

## Statistical release

# Electricity generated and available for distribution (Preliminary)

**April 2013** 

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Enquiries:
User Information Services
Tel: (012) 310 8600 / 4892 /8390

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#### **Results for April 2013**

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

| Actual estimates  | April 2013<br>1/ | % change between<br>April 2012<br>and<br>April 2013 | % change between February to April 2012 and February to April 2013 | % change between January to April 2012 and January to April 2013 |
|---|------------------|---|--|--|
| Electricity available for distribution (Gigawatt-hours)           | 18 650           | 1,0   | -3,0   | -3,3   |
| Index of the physical volume of electricity production (2010=100) | 96,2             | 3,6   | -0,2   | -0,9   |

<sup>1/</sup> Preliminary.

| Seasonally adjusted estimates                                     | April 2013 | % change between<br>March<br>and<br>April 2013 | % change between<br>November 2012 to<br>January 2013<br>and<br>February to April 2013 |
|---|------------|--|---|
| Electricity available for distribution (Gigawatt-hours)           | 19 334     | 1,9  | -1,7  |
| Index of the physical volume of electricity production (2010=100) | 99,7       | 1,2  | 0,0   |

#### **Consumption of electricity**

Seasonally adjusted electricity consumption decreased by 1,7% in the three months ended April 2013 compared with the previous three months. A month-on-month increase of 1,9% was recorded in April 2013, following a month-on-month decrease of 0,1% in March 2013.

A year-on-year increase of 1,0% in the actual volume of electricity consumption was recorded in April 2013.

#### **Production of electricity**

Seasonally adjusted electricity production remained constant in the three months ended April 2013 compared with the previous three months. A month-on-month increase of 1,2% was recorded in April 2013, following a month-on-month decrease of 0,2% in March 2013.

The actual estimated electricity production recorded a year-on-year increase of 3,6% in April 2013.

#### Electricity delivered by Eskom to the provinces

The total volume of electricity delivered by Eskom to the provinces increased by 0,9% (161 Gigawatt-hours) in April 2013 compared with April 2012. Increases were reported in five of the nine provinces, with the largest volume increase recorded for KwaZulu-Natal (198 Gigawatt-hours), followed by Gauteng (125 Gigawatt-hours). Mpumalanga recorded the largest volume decrease (-143 Gigawatt-hours) over this period.

Table B – Comparison of the seasonally adjusted volume of electricity generated and available for distribution in the three months ended April 2013 and the previous three months

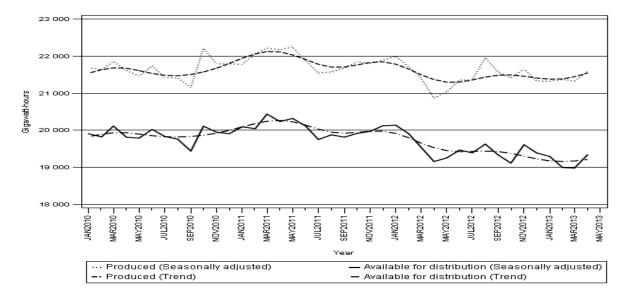
| Gigawatt-hours   | Seasonally<br>adjusted quantity<br>November 2012<br>to<br>January 2013 | Seasonally<br>adjusted quantity<br>February to April<br>2013 | % change between<br>November 2012 to<br>January 2013<br>and<br>February to April<br>2013 | Quantity difference<br>between<br>November 2012 to<br>January 2013<br>and<br>February to April<br>2013 |
|--|--|--|--|--|
| Electricity produced                                   | 64 296   | 64 273   | 0,0  | -23  |
| Electricity available for distribution in South Africa | 58 283   | 57 300   | -1,7   | -983   |

Table C – Comparison of actual estimates between the three months ended April 2013 and three months ended April 2012

| Gigawatt-hours   | Actual volume<br>February to April<br>2012 | Actual volume<br>February to April<br>2013 | % change between February to April 2012 and February to April 2013 | Quantity difference<br>between<br>February to April<br>2012<br>and<br>February to April<br>2013 |
|--|--|--|--|---|
| Electricity produced                                   | 61 874                                     | 61 767                                     | -0,2   | -107  |
| Purchased outside South Africa (import) 1/             | 3 076                                      | 1 421                                      | -53,8  | -1 655  |
| Consumed in power stations and auxiliary systems       | 4 449                                      | 4 591                                      | 3,2  | 142   |
| Sold outside South Africa (export) 2/                  | 3 628                                      | 3 414                                      | -5,9   | -214  |
| Electricity available for distribution in South Africa | 56 872                                     | 55 184                                     | -3,0   | -1 688  |

<sup>1/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

Figure 1 - Electricity produced and available for distribution in South Africa, seasonally adjusted and trend



PJ Lehohla Statistician-General

<sup>2/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

#### **Tables**

Table 1 – Total volume of electricity available for distribution in South Africa: 2008–2013

| Manth     |         |         |         |         |         |           |
|-----------|---------|---------|---------|---------|---------|-----------|
| Month     | 2008    | 2009    | 2010    | 2011    | 2012    | 2013      |
| January   | 19 256  | 17 919  | 19 396  | 19 616  | 19 676  | 18 860    |
| February  | 18 668  | 16 757  | 18 181  | 18 455  | 18 783  | 17 493    |
| March     | 19 603  | 18 694  | 20 186  | 20 518  | 19 623  | 19 041    |
| April     | 19 127  | 17 934  | 19 102  | 19 539  | 18 466  | 1/ 18 650 |
| May       | 20 365  | 19 548  | 20 435  | 20 938  | 19 869  |           |
| June      | 20 515  | 19 819  | 20 800  | 20 914  | 20 274  |           |
| July      | 21 610  | 21 151  | 21 307  | 21 162  | 20 743  |           |
| August    | 20 736  | 20 398  | 20 540  | 20 617  | 20 345  |           |
| September | 19 725  | 19 382  | 19 256  | 19 619  | 19 100  |           |
| October   | 20 138  | 19 899  | 20 371  | 20 198  | 19 413  |           |
| November  | 18 640  | 19 248  | 19 702  | 19 763  | 19 426  |           |
| December  | 17 541  | 18 850  | 18 996  | 19 189  | 18 456  |           |
| Year      | 235 924 | 229 599 | 238 272 | 240 528 | 234 174 |           |

<sup>1/</sup> Preliminary.

Table 2 – Annual percentage change in electricity available for distribution in South Africa: 2008–2013

| <b>5.5</b> (1 | Percentage change 2/ |       |      |      |      |      |  |  |  |
|---------------|----------------------|-------|------|------|------|------|--|--|--|
| Month         | 2008                 | 2009  | 2010 | 2011 | 2012 | 2013 |  |  |  |
| January       | -1,6                 | -6,9  | 8,2  | 1,1  | 0,3  | -4,1 |  |  |  |
| February      | 2,0                  | -10,2 | 8,5  | 1,5  | 1,8  | -6,9 |  |  |  |
| March         | -2,8                 | -4,6  | 8,0  | 1,6  | -4,4 | -3,0 |  |  |  |
| April         | 0,8                  | -6,2  | 6,5  | 2,3  | -5,5 | 1,0  |  |  |  |
| May           | -2,6                 | -4,0  | 4,5  | 2,5  | -5,1 |      |  |  |  |
| June          | -2,4                 | -3,4  | 4,9  | 0,5  | -3,1 |      |  |  |  |
| July          | -0,8                 | -2,1  | 0,7  | -0,7 | -2,0 |      |  |  |  |
| August        | -2,9                 | -1,6  | 0,7  | 0,4  | -1,3 |      |  |  |  |
| September     | 0,0                  | -1,7  | -0,7 | 1,9  | -2,6 |      |  |  |  |
| October       | -1,5                 | -1,2  | 2,4  | -0,8 | -3,9 |      |  |  |  |
| November      | -5,8                 | 3,3   | 2,4  | 0,3  | -1,7 |      |  |  |  |
| December      | -8,4                 | 7,5   | 0,8  | 1,0  | -3,8 |      |  |  |  |
| Year          | -2,2                 | -2,7  | 3,8  | 0,9  | -2,6 |      |  |  |  |

<sup>2/</sup> The annual percentage change is the change in the volume of electricity available for distribution of the relevant month of the current year compared with the corresponding month of the previous year expressed as a percentage.

Table 3 – Seasonally adjusted total volume of electricity available for distribution in South Africa: 2008–2013

|           | Gigawatt-hours |        |        |        |        |        |  |  |  |  |
|-----------|----------------|--------|--------|--------|--------|--------|--|--|--|--|
| Month     | 2008           | 2009   | 2010   | 2011   | 2012   | 2013   | % change<br>between current<br>and previous<br>month |  |  |  |
| January   | 19 765         | 18 420 | 19 901 | 20 091 | 20 135 | 19 290 | -0,5   |  |  |  |
| February  | 19 925         | 18 427 | 19 818 | 20 040 | 19 903 | 18 988 | -1,6   |  |  |  |
| March     | 19 571         | 18 640 | 20 112 | 20 433 | 19 541 | 18 978 | -0,1   |  |  |  |
| April     | 19 891         | 18 668 | 19 808 | 20 234 | 19 153 | 19 334 | 1,9  |  |  |  |
| May       | 19 633         | 18 867 | 19 786 | 20 316 | 19 249 |        |  |  |  |  |
| June      | 19 761         | 19 041 | 20 020 | 20 114 | 19 464 |        |  |  |  |  |
| July      | 20 097         | 19 639 | 19 831 | 19 748 | 19 387 |        |  |  |  |  |
| August    | 19 864         | 19 564 | 19 756 | 19 874 | 19 624 |        |  |  |  |  |
| September | 19 934         | 19 573 | 19 434 | 19 812 | 19 327 |        |  |  |  |  |
| October   | 19 870         | 19 639 | 20 108 | 19 912 | 19 110 |        |  |  |  |  |
| November  | 18 935         | 19 510 | 19 947 | 19 967 | 19 607 |        |  |  |  |  |
| December  | 18 390         | 19 733 | 19 902 | 20 118 | 19 386 |        |  |  |  |  |

Table 4 - Indices of the physical volume of electricity production: 2008-2013

| Mandh     | Base: 2010=100 |       |       |       |       |         |  |  |  |
|-----------|----------------|-------|-------|-------|-------|---------|--|--|--|
| Month     | 2008           | 2009  | 2010  | 2011  | 2012  | 2013    |  |  |  |
| January   | 99,3           | 89,7  | 97,6  | 98,1  | 99,2  | 96,2    |  |  |  |
| February  | 94,1           | 83,5  | 91,1  | 93,3  | 93,8  | 90,5    |  |  |  |
| March     | 99,6           | 93,7  | 101,3 | 103,0 | 99,3  | 98,8    |  |  |  |
| April     | 96,2           | 90,7  | 96,2  | 98,9  | 92,9  | 1/ 96,2 |  |  |  |
| May       | 103,4          | 98,6  | 102,3 | 105,9 | 100,3 |         |  |  |  |
| June      | 102,6          | 98,8  | 103,8 | 104,6 | 102,2 |         |  |  |  |
| July      | 108,6          | 106,4 | 106,6 | 106,8 | 105,7 |         |  |  |  |
| August    | 104,0          | 102,7 | 103,2 | 103,7 | 105,4 |         |  |  |  |
| September | 98,8           | 98,5  | 97,0  | 99,4  | 98,7  |         |  |  |  |
| October   | 103,2          | 99,6  | 104,6 | 103,1 | 101,1 |         |  |  |  |
| November  | 95,7           | 96,8  | 100,0 | 100,1 | 99,5  |         |  |  |  |
| December  | 88,3           | 94,6  | 96,3  | 96,7  | 94,0  |         |  |  |  |
| Year      | 99,5           | 96,1  | 100,0 | 101,1 | 99,3  |         |  |  |  |

<sup>1/</sup> Preliminary.

Table 5 – Annual percentage change in indices of the physical volume of electricity production: 2008–2013

| •• 4      | Percentage change 2/ |       |      |      |      |      |  |  |  |
|-----------|----------------------|-------|------|------|------|------|--|--|--|
| Month     | 2008                 | 2009  | 2010 | 2011 | 2012 | 2013 |  |  |  |
| January   | 1,2                  | -9,7  | 8,8  | 0,5  | 1,1  | -3,0 |  |  |  |
| February  | 2,6                  | -11,3 | 9,1  | 2,4  | 0,5  | -3,5 |  |  |  |
| March     | -2,1                 | -5,9  | 8,1  | 1,7  | -3,6 | -0,5 |  |  |  |
| April     | 1,1                  | -5,7  | 6,1  | 2,8  | -6,1 | 3,6  |  |  |  |
| May       | -2,1                 | -4,6  | 3,8  | 3,5  | -5,3 |      |  |  |  |
| June      | -3,3                 | -3,7  | 5,1  | 0,8  | -2,3 |      |  |  |  |
| July      | -1,3                 | -2,0  | 0,2  | 0,2  | -1,0 |      |  |  |  |
| August    | -3,3                 | -1,3  | 0,5  | 0,5  | 1,6  |      |  |  |  |
| September | -0,7                 | -0,3  | -1,5 | 2,5  | -0,7 |      |  |  |  |
| October   | 0,2                  | -3,5  | 5,0  | -1,4 | -1,9 |      |  |  |  |
| November  | -5,1                 | 1,1   | 3,3  | 0,1  | -0,6 |      |  |  |  |
| December  | -10,5                | 7,1   | 1,8  | 0,4  | -2,8 |      |  |  |  |
| Year      | -2,0                 | -3,4  | 4,1  | 1,1  | -1,8 |      |  |  |  |

<sup>2/</sup> The annual percentage change is the change in the index of the physical volume of electricity production of the relevant month of the current year compared with the corresponding month of the previous year expressed as a percentage.

Table 6 - Seasonally adjusted indices of the physical volume of electricity production: 2008–2013

|           |       | Base: 2010=100 |       |       |       |      |   |  |  |  |  |  |
|-----------|-------|----------------|-------|-------|-------|------|---|--|--|--|--|--|
| Month     | 2008  | 2009           | 2010  | 2011  | 2012  | 2013 | % change<br>between<br>current and<br>previous<br>month |  |  |  |  |  |
| January   | 101,9 | 92,2           | 100,2 | 100,6 | 101,6 | 98,5 | 0,0   |  |  |  |  |  |
| February  | 101,1 | 92,5           | 100,0 | 101,9 | 100,3 | 98,7 | 0,2   |  |  |  |  |  |
| March     | 99,4  | 93,4           | 101,0 | 102,6 | 98,9  | 98,5 | -0,2  |  |  |  |  |  |
| April     | 100,2 | 94,5           | 99,8  | 102,4 | 96,4  | 99,7 | 1,2   |  |  |  |  |  |
| May       | 99,8  | 95,2           | 99,1  | 102,8 | 97,2  |      |   |  |  |  |  |  |
| June      | 99,3  | 95,4           | 100,4 | 101,1 | 98,6  |      |   |  |  |  |  |  |
| July      | 100,7 | 98,6           | 98,9  | 99,5  | 98,7  |      |   |  |  |  |  |  |
| August    | 99,3  | 98,1           | 98,9  | 99,7  | 101,4 |      |   |  |  |  |  |  |
| September | 99,7  | 99,3           | 97,7  | 100,1 | 99,6  |      |   |  |  |  |  |  |
| October   | 101,3 | 97,7           | 102,6 | 101,0 | 98,9  |      |   |  |  |  |  |  |
| November  | 96,8  | 97,6           | 100,7 | 100,7 | 100,0 |      |   |  |  |  |  |  |
| December  | 92,3  | 98,8           | 100,7 | 101,1 | 98,5  |      |   |  |  |  |  |  |

Table 7 - Total volume of electricity imported: 2008-2013 1/

| Mandh     |        | Gigawatt-hours |        |        |        |        |  |  |  |  |  |
|-----------|--------|----------------|--------|--------|--------|--------|--|--|--|--|--|
| Month     | 2008   | 2009           | 2010   | 2011   | 2012   | 2013   |  |  |  |  |  |
| January   | 638    | 1 102          | 1 122  | 1 088  | 1 085  | 676    |  |  |  |  |  |
| February  | 885    | 999            | 995    | 730    | 1 063  | 407    |  |  |  |  |  |
| March     | 802    | 1 064          | 1 040  | 1 112  | 945    | 455    |  |  |  |  |  |
| April     | 844    | 906            | 931    | 912    | 1 068  | 2/ 559 |  |  |  |  |  |
| May       | 761    | 937            | 1 074  | 907    | 1 066  |        |  |  |  |  |  |
| June      | 1 002  | 1 088          | 1 019  | 1 009  | 1 044  |        |  |  |  |  |  |
| July      | 1 089  | 1 040          | 1 117  | 979    | 903    |        |  |  |  |  |  |
| August    | 1 076  | 1 072          | 1 109  | 1 108  | 465    |        |  |  |  |  |  |
| September | 1 044  | 920            | 1 068  | 974    | 474    |        |  |  |  |  |  |
| October   | 645    | 1 115          | 770    | 911    | 451    |        |  |  |  |  |  |
| November  | 711    | 940            | 1 018  | 1 073  | 654    |        |  |  |  |  |  |
| December  | 1 075  | 1 112          | 930    | 1 087  | 788    |        |  |  |  |  |  |
| Year      | 10 572 | 12 295         | 12 193 | 11 890 | 10 006 |        |  |  |  |  |  |

<sup>1/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

Table 8 - Total volume of electricity exported: 2008-2013 1/

| Month     | Gigawatt-hours |        |        |        |             |       |  |  |  |
|-----------|----------------|--------|--------|--------|-------------|-------|--|--|--|
|           | 2008           | 2009   | 2010   | 2011   | 2012        | 2013  |  |  |  |
| January   | 1 280          | 1 096  | 1 217  | 1 133  | 1 247       | 1 115 |  |  |  |
| February  | 1 101          | 979    | 1 128  | 1 069  | 1 212       | 1 095 |  |  |  |
| March     | 1 136          | 1 100  | 1 252  | 1 279  | 1 242       | 1 187 |  |  |  |
| April     | 998            | 1 086  | 1 170  | 1 190  | 1 190 1 174 |       |  |  |  |
| May       | 1 120          | 1 109  | 1 177  | 1 241  | 1 322       |       |  |  |  |
| June      | 1 162          | 1 175  | 1 132  | 1 174  | 1 335       |       |  |  |  |
| July      | 1 249          | 1 223  | 1 206  | 1 247  | 1 350       |       |  |  |  |
| August    | 1 220          | 1 235  | 1 275  | 1 298  | 1 295       |       |  |  |  |
| September | 1 203          | 1 285  | 1 248  | 1 288  | 1 165       |       |  |  |  |
| October   | 1 258          | 1 288  | 1 338  | 1 378  | 1 300       |       |  |  |  |
| November  | 1 252          | 1 213  | 1 316  | 1 381  | 1 233       |       |  |  |  |
| December  | 1 189          | 1 263  | 1 209  | 1 286  | 1 160       |       |  |  |  |
| Year      | 14 168         | 14 052 | 14 668 | 14 964 | 15 035      |       |  |  |  |

<sup>1/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

<sup>2/</sup> Preliminary.

<sup>2/</sup> Preliminary.

Table 9a – Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa (monthly figures)

|                          |  | Gigawatt-hours |            |                  |  |  |  |  |
|--------------------------|--|----------------|------------|------------------|--|--|--|--|
|                          |  | April 2012     | March 2013 | April 2013<br>1/ | % change<br>between<br>April 2012<br>and<br>April 2013 | Difference<br>between<br>April 2012<br>and<br>April 2013 |  |  |
| Total - All<br>producers | Electricity produced                                   | 20 099         | 21 374     | 20 809           | 3,6  | 710  |  |  |
|                          | Purchased outside South<br>Africa (import) 2/          | 1 068          | 455        | 559              | -47,7  | -509   |  |  |
|                          | Consumed in power stations and auxiliary systems       | 1 527          | 1 600      | 1 587            | 3,9  | 60   |  |  |
|                          | Sold outside South Africa (export) 3/                  | 1 174          | 1 187      | 1 132            | -3,6   | -42  |  |  |
|                          | Electricity available for distribution in South Africa | 18 466         | 19 041     | 18 650           | 1,0  | 184  |  |  |
| ESKOM                    | Electricity produced                                   | 19 287         | 20 544     | 20 013           | 3,8  | 726  |  |  |
|                          | Purchased outside South<br>Africa (import) 2/          | 1 068          | 455        | 559              | -47,7  | -509   |  |  |
|                          | Consumed in power stations and auxiliary systems       | 1 467          | 1 536      | 1 532            | 4,4  | 65   |  |  |
|                          | Sold outside South Africa (export) 3/                  | 1 174          | 1 187      | 1 132            | -3,6   | -42  |  |  |
|                          | Electricity available for distribution in South Africa | 17 715         | 18 276     | 17 909           | 1,1  | 194  |  |  |

<sup>1/</sup> Preliminary.

Table 9b – Electricity produced and consumed in power stations, purchased and sold outside South Africa and available for distribution in South Africa (cumulative figures)

|                       |  | Gigawatt-hours              |                                   |  |  |  |  |
|-----------------------|--|-----------------------------|-----------------------------------|--|--|--|--|
|                       |  | January<br>to<br>April 2012 | January<br>to<br>April 2013<br>1/ | % change between January to April 2012 and January to April 2013 | Difference between January to April 2012 and January to April 2013 |  |  |
| Total - All producers | Electricity produced                                   | 83 336                      | 82 586                            | -0,9   | -750   |  |  |
|                       | Purchased outside South Africa (import) 2/             | 4 161                       | 2 097                             | -49,6  | -2 064   |  |  |
|                       | Consumed in power stations and auxiliary systems       | 6 073                       | 6 112                             | 0,6  | 39   |  |  |
|                       | Sold outside South Africa (export) 3/                  | 4 875                       | 4 529                             | -7,1   | -346   |  |  |
|                       | Electricity available for distribution in South Africa | 76 548                      | 74 044                            | -3,3   | -2 504   |  |  |
| ESKOM                 | Electricity produced                                   | 79 914                      | 79 480                            | -0,5   | -434   |  |  |
|                       | Purchased outside South Africa (import) 2/             | 4 161                       | 2 097                             | -49,6  | -2 064   |  |  |
|                       | Consumed in power stations and auxiliary systems       | 5 781                       | 5 869                             | 1,5  | 88   |  |  |
|                       | Sold outside South Africa (export) 3/                  | 4 875                       | 4 529                             | -7,1   | -346   |  |  |
|                       | Electricity available for distribution in South Africa | 73 419                      | 71 181                            | -3,0   | -2 238   |  |  |

<sup>1/</sup> Preliminary.

<sup>2/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

<sup>3/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

<sup>2/</sup> Physical energy flowing into South Africa as measured by the metering systems at the South African borders.

<sup>3/</sup> Physical energy flowing out of South Africa as measured by the metering systems at the South African borders.

Table 10 - Total volume of electricity delivered by Eskom to provinces for 2012 and 2013 1/

| Gigawatt-hour |              |                 |                 |                  |               |                   | -hours        | ours    |                 |         |                          |  |
|---------------|--------------|-----------------|-----------------|------------------|---------------|-------------------|---------------|---------|-----------------|---------|--------------------------|--|
| Period        |              | Western<br>Cape | Eastern<br>Cape | Northern<br>Cape | Free<br>State | KwaZulu-<br>Natal | North<br>West | Gauteng | Mpuma-<br>langa | Limpopo | Total<br>South<br>Africa |  |
| 2012          | January      | 1 889           | 844             | 464              | 706           | 3 527             | 2 237         | 4 631   | 2 910           | 1 038   | 18 246                   |  |
|               | February     | 1 922           | 816             | 403              | 668           | 3 271             | 2 034         | 4 509   | 2 779           | 988     | 17 390                   |  |
|               | March        | 2 027           | 859             | 436              | 688           | 3 282             | 2 161         | 4 849   | 2 900           | 1 000   | 18 202                   |  |
|               | April        | 1 846           | 763             | 391              | 655           | 3 154             | 1 993         | 4 624   | 2 800           | 937     | 17 163                   |  |
|               | May          | 1 943           | 839             | 401              | 709           | 3 318             | 2 181         | 5 159   | 2 884           | 991     | 18 425                   |  |
|               | June         | 1 933           | 802             | 406              | 775           | 3 315             | 2 205         | 5 643   | 2 816           | 974     | 18 869                   |  |
|               | July         | 1 978           | 837             | 432              | 793           | 3 441             | 2 273         | 5 731   | 2 922           | 952     | 19 359                   |  |
|               | August       | 1 993           | 838             | 420              | 776           | 3 436             | 2 186         | 5 540   | 2 767           | 937     | 18 893                   |  |
|               | September    | 1 852           | 788             | 414              | 664           | 3 316             | 2 097         | 4 981   | 2 678           | 950     | 17 740                   |  |
|               | October      | 1 885           | 795             | 418              | 703           | 3 458             | 2 085         | 4 856   | 2 884           | 988     | 18 072                   |  |
|               | November     | 1 840           | 784             | 451              | 717           | 3 422             | 2 170         | 4 701   | 2 944           | 975     | 18 004                   |  |
|               | December     | 1 867           | 751             | 433              | 633           | 3 355             | 2 039         | 4 213   | 2 805           | 959     | 17 055                   |  |
|               | Year         | 22 975          | 9 716           | 5 069            | 8 487         | 40 295            | 25 661        | 59 437  | 34 089          | 11 689  | 217 418                  |  |
|               | Year to date | 7 684           | 3 282           | 1 694            | 2 717         | 13 234            | 8 425         | 18 613  | 11 389          | 3 963   | 71 001                   |  |
| 2013          | January      | 1 932           | 796             | 490              | 667           | 3 409             | 2 022         | 4 432   | 2 911           | 910     | 17 569                   |  |
|               | February     | 1 825           | 751             | 441              | 618           | 3 137             | 1 900         | 4 216   | 2 517           | 811     | 16 216                   |  |
|               | March        | 1 956           | 839             | 476              | 630           | 3 454             | 1 973         | 4 655   | 2 781           | 930     | 17 694                   |  |
|               | April 2/     | 1 833           | 802             | 415              | 615           | 3 352             | 2 000         | 4 749   | 2 657           | 901     | 17 324                   |  |
|               | Year to date | 7 546           | 3 188           | 1 822            | 2 530         | 13 352            | 7 895         | 18 052  | 10 866          | 3 552   | 68 803                   |  |

<sup>1/</sup> Wholesale energy (Gigawatt-hours) as delivered by Eskom to the various provinces. 2/ Preliminary.

#### **Explanatory notes**

#### Introduction

1

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 volume of electricity units generated and available for distribution in South Africa, the volume of units purchased and sold outside South Africa and the volume 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 2010=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.

### Purpose of the 4 survey

The results of the monthly electricity generated and available for distribution 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 5 survey

This survey covers electricity undertakings and establishments conducting activities concerned with the generation or transmission and distribution of electricity. It includes electrical power installations, which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

#### Classification 6

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 April 2013 was 96%. The collection rate for March 2013 remained unchanged.

#### Statistical unit 8

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.

The survey is conducted by mail, email and telephone. Information is collected from a sample of 25 electricity undertakings or establishments.

## Monthly production indices

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

#### Benchmarking 12

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. These levels are weighted according to the original sample and designed 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 a benchmark 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 August 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 August 1995 as reference point).

### Seasonal 14 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 at <a href="http://www.statssa.gov.za/publications/P4141/electricity\_seasonal\_adjustment\_note\_2012.pdf">http://www.statssa.gov.za/publications/P4141/electricity\_seasonal\_adjustment\_note\_2012.pdf</a>

#### Trend cycle

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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.

## Related publications

Users may also wish to refer to the following publications which are available from Stats SA:

- Bulletin of Statistics;
- SA Statistics; and
- Stats in Brief.

## Rounding-off of figures

Where necessary, the figures in the tables have 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.

#### **Glossary**

Consumption of electricity

For purposes of this release the term 'consumption of electricity' is used

interchangeably with the term 'electricity available for distribution'.

**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.

Index of physical volume of electricity production

A statistical measure of the change in 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 2010. 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 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

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of all Economic Activities

Stats SA Statistics South Africa
\* Revised figures

#### **Technical enquiries**

Suzzie Mnguni Telephone number: (012) 310 8443

Email: suzziemn@statssa.gov.za

Nicolai Claassen Telephone number: (012) 336 0142

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.

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#### Advanced release calendar

An advanced release calendar is disseminated on www.statssa.gov.za

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#### **General enquiries**

**User information services** Telephone number: (012) 310 8600

Email: info@statssa.gov.za

Orders/subscription services Telephone number: (012) 310 8358

Email: magdaj@statssa.gov.za

Postal address: Private Bag X44, Pretoria, 0001

Produced by Stats SA