Statistics South Africa

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# Statistical release

**P4141**

# Electricity generated and available for distribution (Preliminary)

## May 2010

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# Summary of findings: Electricity generated and available for distribution

## Key figures

### Table A – Selected key figures regarding electricity generated and available for distribution for May 2010

| Actual estimates | May 2010 1/ | % change between May 2009 and May 2010 | % change between March to May 2009 and March to May 2010 | % change between January to May 2009 and January to May 2010 |
|---|---|---|---|---|
| Electricity available for distribution (Gigawatt-hours) | 20 433 | 4,5 | 6,3 | 7,1 |
| Index of the physical volume of electricity production (2005=100) 2/ | 108,4 | 3,7 | 5,9 | 7,1 |

1/ Preliminary.

| Seasonally adjusted estimates | May 2010 | % change between April and May 2010 | % change between December 2009 to February 2010 and March to May 2010 |
|---|---|---|---|
| Electricity available for distribution (Gigawatt-hours) | 19 830 | -1,9 | 1,4 |
| Index of the physical volume of electricity production (2005=100) 2/ | 105,0 | -2,4 | 1,0 |

2/ Percentage changes in production indices may differ marginally from percentage changes in actual volumes due to rounding off.

## Key findings

### Consumption of electricity

The actual estimated volume of electricity consumed in May 2010 increased by 4,5% (885 Gigawatt-hours) compared with May 2009 (see Tables A, 2 and 9a). Electricity consumption for the three months ended May 2010 increased by 6,3% (3 557 Gigawatt-hours) compared with the three months ended May 2009 (see Tables A and C). Electricity consumption, after seasonal adjustment, for the three months ended May 2010 increased by 1,4% compared with the three months ended February 2010 (see Tables A and B).

### Production of electricity

The actual estimated production of electricity in May 2010 increased by 3,8% (811 Gigawatt-hours) compared with May 2009 (see Table 9a). The estimated production of electricity for the three months ended May 2010 increased by 6,0% (3 651 Gigawatt-hours) compared with the three months ended May 2009 (see Table C). Electricity production, after seasonal adjustment, for the three months ended May 2010 increased by 1,0% compared with the three months ended February 2010 (see Tables A and B).

**Electricity delivered by Eskom to the provinces**

Electricity delivered to the provinces for the first five months of 2010 increased by 8,4% (7 109 Gigawatt-hours) compared with the first five months of 2009. Increases were reported for all the nine provinces ranging from 1,5% for Northern Cape to 18,6% for Mpumalanga.

**International trade in electricity**

The volume of electricity purchased from outside South African borders increased from 5 008 Gigawatt-hours in the first five months of 2009 to 5 162 Gigawatt-hours in the first five months of 2010, representing an increase of 3,1% (154 Gigawatt-hours). The volume of electricity sold to neighbouring countries in the first five months of 2010 increased by 10,5% (563 Gigawatt-hours) compared with the first five months of 2009 (see Table 9b).

**Table B – Comparison of the seasonally adjusted volume of electricity generated and available for distribution between the three months ended May 2010 and the previous three months**

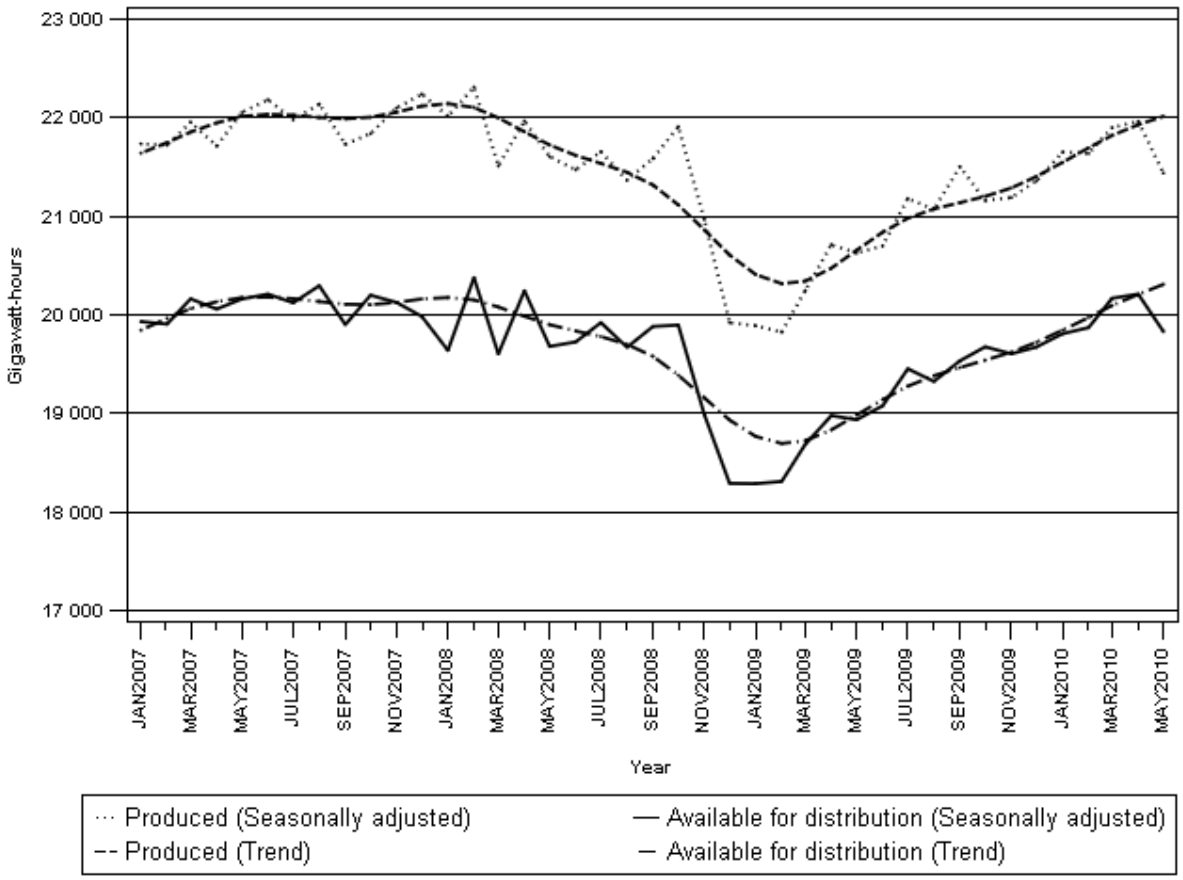
| Gigawatt-hours | Seasonally adjusted quantity December 2009 to February 2010 | Seasonally adjusted quantity March to May 2010 | % change between December 2009 to February 2010 and March to May 2010 | Quantity difference between December 2009 to February 2010 and March to May 2010 |
|---|---|---|---|---|
| **Electricity produced** | 64 648 | 65 300 | 1,0 | 652 |
| **Electricity available for distribution in South Africa** | 59 351 | 60 208 | 1,4 | 857 |

**Table C – Comparison of actual estimates between the three months ended May 2010 and the three months ended May 2009**

| Gigawatt-hours | Actual volume March to May 2009 | Actual volume March to May 2010 | % change between March to May 2009 and March to May 2010 | Quantity difference between March to May 2009 and March to May 2010 |
|---|---|---|---|---|
| **Electricity produced** | 61 219 | 64 870 | 6,0 | 3 651 |
| **Purchased outside South Africa (import)** | 2 907 | 3 045 | 4,7 | 138 |
| **Consumed in power stations and auxiliary systems** | 4 657 | 4 593 | -1,4 | -64 |
| **Sold outside South Africa (export)** | 3 295 | 3 588 | 8,9 | 293 |
| **Electricity available for distribution in South Africa** | 56 176 | 59 733 | 6,3 | 3 557 |

Figure 1 below shows the seasonally adjusted and trend patterns for electricity produced and available for distribution in South Africa from January 2007 to May 2010.

**Figure 1 – Electricity produced and available for distribution in South Africa from 2007 to 2010**




**P J Lehohla**
**Statistician-General**

## Detailed results

### Table 1 – Total volume of electricity available for distribution in South Africa: 2005 – 2010

| Month | Gigawatt-hours | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| January | 18 149 | 18 603 | 19 561 | 19 256 | 17 919 | 19 396 |
| February | 17 169 | 17 396 | 18 301 | 18 668 | 16 757 | 18 181 |
| March | 18 487 | 18 982 | 20 160 | 19 603 | 18 694 | 20 186 |
| April | 18 132 | 18 122 | 18 982 | 19 127 | 17 934 | 19 114 |
| May | 19 224 | 20 312 | 20 901 | 20 365 | 19 548 | 1/ 20 433 |
| June | 18 983 | 20 166 | 21 020 | 20 515 | 19 819 | |
| July | 19 657 | 20 632 | 21 780 | 21 610 | 21 151 | |
| August | 19 191 | 20 307 | 21 353 | 20 736 | 20 398 | |
| September | 18 383 | 18 987 | 19 732 | 19 725 | 19 382 | |
| October | 19 127 | 19 663 | 20 435 | 20 138 | 19 899 | |
| November | 18 523 | 19 244 | 19 785 | 18 640 | 19 248 | |
| December | 18 230 | 18 909 | 19 160 | 17 541 | 18 850 | |
| Year | **223 255** | **231 323** | **241 170** | **235 924** | **229 599** | |

1/ Preliminary.

### Table 2 – Annual percentage change in electricity available for distribution in South Africa: 2005 – 2010

| Month | Percentage change 2/ | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| January | 1,7 | 2,5 | 5,1 | -1,6 | -6,9 | 8,2 |
| February | -0,6 | 1,3 | 5,2 | 2,0 | -10,2 | 8,5 |
| March | 0,1 | 2,7 | 6,2 | -2,8 | -4,6 | 8,0 |
| April | 3,5 | -0,1 | 4,7 | 0,8 | -6,2 | 6,6 |
| May | 1,7 | 5,7 | 2,9 | -2,6 | -4,0 | 4,5 |
| June | -1,8 | 6,2 | 4,2 | -2,4 | -3,4 | |
| July | -2,5 | 5,0 | 5,6 | -0,8 | -2,1 | |
| August | -0,4 | 5,8 | 5,2 | -2,9 | -1,6 | |
| September | 0,1 | 3,3 | 3,9 | -0,0 | -1,7 | |
| October | 2,2 | 2,8 | 3,9 | -1,5 | -1,2 | |
| November | 1,1 | 3,9 | 2,8 | -5,8 | 3,3 | |
| December | 2,7 | 3,7 | 1,3 | -8,4 | 7,5 | |
| Year | **0,6** | **3,6** | **4,3** | **-2,2** | **-2,7** | |

2/ 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: 2005 – 2010

| Month | Gigawatt-hours | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | % change between current and previous month |
| January | 18 493 | 18 945 | 19 931 | 19 639 | 18 286 | 19 808 | 0,7 |
| February | 18 638 | 18 896 | 19 906 | 20 377 | 18 309 | 19 870 | 0,3 |
| March | 18 461 | 18 958 | 20 162 | 19 603 | 18 685 | 20 168 | 1,5 |
| April | 19 085 | 19 122 | 20 058 | 20 244 | 18 977 | 20 210 | 0,2 |
| May | 18 488 | 19 559 | 20 161 | 19 679 | 18 935 | 19 830 | -1,9 |
| June | 18 250 | 19 408 | 20 210 | 19 725 | 19 076 | | |
| July | 18 274 | 19 151 | 20 122 | 19 921 | 19 452 | | |
| August | 18 348 | 19 365 | 20 295 | 19 670 | 19 324 | | |
| September | 18 603 | 19 182 | 19 900 | 19 882 | 19 533 | | |
| October | 18 886 | 19 425 | 20 199 | 19 896 | 19 675 | | |
| November | 18 815 | 19 557 | 20 125 | 18 987 | 19 604 | | |
| December | 18 992 | 19 686 | 19 983 | 18 289 | 19 673 | | |

### Table 4 – Indices of the physical volume of electricity production: 2005 – 2010

| Month | Base : 2005=100 | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| January | 97,6 | 99,8 | 103,9 | 105,3 | 95,0 | 103,4 |
| February | 91,7 | 94,0 | 97,2 | 99,7 | 88,5 | 96,5 |
| March | 100,2 | 103,3 | 107,8 | 105,6 | 99,3 | 107,4 |
| April | 98,1 | 98,0 | 100,9 | 102,0 | 96,1 | 102,0 |
| May | 102,9 | 108,1 | 111,9 | 109,6 | 104,5 | 1/ 108,4 |
| June | 101,6 | 107,3 | 112,5 | 108,8 | 104,8 | |
| July | 105,5 | 110,8 | 116,6 | 115,1 | 112,8 | |
| August | 103,0 | 109,1 | 114,1 | 110,3 | 108,8 | |
| September | 99,1 | 101,8 | 105,5 | 104,8 | 104,4 | |
| October | 102,5 | 107,2 | 109,1 | 109,4 | 105,6 | |
| November | 99,4 | 103,3 | 106,9 | 101,4 | 102,6 | |
| December | 98,2 | 100,9 | 104,6 | 93,6 | 100,3 | |
| Year | **100,0** | **103,6** | **107,6** | **105,5** | **101,9** | |

1/ Preliminary.

### Table 5 – Annual percentage change in indices of the physical volume of electricity production: 2005 – 2010

| Month | Percentage change 2/ | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2008 | 2010 |
| January | 2,2 | 2,3 | 4,1 | 1,3 | -9,8 | 8,8 |
| February | -0,5 | 2,5 | 3,4 | 2,6 | -11,2 | 9,0 |
| March | 1,5 | 3,1 | 4,4 | -2,0 | -6,0 | 8,2 |
| April | 3,6 | -0,1 | 3,0 | 1,1 | -5,8 | 6,1 |
| May | 0,5 | 5,1 | 3,5 | -2,1 | -4,7 | 3,7 |
| June | -3,2 | 5,6 | 4,8 | -3,3 | -3,7 | |
| July | -3,7 | 5,0 | 5,2 | -1,3 | -2,0 | |
| August | -1,2 | 5,9 | 4,6 | -3,3 | -1,4 | |
| September | -0,4 | 2,7 | 3,6 | -0,7 | -0,4 | |
| October | 0,4 | 4,6 | 1,8 | 0,3 | -3,5 | |
| November | 0,9 | 3,9 | 3,5 | -5,1 | 1,2 | |
| December | 2,3 | 2,7 | 3,7 | -10,5 | 7,2 | |
| Year | **0,1** | **3,7** | **3,8** | **-2,0** | **-3,4** | |

2/ 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: 2005 – 2010

| Month | Base : 2005=100 | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | % change between current and previous month |
| January | 100,1 | 102,2 | 106,4 | 107,8 | 97,4 | 106,0 | 1,3 |
| February | 100,4 | 102,7 | 106,4 | 109,3 | 97,1 | 106,0 | 0,0 |
| March | 100,1 | 103,0 | 107,5 | 105,3 | 99,1 | 107,2 | 1,1 |
| April | 103,0 | 103,0 | 106,3 | 107,6 | 101,4 | 107,6 | 0,4 |
| May | 99,1 | 104,2 | 108,0 | 105,8 | 101,0 | 105,0 | -2,4 |
| June | 97,8 | 103,5 | 108,6 | 105,1 | 101,4 | | |
| July | 97,8 | 102,7 | 107,6 | 106,1 | 103,7 | | |
| August | 98,2 | 104,0 | 108,4 | 104,6 | 103,2 | | |
| September | 100,1 | 102,8 | 106,4 | 105,7 | 105,3 | | |
| October | 100,1 | 104,9 | 106,9 | 107,3 | 103,6 | | |
| November | 100,9 | 104,7 | 108,2 | 102,7 | 103,8 | | |
| December | 102,3 | 105,0 | 108,9 | 97,6 | 104,6 | | |

**Table 7 – Total volume of electricity imported: 2005 – 2010**

| Month | Gigawatt-hours | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| January | 729 | 872 | 1 088 | 638 | 1 102 | 1 122 |
| February | 714 | 646 | 942 | 885 | 999 | 995 |
| March | 533 | 581 | 973 | 802 | 1 064 | 1 040 |
| April | 598 | 587 | 1 055 | 844 | 906 | 931 |
| May | 849 | 879 | 900 | 761 | 937 | 1/ 1 074 |
| June | 813 | 881 | 880 | 1 002 | 1 088 | |
| July | 856 | 926 | 984 | 1 089 | 1 040 | |
| August | 883 | 930 | 1 045 | 1 076 | 1 072 | |
| September | 686 | 971 | 1 026 | 1 044 | 920 | |
| October | 836 | 682 | 1 040 | 645 | 1 115 | |
| November | 865 | 862 | 796 | 711 | 940 | |
| December | 837 | 965 | 619 | 1 075 | 1 112 | |
| **Year** | **9 199** | **9 782** | **11 348** | **10 572** | **12 295** | |

1/ Preliminary.

**Table 8 – Total volume of electricity exported: 2005 – 2010**

| Month | Gigawatt-hours | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| January | 1 030 | 1 056 | 1 134 | 1 280 | 1 096 | 1 217 |
| February | 901 | 1 050 | 1 060 | 1 101 | 979 | 1 128 |
| March | 968 | 1 129 | 1 231 | 1 136 | 1 100 | 1 252 |
| April | 991 | 1 017 | 1 132 | 998 | 1 086 | 1 164 |
| May | 1 083 | 1 046 | 1 203 | 1 120 | 1 109 | 1/ 1 172 |
| June | 1 096 | 1 102 | 1 256 | 1 162 | 1 175 | |
| July | 1 102 | 1 239 | 1 301 | 1 249 | 1 223 | |
| August | 1 144 | 1 262 | 1 252 | 1 220 | 1 235 | |
| September | 1 134 | 1 239 | 1 186 | 1 203 | 1 285 | |
| October | 1 161 | 1 311 | 1 252 | 1 258 | 1 288 | |
| November | 1 119 | 1 186 | 1 256 | 1 252 | 1 213 | |
| December | 1 155 | 1 129 | 1 233 | 1 189 | 1 263 | |
| **Year** | **12 884** | **13 766** | **14 496** | **14 168** | **14 052** | |

1/ 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 | | | | |
|---|---|---|---|---|---|---|
| | | May 2009 | April 2010 | May 2010 1/ | % change between May 2009 and May 2010 | Difference between May 2009 and May 2010 |
| **Total - All producers** | **Electricity produced** | 21 322 | 20 820 | 22 133 | 3,8 | 811 |
| | **Purchased outside South Africa (import)** | 937 | 931 | 1 074 | 14,6 | 137 |
| | **Consumed in power stations and auxiliary systems** | 1 603 | 1 473 | 1 601 | -0,1 | -2 |
| | **Sold outside South Africa (export)** | 1 109 | 1 164 | 1 172 | 5,7 | 63 |
| | **Electricity available for distribution in South Africa** | **19 548** | **19 114** | **20 433** | **4,5** | **885** |
| **ESKOM** | **Electricity produced** | 20 620 | 20 281 | 21 557 | 4,5 | 937 |
| | **Purchased outside South Africa (import)** | 937 | 931 | 1 074 | 14,6 | 137 |
| | **Consumed in power stations and auxiliary systems** | 1 538 | 1 413 | 1 534 | -0,3 | -4 |
| | **Sold outside South Africa (export)** | 1 109 | 1 164 | 1 172 | 5,7 | 63 |
| | **Electricity available for distribution in South Africa** | **18 910** | **18 634** | **19 925** | **5,4** | **1 015** |

1/ 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 to May 2009 | January to May 2010 1/ | % change between January to May 2009 and January to May 2010 | Difference between January to May 2009 and January to May 2010 |
| **Total - All producers** | **Electricity produced** | 98 670 | 105 685 | 7,1 | 7 015 |
| | **Purchased outside South Africa (import)** | 5 008 | 5 162 | 3,1 | 154 |
| | **Consumed in power stations and auxiliary systems** | 7 459 | 7 603 | 1,9 | 144 |
| | **Sold outside South Africa (export)** | 5 370 | 5 933 | 10,5 | 563 |
| | **Electricity available for distribution in South Africa** | **90 852** | **97 310** | **7,1** | **6 458** |
| **ESKOM** | **Electricity produced** | 95 050 | 102 828 | 8,2 | 7 778 |
| | **Purchased outside South Africa (import)** | 5 008 | 5 162 | 3,1 | 154 |
| | **Consumed in power stations and auxiliary systems** | 7 091 | 7 292 | 2,8 | 201 |
| | **Sold outside South Africa (export)** | 5 370 | 5 933 | 10,5 | 563 |
| | **Electricity available for distribution in South Africa** | **87 599** | **94 765** | **8,2** | **7 166** |

1/ Preliminary.

**Table 10 – Total volume of electricity delivered by Eskom to provinces for 2009 and 2010 1/**

| Period | | Gigawatt-hours | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Western Cape | Eastern Cape | Northern Cape | Free State | KwaZulu -Natal | North West | Gauteng | Mpuma-langa | Limpopo | Total South Africa |
| 2009 | January | 1 886 | 733 | 408 | 748 | 3 368 | 1 833 | 4 502 | 2 265 | 849 | 16 592 |
| | February | 1 779 | 625 | 367 | 661 | 3 196 | 1 721 | 4 272 | 2 154 | 752 | 15 527 |
| | March | 1 995 | 691 | 404 | 739 | 3 553 | 1 936 | 4 716 | 2 442 | 875 | 17 351 |
| | April | 1 812 | 713 | 350 | 673 | 3 410 | 1 852 | 4 499 | 2 476 | 860 | 16 645 |
| | May | 1 852 | 799 | 361 | 735 | 3 583 | 2 009 | 5 270 | 2 736 | 935 | 18 280 |
| | June | 1 891 | 744 | 368 | 763 | 3 529 | 2 033 | 5 552 | 2 711 | 924 | 18 515 |
| | July | 1 942 | 789 | 398 | 825 | 3 689 | 2 188 | 6 059 | 2 841 | 975 | 19 706 |
| | August | 1 982 | 761 | 370 | 776 | 3 620 | 2 095 | 5 600 | 2 810 | 993 | 19 007 |
| | September | 1 889 | 769 | 383 | 658 | 3 515 | 2 055 | 4 923 | 2 762 | 1 045 | 17 999 |
| | October | 1 878 | 752 | 398 | 704 | 3 629 | 2 276 | 5 005 | 2 885 | 1 000 | 18 527 |
| | November | 1 837 | 761 | 402 | 739 | 3 490 | 2 221 | 4 916 | 2 717 | 942 | 18 025 |
| | December | 1 840 | 736 | 420 | 719 | 3 499 | 2 170 | 4 651 | 2 725 | 947 | 17 707 |
| | **Year** | **22 583** | **8 873** | **4 629** | **8 740** | **42 081** | **24 389** | **59 965** | **31 524** | **11 097** | **213 881** |
| | **Year to date** | **9 324** | **3 561** | **1 890** | **3 556** | **17 110** | **9 351** | **23 259** | **12 073** | **4 271** | **84 395** |
| 2010 | January | 1 932 | 780 | 404 | 751 | 3 540 | 2 182 | 4 806 | 2 845 | 991 | 18 231 |
| | February | 1 842 | 719 | 383 | 706 | 3 281 | 2 029 | 4 592 | 2 658 | 917 | 17 127 |
| | March | 2 037 | 809 | 405 | 780 | 3 629 | 2 273 | 5 086 | 2 926 | 1 032 | 18 977 |
| | April | 1 873 | 750 | 362 | 735 | 3 432 | 2 106 | 4 929 | 2 813 | 983 | 17 982 |
| | May 2/ | 1 930 | 825 | 365 | 788 | 3 551 | 2 259 | 5 411 | 3 079 | 979 | 19 187 |
| | **Year to date** | **9 614** | **3 883** | **1 919** | **3 760** | **17 433** | **10 849** | **24 824** | **14 321** | **4 902** | **91 504** |

1/ Wholesale energy 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.

**2** This statistical release reflects indices of the physical volume of electricity production on the basis of 2005=100. In accordance with international practice, the indices have to be rebased every five years to a new base year.

**3** 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 survey** **4** 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 survey** **5** 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.

**Response rate** **7** The response rate for the survey on electricity generated and available for distribution for May 2010 was 99%.

**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** **9** 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.

**10** The survey is conducted by mail, email and telephone. Information is collected from a sample of 22 electricity undertakings or establishments.

**Monthly production indices** **11** 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.

**13** 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 adjustment** **14** Seasonally adjusted estimates of all items are generated each month, using the X-11 Seasonal Adjustment Program developed by US Bureau of the Census Economic Research and Analyses Division, 1968. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly 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.

**Trend cycle** **15** The trend is the long-term pattern or movement of a time series. The X-11 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates.

**Related publications** **16** Users may also wish to refer to the following publications which are available from Stats SA -

- *Bulletin of Statistics.*
- *SA Statistics.*

**Unpublished statistics** **17** In some cases Stats SA can also make available statistics, which are not published. The statistics can be made available as computer printouts or on CD. Generally a charge is made for providing unpublished statistics.

**Rounding-off of figures** **18** 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.

**Pre-release policy** **19** Stats SA pre-release policy may be inspected at its website, www.statssa.gov.za.

## 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 2005. 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 |

## 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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