 - Electricity generated in South Africa



Electricity distributed (consumed) in South Africa: results for June 2020

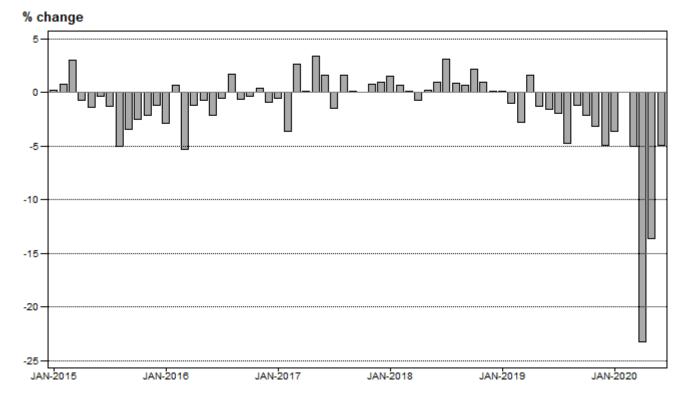
Table B - Key growth rates in the volume of electricity distributed

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Year-on-year % change, unadjusted	-3,6	0,0	-5,0	-23,3	-13,6	-4,9
Month-on-month % change, seasonally adjusted	1,4	-1,2	-2,6	-16,1	10,2	8,1
3-month % change, seasonally adjusted ¹	-1,4	-2,1	-1,7	-7,6	-10,6	-9,9

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

Electricity distribution (consumption) decreased by 4,9% year-on-year in June 2020. Seasonally adjusted electricity distribution increased by 8,1% month-on-month in June 2020, following month-on-month changes of 10,2% in May 2020 and -16,1% in April 2020. Seasonally adjusted electricity distribution decreased by 9,9% in the second quarter of 2020 compared with the first quarter of 2020.

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



Risenga Maluleke Statistician-General

Tables

Table 1 - Index of the volume of electricity generated (Base: 2015=100)

Month	2014	2015	2016	2017	2018	2019	2020 ¹
Jan	101,3	101,2	99,2	100,1	102,4	100,4	97,9
Feb	93,6	93,0	95,9	92,2	93,9	92,1	93,0
Mar	102,5	103,6	99,6	102,2	103,4	100,4	96,4
Apr	99,6	96,5	97,4	98,1	97,6	99,4	76,7
May	103,8	101,4	102,7	107,4	106,5	105,9	91,9
Jun	103,5	102,7	103,2	104,8	105,1	105,2	99,1
Jul	107,9	105,4	108,4	106,5	108,8	108,1	
Aug	105,9	101,2	105,1	106,0	105,5	103,0	
Sep	102,1	98,6	99,8	100,8	100,0	99,6	
Oct	104,1	101,0	103,2	104,6	105,4	103,4	
Nov	99,2	98,1	100,3	101,9	101,8	99,0	
Dec	97,4	97,3	98,2	99,6	98,0	94,1	
Total	101,7	100,0	101,1	102,0	102,4	100,9	

¹ Latest month is preliminary.

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

Month	2015	2016	2017	2018	2019	2020	2020 year-to-date
Jan	-0,1	-2,0	0,9	2,3	-2,0	-2,5	-2,5
Feb	-0,6	3,1	-3,9	1,8	-1,9	1,0	-0,8
Mar	1,1	-3,9	2,6	1,2	-2,9	-4,0	-1,9
Apr	-3,1	0,9	0,7	-0,5	1,8	-22,8	-7,2
May	-2,3	1,3	4,6	-0,8	-0,6	-13,2	-8,5
Jun	-0,8	0,5	1,6	0,3	0,1	-5,8	-8,0
Jul	-2,3	2,8	-1,8	2,2	-0,6		
Aug	-4,4	3,9	0,9	-0,5	-2,4		
Sep	-3,4	1,2	1,0	-0,8	-0,4		
Oct	-3,0	2,2	1,4	0,8	-1,9		
Nov	-1,1	2,2	1,6	-0,1	-2,8		
Dec	-0,1	0,9	1,4	-1,6	-4,0		
Total	-1,7	1,1	0,9	0,4	-1,5		

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

Manth		Base: 2	015=100		Month-on-month % change				
Month	2017	2018	2019	2020	2017	2018	2019	2020	
Jan	100,7	103,3	101,3	99,0	-0,7	0,4	-1,1	1,4	
Feb	100,8	103,0	101,2	98,7	0,1	-0,3	-0,1	-0,3	
Mar	102,0	103,6	100,2	96,4	1,2	0,6	-1,0	-2,3	
Apr	102,3	101,8	103,0	80,7	0,3	-1,7	2,8	-16,3	
May	104,2	103,1	102,4	88,6	1,9	1,3	-0,6	9,8	
Jun	101,5	101,5	102,5	95,5	-2,6	-1,6	0,1	7,8	
Jul	100,5	101,7	100,9		-1,0	0,2	-1,6		
Aug	101,9	101,7	99,1		1,4	0,0	-1,8		
Sep	101,5	101,7	101,5		-0,4	0,0	2,4		
Oct	101,8	102,4	100,4		0,3	0,7	-1,1		
Nov	103,4	102,1	99,0		1,6	-0,3	-1,4		
Dec	102,9	102,4	97,6		-0,5	0,3	-1,4		

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

Month	2015	2016	2017	2018	2019	2020 ¹
Jan	19 491	18 924	18 820	19 106	19 132	18 444
Feb	18 060	18 190	17 539	17 667	17 493	17 491
Mar	19 998	18 935	19 441	19 470	18 930	17 976
Apr	18 769	18 535	18 550	18 421	18 711	14 357
May	19 636	19 502	20 161	20 207	19 943	17 230
Jun	19 824	19 405	19 720	19 926	19 609	18 648
Jul	20 391	20 297	19 997	20 626	20 224	
Aug	19 236	19 570	19 880	20 053	19 105	
Sep	18 788	18 679	18 707	18 839	18 605	
Oct	19 415	19 349	19 352	19 785	19 367	
Nov	18 720	18 790	18 940	19 123	18 539	
Dec	18 529	18 370	18 562	18 582	17 678	
Total	230 857	228 546	229 669	231 805	227 336	

¹ Latest month is preliminary.

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

Month	2016	2017	2018	2019	2020	2020 year-to-date
Jan	-2,9	-0,5	1,5	0,1	-3,6	-3,6
Feb	0,7	-3,6	0,7	-1,0	0,0	-1,9
Mar	-5,3	2,7	0,1	-2,8	-5,0	-3,0
Apr	-1,2	0,1	-0,7	1,6	-23,3	-8,1
May	-0,7	3,4	0,2	-1,3	-13,6	-9,2
Jun	-2,1	1,6	1,0	-1,6	-4,9	-8,5
Jul	-0,5	-1,5	3,1	-1,9		
Aug	1,7	1,6	0,9	-4,7		
Sep	-0,6	0,1	0,7	-1,2		
Oct	-0,3	0,0	2,2	-2,1		
Nov	0,4	0,8	1,0	-3,1		
Dec	-0,9	1,0	0,1	-4,9		
Total	-1,0	0,5	0,9	-1,9		

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

Manth		Gigawa	tt-hours		Month-on-month % change				
Month	2017	2018	2019	2020	2017	2018	2019	2020	
Jan	18 945	19 267	19 305	18 638	-0,5	0,1	-0,9	1,4	
Feb	19 072	19 274	19 094	18 415	0,7	0,0	-1,1	-1,2	
Mar	19 385	19 453	18 865	17 928	1,6	0,9	-1,2	-2,6	
Apr	19 293	19 154	19 341	15 041	-0,5	-1,5	2,5	-16,1	
May	19 539	19 534	19 245	16 573	1,3	2,0	-0,5	10,2	
Jun	19 037	19 193	19 074	17 923	-2,6	-1,7	-0,9	8,1	
Jul	18 907	19 305	18 914		-0,7	0,6	-0,8		
Aug	19 180	19 398	18 429		1,4	0,5	-2,6		
Sep	18 919	19 269	19 058		-1,4	-0,7	3,4		
Oct	18 993	19 386	18 942		0,4	0,6	-0,6		
Nov	19 262	19 205	18 594		1,4	-0,9	-1,8		
Dec	19 257	19 479	18 379		0,0	1,4	-1,2		

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

	Feb-20	Mar-20	Apr-20	May-20	Jun-20 ¹	Jun-20 year-on- year % change
Total - all producers						
Generated	19 414	20 110	16 014	19 177	20 679	-5,8
Inflow into South Africa	820	920	898	794	788	13,9
Consumed in power stations and auxiliary systems	1 534	1 660	1 506	1 680	1 746	-1,1
Outflow from South Africa	1 209	1 393	1 050	1 061	1 073	-15,1
Distributed in South Africa	17 491	17 976	14 357	17 230	18 648	-4,9
Eskom						
Generated	17 696	18 299	14 217	17 503	18 651	-6,2
Inflow into South Africa	820	920	898	794	788	13,9
Consumed in power stations and auxiliary systems	1 482	1 602	1 448	1 627	1 676	-0,2
Outflow from South Africa	1 209	1 393	1 050	1 061	1 073	-15,1
Distributed in South Africa	15 826	16 224	12 617	15 608	16 691	-5,4

¹ Preliminary.

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

	Jan – Jun 2019 (GWh)	Jan – Jun 2020 (GWh)	% change between Jan – Jun 2019 and Jan – Jun 2020	Difference between Jan – Jun 2019 and Jan – Jun 2020 (GWh)
Total - all producers				
Generated	125 872	115 828	-8,0	-10 044
Inflow into South Africa	4 640	5 195	12,0	555
Consumed in power stations and auxiliary systems	9 713	9 753	0,4	40
Outflow from South Africa	6 980	7 124	2,1	144
Distributed in South Africa	113 818	104 146	-8,5	-9 672
Eskom				
Generated	114 065	104 778	-8,1	-9 287
Inflow into South Africa	4 640	5 195	12,0	555
Consumed in power stations and auxiliary systems	9 277	9 403	1,4	126
Outflow from South Africa	6 980	7 124	2,1	144
Distributed in South Africa	102 448	93 447	-8,8	-9 001

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

Province	Feb-20	Mar-20	Apr-20	May-20	Jun-20 ¹	Jun-20 year-on-year % change
Western Cape	1 781	1 834	1 464	1 621	1 661	-11,6
Eastern Cape	668	704	587	691	721	-4,8
Northern Cape	469	474	378	466	504	-1,4
Free State	900	912	748	902	969	-1,0
KwaZulu-Natal	3 122	3 308	2 854	3 198	3 378	-0,7
North West	1 637	1 529	824	1 221	1 331	-21,1
Gauteng	4 377	4 602	3 857	4 782	5 486	-0,7
Mpumalanga	2 560	2 695	2 221	2 460	2 616	-6,0
Limpopo	1 633	1 661	1 189	1 566	1 618	-4,7
Total	17 147	17 719	14 122	16 907	18 284	-4,9

¹ Preliminary.

Survey information

Introduction

- 1 Statistics South Africa (Stats SA) conducts a monthly survey covering electricity undertakings and establishments (branches) 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 2015.
- 3 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.

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 electricity undertakings and establishments 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 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.

Collection rate

7 The collection rate for the survey on electricity generated and available for distribution for June 2020 was 87,5%. The collection rate for May 2020 was 92%.

Statistical unit

The 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 (see point 5).

Revised figures

- **9** Normally revised figures are due to:
 - late submission of data to Stats SA: and
 - revisions or corrections by respondents to previous reported data.

Data are edited at enterprise level.

Rounding-off of figures

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 electricity undertaking or establishment. All large undertakings or establishments (size group one) 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 kilowatts is excluded from the sample.
- The survey is conducted by electronic filing, email, fax and telephone. Information is collected from a sample of 24 electricity undertakings or establishments. As from September 2013, Eskom supplied additional data for independent power producers (IPPs) that were not in the original sample of 24 establishments.

Monthly index of electricity generated

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 electricity undertakings and establishments. These levels are weighted according to the original sample and designed to represent the population of electricity undertakings and establishments.

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 of all items are generated each month, using the X-12-ARIMA 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 recognized. 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 September 2017

Note: Owing to the impact of the COVID-19 lockdown, a transitory change adjustment was applied to April 2020. Transitory (temporary) change (TC), describes a temporary effect on the level of series after a certain point in time. The methodology will be reviewed as more data points are added to the time series.

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

Electricity undertaking

An undertaking concerned with the generation and distribution of electricity, including electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

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 2015. 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

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of all Economic Activities

SA South Africa

Stats SA Statistics South Africa
* Revised figures

Technical enquiries

Tsholofelo Ditinti Telephone number: 072 917 6444

Email: tsholofelod@statssa.gov.za

Nicolai Claassen Telephone number: 064 500 3082

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 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.

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, King William's Town
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.

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

Postal address Private Bag X44, Pretoria, 0001

Produced by Stats SA