# 2016BUDGET

**ESTIMATES OF NATIONAL EXPENDITURE** 





# Estimates of National Expenditure

2016

**National Treasury** 

Republic of South Africa

24 February 2016



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The 2016 Estimates of National Expenditure e-publications are compiled with the latest available information from departmental and other sources. Some of this information is unaudited or subject to revision.

The Estimates of National Expenditure e-publications for individual votes are available on www.treasury.gov.za.

Compared to the abridged version of the 2016 ENE, the 2016 ENE e-publications contain more comprehensive coverage of goods and services, transfers and subsidies, and programme specific personnel expenditure. Budget information is also provided for the public entities that are not shown in detail in the abridged publication. The abridged version of the ENE contains one additional table at the end of a chapter that shows expenditure on infrastructure, whereas the vote ENE e-publications' additional tables also contain information on conditional grants to provinces and municipalities, public private partnerships and donor funding. Expenditure information at the level of service delivery is also included, where appropriate.

### **Foreword**

The 2016 Budget is tabled at a time when both global and domestic economic conditions continue to be difficult. Government is unwavering in its commitment to stay the course of sound fiscal management in the face of this challenging environment. The approach of using the expenditure ceiling as a fiscal anchor, which was adopted in 2012, serves us well. To achieve the fiscal adjustment necessary, the expenditure level has been reduced and further revenue enhancement measures are introduced in the 2016 MTEF period.

Over the 2016 MTEF period expenditure is R3.73 trillion and will grow at an average annual rate of 7.5 per cent. Spending growth is slower than prior to 2008, but it still remains above the projected inflation rate. During consultations in the budget preparation process trade-offs in financing different policy objectives were carefully examined and culminated in recommendations on how institutional policies, practices and organisational arrangements would be adjusted in line with the national development plan and the 2014-2019 medium term strategic framework on the one hand, and in a manner consistent with fiscal consolidation, on the other hand.

For the 2016 MTEF period, budget amendments were effected through the reprioritisation of existing funding within the lowered expenditure ceiling, with movements away from areas of lower priority to key priorities. Labour-intensive departments received substantial funding for compensation of employees, owing to spending pressures related to the 2015 public sector wage agreement. In the case of departments which historically underspend on their wage bill, the budgets for compensation of employees have been reduced accordingly. A ceiling is put on compensation of employees budgets of national departments through the 2016 Appropriation Act. Resources cannot be diverted from frontline services for the wage bill.

Further reductions have been effected on goods and services budgets. In some cases departments have been asked to provide evidence of service delivery performance before funding can be appropriated to programmes under their specific votes. These provisional allocations, pending programme viability and verifiable record of good performance, total R17.8 billion in 2018/19. Given these measures, government service delivery will not be negatively affected even as spending growth is curtailed.

The financial information and key performance indicators in the institutional budget plans set out in the Estimates of National Expenditure, provide Parliament and the public with the information to hold government accountable against its 14 outcomes, set out in its medium term strategic framework.

The budget process is ably directed by the Ministers' Committee on the Budget, supported by a devoted Medium Term Expenditure Committee of Directors-General in central government departments. As the National Treasury team we are eternally grateful for their guidance and hard work. We are also indebted to the Budget Council, the Budget Forum and our national and provincial counterparts for making what is otherwise an impossible task, seem easier. The presentation of this budget is the product of all their collective efforts.

Lungisa Fuzile

**Director-General: National Treasury** 

### Introduction

### The Estimates of National Expenditure publications

The Estimates of National Expenditure (ENE) publications provide comprehensive information on how institutions have spent their budgets in previous years, and how institutions plan to spend the resources allocated to them over the upcoming three-year medium term expenditure framework (MTEF) period. Key performance indicators are included for each national government vote and entity reporting to the same executive authority, showing what institutions aim to achieve by spending their budget allocations in a particular manner. This information is based on government's 2014-2019 medium term strategic framework (MTSF), particularly as it is expressed in institutional strategic and annual performance plans, and in annual reports. Coupled with financial information, performance information provides Parliament and the public with the necessary facts to hold government accountable against the 14 outcomes set out in the 2014-2019 medium term strategic framework.

Each chapter in the abridged 2016 ENE publication relates to a specific budget vote. A separate, more detailed, e-publication is also available for each vote. These e-publications provide more detailed information than the relevant chapter in the abridged ENE, including on goods and services, transfers and subsidies, as well as on programme specific personnel expenditure. Budget information is also provided for the public entities that are not shown in detail in the abridged publication. Each chapter in the abridged ENE publication has a summary table showing expenditure on infrastructure, whereas the vote ENE e-publications' additional tables also contain summaries of expenditure on conditional grants to provinces and municipalities, departmental public private partnerships and information on donor funding. In some e-publications more detailed information at the level of site service delivery is also included

In addition, a separate 2016 ENE Overview e-publication is also available summarising the ENE information across votes. The 2016 ENE Overview contains a narrative explanation and summary tables; a description of the budgeting approach; and it also has a write-up on how to interpret the information that is contained in each section of the publications.

## **Energy**

# National Treasury Republic of South Africa



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# Vote 26

## **Energy**

**Budget summary** 

		2016	6/17		2017/18	2018/19
		Current	Transfers and	Payments for		
R million	Total	payments	subsidies	capital assets	Total	Total
MTEF allocation						
Administration	240.1	232.9	3.2	4.1	250.5	259.2
Energy Policy and Planning	46.7	46.7	-	-	46.3	50.1
Petroleum and Petroleum Products	77.9	77.9	-	_	77.0	80.4
Regulation						
Electrification and Energy Programme	5 699.9	60.9	5 639.0	_	6 216.1	6 466.1
and Project Management						
Nuclear Energy	863.6	230.2	633.3	-	764.5	807.5
Clean Energy	616.9	90.4	526.6	_	774.6	823.1
Total expenditure estimates	7 545.2	739.0	6 802.1	4.1	8 129.0	8 486.4

Executive authority Minister of Energy
Accounting officer Director General of Energy
Website address www.energy.gov.za

The Estimates of National Expenditure e-publications for individual votes are available on www.treasury.gov.za. These publications provide more comprehensive coverage of vote specific information, particularly about goods and services, transfers and subsidies, personnel, entities, donor funding, public private partnerships, conditional grants to provinces and municipalities and expenditure information at the level of service delivery, where appropriate.

### Vote purpose

Formulate energy policies, regulatory frameworks and legislation, and oversee their implementation to ensure energy security, the promotion of environmentally friendly energy carriers, and access to affordable and reliable energy for all South Africans.

### **Mandate**

The Department of Energy is mandated to ensure the secure and sustainable provision of energy for socioeconomic development. It is to achieve this by developing an integrated energy plan for the entire energy sector, regulating energy industries, and promoting investment in accordance with the integrated resource plan (which focuses on electricity). A number of acts regulate the energy sector and reflect the legislative measures the department has instituted to govern the energy sector.

- Key among these are:
  - the National Energy Act (2008)
  - the Petroleum Products Act (1977)
  - the Electricity Regulation Act (2006).
- The National Energy Act (2008) sets out the core aspects of the department's mandate and is the enabling legislation that empowers the Minister of Energy to:
  - ensure that diverse energy resources are available in sustainable quantities and at affordable prices in the South African economy to support economic growth and poverty alleviation, while taking into account environmental considerations
  - plan for the increased generation and consumption of renewable energy, a contingency energy supply, the holding of strategic energy feedstock and carriers, adequate investment in appropriate upkeep, and access to energy infrastructure
  - collect data and information regarding energy demand, supply and generation
  - promote electricity regulation, energy research and the efficient generation and consumption of energy.

The department is also mandated to regulate the petroleum industry at the manufacturing, wholesale and retail levels, through the implementation of the Petroleum Products Act (1977). The Petroleum and Liquid Fuels

Charter is annexed to the Petroleum Products Amendment Act (2003), and outlines the department's strategy to effect the transformation of the industry.

In terms of its policy mandate, the department is working with a range of documents and legislation that support the long term vision for South Africa to use as much renewable energy as possible; create the necessary conditions to stimulate an efficient electricity market; and position South Africa to become globally competitive in the use of innovative technology for the design, manufacture and deployment of state of the art nuclear energy systems, power reactors and nuclear fuel cycle systems.

### **Selected performance indicators**

Table 26.1 Performance indicators by programme and related outcome

Indicator	Programme	Outcome		Past		Current	Projections		
	-		2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of new petroleum retail site inspections per year	Petroleum and Petroleum Products Regulation	Outcome 6: An efficient, competitive and responsive economic infrastructure network	1 500	1 945	2 070	1 500	1 500	1 500	1 500
Number of additional households electrified per year	Electrification and Energy Programme and Project Management	Outcome 9: Responsive, accountable, effective and efficient developmental local government system	166 130	292 714	233 455	260 000	240 000	255 000	260 000
Number of new bulk substations built per year	Electrification and Energy Programme and Project Management		4	2	5	4	3	3	3
Number of additional substations upgraded per year	Electrification and Energy Programme and Project Management	Outcome 6: An efficient, competitive and responsive	5	2	15	6	3	4	4
Kilometres of new medium voltage power lines constructed per year	Electrification and Energy Programme and Project Management	economic infrastructure network	275 km	370 km	440 km	100 km	90 km	95 km	100 km
Kilometres of existing medium voltage power lines upgraded per year	Electrification and Energy Programme and Project Management		200 km	283 km	12.3 km	90 km	90 km	95 km	100 km
Number of non-grid connections per year	Electrification and Energy Programme and Project Management	Outcome 9: Responsive, accountable, effective and efficient developmental local government system	9 343	14 059	14 030	20 000	20 000	25 000	25 000
Number of new operational integrated energy centres established per year	Electrification and Energy Programme and Project Management	Departmental mandate	2	2	1	1	1	1	1
Number of terawatt hours (TWh) of energy savings realised and verified from energy efficiency and demand side management projects per year	Clean Energy	Outcome 10: Protect and enhance our environmental	1.2 TWh	1.2 TWh	0.5 TWh	1.5 TWh	0.5 TWh	0.5 TWh	
Number of solar water heating units installed in residential and commercial sectors per year	Clean Energy	assets and natural resources	111 188	46 954	31 190	15 000	38 375	44 771	48 000

### **Expenditure analysis**

The national development plan envisages that by 2030 South Africa will have an adequate supply of electricity and liquid fuels to ensure the wellbeing of the economy and that economic activity is not disrupted. The plan also envisages economic growth, development and social equity through expanded access to energy services that are environmentally sustainable. In addition, the plan envisages that more than 90 per cent of the population should enjoy access to electricity by 2030. Over the medium term, the Department of Energy will focus on the security of energy resources and energy supply, including through increasing household access to electricity, increasing energy efficiency, diversifying the energy generation mix, and improving the quality and security of petroleum fuels.

### Increasing household access to electricity

The department's spending over the medium term remains largely on household electrification. Approximately 75.3 per cent of the department's budget is transferred to implementing municipalities, non-grid service providers and the state owned company Eskom for this purpose.

755 000 grid connections to households are expected to be made over the medium term, funded by earmarked allocations for the integrated national electrification programme. The programme electrifies households through grid and non-grid connections, and builds and upgrades substations and electricity networks. The department funds the programme through transfers to Eskom and municipalities in the *Electrification and Energy Programme and Project Management* programme. Transfers to municipalities are expected to increase from R1.9 billion in 2016/17 to R2.2 billion in 2018/19, and transfers to Eskom from R3.5 billion in 2016/17 to R4 billion in 2018/19.

The cost of electrification connections is expected to increase over the medium term as the integrated national electrification programme shifts to deep rural areas, requiring more expensive hardware and covering larger geographic areas. Spending on electrification infrastructure, budgeted for in the *Integrated National Electrification Programme* subprogramme in the *Electrification and Energy Programme and Project Management* programme, is expected to increase to R6.4 billion by 2018/19.

Non-grid electrification projects, mainly solar energy, will be extended countrywide. The projects will be implemented in any areas where extending the grid would not be cost-effective, and not only, as previously, in concessionary areas (low density and low consumption households where non-grid service providers have been given concessions to provide solar home systems). 70 000 non-grid connections to households are expected to be made over the medium term, with spending on non-grid electrification projects expected to increase from R166.4 million in 2016/17 to R201.6 million in 2018/19 in the *Integrated National Electrification Programme* subprogramme. Increased funding of R10.9 million over the medium term in the *Integrated National Electrification Programme* subprogramme is for the oversight, monitoring and evaluation of non-grid electrification.

### **Increasing energy efficiency**

Targets for installing solar water heaters had not been met due to delays in finalising the implementing contract with Eskom and the local content verification outcomes projected by the South African Bureau of Standards. The solar water heaters programme will now be managed by the Department of Energy. Spending of R1.2 billion over the medium term on 131 146 solar water heaters is projected. The budget for solar water heater service providers is in the *Energy Efficiency* subprogramme of the *Clean Energy* programme and is expected to grow at an average annual rate of 49.8 per cent over the medium term. The high growth rate can be attributed to the low base in 2015/16, due to slow spending at the inception of the project. Spending on agency and support services in the *Clean Energy* programme is expected to grow at an average annual rate of 46.9 per cent over the medium term to pay for services such as the transportation and warehousing of solar water heating systems.

The department's energy efficiency and demand side management conditional grant provides subsidies to municipalities to reduce energy consumption and increase energy efficiency through efficient public lighting and the retrofitting of energy efficient technologies in municipal buildings. Subsidies totalling R603.9 million over the medium term will be transferred to municipalities. Energy savings of approximately 0.5 TWh per year are projected.

### Diversifying the energy generation mix

In line with the 2010-2030 integrated resource plan, the department will pursue a balanced energy mix that includes clean and renewable resources, thus meeting the needs of South Africa's growing economy without compromising government's commitment to sustainable development. The department aims to expand both traditional and green energy, including safe and environmentally sustainable nuclear energy.

The department is developing a gas utilisation master plan, which will take a 30-year view of the gas industry from a regulatory, economic and social perspective. The integrated resource plan targets new gas fired power generation capacity, plus the supply of gas for converting gas to liquid petroleum products at the plant of the state owned company, the Mossel Bay Petroleum Oil and Gas Corporation of South Africa. The department has

designed a programme to procure 3 126 megawatts (MW) of electricity produced from gas from selected providers, and a request for information for gas to electricity is expected to be released by the end of April 2016.

The Department of Energy, National Treasury and the Development Bank of Southern Africa established the independent power producer procurement programme at the end of 2010 to secure electrical energy generated from renewable and non-renewable sources from the private sector. The programme is designed to be selffunding through revenue derived from development fees paid by bidders and investors. As at 31 December 2015, the department has procured 6 377 MW of renewable energy through the programme and connected 44 projects with a capacity of 2 021 MW to the national grid. The energy contribution of independent power producers is expected to grow to approximately 7 000 MW with the first 47 renewable energy independent power producers fully operational by mid 2016. Private investment in the programme currently exceeds R194 billion. The programme also seeks to procure energy from small scale independent power producers, with projects that generate between 1 MW and 5 MWof energy from solar, wind, biomass and landfill gas projects.

Additional funding of R200 million in the *Nuclear Energy* programme is made available in 2016/17 for a transactional advisors and consulting services for the new nuclear build programme. The advisors will assist with the call for proposals for procuring nuclear energy and provide transactional advice to the department as a procuring agent for the new nuclear build programme.

### Improving the quality and security of petroleum fuels

The department plans to undertake 4 500 inspections of petroleum retail sites to ensure that petroleum fuel meets regulated quality standards. Spending on inspections is projected at R235.3 million over the medium term in the Petroleum and Petroleum Products Regulation programme.

The department is currently reviewing the proposed biofuels subsidy models and addressing related concerns about food security.

### **Expenditure trends**

Table 26.2 Vote expenditure trends by programme and economic classification

Р	ro	gr	an	nr	ne	es
•	•	•	•	•		

- 2. Energy Policy and Planning
- 3. Petroleum and Petroleum Products Regulation
- 4. Electrification and Energy Programme and Project Management
- 5. Nuclear Energy
- 6. Clean Energy

Programme	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Audited outcome	Annual budget	Adjusted appropriation	Revised estimate	Outcome/Annual budget Average (%)	Outcome/Adjusted appropriation Average (%)
R million	2	012/13			2013/14			2014/15			2015/16		2012/13 -	2015/16
Programme 1	181.7	242.4	216.8	221.0	219.6	232.6	244.1	257.3	257.2	242.6	246.6	268.4	109.6%	100.9%
Programme 2	1 548.6	1 570.2	1 545.3	51.2	47.2	47.8	52.6	57.6	41.7	45.1	44.1	36.0	98.4%	97.2%
Programme 3	15.7	18.5	44.4	49.7	68.8	25.8	82.7	84.5	64.5	74.4	73.4	70.6	92.3%	83.7%
Programme 4	3 158.1	3 170.0	3 116.0	3 942.8	3 952.5	3 958.5	4 199.2	4 208.6	4 181.0	5 778.3	5 813.8	5 811.4	99.9%	99.5%
Programme 5	598.4	643.0	643.2	710.0	708.8	722.5	850.5	843.8	845.4	654.4	653.9	644.6	101.5%	100.2%
Programme 6	1 303.4	1 090.3	1 093.3	1 623.6	1 506.3	1 489.9	1 986.5	1 986.0	830.3	687.3	435.8	426.9	68.6%	76.5%
Total	6 805.9	6 734.5	6 659.0	6 598.2	6 503.2	6 477.1	7 415.6	7 437.8	6 220.1	7 482.1	7 267.6	7 257.9	94.0%	95.2%
Change to 2015 Budget estimate		_			•			_			(214.5)			

Table 26.2 Vote expenditure trends by programme and economic classification

Table 26.2 Vote expenditure trends by programme and economic classification														
Economic classification							ţ						- u	pa
	Annual budget	Adjusted appropriation	Audited	Annual budget	Adjusted appropriation	Audited	Annual budget	Adjusted appropriation	Audited	Annual budget	Adjusted appropriation	Revised estimate	Outcome/Annual budget Average (%)	Outcome/Adjusted appropriation Average (%)
	Ann	appr	4 9	Annı	Acappr	4 9	Ann	Acappr	4 9	Ann	Acappr	æ &	Outco	Jutcon appr A
R million		2012/13			2013/14			2014/15			2015/16		2012/13 -	
Current payments	307.3	417.7	371.7	468.8	460.3	414.8	518.3	530.7	473.6	492.6	508.8	509.5	99.0%	92.3%
Compensation of employees	196.3	207.4	201.5	247.6	242.6	228.5	291.9	286.0	264.3	289.5	289.5	292.7	96.3%	96.2%
Goods and services	111.0	210.3	170.2	221.3	217.7	186.2	226.4	244.7	209.3	203.1	219.3	216.9	102.7%	87.7%
of which: Administrative fees	2.8	2.2	2.3	3.0	3.0	4.0	3.0	3.7	4.5	3.9	4.0	4.7	122.4%	120.5%
Advertising	3.6	4.2	3.5	8.1	8.0	16.0	7.7	10.3	8.7	12.3	9.6	10.2	120.4%	119.4%
Minor assets	0.3	2.3	0.1	2.4	2.8	0.4	6.0	6.1	0.4	4.1	3.2	2.0	21.9%	19.8%
Audit costs: External	2.3 0.0	7.3 0.7	4.8 0.8	2.5 1.0	2.5 1.6	4.5 0.7	3.1 0.9	3.1 0.9	3.6 0.8	3.6 0.9	3.6 0.9	5.5 0.3	159.2% 90.6%	111.3% 63.1%
Bursaries: Employees Catering: Departmental	1.4	1.0	1.5	1.0	1.0 1.7	2.6	2.0	2.0	1.0	2.5	2.2	1.4	86.0%	95.7%
activities				***	•••	2.0	2.0	2.0		2.0			00.070	00.170
Communication	6.2	6.1	6.5	7.2	7.2	6.9	9.7	10.1	7.8	7.2	6.7	7.5	94.7%	95.7%
Computer services Consultants: Business and	2.6 6.0	3.4 61.2	7.4 15.4	13.5 18.4	8.8 17.9	8.0 25.4	7.2 34.9	7.2 43.1	10.3 43.8	7.1 46.8	10.5 58.5	10.4 45.1	118.8% 122.2%	120.4% 71.7%
advisory services	0.0	01.2	10.4	10.4	17.9	20.4	34.9	43.1	43.0	40.0	30.0	40.1	122.270	11.170
Infrastructure and planning	_	_	_	1.8	1.8	_	_	_	_	_	_	_	_	_
services														
Laboratory services Legal services	_	- 4.5	- 4.4	4.0	4.0	0.5	0.5	1.5 1.8	0.8	0.5	0.5	0.7	684.6%	95.8%
Science and technological	_	<b>4.</b> 0	-	_	_	-	-	2.5	-	-	-	-	-	30.070
services														
Contractors	1.2	3.7	3.7	1.6	2.6	2.0	1.8	0.2	1.7	1.4	3.0	2.5	166.5%	105.0%
Agency and support/outsourced services	1.0	1.0	0.4	10.4	10.0	1.0	2.5	0.9	0.3	0.8	5.2	5.0	45.2%	38.9%
Entertainment	0.0	0.0	0.1	0.1	0.1	0.1	0.2	_	0.0	0.6	0.1	0.1	23.7%	76.5%
Fleet services (including	-	-	0.2	-	-	0.3	0.7	0.0	1.1	0.7	0.6	0.6	160.1%	345.4%
government motor transport)		_			_	_	0.0		_	0.3				
Inventory: Clothing material and accessories	_	_	_	_	_	_	0.0	_	-	0.3	_	-	_	-
Inventory: Learner and teacher	0.3	0.3	0.0	0.3	0.3	_	_	_	-	_	_	-	0.3%	0.3%
support material		0.5	0.0										20.50/	0.4.50/
Inventory: Materials and supplies	0.3	0.5	0.2	0.2	0.2	-	0.0	0.0	-	0.0	-	-	38.5%	31.5%
Inventory: Other supplies	_	_	0.5	_	0.3	_	0.3	0.3	_	0.1	0.1	0.1	150.1%	85.5%
Consumable supplies	0.3	0.3	_	0.3	0.0	0.8	0.8	0.8	1.6	2.1	2.0	1.8	116.6%	128.2%
Consumables: Stationery,	3.4	3.1	2.5	5.2	5.2	3.9	4.0	4.3	4.1	4.6	5.9	4.7	87.7%	82.1%
printing and office supplies Operating leases	41.3	49.8	28.6	41.3	36.7	26.7	36.9	36.2	27.1	36.1	29.1	30.6	72.6%	74.5%
Rental and hiring	-	_	0.0	-	-	0.0	0.4	3.4	0.0	0.4	0.2	0.0	10.2%	2.4%
Property payments	0.2	14.0	20.2	0.2	0.6	6.2	2.3	4.2	3.8	0.0	5.1	3.5	1 244.0%	140.9%
Transport provided: Departmental activity	_	-	-	3.8	3.8	0.3	4.2	61.3	0.0	3.1	2.5	2.3	23.2%	3.8%
Travel and subsistence	31.6	28.0	37.0	61.2	62.9	58.0	57.8	4.4	56.3	45.1	43.2	54.2	105.1%	148.6%
Training and development	0.6	1.2	2.1	0.3	1.2	4.0	5.2	6.9	5.7	4.3	4.4	4.4	155.4%	119.0%
Operating payments	1.6	10.0	24.0	5.5	5.9	2.8	6.7	29.2	6.2	5.4	6.6	6.1	204.5%	75.6%
Venues and facilities Transfers and subsidies	4.1 6 493.6	5.7 6 304.8	4.2 <b>6 276.7</b>	27.2 <b>6 124.2</b>	28.5 <b>6 034.3</b>	11.1 6 050.6	27.3 <b>6 892.1</b>	0.4 6 901.9	19.7 <b>5 742.7</b>	9.1 <b>6 985.5</b>	11.9 <b>6 754.8</b>	13.3 <b>6 743.8</b>	71.5% 93.7%	104.0% <b>95.5%</b>
Provinces and municipalities	1 351.4		1 351.4	1 815.5	1 815.5	1 815.5	1 241.6	1 241.6	1 241.6	2 158.2	2 158.2	2 158.2	100.0%	100.0%
Departmental agencies and	81.0	99.0	99.0	202.5	202.5	202.5	196.4	197.3	197.2	87.3	87.1	87.1	103.3%	100.0%
accounts Foreign governments and	_	_	_	13.6	13.6	38.9	12.1	12.1	21.3	16.6	19.6	19.0	187.5%	175.0%
international organisations	_	_	_	10.0	10.0	30.3	12.1	12.1	21.0	10.0	13.0	13.0	107.570	17 3.0 /0
Public corporations and private	5 060.7	4 854.0	4 825.9	4 092.3	4 002.3	3 993.4	5 441.7	5 450.6	4 278.7	4 723.0	4 489.5	4 476.7	91.0%	93.5%
enterprises	0.4	0.4	0.3	0.4	0.4	0.2	0.4	0.4	4.0	0.4	0.4	0.7	ADE 40/	AOF 40/
Households Payments for capital assets	0.4 <b>5.1</b>	0.4 <b>11.9</b>	0.3 <b>10.6</b>	0.4 <b>5.2</b>	0.4 <b>8.7</b>	0.3 <b>11.7</b>	0.4 <b>5.2</b>	0.4 <b>5.2</b>	4.0 <b>3.8</b>	0.4 <b>4.0</b>	0.4 <b>4.0</b>	2.7 <b>4.6</b>	485.1% <b>157.5%</b>	485.1% <b>102.6%</b>
Machinery and equipment	5.1	10.6	9.9	5.2	8.7	11.3	5.2	5.2	3.8	4.0	4.0	4.6	152.5%	104.0%
Software and other intangible	_	1.3	0.6	-	-	0.3	-	-	-	-	-	-	-	71.9%
assets	6 905 0	6 724 5	6 650 O	6 500 2	6 502 2	6 477 4	7 //45 6	7 /27 0	6 220 4	7 402 4	7 267 6	7 257 0	04.00/	QE 20/
Total	6 805.9	บ / 34.3	6 659.0	6 598.2	6 503.2	6 477.1	7 415.6	7 437.8	6 220.1	7 482.1	7 267.6	7 257.9	94.0%	95.2%

### **Expenditure estimates**

### Table 26.3 Vote expenditure estimates by programme and economic classification

- Programmes

  1. Administration
  2. Energy Policy and Planning
  3. Petroleum and Petroleum Products Regulation
  4. Electrification and Energy Programme and Project Management
  5. Nuclear Energy
  6. Clean Energy
  Programme

Programme		Average	Expenditure/				Average	Expenditure/
	Revised	growth	Total: Average				growth	Total: Average
	estimate	rate (%)	Average (%)	Medium-ter	rm expenditure estimat	<u> </u>	rate (%)	Average (%)
R million	2015/16	2012/13 -		2016/17	2017/18	2018/19	2015/16 - 2	
Programme 1	268.4	3.4%	3.7%	240.1	250.5	259.2	-1.2%	3.2%
Programme 2	36.0	-71.6%	6.3%	46.7	46.3	50.1	11.6%	0.6%
Programme 3	70.6	56.1%	0.8%	77.9	77.0	80.4	4.4%	1.0%
Programme 4	5 811.4	22.4%	64.1%	5 699.9	6 216.1	6 466.1	3.6%	77.0%
Programme 5	644.6	0.1%	10.7%	863.6	764.5	807.5	7.8%	9.8%
Programme 6	426.9	-26.8%	14.4%	616.9	774.6	823.1	24.5%	8.4%
Total	7 257.9	2.5%	100.0%	7 545.2	8 129.0	8 486.4	5.4%	100.0%
Change to 2015	(224.2)			(149.8)	(205.4)	(331.3)		
Budget estimate	. ,					` ′		
Economic classification								
Current payments	509.5	6.8%	6.6%	739.0	566.2	595.8	5.4%	7.7%
Compensation of employees	292.7	12.2%	3.7%	310.8	314.1	327.5	3.8%	4.0%
Goods and services	216.9	1.0%	2.9%	428.2	252.1	268.3	7.4%	3.7%
of which:								
Administrative fees	4.7	29.5%	0.1%	3.5	3.7	3.8	-6.9%	0.0%
Advertising	10.2	34.4%	0.1%	7.6	7.9	8.1	-7.4%	0.1%
Minor assets	2.0	-5.0%	0.0%	3.2	4.1	4.3	30.1%	0.0%
Audit costs: External	5.5	-8.8%	0.1%	3.9	4.8	4.2	-8.6%	0.1%
Bursaries: Employees	0.3	-25.8%	0.0%	0.8	0.8	0.8	44.2%	0.0%
Catering: Departmental activities	1.4	13.8%	0.0%	2.1	2.2	2.4	18.1%	0.0%
Communication	7.5	7.1%	0.1%	6.0	6.1	6.4	-5.3%	0.1%
Computer services	10.4	44.7%	0.1%	6.3	6.6	7.0	-12.5%	0.1%
Consultants: Business and advisory	45.1	-9.7%	0.5%	283.5	99.7	109.5	34.4%	1.7%
services								
Legal services	0.7	-45.8%	0.0%	0.4	0.5	0.5	-12.0%	0.0%
Contractors	2.5	-12.6%	0.0%	1.4	1.5	1.5	-14.6%	0.0%
Agency and support/outsourced	5.0	72.3%	0.0%	7.9	9.9	10.3	27.4%	0.1%
services								
Entertainment	0.1	24.4%	0.0%	0.2	0.2	0.2	44.2%	0.0%
Fleet services (including government	0.6	-	0.0%	0.7	0.7	0.7	3.7%	0.0%
motor transport)								
Inventory: Other supplies	0.1	75.00/	0.0%	_	-	-	-100.0%	0.0%
Consumable supplies	1.8	75.9%	0.0%	2.3	2.7	2.9	17.8%	0.0%
Consumables: Stationery, printing	4.7	14.4%	0.1%	4.0	4.1	4.3	-2.8%	0.1%
and office supplies	00.0	4400/	0.404	20.0	24.4	20.4	5.00/	0.404
Operating leases	30.6	-14.9%	0.4%	32.8	34.1	36.1	5.6%	0.4%
Rental and hiring	0.0	20.00/	0.0%	0.4	0.4	0.4	132.0%	0.0%
Property payments	3.5	-36.8%	0.1%	0.8	0.8	0.8	-38.7%	0.0%
Transport provided: Departmental	2.3	_	0.0%	-	-	-	-100.0%	0.0%
activity Traval and subsistence	54.2	24.7%	0.8%	42.7	42.9	44.4	-6.4%	0.6%
Travel and subsistence Training and development	4.4	56.6%	0.6%	3.9	42.9 4.0	4.2	-0.4% -1.7%	0.6%
	6.1	-15.1%	0.1%	5.2	5.5	5.7	-2.1%	0.1%
Operating payments Venues and facilities	13.3	32.4%	0.1%	8.8	9.1	9.8	-2.1% -9.7%	0.1%
Transfers and subsidies	6 743.8	2.3%	93.2%	6 802.1	7 558.4	7 886.0	5.4%	92.3%
Provinces and municipalities	2 158.2	16.9%	24.7%	2 131.9	2 290.3	2 419.5	3.9%	28.6%
Departmental agencies and accounts	87.1	-4.2%	2.2%	38.2	99.4	105.2	6.5%	1.1%
Foreign governments and	19.0	-4.Z /0	0.3%	36.2 17.4	17.9	18.9	-0.1%	0.2%
international organisations	10.0	_	0.576	17.4	11.3	10.3	-0.170	0.2 /0
Public corporations and private	4 476.7	-2.7%	66.0%	4 612.4	5 148.4	5 341.9	6.1%	62.3%
enterprises	7 710.1	-2.1 70	00.0 /0	4012.4	0 140.4	J J41.3	0.176	02.3 /0
Households	2.7	92.9%	0.0%	2.2	2.4	0.5	-44.5%	0.0%
Payments for capital assets	4.6	-27.3%	0.1%	4.1	4.3	4.6	-0.1%	0.0%
Machinery and equipment	4.6	-24.4%	0.1%	4.1	4.3	4.6	-0.1%	0.1%
Total	7 257.9	2.5%	100.0%	7 545.2	8 129.0	8 486.4	5.4%	100.0%
Total	1 431.3	Z.J <sup>7</sup> /0	100.0 /0	/ J4J.Z	0 123.0	0 400.4	J. <del>4</del> /0	100.0 /0

### **Personnel information**

Table 26.4 Vote personnel numbers and cost by salary level and programme<sup>1</sup> prior to Cabinet approved reduction, effective from 2017/182; budget reductions and aggregate baseline total

- Programmes
  1. Administration
- 2. Energy Policy and Planning
- 3. Petroleum and Petroleum Products Regulation
- Electrification and Energy Programme and Project Management
   Nuclear Energy
- 6. Clean Energy

o. Oldan Endig	Numl	ber of posts mated for																	
	31 N	larch 2016			Numl	er and co	st <sup>3</sup> of per	sonnel <sub>l</sub>	oosts filled	l / planne	d for or	n funded es	tablishr	nent				Number	
	Number	Number of					-			-								Average	Salary
	of	posts																growth	level/Total:
	funded	additional																rate	Average
	posts	to the	_	Actual			sed estin	nate			Medit	ım-term ex	•	e estir				(%)	(%)
		establishment	2	2014/15	11.24	2	015/16	11.24	2	016/17	11.34	2	017/18	11.24	20	18/19	11.24	2015/16 -	2018/19
Faces.			Number	Cost	Unit	Number	Cost	Unit	Number	Cost	Unit Cost	Number	Cost	Unit	Number		Unit		
Energy Salary level	622	_	583	264.3	Cost 0.5	585	292.7	Cost 0.5	561	310.8	0.6	570	338.7	Cost 0.6	585	Cost (	0.6		100.0%
1 – 6	122	-	141	26.7	0.3	126	27.3	0.3	110	26.3	0.0	110	27.8	0.3	113	30.0	0.3	-3.6%	19.9%
7 – 10	290	_	267	95.3	0.4	270	102.9	0.4	269	117.7	0.4	274	127.0	0.5	281	137.0	0.5	1.3%	47.5%
11 – 12	104	_	95	62.8	0.7	99	66.2	0.7	98	71.7	0.7	99	77.4	0.8	102	84.6	0.8	1.0%	17.3%
13 – 16	104	_	78	75.4	1.0	88	92.3	1.0	82	91.2	1.1	85	102.4	1.2	87	110.6	1.3	-0.4%	14.9%
Other	2	_	2	4.1	2.0	2	4.1	2.0	2	3.9	1.9	2	4.1	2.1	2	4.3	2.1	-0.470	0.3%
Programme	622	_	583	264.3	0.5	585	292.7	0.5	561	310.8	0.6	570	338.7	0.6	585	366.5	0.6	_	100.0%
Programme 1	327	_	290	131.5	0.5	292	136.4	0.5	273	136.8	0.5	280	151.3	0.5	285	161.3	0.6	-0.8%	49.1%
Programme 2	59	_	52	28.8	0.6	50	31.7	0.6	50	34.8	0.7	50	37.1	0.7	54	42.5	0.8	2.6%	8.9%
Programme 3	103	_	117	41.9	0.4	118	51.7	0.4	113	56.8	0.5	113	60.4	0.5	117	65.9	0.6	-0.3%	20.0%
Programme 4	69	_	78	36.2	0.5	74	41.9	0.6	73	45.7	0.6	74	49.5	0.7	75	53.4	0.7	0.4%	12.9%
Programme 5	34	_	23	13.4	0.6	27	16.7	0.6	27	19.4	0.7	28	22.1	0.8	28	23.3	0.8	1.2%	4.8%
Programme 6	30	_	23	12.4	0.5	24	14.3	0.6	25	17.3	0.7	25	18.4	0.7	26	20.1	0.8	2.7%	4.3%
Reduction	-	-	_	_	-	_	_	-	_	_	-	_	(24.6)	-	-	(39.0)	_	-	_
Total	622	ı	583	264.3	0.5	585	292.7	0.5	561	310.8	0.6	-	314.1	-	-	327.5	-	-	-

<sup>1.</sup> Data has been provided by the department and may not necessarily reconcile with official government personnel data.

### **Departmental receipts**

Table 26.5 Departmental receipts by economic classification

						Average	Receipt item/				Average	Receipt item/
						growth	Total:				growth	Total:
				Adjusted	Revised	rate	Average				rate	Average
		lited outco		estimate	estimate	(%)	(%)		erm receipts e	estimate	(%)	(%)
R thousand	2012/13	2013/14	2014/15		5/16	i	3 - 2015/16	2016/17	2017/18	2018/19		6 - 2018/19
Departmental receipts	2 516	6 472	5 277	3 950	4 381	20.3%	4.2%	4 840	5 004	5 190	5.8%	100.0%
Sales of goods and services												
produced by department	2 296	2 758	3 132	2 849	2 849	7.5%	2.5%	3 353	3 508	3 684	8.9%	69.0%
Sales by market establishments	233	132	139	140	140	-15.6%	0.1%	143	146	149	2.1%	3.0%
of which:												
Sales by market establishment:	233	132	139	140	140	-15.6%	0.1%	143	146	149	2.1%	3.0%
parking												
Administrative fees	2 056	2 536	2 896	2 601	2 601	8.2%	2.3%	3 100	3 250	3 420	9.6%	63.7%
of which:												
Administrative fees: petroleum	2 056	2 536	2 896	2 601	2 601	8.2%	2.3%	3 100	3 250	3 420	9.6%	63.7%
license fees												
Other sales	7	90	97	108	108	148.9%	0.1%	110	112	115	2.1%	2.3%
of which:												
Other sales: garnishee, photocopy,	7	90	97	108	108	148.9%	0.1%	110	112	115	2.1%	2.3%
faxes												
Sales of scrap, waste, arms and	1	2	1	2	2	26.0%	-	2	2	2	-	_
other used current goods												
of which:												
Sales: Waste paper	1	2	1	2	2	26.0%	-	2	2	2	-	-
Transfers received	-	3 270	1 587	513	944	-	1.3%	1 000	1 000	1 000	1.9%	20.3%
Interest, dividends and rent on	85	24	47	28	28	-30.9%	-	29	29	30	2.3%	0.6%
land												
Interest	85	24	47	28	28	-30.9%	-	29	29	30	2.3%	0.6%
Sales of capital assets	-	-	-	111	111	-	-	_	_	-	-100.0%	0.6%
Transactions in financial assets	134	418	510	447	447	49.4%	0.3%	456	465	474	2.0%	9.5%
and liabilities												
National Revenue Fund receipts	387 618	37 000	-	-	_	-100.0%	95.8%	_	_	-	-	_
of which:												
Electricity Distribution Industry	387 618	37 000	_	_	_	-100.0%	95.8%	_	_	-	_	_
Holdings												
Total	390 134	43 472	5 277	3 950	4 381	-77.6%	100.0%	4 840	5 004	5 190	5.8%	100.0%

<sup>2.</sup> The department's compensation of employees budget has been reduced by R63.6 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

<sup>3.</sup> Rand million.

### **Programme 1: Administration**

### **Programme purpose**

Provide strategic leadership, management and support services to the department.

### **Expenditure trends and estimates**

Table 26.6 Administration expenditure trends and estimates by subprogramme and economic classification

Subprogramme						Expen-					Expen-
					Average	diture/				Average	diture/
					growth	Total:				growth	Total:
				Adjusted	rate	Average	Medium	n-term expend	liture	rate	Average
_		dited outcome		appropriation	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13		2016/17	2017/18	2018/19		2018/19
Ministry	20 843	35 536	41 767	27 308	9.4%	13.2%	27 045	28 332	29 797	3.0%	11.3%
Departmental Management	36 483	43 271	45 787	52 092	12.6%	18.6%	52 273	59 268	62 995	6.5%	22.7%
Finance Administration	53 152	27 204	29 390	34 292	-13.6%	15.1%	34 389	34 672	36 363	2.0%	14.0%
Audit Services	5 863	4 564	6 754	7 727	9.6%	2.6%	7 845	7 720	7 883	0.7%	3.1%
Corporate Services	74 818	121 983	109 053	94 678	8.2%	42.0%	86 524	87 215	86 917	-2.8%	35.7%
Office Accommodation	25 617		24 417	30 501	6.0%	8.4%	32 061	33 311	35 243	4.9%	13.2%
Total	216 776	232 558	257 168	246 598	4.4%	100.0%	240 137	250 518	259 198	1.7%	100.0%
Change to 2015				4 000			(5 415)	(7 511)	(13 796)		
Budget estimate											
Economic classification											
Current payments	206 014	221 076	248 394	241 411	5.4%	96.2%	232 858	242 732	253 058	1.6%	97.4%
Compensation of employees	92 876	112 636	131 521	131 214	12.2%	49.1%	136 792	143 141	148 570	4.2%	56.2%
Goods and services	113 138	108 440	116 873	110 197	-0.9%	47.1%	96 066	99 591	104 488	-1.8%	41.2%
of which:											,
Administrative fees	1 335	1 803	2 111	1 809	10.7%	0.7%	1 708	1 819	1 877	1.2%	0.7%
Advertising	1 089	5 707	6 062	4 077	55.3%	1.8%	3 228	3 282	3 430	-5.6%	1.4%
Minor assets	124	380	360	1 757	142.0%	0.3%	2 456	2 571	2 696	15.3%	1.0%
Audit costs: External	4 781	4 460	3 578	3 552	-9.4%	1.7%	3 872	4 029	4 209	5.8%	1.6%
Bursaries: Employees	793	696	761	853	2.5%	0.3%	755	785	821	-1.3%	0.3%
Catering: Departmental activities	663	610	392	575	-4.6%	0.2%	572	633	698	6.7%	0.2%
Communication	5 016	5 375	6 352	4 105	-6.5%	2.2%	3 581	3 693	3 857	-2.1%	1.5%
Computer services	7 427	7 397	10 204	10 208	11.2%	3.7%	5 979	6 223	6 509	-13.9%	2.9%
Consultants: Business and advisory	4 638	3 511	5 103	4 327	-2.3%	1.8%	4 883	5 051	5 334	7.2%	2.0%
services	4.074	504	0.47	450	FO 40/	0.00/	440	450	400	0.00/	0.00/
Legal services	4 374	504	647	450	-53.1%	0.6%	448	458	490	2.9% -21.2%	0.2% 0.7%
Contractors Agency and support/outsourced services	3 020 355	1 911 995	1 461 270	2 913 2 156	-1.2% 82.4%	1.0% 0.4%	1 254 727	1 333 751	1 423 779	-21.2%	0.7%
Entertainment	57	67	22	131	32.0%	0.4%	152	174	207	16.5%	0.4%
Fleet services (including government motor	162	301	951	459	41.5%	0.2%	462	489	514	3.8%	0.1%
transport)	102	001	301	400	41.070	0.270	402	400	014	0.070	0.270
Inventory: Fuel, oil and gas	20	_	_	_	-100.0%	_	_	_	_	_	_
Inventory: Learner and teacher support	1	_	_	_	-100.0%	_	_	_	_	_	_
material											
Inventory: Materials and supplies	228	-	-	-	-100.0%	-		-	-	-	-
Inventory: Other supplies	384	-	-	-	-100.0%	-		-	-	-	-
Consumable supplies	-	597	1 219	1 378	-	0.3%	1 627	1 922	2 100	15.1%	0.7%
Consumables: Stationery, printing and	2 110	3 273	3 542	4 768	31.2%	1.4%	2 868	2 932	3 063	-13.7%	1.4%
office supplies											
Operating leases	28 575	26 297	26 737	29 004	0.5%	11.6%	32 782	34 080	36 097	7.6%	13.2%
Rental and hiring	20.447	28	2.040	145	20.70/	2.70/	314	328	342	33.1%	0.1%
Property payments	20 147	6 181	3 849 1	5 100	-36.7%	3.7%	-	-	_	-100.0%	0.5%
Transport provided: Departmental activity Travel and subsistence	19 331	90 29 872	27 842	21 803	4.1%	10.4%	19 584	19 987	20 265	-2.4%	8.2%
Training and development	1 396	3 077	5 636	4 399	46.6%	1.5%	3 784	3 925	4 086	-2.4%	1.6%
Operating payments	5 176	1 939	2 212	3 103	-15.7%	1.3%	2 272	2 424	2 564	-6.2%	1.0%
Venues and facilities	1 936	3 369	7 561	3 125	17.3%	1.7%	2 758	2 702	3 127	-0.270	1.2%
Transfers and subsidies	179	170	5 007	1 180	87.5%	0.7%	3 184	3 459	1 562	9.8%	0.9%
Departmental agencies and accounts	-		812	792	-	0.2%	985	1 047	1 108	11.8%	0.4%
Foreign governments and international	_	_	282	-	_	- 0.270	-	-			-
organisations			<b>-</b>								
Households	179	170	3 913	388	29.4%	0.5%	2 199	2 412	454	5.4%	0.5%
Payments for capital assets	10 548	11 312	3 763	4 007	-27.6%	3.1%	4 095	4 327	4 578	4.5%	1.7%
Machinery and equipment	9 933	11 312	3 763	4 007	-26.1%	3.0%	4 095	4 327	4 578	4.5%	1.7%
Software and other intangible assets	615		-		-100.0%	0.1%					_
Payments for financial assets	35	_	4		-100.0%	-	-				
Total	216 776	232 558	257 168	246 598	4.4%	100.0%	240 137	250 518	259 198	1.7%	100.0%
Proportion of total programme	3.3%	3.6%	4.1%	3.4%	-	-	3.2%	3.1%	3.1%	-	-
expenditure to vote expenditure											

Table 26.6 Administration expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies						Expen-					Expen-
					Average	diture/				Average	diture/
					growth	Total:				growth	Total:
				Adjusted	rate	Average	Mediun	n-term expend	liture	rate	Average
	Audit	ed outcome		appropriation	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13	- 2015/16	2016/17	2017/18	2018/19	2015/16	- 2018/19
Households											
Other transfers to households											
Current	4	_	701	55	139.6%	0.1%	1 848	2 044	65	5.7%	0.4%
Employee ex-gratia payments	4	-	701	55	139.6%	0.1%	58	61	65	5.7%	-
Bursaries: Non-employees	-	_	_	_	-	-	1 790	1 983	-	-	0.4%
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	-	-	812	792	-	0.2%	985	1 047	1 108	11.8%	0.4%
Energy and Water Sector Education and Training Authority	-	-	812	792	-	0.2%	985	1 047	1 108	11.8%	0.4%
Households											
Social benefits											
Current	175	170	3 212	333	23.9%	0.4%	351	368	389	5.3%	0.1%
Employee social benefits	175	170	3 212	333	23.9%	0.4%	351	368	389	5.3%	0.1%
Foreign governments and international organisations	-										
Current	_	_	282	_	_	_	_	_	_	-	_
International Energy Forum	_	_	282	_	_	-	_	_	-	-	-

### Personnel information

Table 26.7 Administration personnel numbers and cost by salary level<sup>1</sup> prior to Cabinet approved reduction, effective from 2017/18<sup>2</sup>: budget reductions and aggregate baseline total

		per of posts																	
		mated for																	
		larch 2016			Nui	mber and o	cost <sup>3</sup> of	nerso	nnel posts	filled /	nlanne	ed for on f	unded e	stabli	shment			Nu	mber
	Number	Number of						po.00	o. pooto		p	,						Average	Salary
	of	posts																-	level/Total:
	funded	additional																rate	Average
	posts	to the		Actual		Revis	ed esti	mate			Mediu	ım-term ex	cpendit	ure est	imate			(%)	(%)
		establishment	2	014/15		20	015/16		20	16/17		20	017/18		20	18/19			- 2018/19
	i i				Unit			Unit			Unit			Unit			Unit		
Administrati	on		Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary level	327	_	290	131.5	0.5	292	136.4	0.5	273	136.8	0.5	280	151.3	0.5	285	161.3	0.6	-0.8%	100.0%
1 – 6	117	_	89	17.8	0.2	89	19.8	0.2	78	18.9	0.2	78	19.9	0.3	81	21.8	0.3	-3.1%	28.8%
7 – 10	128	_	124	45.0	0.4	124	44.4	0.4	122	49.1	0.4	127	54.2	0.4	129	57.7	0.4	1.3%	44.4%
11 – 12	37	-	39	25.8	0.7	40	26.4	0.7	39	27.9	0.7	39	29.9	0.8	39	31.7	0.8	-0.8%	13.9%
13 – 16	43	-	36	38.8	1.1	37	41.8	1.1	32	37.0	1.2	34	43.2	1.3	34	45.7	1.3	-2.8%	12.1%
Other	2	-	2	4.1	2.0	2	4.1	2.0	2	3.9	1.9	2	4.1	2.1	2	4.3	2.1	_	0.7%
Reduction	_	_	_	-	_	_	-	-	_	-	_	_	(8.2)	-	_	(12.7)	_	_	_
Total	327	_	290	131.5	0.5	292	136.4	0.5	273	136.8	0.5	_	143.1	_	_	148.6	_	_	_

<sup>1.</sup> Data has been provided by the department and may not necessarily reconcile with official government personnel data.

### **Programme 2: Energy Policy and Planning**

### Programme purpose

Ensure evidence-based planning, policy setting and investment decisions in the energy sector to improve the security of energy supply, regulation and competition.

### **Objectives**

- Improve energy security by:
  - regulating demand and introducing a diversified mix of energy generation technologies on an ongoing basis
  - improving efficiency through the introduction of regulations for liquefied petroleum gas supply and distribution in order to reduce prices by March 2016
  - developing key indicators to effectively monitor energy sector policies on an ongoing basis
  - planning interventions to expand energy infrastructure through the development of a policy framework for the integrated energy plan, the integrated resource plan, the liquid fuels infrastructure roadmap, the transmission development plan and the major distribution infrastructure plan over the medium term

<sup>2.</sup> This programme's compensation of employees budget has been reduced by R20.9 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

<sup>3.</sup> Rand million.

- publishing an annual energy statistics report to facilitate information-based decision making.
- Address current and envisaged energy supply and distribution constraints through the development of an approach to distribution asset management norms and standards in order to rehabilitate critical municipal electricity distribution infrastructure over the medium term.
- Improve liquid fuels energy security by developing and implementing the liquid fuels 20-year infrastructure plan over the medium term.
- Develop a regulatory framework that supports carbon capture and storage test injection by 2016.
- Ensure the integration of renewable energy into South Africa's mainstream energy supply by:
  - planning and coordinating initiatives and interventions focused on the development and improvement of the renewable energy market on an ongoing basis
  - improving the generation capacity of renewable energy to at least 42 per cent by 2030.

### **Subprogrammes**

- Policy Analysis and Research develops key indicators and monitors the impact of energy sector policies, planning and interventions; analyses all energy policies and their impact on access to energy and security of energy supply; conducts research and analyses policies in relation to other countries; and conducts research and analysis on national and international trends or developments that impact on the demand and supply of energy.
- Energy Planning manages energy data and information; develops and maintains an energy modelling system to simulate energy supply and distribution; identifies energy supply and distribution constraints, and addresses them through the integrated energy plan; manages the overall collection, collation, validation, integrity and quality of energy data; and is responsible for managing the development of energy plans and strategic interventions for the generation, refining, distribution and transmission of energy sources for demand and supply optimisation.
- *Hydrocarbon Policy* ensures a secure energy supply, well managed demand, and enhanced access to hydrocarbons; a transformed energy sector; and ensures that energy regulation and competition is improved through the development, promulgation and maintenance of a statutory framework for petroleum, petroleum products, petroleum infrastructure, coal and gas.
- *Electricity, Energy Efficiency and Environmental Policy* ensures a secure energy supply, well managed demand and a transformed energy sector, and energy regulation and competition that is improved through the development, promulgation and maintenance of a statutory framework for electricity over the medium term. This includes reforming the electricity supply industry to introduce independent power producers in support of electricity security.

### **Expenditure trends and estimates**

Table 26.8 Energy Policy and Planning expenditure trends and estimates by subprogramme and economic classification

Subprogramme				Adjusted	Average growth rate	Expen- diture/ Total: Average	Medium-t	term expend	liture	Average growth rate	Total:
	Audi	ted outcome	)	appropriation	(%)	(%)	е	estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 -	2018/19
Policy Analysis and Research	11 779	2 337	475	1 450	-50.3%	1.0%	2 421	2 409	2 460	19.3%	4.7%
Energy Planning	15 286	18 380	23 134	22 004	12.9%	4.7%	24 095	23 992	26 206	6.0%	51.4%
Hydrocarbon Policy	1 513 077	15 402	11 695	12 860	-79.6%	92.5%	12 361	12 116	13 079	0.6%	26.9%
Electricity, Energy Efficiency and Environmental	5 181	11 637	6 445	7 782	14.5%	1.8%	7 871	7 764	8 353	2.4%	17.0%
Policy											
Total	1 545 323	47 756	41 749	44 096	-69.4%	100.0%	46 748	46 281	50 098	4.3%	100.0%
Change to 2015				(1 000)			283	(2 723)	(1 748)		
Budget estimate				,				, ,	, ,		

Table 26.8 Energy Policy and Planning expenditure trends and estimates by subprogramme and economic classification

Economic classification	<u> </u>					Expen-					Expen-
					Average growth	diture/ Total:				Average growth	diture/ Total:
				Adjusted	rate	Average	Madium-t	erm expend	litura	rate	Average
	Δudi	ted outcome		appropriation	(%)	(%)		estimate	iitui <del>c</del>	(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -		2016/17	2017/18	2018/19	2015/16 -	
Current payments	45 284	47 748	41 708	44 096	-0.9%	10.7%	46 748	46 281	50 098	4.3%	100.0%
Compensation of employees	32 901	28 348	28 754	31 735	-1.2%	7.3%	34 769	33 806	37 065	5.3%	73.4%
Goods and services	12 383	19 400	12 954	12 361	-0.1%	3.4%	11 979	12 475	13 033	1.8%	26.6%
of which:											
Administrative fees	252	368	233	503	25.9%	0.1%	424	469	489	-0.9%	1.0%
Advertisina	299	1 012	111	248	-6.0%	0.1%	218	227	236	-1.6%	0.5%
Minor assets	1	_	_	27	200.0%	_	30	30	30	3.6%	0.1%
Catering: Departmental activities	36	51	30	186	72.9%	_	171	181	192	1.1%	0.4%
Communication	432	441	408	578	10.2%	0.1%	511	537	563	-0.9%	1.2%
Computer services	_	439	_	26	_	_	47	63	65	35.7%	0.1%
Consultants: Business and advisory services	5 928	9 643	8 144	4 992	-5.6%	1.7%	4 668	4 887	5 112	0.8%	10.5%
Contractors	172	59	15	71	-25.5%	-	93	97	102	12.8%	0.2%
Inventory: Learner and teacher support material	1	_	_	_	-100.0%	_	_	_	_	_	_
Consumable supplies	_	8	19	100	_	_	28	29	30	-33.1%	0.1%
Consumables: Stationery, printing and office	58	334	8	313	75.4%	_	336	304	317	0.4%	0.7%
supplies			_		, .				***		******
Operating leases	_	10	_	_	_	_	_	_	_	_	_
Property payments	_	-	_	_	_	_	91	41	43	_	0.1%
Travel and subsistence	4 278	4 993	2 941	4 160	-0.9%	1.0%	3 856	4 098	4 274	0.9%	8.8%
Training and development	136	151		7	-62.8%	-	149	124	130	164.8%	0.2%
Operating payments	211	381	833	305	13.1%	0.1%	207	236	246	-6.9%	0.5%
Venues and facilities	579	1 510	212	845	13.4%	0.2%	1 150	1 152	1 204	12.5%	2.3%
Transfers and subsidies	1 500 031	8	41	-	-100.0%	89.3%	_	_	_	_	
Public corporations and private enterprises	1 500 000			_	-100.0%	89.3%	_	_	_	_	_
Households	31	8	41	_	-100.0%	-	_	_	_	_	_
Payments for capital assets	7	_		_	-100.0%	_	_	_	_	_	_
Machinery and equipment	7	_	_	_	-100.0%	_	_	_	_	_	_
Payments for financial assets	1	_	_	_	-100.0%	_	_	_	_	_	_
Total	1 545 323	47 756	41 749	44 096	-69.4%	100.0%	46 748	46 281	50 098	4.3%	100.0%
Proportion of total programme	23.2%	0.7%	0.7%	0.6%	-	-	0.6%	0.6%	0.6%	4.070	-
expenditure to vote expenditure	23.270	0.1 /0	0.770	0.070		_	0.070	0.070	0.070	_	
•											
Details of transfers and subsidies				T							
Households											
Social benefits		_			100 551						
Current	31	8	41	-	-100.0%	-				-	-
Employee social benefits	31	8	41	-	-100.0%	-		-	_	-	-
Public corporations and private enterprises											
Public corporations											
Public corporations - subsidies on products											
and production											
Capital	1 500 000	-	-	_	-100.0%	89.3%	-	-	-	-	-
Transnet	1 500 000	-	-	-	-100.0%	89.3%	-	-	-	-	-

### **Personnel information**

Table 26.9 Energy Policy and Planning personnel numbers and cost by salary level<sup>1</sup> prior to Cabinet approved reduction, effective from 2017/182; budget reductions and aggregate baseline total

							<u> </u>												
	Numb	per of posts																	
	esti	mated for																	
	31 M	arch 2016			Nun	nber and o	ost3 of	persor	nel posts	filled /	planne	d for on fu	nded e	stablis	hment			Nur	nber
	Number	Number of						p			<b></b>							Average	Salary
	of	posts																5	level/total:
	funded	additional																rate	Average
	posts	to the		Actual		Revis	ed esti	mate			Mediu	um-term ex	pendit	ure est	imate			(%)	(%)
	=	establishment	20	)14/15		20	15/16		20	16/17		20	17/18		20	18/19		2015/16	- 2018/19
	,				Unit			Unit			Unit			Unit			Unit		
<b>Energy Polic</b>	y and Plan	ning	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary level	59	_	52	28.8	0.6	50	31.7	0.6	50	34.8	0.7	50	37.1	0.7	54	42.5	0.8	2.6%	100.0%
1 – 6	-	-	2	0.3	0.1	_	_	_	_	_	_	-	_	_	-	_	_	-	_
7 – 10	31	-	27	10.2	0.4	27	11.7	0.4	27	13.6	0.5	27	14.1	0.5	28	15.3	0.5	1.2%	53.4%
11 – 12	13	_	11	7.7	0.7	11	7.8	0.7	11	8.3	0.8	11	9.1	0.8	13	11.3	0.9	5.7%	22.5%
13 – 16	15	_	12	10.6	0.9	12	12.1	1.0	12	12.8	1.1	12	13.9	1.2	13	15.9	1.2	2.7%	24.0%
Reduction	-	_	_	-	-	_	-	-	-	-	_	_	(3.3)	_	-	(5.4)	-	_	_
Total	59	-	52	28.8	0.6	50	31.7	0.6	50	34.8	0.7	-	33.8	-	ı	37.1	-	-	_

<sup>1.</sup> Data has been provided by the department and may not necessarily reconcile with official government personnel data.

2. This programme's compensation of employees budget has been reduced by R8.7 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

3. Rand million.

### **Programme 3: Petroleum and Petroleum Products Regulation**

### Programme purpose

Regulate the petroleum and petroleum products industry, to ensure the optimal and orderly functioning of the industry to achieve government's development goals.

### **Objectives**

- Ensure the development and transformation of the liquid fuels industry and the security of the supply of petroleum products in the South African economy by monitoring and enforcing technical and economic compliance to legislation, specifications, standards and licence conditions on an annual basis.
- Facilitate the orderly development of the petroleum sector through the analysis and efficient adjudication of licences for manufacturing, wholesaling and retailing activities on an ongoing basis.
- Strengthen the regulatory framework in the liquid fuels petroleum industry by implementing the regulatory accounting system on an ongoing basis to introduce a transparent fuel pricing mechanism that will provide an appropriate return to investors in the liquid fuels sector across the value chain.

### **Subprogrammes**

- Petroleum Compliance, Monitoring and Enforcement monitors and enforces technical, commercial and legal compliance by the petroleum industry to the prescripts of the Petroleum Products Act (1977) and its regulations. This includes compliance with import and export conditions as well as the enforcement of the submission of data by the industry. The sub-programme also processes arbitration requests as well as promotion of access to information on behalf of the Controller of Petroleum Products.
- Petroleum Licensing and Fuel Supply manages the petroleum licensing process, regulates the permitting of the export and import of petroleum products, monitors fuel stock levels, and coordinates corrective measures to avoid distribution shortages. This entails conducting licence analyses and ensuring the supply of hydrocarbons and compliance with permits and the charter.
- Fuel Pricing regulates the pricing of petroleum products in accordance with legislation. This entails determining, reviewing, updating and maintaining fuel levies and margins, and the process of paying fuel levies. Fuel price administration includes developing, evaluating and monitoring price models; updating elements of the basic fuel price; and ensuring secure audit services for the auditing of fuel prices to ensure internationally competitive pricing of petroleum products to enable investment in the sector.
- Regional Petroleum Regulation Offices provides advice on integrated energy services, develops appropriate interventions to enhance and promote universal access to energy, and ensures economic and technical compliance with relevant legislation. In addition, all annual information submitted by licence holders is captured and analysed.

### **Expenditure trends and estimates**

Table 26.10 Petroleum and Petroleum Products Regulation expenditure trends and estimates by subprogramme and economic classification

Subprogramme					Average growth	Expen- diture/ Total:				Average growth	Expen- diture/ Total:
				Adjusted	rate	Average	Medium-	-term expen	diture	rate	Average
	Auc	lited outcome		appropriation	(%)	(%)		estimate .		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13	- 2015/16	2016/17	2017/18	2018/19	2015/16 -	2018/19
Petroleum Compliance, Monitoring and											
Enforcement	5 119	6 797	13 541	15 143	43.6%	19.5%	13 707	13 906	14 354	-1.8%	18.5%
Petroleum Licensing and Fuel Supply	12 386	15 473	19 400	20 291	17.9%	32.5%	24 059	23 860	25 410	7.8%	30.3%
Fuel Pricing	12 423	3 566	9 158	8 631	-11.4%	16.2%	7 547	7 583	7 790	-3.4%	10.2%
Regional Petroleum Regulation Offices	14 461	_	22 449	29 313	26.6%	31.8%	32 558	31 680	32 820	3.8%	40.9%
Total	44 389	25 836	64 548	73 378	18.2%	100.0%	77 871	77 029	80 374	3.1%	100.0%
Change to 2015				(1 000)			1 333	(3 637)	(4 970)		
Budget estimate											

Table 26.10 Petroleum and Petroleum Products Regulation expenditure trends and estimates by subprogramme and economic classification

Economic classification					Average	Expen- diture/				Average	Expen- diture/
					growth	Total:				growth	Total:
				Adjusted	rate	Average	Medium-	term expen	diture	rate	Average
	Audit	ted outcome		appropriation	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16		- 2015/16	2016/17	2017/18	2018/19	2015/16 -	
Current payments	44 379	25 783	62 236	73 378	18.2%	98.9%	77 871	77 029	80 374	3.1%	100.0%
Compensation of employees	35 594	19 084	41 927	50 926	12.7%	70.9%	56 792	55 106	57 470	4.1%	71.4%
Goods and services	8 785	6 699	20 309	22 452	36.7%	28.0%	21 079	21 923	22 904	0.7%	28.6%
of which:										***	
Administrative fees	216	128	479	393	22.1%	0.6%	332	346	363	-2.6%	0.5%
Advertising	378	3 175	468	837	30.3%	2.3%	957	995	1 040	7.5%	1.2%
Minor assets	_	2	_	232	_	0.1%	172	177	185	-7.3%	0.2%
Catering: Departmental activities	327	217	85	441	10.5%	0.5%	423	440	460	1.4%	0.6%
Communication	366	302	286	657	21.5%	0.8%	586	610	637	-1.0%	0.8%
Computer services	_	_	60	194.0	_	0.1%	173	180	188	-1.0%	0.2%
Consultants: Business and advisory services	1 743	396	9 056	10 252	80.5%	10.3%	9 329	10 046	10 493.0	0.8%	13.0%
Legal services	-	_	199	-	_	0.1%	_	-	-	_	-
Contractors	5	_	41	25	71.0%	-	21	21	22.0	-4.2%	_
Agency and support/outsourced services	2	_	_	8	58.7%	_	7	6	6.0	-9.1%	_
Entertainment	_	_	_	6	-	_	5	4	4.0	-12.6%	_
Fleet services (including government motor	_	_	22	188	_	0.1%	167	174	182	-1.1%	0.2%
transport)				700		0.170	101		702	1.170	0.270
Inventory: Materials and supplies	1	_	_	_	-100.0%	_	_	_	_	_	_
Inventory: Waterland and Supplies	6	_	_	81	138.1%	_	_	_	_	-100.0%	_
Consumable supplies	_	6	151	309	100.170	0.2%	344	358	374	6.6%	0.4%
Consumables: Stationery, printing and office	176	47	98	64	-28.6%	0.2%	81	83	87	10.8%	0.1%
supplies	170	77	30	04	-20.070	0.270	01	00	01	10.070	0.170
Operating leases	_	9	221	_		0.1%	_	_	_	_	_
Rental and hiring	10	_	15	72	93.1%	0.170	64	67	70	-0.9%	0.1%
Property payments	4	_	-	29	93.5%	_	26	27	28	-1.2%	0.170
Transport provided: Departmental activity	-	_	_	46	30.070	_	_		_	-100.0%	_
Travel and subsistence	4 601	1 649	5 714	4 517	-0.6%	7.9%	4 567	4 419	4 616	0.7%	5.9%
Training and development	537	608	11	4011	-100.0%	0.6%	4 007	7 710	7010	0.170	0.070
Operating payments	86	108	3 036	2 822	220.1%	2.9%	2 494	2 585	2 701	-1.5%	3.4%
Venues and facilities	327	52	367	1 279	57.6%	1.0%	1 331	1 385	1 448	4.2%	1.8%
Transfers and subsidies	10	53	2 312	-	-100.0%	1.1%	-	7 000	1 110	7.270	7.070
Foreign governments and international			2 312		-100.076	1.1%	_				_
organisations	_	_	2312	_	_	1.170	_	_	_	_	_
Households	10	53			-100.0%						
Total	44 389	25 836	64 548	73 378	18.2%	100.0%	77 871	77 029	80 374.0	3.1%	100.0%
					10.2%	100.0%				3.1%	100.0%
Proportion of total programme	0.7%	0.4%	1.0%	1.0%	_	_	1.0%	0.9%	0.9%	-	_
expenditure to vote expenditure											
Details of transfers and subsidies											
Households											
Social benefits											
Current	10	53			-100.0%	-					
Employee social benefits	10	53	-	-	-100.0%	-	-	-	-	-	-
Foreign governments and international											
organisations											
	_	_	2 312	_	_	1.1%	_	_	_	_	_
Current	_		2 3 12	_				_	_	_	

### **Personnel information**

Table 26.11 Petroleum and Petroleum Products Regulation personnel numbers and cost by salary level<sup>1</sup> prior to Cabinet approved reduction, effective from 2017/182; budget reductions and aggregate baseline total

		per of posts								- 55	<u> </u>								
		larch 2016			Misses		43 -6			اما الممالة	اممسما	fa., a., f.,	d	مسما ما الما				NI	mber
					Nun	iber and c	ost or p	ersoni	iei posts i	illea / pi	ianneu	for on fun	ueu esta	ibiisnin	ent				
	Number	Number of																Average	Salary
	of	posts																growth	level/total:
	funded	additional																rate	Average
	posts	to the		Actual		Revis	sed esti	mate			Medi	um-term e	xpendit	ure esti	mate			(%)	(%)
		establishment	2	014/15		20	015/16		2	016/17		20	017/18		20	018/19		2015/16	- 2018/19
Petroleum an	d Petrole	um Products			Unit			Unit			Unit			Unit			Unit		
Regulation			Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary level	103	_	117	41.9	0.4	118	51.7	0.4	113	56.8	0.5	113	60.4	0.5	117	65.9	0.6	-0.3%	100.0%
1 – 6	5	-	35	6.3	0.2	34	6.8	0.2	30	7.0	0.2	30	7.4	0.2	30	7.7	0.3	-4.1%	26.9%
7 – 10	72	_	59	18.7	0.3	60	24.2	0.4	60	28.3	0.5	60	30.1	0.5	63	33.1	0.5	1.6%	52.7%
11 – 12	9	-	9	5.6	0.6	9	6.0	0.7	9	6.6	0.7	9	7.1	0.8	10	8.3	0.8	3.6%	8.0%
13 – 16	17	-	14	11.3	0.8	15	14.7	1.0	14	14.9	1.1	14	15.9	1.1	14	16.8	1.2	-2.3%	12.4%
Reduction	_	_	-	-	-	-	-	-	_	_	-	_	(5.3)	-	-	(8.4)	-	_	-
Total	103	_	117	41.9	0.4	118	51.7	0.4	113	56.8	0.5	-	55.1	_	-	57.5	-	_	_

Data has been provided by the department and may not necessarily reconcile with official government personnel data.
 This programme's compensation of employees budget has been reduced by R13.7 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

<sup>3.</sup> Rand million.

# **Programme 4: Electrification and Energy Programme and Project Management**

### Programme purpose

Manage, coordinate and monitor programmes and projects that are focused on access to energy.

### **Objectives**

- Increase access to electricity by managing funding and monitoring the implementation of the integrated national electrification programme on an ongoing basis.
- Increase public awareness on energy issues while empowering disadvantaged and vulnerable groups by identifying, implementing, managing and coordinating upliftment programmes and projects on an ongoing basis.
- Ensure the efficient management of electricity supply by:
  - enhancing the application of project management business principles to assist programme and project managers on an ongoing basis
  - coordinating, monitoring and reporting on the implementation of programmes and projects focused on the
    development, improvement and transformation of the energy generation, refinement, transmission and
    distribution industry and its infrastructure on an ongoing basis.

### **Subprogrammes**

- Integrated National Electrification Programme oversees and manages the finance and implementation processes for the electrification programme, manages the annual planning processes including electrification infrastructure plans, and manages and coordinates technical audits for the programme.
- Energy Regional Offices provides advice on integrated energy services, develops appropriate interventions to enhance and promote universal access to energy, manages and coordinates regional electrification planning, and ensures economic and technical compliance with relevant legislation.
- Programme and Project Management Office provides specialised assistance to programme and project managers, and management in general, to apply management principles, coordinate project information and report on projects.
- *Electricity Infrastructure/Industry Transformation* oversees programmes and projects focused on the development, improvement and transformation of the electricity generation, transmission and distribution sector, and independent power producers.
- Community Upliftment Programmes and Projects implements, manages and coordinates programmes and projects aimed at the mainstreaming, upliftment and empowerment of disadvantaged and vulnerable groups; and increases public awareness on energy issues. This subprogramme also establishes integrated energy centres, which provide energy services and education to communities.

### **Expenditure trends and estimates**

Table 26.12 Electrification and Energy Programme and Project Management expenditure trends and estimates by subprogramme and economic classification

Subprogramme		A 1% 1		Adjusted	Average growth rate	Average	Medium	n-term expen	diture	Average growth rate	Expen- diture/ Total: Average
Difference	2040/42	Audited outcom		appropriation			004647	estimate	2040/40	(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -		2016/17	2017/18	2018/19	2015/16 -	
Integrated National Electrification Programme	3 106 371	3 907 895	4 142 550	5 777 233	23.0%	99.2%	5 657 039	6 173 242	6 421 574	3.6%	99.3%
Energy Regional Offices	5 127	33 204	17 581	11 950	32.6%	0.4%	15 687	15 261	16 425	11.2%	0.2%
Programme and Project Management Office	_	5 926	7 245	9 640	-	0.1%	11 532	11 554	11 850	7.1%	0.2%
Electricity Infrastructure/Industry Transformation	814	4 262	6 575	9 420	126.2%	0.1%	9 727	10 189	10 328	3.1%	0.2%
Community Upliftment Programmes and Projects	3 638	7 238	7 022	5 579	15.3%	0.1%	5 922	5 860	5 971	2.3%	0.1%
Total	3 115 950	3 958 525	4 180 973	5 813 822	23.1%	100.0%	5 699 907	6 216 106	6 466 148	3.6%	100.0%
Change to 2015				35 525			(334 371)	(177 144)	(297 910)		
Budget estimate							,	. ,			

Table 26.12 Electrification and Energy Programme and Project Management expenditure trends and estimates by subprogramme and economic classification

subprogramme and economic of	lassificat	tion									
Economic classification						Expen-					Expen-
					Average growth	diture/ Total:				Average growth	diture/ Total:
				Adjusted	rate	Average	Mediu	m-term expe	nditure	rate	_
	A	udited outco	me	appropriation	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13	- 2015/16	2016/17	2017/18	2018/19	2015/16 -	2018/19
Current payments	26 744	72 011	58 240	53 647	26.1%	1.2%	60 903	63 076	64 991	6.6%	1.0%
Compensation of employees	19 685	46 050	36 224	38 864	25.5%	0.8%	45 749	45 131	46 574	6.2%	0.7%
Goods and services of which:	7 059	25 961	22 016	14 783	27.9%	0.4%	15 154	17 945	18 417	7.6%	0.3%
Administrative fees	242	1 152	991	909	55.4%	_	811	833	863	-1.7%	_
Advertising	231	1 544	976	99	-24.6%	_	104	93	98	-0.3%	_
Minor assets	-	4	7	588	-	-	536	564	589	0.1%	-
Audit costs: External	227	4 000	- 004	613	- 00.40/	-	-	732	-	4.40/	-
Catering: Departmental activities Communication	337 299	1 096 485	261 537	768	22.1% 37.0%	-	656 692	669 714	698 748	4.4% -0.9%	-
Computer services	1	2	-	31	214.1%	_	21	53	56	21.8%	_
Consultants: Business and advisory services	2	1	25	_	-100.0%	_	1 975	3 515	4 111	-	-
Contractors	51	68	14	3	-61.1%	_	-	_	_	-100.0%	_
Entertainment	-	2	-	_	-	-	-	-	-	-	-
Fleet services (including government motor	-	3	153	1	-	-	27	26	28	203.7%	-
transport) Inventory: Fuel, oil and gas	1				-100.0%						
Inventory: Fuel, oil and gas Inventory: Materials and supplies	2	_	_	_	-100.0%	_	_	_	_	_	_
Inventory: Other supplies	101	_	_	_	-100.0%	-	_	_	_	_	-
Consumable supplies	_	136	75	101	-	-	101	125	133	9.6%	-
Consumables: Stationery, printing and office	13	21	1	227	159.4%	-	147	168	170	-9.2%	-
supplies Operating leases	_	390	183								
Transport provided: Departmental activity	_	233	103	29	_	_	_	_	_	-100.0%	_
Travel and subsistence	4 192	15 271	14 254	8 551	26.8%	0.2%	8 344	8 584	8 976	1.6%	0.1%
Training and development	-	133	18	_	-	-		-	_	-	-
Operating payments	632	232	74	278	-23.9%	- 0.404	147	181	188	-12.2%	-
Venues and facilities Transfers and subsidies	955 <b>3 089 206</b>	5 188 3 886 157	4 447 4 122 704	2 585 5 760 175	39.4% <b>23.1%</b>	0.1% 98.8%	1 593 <b>5 639 004</b>	1 688 <b>6 153 030</b>	1 759 <b>6 401 157</b>	-12.0% <b>3.6%</b>	99.0%
Provinces and municipalities	1 151 443	1 634 772	1 104 658	1 980 340	19.8%	34.4%	1 946 246	2 087 048	2 204 477	3.6%	34.0%
Public corporations and private enterprises	1 937 696	2 251 347	3 018 037	3 779 835	24.9%	64.4%	3 692 758	4 065 982	4 196 680	3.5%	65.0%
Households	67	38	9	_	-100.0%	_	-	_	_	-	-
Payments for capital assets	_	357	_	-	-	_	-	-	-	-	-
Machinery and equipment	-	9	-	-	-	-	-	-	-	-	-
Software and other intangible assets	-	348	_	_	-	-	-	-	-	-	-
Payments for financial assets Total	3 115 950	3 958 525	4 180 973	5 813 822	23.1%	100.0%	5 699 907	6 216 106	6 466 148	3.6%	100.0%
Proportion of total programme	46.8%	61.1%	67.2%	80.0%	23.170	100.0 /6	75.5%	76.5%	76.2%	3.0 /0	100.0 /6
expenditure to vote expenditure	10.070	•,	V,	00.070			1 0.0 / 0				
· · · · · · · · · · · · · · · · · · ·											
Details of transfers and subsidies											
Households											
Other transfers to households Current	_	_	9	_	_	_	_	_	_	_	_
Employee ex-gratia payments	_		9	_	_		_		_		_
Provinces and municipalities											
Municipalities											
Municipal bank accounts	4.454.440	4 004 770	4 404 050	4 000 040	40.00/	0.4.40/	4 0 40 0 40	0.007.040	0.004.477	0.00/	0.4.00/
Capital	1 151 443 1 151 443	1 <b>634 772</b> 1 314 772	1 104 658 1 104 658	<b>1 980 340</b> 1 980 340	<b>19.8%</b> 19.8%	<b>34.4%</b> 32.5%	<b>1 946 246</b> 1 946 246	2 087 048 2 087 048	<b>2 204 477</b> 2 204 477	<b>3.6%</b> 3.6%	<b>34.0%</b> 34.0%
Integrated national electrification programme grant	1 151 443	1 314 112	1 104 000	1 900 340	19.0%	32.5%	1 940 240	2 007 040	2 204 477	3.0%	34.0%
Integrated national electrification programme:	_	320 000	_	_	_	1.9%	_	_	_	_	_
Approach to distribution asset management											
Households											
Social benefits	67	20			400.00/						
Current Employee social benefits	<b>67</b> 67	<b>38</b> 38		_	<b>-100.0%</b> -100.0%	<del>-</del>	_				_
Public corporations and private enterprises	01	30		_	-100.076		_				_
Public corporations											
Public corporations - subsidies on products											
and production											
Capital	1 879 368	2 141 027 2 141 027	2 948 037 2 948 037	3 613 243	24.3%	62.0%	3 526 334	3 876 154	3 995 031	3.4%	62.0%
Eskom: Integrated national electrification programme allocation in-kind	1 879 368	2 141 027	2 940 037	3 613 243	24.3%	62.0%	3 526 334	3 876 154	3 995 031	3.4%	62.0%
Public corporations and private enterprises											
Private enterprises											
Private enterprises - subsidies on products											
and production	F0 000	440.000	70.000	100 -0-	44 004	0.401	400 101	400 000	004 046		0.004
Capital Integrated national electrification programme	<b>58 328</b> 58 328	110 320 110 320	<b>70 000</b> 70 000	<b>166 592</b> 166 592	<b>41.9%</b> 41.9%	2.4% 2.4%	<b>166 424</b> 166 424	<b>189 828</b> 189 828	<b>201 649</b> 201 649	<b>6.6%</b>	<b>3.0%</b> 3.0%
integrated national electrification programme	J0 J20	110 320	10 000	100 392	41.3/0	2.4 70	100 424	103 020	201049	0.0%	J.U /0

#### Personnel information

Table 26.13 Electrification and Energy Programme and Project Management personnel numbers and cost by salary level<sup>1</sup> prior to Cabinet approved reduction, effective from 2017/18<sup>2</sup>; budget reductions and aggregate baseline total

<u> </u>													<del>,                                    </del>						
		per of posts																	
	esti	mated for																	
	31 M	larch 2016			Nur	nber and o	ost3 of	perso	nnel posts	filled /	planne	ed for on fo	unded (	establis	shment			Nur	nber
	Number	Number of																Average	
	of	posts																growth	level/total:
	funded	additional																rate	Average
	posts	to the	1	Actual		Revise	ed estir	mate			Mediu	ım-term ex	pendit	ure est	imate			(%)	(%)
	•	establishment	20	014/15		20	15/16		20	16/17		20	17/18		20	18/19		2015/16	- 2018/19
Electrification	and Energ	y Programme			Unit			Unit			Unit			Unit			Unit		
and Project Ma	anagement		Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary level	69	-	78	36.2	0.5	74	41.9	0.6	73	45.7	0.6	74	49.5	0.7	75	53.4	0.7	0.4%	100.0%
1 – 6	-	-	13	2.1	0.2	3	0.6	0.2	2	0.5	0.2	2	0.5	0.2	2	0.5	0.3	-12.6%	3.0%
7 – 10	34	_	35	13.0	0.4	39	15.9	0.4	39	18.1	0.5	39	19.2	0.5	39	20.2	0.5	-	52.7%
11 – 12	24	_	22	13.9	0.6	21	14.2	0.7	21	15.2	0.7	22	16.9	0.8	22	18.1	0.8	1.6%	29.1%
13 – 16	11	_	8	7.2	0.9	11	11.2	1.0	11	12.0	1.1	11	12.8	1.2	12	14.6	1.2	2.9%	15.2%
Reduction	_	-	-	_		-	-	-	-	-	-	-	(4.3)	-	-	(6.8)	-	-	-
Total	69	-	78	36.2	0.5	74	41.9	0.6	73	45.7	0.6	-	45.1	-	ı	46.6	-	-	-

<sup>1.</sup> Data has been provided by the department and may not necessarily reconcile with official government personnel data.

### **Programme 5: Nuclear Energy**

### Programme purpose

Manage the South African nuclear energy industry and control nuclear materials in terms of international obligations, nuclear legislation and policies to ensure the peaceful use of nuclear energy.

### **Objectives**

- Regulate the security of nuclear material, related equipment and facilities by developing and publishing appropriate regulations on an ongoing basis.
- Promote the safe management and disposal of radioactive waste by establishing and ensuring the full operation of the National Radioactive Waste Disposal Institute by 2016/17, as provided for in the radioactive waste management policy and strategy of 2005, and the National Radioactive Waste Disposal Institute Act (2008).
- Contribute towards ensuring the security of energy supply through initiating a request for proposal to the market on the new nuclear build programme and undertake the necessary work over the medium term.
- Manage the procurement process for the new nuclear build programme in line with the Integrated Resource Plan.
- Increase nuclear energy awareness and the level of nuclear knowledge among all South Africans through active demystification campaigns on an ongoing basis.
- Ensure compliance with international nuclear obligations by developing, maintaining, implementing and enforcing a relevant, appropriate statutory framework for nuclear energy policy on an ongoing basis.

### **Subprogrammes**

- Nuclear Safety and Technology manages and implements all matters related to nuclear safety and technology as required by legislation and international agreements; implements nuclear energy policy in line with requirements of the integrated resource plan; and administers all matters related to nuclear safety, liability and emergency management with the aim of improving the governance of the nuclear sector, specifically in relation to nuclear safety and nuclear technology. This subprogramme also makes transfers to the South African Nuclear Energy Corporation and the National Nuclear Regulator.
- Nuclear Non-proliferation and Radiation Security manages and implements all matters related to nuclear non-proliferation and radiation security, as required by legislation and international agreements. This entails accounting for and control of nuclear material through authorisation; ensuring compliance by conducting

<sup>2.</sup> This programme's compensation of employees budget has been reduced by R11.2 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

- inspections and audits; and regulating security of nuclear material by implementing the security measures during transportation, use, storage as well as during the major public events.
- Nuclear Policy develops and reviews policies and legislation as required by international agreements and the governance principles of the nuclear energy sector in South Africa; undertakes research and development on matters related to nuclear policy and legislation; and reviews and monitors nuclear safety, nuclear technology, nuclear non-proliferation and nuclear radiation security policies, legislation, and provides advice accordingly. This subprogramme will manage the call for proposals for the new nuclear build procurement and the necessary due diligence on the proposed transaction.

### **Expenditure trends and estimates**

Table 26.14 Nuclear Energy expenditure trends and estimates by subprogramme and economic classification

Table 26.14 Nuclear Energy expend		140 4110		too ay caap.	- g	Expen-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Expen-
Subprogramme					Average	diture/				Average	diture/
					growth	Total:				growth	Total:
				Adjusted	rate	Average	Medium-	erm expen	ditura	rate	Average
	Λ	dited outco	·mo	appropriation	(%)	Average (%)		estimate	lulture	(%)	_
R thousand	2012/13	2013/14		2015/16	2012/13 -		2016/17	2017/18	2018/19	2015/16 - 2	(%)
Nuclear Safety and Technology	638 698	712 386	832 274	638 534	2012/13 -	98.5%	651 669	746 460	789 155	7.3%	91.5%
Nuclear Non-proliferation and Radiation Security	3 846	5 461	6 156	7 385	24.3%	0.8%	8 314	8 164	8 460	4.6%	1.0%
Nuclear Policy	684	4 654	6 988	7 979	126.8%	0.6%	203 592	9 836	9 883	7.4%	7.5%
Total	643 228	722 501	845 418	653 898	0.5%	100.0%	863 575	764 460	807 498	7.3%	100.0%
Change to 2015				(500)			194 240	(1 468)	(2 854)		
Budget estimate											
Economic classification											
Current payments	32 732	23 249	34 040	32 441	-0.3%	4.3%	230 226	36 608	37 431	4.9%	10.9%
Compensation of employees	8 686	10 0580	13 446	18 479	28.6%	1.8%	19 429	20 125	20 331	3.2%	2.5%
Goods and services	24 046	13 191	20 594	13 962	-16.6%	2.5%	210 797	16 483	17 100	7.0%	8.4%
of which:	21010	10 101	20 00 1	10 002	10.070	2.070	210101	10 100	11 100	7.070	0.170
Administrative fees	170	410	447	184	2.7%	_	84	92	96	-19.5%	_
Advertising	1 327	4 129	476	1 932	13.3%	0.3%	2 280	2 350	2 291	5.8%	0.3%
Minor assets		3	-	6	-	-	-	_	_	-100.0%	0.070
Catering: Departmental activities	88	594	155	137	15.9%	_	154	169	178	9.1%	_
Communication	151	166	146	189	7.8%	_	221	244	255	10.5%	_
Computer services	_	6	_	_	_	_				_	_
Consultants: Business and advisory services	2 738	3 252	11 847	7 302	38.7%	0.9%	205 250	10 660	11 016	14.7%	7.6%
Contractors	305	3	212	-	-100.0%	-		_	-	_	_
Agency and support/outsourced services	_	_	_	_	_	_	31	32	34	_	_
Fleet services (including government motor transport)	_	_	2	_	_	_	_	_	-	_	_
Inventory: Materials and supplies	1	_	_	_	-100.0%	_	_	_	_	_	_
Consumable supplies	_	3	16	18	-	_	_	_	_	-100.0%	_
Consumables: Stationery, printing and office supplies	59	236	468	391	87.8%	_	419	465	484	7.4%	0.1%
Operating leases	_	3	2	-	-	_	-	-	-	-	-
Transport provided: Departmental activity	_	22	_	217	_	_	_	_	_	-100.0%	_
Travel and subsistence	1 750	3 485	3 386	2 064	5.7%	0.4%	1 749	1 783	2 029	-0.6%	0.2%
Training and development	26	34	_	_	-100.0%	_	_	_	-	_	_
Operating payments	17 065	71	_	4	-93.8%	0.6%	_	_	_	-100.0%	_
Venues and facilities	366	774	3 437	1 518	60.7%	0.2%	609	688	717	-22.1%	0.1%
Transfers and subsidies	610 496	699 252	811 378.0	621 457	0.6%	95.7%	633 349	727 852	770 067	7.4%	89.1%
Departmental agencies and accounts	42 912	68 160	33 697	21 487	-20.6%	5.8%	16 636	38 573	40 810	23.8%	3.8%
Foreign governments and international organisations	_	38 910	17 003	19 612	_	2.6%	17 375	17 907	18 946	-1.1%	2.4%
Public corporations and private enterprises	567 579	592 182	760 678	580 358	0.7%	87.3%	599 338	671 372	710 311	7.0%	82.9%
Households	5	_	_	_	-100.0%	_	_	_	_	_	_
Total	643 228	722 501	845 418	653 898	0.5%	100.0%	863 575	764 460	807 498	7.3%	100.0%
Proportion of total programme	9.7%	11.2%	13.6%	9.0%	_	-	11.4%	9.4%	9.5%	-	_
expenditure to vote expenditure											
	-		•				·				-
Details of transfers and subsidies											
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	42 547	67 812	33 331	21 109	-20.8%	5.8%	16 238	38 155	40 368	24.1%	3.8%
National Nuclear Regulator	42 547	48 012	33 331	21 109	-20.8%	5.1%	16 238	38 155	40 368	24.1%	3.8%
National Radioactive Waste Disposal Institute	-	19 800	-	-	-	0.7%	-	-	-	-	_
Capital	365	348	366	378	1.2%	0.1%	398	418	442	5.4%	0.1%
•	365	348	366	378	1.2%	0.1%	398	418	442	5.4%	0.1%
National Nuclear Regulator	303			3/01							
National Nuclear Regulator  Households	303	0+0	000	570	11270	0.170				0.170	
	303	040	300	370		0.170				0.176	
Households	5	-	-	-	-100.0%	-	-	-	-	-	_

Table 26.14 Nuclear Energy expenditure trends and estimates by subprogramme and economic classification

Details of transfers and subsidies					Average	Expen- diture/				Average	Expen- diture/
					growth					growth	Total:
				Adjusted	rate	_	Medium-	term expen	diture	rate	Average
	Au	dited outco	me	appropriation		(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 -	2018/19
Foreign governments and international											
organisations											
Current	_	-	_	600	_	-	660	700	741	7.3%	0.1%
Generation IV International Forum	-	-	-	600	-	-	660	700	741	7.3%	0.1%
Capital	-	38 910	17 003	19 012	_	2.6%	16 715	17 207	18 205	-1.4%	2.3%
International Atomic Energy Agency	-	38 910	17 003	19 012	-	2.6%	16 715	17 207	18 205	-1.4%	2.3%
Public corporations and private enterprises	-										
Public corporations											
Public corporations - subsidies on products											
and production											
Current	489 122	460 373	491 881	498 777	0.7%	67.7%	513 461	581 201	614 910	7.2%	71.5%
South African Nuclear Energy Corporation	489 122	460 373	491 881	482 657	-0.4%	67.2%	496 375	563 089	595 748	7.3%	69.2%
South African Nuclear Energy Corporation	-	-	-	16 120	_	0.6%	17 086	18 112	19 162	5.9%	2.3%
Capital	78 457	131 809	268 797	81 581	1.3%	19.6%	85 877	90 171	95 401	5.4%	11.4%
South African Nuclear Energy Corporation	78 457	131 809	268 797	81 581	1.3%	19.6%	85 877	90 171	95 401	5.4%	11.4%

### **Personnel information**

Table 26.15 Nuclear Energy personnel numbers and cost by salary level¹ prior to Cabinet approved reduction, effective from 2017/18²; budget reductions and aggregate baseline total

	Numl	per of posts																	
		mated for																	
	31 N	larch 2016			Nun	nber and o	ost3 of	persor	nel posts	filled /	planne	d for on fu	nded e	stablis	hment			Nur	nber
	Number	Number of									•							Average	Salary
	of	posts																growth	level/total:
	funded	additional																rate	Average
	posts	to the		Actual		Revis	ed esti	mate			Medi	um-term ex	pendit	ure est	imate			(%)	(%)
		establishment	20	014/15		2015/16			20	16/17		20	17/18		20	18/19		2015/16	- 2018/19
					Unit			Unit			Unit			Unit			Unit		
Nuclear Ener	gy		Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary level	34	-	23	13.4	0.6	27	16.7	0.6	27	19.4	0.7	28	22.1	0.8	28	23.3	0.8	1.2%	100.0%
1 – 6	-	-	1	0.1	0.1	-	-	-	_	-	-	-	-	-	-	-	-	-	-
7 – 10	13	-	11	4.4	0.4	10	3.3	0.3	10	4.1	0.4	10	4.4	0.4	10	4.6	0.5	-	36.4%
11 – 12	12	-	7	5.1	0.7	10	6.5	0.7	10	7.4	0.7	10	7.9	0.8	10	8.4	0.8	-	36.4%
13 – 16	9	-	4	3.8	0.9	7	6.9	1.0	7	7.9	1.1	8	9.8	1.2	8	10.3	1.3	4.6%	27.3%
Reduction	-	-	_	_	_	-	-	_	_	_	_	_	(1.9)	-	_	(3.0)	_	_	_
Total	34	_	23	13.4	0.6	27	16.7	0.6	27	19.4	0.7	-	20.1	-	-	20.3	-	-	-

<sup>1.</sup> Data has been provided by the department and may not necessarily reconcile with official government personnel data.

### **Programme 6: Clean Energy**

### Programme purpose

Manage and facilitate the development and implementation of clean and renewable energy initiatives, as well as energy efficiency and demand side management initiatives.

### **Objectives**

- Manage climate change and environmental matters by:
  - monitoring the implementation of climate change regulations to mitigate the risk of environmental impact on an ongoing basis
  - publishing climate change strategies and plans
  - developing a regulatory framework that supports carbon capture and storage test injection by 2016.
- Promote and facilitate energy efficiency and demand management by:
  - monitoring and reporting on energy savings on an ongoing basis
  - coordinating, monitoring and reporting on the progress and impact of energy efficiency and demand management strategies on annual basis
  - reviewing the energy efficiency tax incentive and energy conservation schemes on an ongoing basis.

<sup>2.</sup> This programme's compensation of employees budget has been reduced by R4.9 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

<sup>3</sup> Rand million

• Improve energy demand side management by facilitating the development of an energy management plan annually.

### **Subprogrammes**

- Energy Efficiency advances energy efficiency in South Africa by planning and coordinating initiatives and interventions that are focused on developing and improving the energy efficiency market, and ensures the integration and coordination of energy efficiency initiatives and interventions with relevant associated institutions. This subprogramme also makes transfers in respect of the solar water heater project.
- Renewable Energy ensures the integration of renewable energy into South Africa's mainstream energy supply by planning and coordinating initiatives and interventions that are focused on the development and improvement of the renewable energy market, and ensures the integration and coordination of renewable energy initiatives and interventions with relevant associated institutions. This subprogramme also makes transfers to the South African National Energy Development Institute.
- Climate Change and Designated National Authority ensures that climate change and environment response measures, in terms of mitigation and adaptation, are implemented within the energy sector. It also ensures the fulfilment of international energy commitments and obligations under the United Nations Framework Convention on Climate Change pertaining to the Kyoto Protocol.

### **Expenditure trends and estimates**

Table 26.16 Clean Energy expenditure trends and estimates by subprogramme and economic classification

Subprogramme					Average	Expen- diture/				Average	Expen- diture/
					growth	Total:				growth	Total:
				Adjusted	rate	Average		term expend	diture	rate	Average
<b>-</b>		ted outcome		appropriation	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 - 2		2016/17	2017/18	2018/19	2015/16 -	
Energy Efficiency	1 026 953	1 347 547	658 657	357 112	-29.7%	88.1%	581 964	700 673	744 907	27.8%	90.0%
Renewable Energy	62 763	137 538	167 419	71 233	4.3%	11.4%	27 144	66 241	69 841	-0.7%	8.8%
Climate Change and Designated National Authority	3 602	4 802	4 181	7 482	27.6%	0.5%	7 825	7 672	8 336	3.7%	1.2%
Total	1 093 318	1 489 887	830 257	435 827	-26.4%	100.0%	616 933	774 586	823 084	23.6%	100.0%
Change to 2015 Budget estimate				(251 500)			(5 855)	(12 875)	(10 050)		
Economic classification				<u> </u>							
Current payments	16 540	24 918	28 989	63 796	56.8%	3.5%	90 357.0	100 485	109 886	19.9%	13.8%
Compensation of employees	11 743	12 369	12 394	18 261	15.9%	1.4%	17 266	16 793	17 512	-1.4%	2.6%
Goods and services	4 797	12 549	16 595	45 535	111.7%	2.1%	73 091	83 692	92 374	26.6%	11.1%
of which:											
Administrative fees	52	162	192	173	49.3%	_	112	127	132	-8.6%	_
Advertising	157	403	559	2 368	147.1%	0.1%	825	927	967	-25.8%	0.2%
Minor assets	_	_	_	631	_	_	_	775	809	8.6%	0.1%
Catering: Departmental activities	26	73	109	201	97.7%	_	106	120	124	-14.9%	_
Communication	275	84	117	380	11.4%	_	427	279.0	291	-8.5%	0.1%
Computer services	-	131	_	10	_	_	125	129	134	137.5%	-
Consultants: Business and advisory services	309	8 584	9 605	31 604	367.7%	1.3%	57 381	65 569	73 436	32.5%	8.6%
Contractors	167	_	_	-	-100.0%	_	-	_	_	_	_
Agency and support/outsourced services	-	_	_	3 006	_	0.1%	7 101	9 120	9 529	46.9%	1.1%
Entertainment	_	_	_	2	_	_	20	19	20	115.4%	_
Fleet services (including government motor		_	2	-	-	-	-	-	-	-	-
transport)											
Inventory: Medicine	1	_	_	-	-100.0%	_	-	-	_	-	-
Consumable supplies	_	45	102	135	_	_	195	232	242	21.5%	_
Consumables: Stationery, printing and office	60	_	2	115	24.2%	-	165	176	184	17.0%	-
supplies											
Operating leases	-	_	2	54	_	_	-	-	-	-100.0%	-
Property payments		-	-	-	_	-	683	711	744	-	0.1%
Transport provided: Departmental activity	_	_	_	2 213	_	0.1%	_	_	_	-100.0%	0.1%
Travel and subsistence	2 857	2 764	2 207	2 059	-10.3%	0.3%	4 569	4 019	4 213	27.0%	0.6%
Operating payments	819	86	16	81	-53.8%	_	31	36	38	-22.3%	-
Venues and facilities	74	217	3 682	2 503	223.4%	0.2%	1 351	1 453	1 511	-15.5%	0.3%

Table 26.16 Clean Energy expenditure trends and estimates by subprogramme and economic classification

Economic classification					Average	Expen- diture/				Average	Expen- diture/
					growth	Total:				growth	Total:
				Adjusted	rate	Average		term expend	diture	rate	Average
B.1		ited outcom		appropriation	(%)	(%)		estimate	0040/40	(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 - 2		2016/17	2017/18	2018/19		- 2018/19
Transfers and subsidies	1 076 778	1 464 955	801 268	372 031	-29.8%	96.5%	526 576	674 101	713 190	24.2%	86.2%
Provinces and municipalities	200 000	180 718	136 905	177 899	-3.8%	18.1%	185 625	203 236	215 024	6.5%	29.5%
Departmental agencies and accounts	56 110	134 344	162 685 1 678	64 861	4.9%	10.9%	20 625	59 774	63 241	-0.8%	7.9%
Foreign governments and international organisations	_	(7)	10/0	-	_	-	_	-	-	-	_
Public corporations and private enterprises	820 629	1 149 900	500 000	129 271	-46.0%	67.5%	320 326	411 091	434 933	49.8%	48.9%
Households	39	1 143 300	300 000	129 27 1	-100.0%	07.570	J20 J20 -	411 031	434 333	43.070	40.370
Payments for capital assets	-	14			-100.070	_			_		_
Machinery and equipment		14		_		_					_
Total	1 093 318	1 489 887	830 257	435 827	-26.4%	100.0%	616 933	774 586	823 084	23.6%	100.0%
Proportion of total programme	16.4%	23.0%	13.3%	6.0%	-20.470	100.070	8.2%	9.5%	9.7%	25.070	100.070
expenditure to vote expenditure	10.470	23.070	13.370	0.070			0.2 /0	3.370	3.1 /0		
Details of transfers and subsidies											
Departmental agencies and accounts											
Departmental agencies (non-business entities)	1										
Current	56 110	63 344	51 685	64 861	4.9%	6.1%	20 625	59 774	63 241	-0.8%	7.9%
South African National Energy Development	56 110	63 344	51 685	64 861	4.9%	6.1%	20 625	59 774	63 241	-0.8%	7.9%
Institute											
Capital	-	71 000	111 000	I	-	4.7%	_	-	-	-	-
South African National Energy Development	-	71 000	111 000	-	_	4.7%	-	-	-	-	-
Institute											
Provinces and municipalities											
Municipalities											
Municipal bank accounts											
Current	200 000	180 718	136 905	177 899	-3.8%	18.1%	185 625		215 024	6.5%	29.5%
Energy efficiency and demand side	200 000	180 718	136 905	177 899	-3.8%	18.1%	185 625	203 236	215 024	6.5%	29.5%
management grant											
Households											
Social benefits					400.00/						
Current	39		_	-	-100.0%	-		-	-		_
Employee social benefits	39	_	_	-	-100.0%	-	-	-	-	_	-
Foreign governments and international											
organisations		(7)	4 070								
Current		(7)	<b>1 678</b> 1 678	_		-		<u>-</u>	_		-
International Atomic Energy Agency	_	(7)	10/8	-		-			-	_	-
Public corporations and private enterprises Private enterprises											
Private enterprises - subsidies on products											
and production											
Current	820 629	1 149 900	500 000	129 271	-46.0%	67.5%	320 326	411 091	434 933	49.8%	48.9%
Various institutions: Solar water heater project	820 629	1 149 900	500 000	129 271	-46.0%	67.5%	320 326	411 091	434 933	49.8%	48.9%
various institutions. Solai water neater project	020 029	1 143 300	JUU 000	172 21 1	<del>-4</del> 0.076	01.570	320 320	411031	7J4 JJJ	43.070	40.570

### **Personnel information**

Table 26.17 Clean Energy personnel numbers and cost by salary level¹ prior to Cabinet approved reduction, effective from 2017/182; budget reductions and aggregate baseline total

		per of posts mated for																	
					Maria		42-4	e			1 1	6	e	4-1-1	!:- I			NI.	
	31 IV	arch 2016			Nur	nber and o	cost o	r perso	nnei posts	s tillea	<i>i</i> piann	ed for on	runaea	estab	isnment			N	ımber
	Number	Number of																Average	Salary
	of	posts																growth	level/total:
	funded	additional																rate	Average
	posts	to the		Actual Revised estimate						Mediu	ım-term ex	pendit	ure est	timate			(%)	(%)	
		establishment	20	2014/15 2015/16			20	16/17		20	17/18		20	18/19		2015/1	6 - 2018/19		
	Unit Uni				Unit			Unit			Unit			Unit					
Clean Energy	/		Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary level	30	-	23	12.4	0.5	24	14.3	0.6	25	17.3	0.7	25	18.4	0.7	26	20.1	0.8	2.7%	100.0%
1 – 6	-	-	1	0.1	0.1	-	-	-	-	-	-	1	-	-	-	-	-	-	_
7 – 10	12	-	11	3.9	0.4	10	3.5	0.3	11	4.4	0.4	11	5.1	0.5	12	6.0	0.5	6.3%	44.0%
11 – 12	9	-	7	4.6	0.7	8	5.2	0.7	8	6.3	0.8	8	6.5	0.8	8	6.9	0.9	_	32.0%
13 – 16	9	-	4	3.7	0.9	6	5.6	0.9	6	6.6	1.1	6	6.8	1.1	6	7.2	1.2	-	24.0%
Reduction	_	_	-	_	_	-	_	_	-	_	_	-	(1.6)	_	_	(2.6)	_	_	_
Total	30	-	23	12.4	0.5	24	14.3	0.6	25	17.3	0.7	-	16.8	-	_	17.5	-	_	_

Data has been provided by the department and may not necessarily reconcile with official government personnel data.
 This programme's compensation of employees budget has been reduced by R4.2 million for 2017/18 and 2018/19. After consultation with the Department of Public Service and Administration and National Treasury, the department will finalise, develop and implement a plan to manage its personnel expenditure within this reduced expenditure ceiling.

### **Entities**

### **Central Energy Fund**

#### **Mandate**

The Central Energy Fund is listed in schedule 2 of the Public Finance Management Act (1999), and is governed by the Central Energy Fund Act (1977) and the Companies Act (2008). Its mandate is to research, finance, develop and exploit appropriate energy solutions across the spectrum of energy sources to meet South Africa's future energy needs.

Through its 8 operating subsidiaries, the fund is also mandated to finance and promote the acquisition of coal; exploit coal deposits; manufacture liquid fuel, oil and other products from coal; and market these products. It is also mandated to acquire, generate, manufacture, market, distribute or research any other form of energy. The subsidiaries are: the Petroleum Oil and Gas Corporation of South Africa; the South African Gas Development Company; the Petroleum Agency of South Africa; Oil Pollution Control South Africa; the Strategic Fuel Fund Association; African Exploration; ETA Energy; and CCE Solutions.

### Selected performance indicators

Table 26.18 Central Energy Fund performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome		Past		Current		Projections	
			2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of crude oil barrels maintained as per ministerial directive per year	Ensure the security of energy supply by diversifying sources, and by building and managing strategic energy stocks and energy infrastructure		10.3 million						
Number of demonstrations of the Basa njengo Magogo method for cleaner coal usage in townships per year <sup>1</sup>	Invest in relevant research and development activities		40 000	40 000	_1	_1	-1	_1	_1
Number of new solar water heating units installed per year <sup>1</sup>	Invest in relevant research and development activities	Outcome 6: An efficient,	1 500	6 600	_1	_1	_1	_1	_1
Number of tons (in thousands) of coal produced at Vlakfontein by the African Exploration Mining And Finance Corporation per year	Acquire, hold and develop exploration and mining rights	competitive and responsive economic infrastructure network	1 200	1 700	1 150	1 416	1 560	2 689	4 838
Volume of liquid fuel supplied to the South African market per year	Ensure the security of energy supply by diversifying sources, and by building and managing strategic energy stocks and energy infrastructure		_2	_2	4.4 million	4.8 million	5.3 million	5.8 million	6.8 million
Number of reportable environmental incidents at PetroSA per year	Ensure the security of energy supply by diversifying sources, and by building and managing strategic energy stocks and energy infrastructure		_2	_2	7	11	12	12	12

<sup>1.</sup> These indicators are discontinued from 2014/15 onwards.

### **Expenditure analysis**

The national development plan envisages that, by 2030, South Africa should have an adequate supply of electricity and liquid fuels so that economic activity and welfare are not disrupted. This is in line with outcome 6 (an efficient, competitive and responsive economic infrastructure network) of government's 2014-2019 medium term strategic framework. A number of the main operational activities of the Central Energy Fund, such as the manufacturing of liquid fuel, and the acquisition, generation, manufacturing, marketing or distribution of any other forms of energy, support the visions of these guiding policy documents.

The fund's Vision 2025 strategy was completed in 2014 with the aim of restructuring the organisation. The strategy aims to stabilise and grow the business in the short term, and to lay foundations for much stronger

<sup>2.</sup> No historical data is available as these indicators were introduced in 2014/15.

growth in the medium term. The three key phases are stabilisation, growth, and leading, and these will be the main focus areas over the medium term.

The stabilisation phase includes PetroSA's turnaround project, which aims to steady its financial and operating environment; tank refurbishment at Milnerton and Saldanha to enable the Strategic Fuel Fund to increase the storage of crude oil in line with government policy; the consideration of a gas to power project to divert tail gas to Eskom's Gourikwa power station; and a condensate project (a process of extracting raw gas and turning it into a liquid state), which seeks to address feedstock challenges. These projects will require the acquisition of assets, which are expected to amount to R9.6 billion over the medium term.

The growth phase of Vision 2025 involves the implementation of projects that will enable the fund to achieve its mandate and ensure long term financial sustainability.

The lead phase seeks to achieve the long term objective of making the fund a market leader in the security of energy supply, and to generate investment income from the refinery, gas infrastructure, and renewable energy projects. In particular, the Strategic Fuel Fund, the Petroleum Agency South Africa, iGas and PetroSA will be involved in increasing storage capacities, holding increased volumes of strategic stocks, and distributing petroleum products. iGas will be positioned to become an active infrastructure partner for increased gas supply into South Africa, as market indications are that global demand for gas will grow at about 2.5 per cent per year until 2018. The fund also aims to comply with the ministerial directive of maintaining 10.3 million barrels of crude oil per year, and to supply the South African market with 4.8 million barrels of liquid fuel per year over the medium term, made possible by the increased coal production at Vlakfontein. As a result of these initiatives, expenditure in the invest in relevant research and development activities programme is expected to grow at an average annual rate of 19.5 per cent over the medium term, while expenditure in the acquire, hold and develop exploration and mining rights programme is expected to increase at an average annual rate of 39.7 per cent over the same period.

The fund is experiencing a lack of feedstock and heavy reliance on condensate refining, but the introduction of the delivery of gas to Eskom's Gourikwa power station, which is planned to come on stream from 2017/18, will allow for feedstock for the production of gas to liquid petroleum products. Revenue is thus expected to increase at a rate of 1.9 per cent over the medium term from R20 billion in 2015/16 to R21.1 billion in 2018/19. The fund derives revenue mostly from the sale of fuel and crude oil products.

The cost of acquiring goods sold, such as oil, gas and coal, is expected to drive an increase in total expenditure from R19.5 billion in 2015/16 to R21.4 billion in 2018/19. Expenditure on goods and services is set to increase at an average annual rate of 2.3 per cent over the medium term due to the costs associated with infrastructure expansion, strategic stocks, and restructuring initiatives.

The fund has 1 886 filled posts, and this number is expected to remain constant over the medium term. Expenditure on compensation of employees is expected to increase from R1 billion in 2015/16 to R1.2 billion in 2018/19 due to inflationary adjustments.

### Programmes/objectives/activities

Table 26.19 Central Energy Fund expenditure trends and estimates by programme/objective/activity

				Revised	Average growth rate	Expen- diture/ Total: Average	Modium	n-term expendit	uro	Average growth rate	Expen- diture/ Total: Average
	Audit	ed outcome		estimate	(%)	(%)	Mediai	estimate	uic	(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -		2016/17	2017/18	2018/19	2015/16 -	
Administration	183 328	279 899	267 034	275 469	14.5%	1.0%	348 294	512 457	780 007	41.5%	2.3%
Invest in relevant research and development activities	189 294	12 683	223 327	330 609	20.4%	0.8%	381 839	458 071	563 918	19.5%	2.1%
Ensure the security of energy supply by diversifying sources, and by building and managing strategic energy stocks and energy infrastructure	19 843 421	24 411 701	33 551 943	18 014 196	-3.2%	95.6%	18 158 983	18 299 211	17 959 177	-0.1%	87.9%

Table 26.19 Central Energy Fund expenditure trends and estimates by programme/objective/activity

	Audit	ed outcome		Revised estimate	Average growth rate (%)	Expen- diture/ Total: Average (%)	Mediur	n-term expendit estimate	ure	Average growth rate (%)	Expenditure/ Total: Average (%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 -	2018/19
Acquire, hold and develop exploration and mining rights	263 041	335 654	679 243	709 376	39.2%	2.1%	1 305 205	1 845 818	1 931 967	39.7%	6.9%
Promote exploration and exploitation of natural oil and gas	75 511	83 587	115 686	140 916	23.1%	0.4%	157 985	165 884	174 178	7.3%	0.8%
Total	20 554 595	25 123 524	34 837 233	19 470 566	-1.8%	100.0%	20 352 306	21 281 441	21 409 247	3.2%	100.0%

### Statements of historical financial performance and position

Table 26.20 Central Energy Fund statements of historical financial performance and position

Table 26.20 Central Energy Statement of financial performance				•					Outcome/ Budget
		Audited		Audited		Audited	Budget	Revised	Average
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	(%)
R thousand	201	2/13	2013	3/14	2014	4/15	2015	/16	2012/13 - 2015/16
Revenue									
Non-tax revenue	16 477 182	21 406 141	26 303 553	23 670 657	19 288 958	19 719 524	27 547 004	19 936 402	94.6%
Sale of goods and services other than	15 753 648	19 453 098	22 915 445	21 553 172	18 481 286	18 515 161	26 797 807	19 187 205	93.8%
capital assets									
of which:									
Sales by market establishment	15 753 648	19 453 098	22 915 445	21 553 172	18 481 286	18 515 161	26 797 807	19 187 205	93.8%
Other non-tax revenue	723 534	1 953 043	3 388 108	2 117 485	807 672	1 204 363	749 197	749 197	106.3%
Total revenue	16 477 182	21 435 348	26 303 553	23 670 657	19 288 958	20 562 801	27 571 512	19 960 910	95.5%
Expenses									
Current expenses	15 039 672	20 554 595	24 517 758	24 995 710	117 272 125	34 837 234	19 348 749	19 348 749	56.6%
Compensation of employees	1 313 583	1 045 118	1 492 581	756 556	1 629 227	1 408 580	1 013 412	1 013 412	77.5%
Goods and services	12 718 474	18 382 170	20 051 684	23 315 816	115 515 548	29 725 579	18 139 574	18 139 574	53.8%
Depreciation	888 122	384 274	1 800 318	21 906	83 465	2 372 551	73 325	73 325	100.2%
Interest, dividends and rent on land	119 494	743 033	1 173 174	901 432	43 885	1 330 524	122 438	122 438	212.3%
Total expenses	15 039 672	20 554 595	24 517 758	25 123 524	117 506 283	34 837 234	19 470 566	19 470 566	56.6%
Surplus/(Deficit)	1 437 510	880 753	1 785 796	(1 452 867)	(98 217 325)	(14 274 432)	8 100 946	490 344	-
Statement of financial position									
Carrying value of assets	13 765 375	17 265 675	18 721 221	21 336 771	25 560 980	11 237 554	19 678 785	14 678 785	83.0%
Acquisition of assets	(11 320 469)	(11 320 469)	(550)	(5 476 796)	(6 399 902)	(6 145 711)	(3 883 208)	(3 883 208)	124.2%
Investments	2 884 328	3 633 420	20 958 787	6 060 194	12 066 604	4 455 131	7 768 229	7 768 229	50.2%
Inventory	2 064 214	6 178 458	3 464 027	2 984 535	2 163 932	2 213 231	2 290 728	2 290 728	136.9%
Loans	-	-	-	8 413	1 409 954	9 716	-	-	1.3%
Receivables and prepayments	3 212 013	3 676 192	3 395 484	3 720 831	3 417 151	3 373 900	2 080 554	2 080 554	106.2%
Cash and cash equivalents	7 924 214	13 073 314	1 466 410	11 310 905	5 000 273	10 364 012	8 085 795	8 085 795	190.6%
Non-current assets held for sale	773 402	-	-	10 669	-	60 669	_	-	9.2%
Taxation		27 781	5 871	12 724	5 257	16 337	5 540	5 540	374.3%
Derivatives financial instruments	7 115 595		<del>-</del>	_		_	<del>-</del>	<del></del>	-
Total assets	37 739 141	43 854 840	48 011 800	45 445 042	49 624 151	31 730 550	39 909 631	34 909 631	89.0%
Accumulated surplus/(deficit)	28 176 693	27 379 009	25 588 385	27 762 270	28 370 915	13 400 287	23 314 501	18 314 501	82.4%
Capital and reserves	(77 252)	146 419	80 720	1 457 859	2 123 855	1 703 179	275 974	275 974	149.1%
Borrowings	1 641 831	-	12 961 000	394 061	4 218 958	287 166	1 330 005	1 330 005	10.0%
Finance lease	34 204	920	-	-	-	551	-	-	4.3%
Deferred income	13 769	10 305		2 587	2 334	1 031	-	-	86.5%
Trade and other payables	1 411 923	3 541 841	798 034	3 597 780	3 435 354	4 033 400	2 880 819	2 880 392	164.8%
Taxation	-	1 766 453	1 491	1 837 784	1 419 795	993 843	1 654 494	1 654 494	203.3%
Provisions	6 537 973	8 864 967	8 572 978	8 759 074	10 052 940	10 321 795	9 882 174	9 882 601	107.9%
Derivatives financial instruments		2 132 273		1 633 627		989 298	571 229	571 229	932.5%
Total equity and liabilities	37 739 141	43 854 840	48 011 800	45 445 042	49 624 151	31 730 550	39 909 631	34 909 631	89.0%

### Statements of estimates of financial performance and position

Table 26.21 Central Energy Fund statements of estimates of financial performance and position

Statement of financial performance			Expen-					Expen-
		Average	diture/				Average	diture/
		growth	Total:				growth	Total:
	Revised	rate	Average				rate	Average
	estimate	(%)	(%)	Med	ium-term estimat	e	(%)	(%)
R thousand	2015/16	2012/13	- 2015/16	2016/17	2017/18	2018/19	2015/16 - 20	18/19
Revenue								
Non-tax revenue	19 936 402	-2.3%	98.9%	20 264 338	20 500 303	21 140 266	2.0%	100.0%
Sale of goods and services other than capital	19 187 205	-0.5%	92.0%	19 381 775	19 735 313	20 151 525	1.6%	95.8%
assets								
of which:								
Sales by market establishment	19 187 205	-0.5%	92.0%	19 381 775	19 735 313	20 151 525	1.6%	95.8%
Other non-tax revenue	749 197	-27.3%	6.9%	882 563	764 990	988 741	9.7%	4.1%
Total revenue	19 960 910	-2.3%	100.0%	20 264 338	20 500 303	21 140 266	1.9%	100.0%

Table 26.21 Central Energy Fund statements of estimates of financial performance and position

0,			_	•	-			-
Statement of financial performance			Expen-				_	Expen-
		Average	diture/				Average	diture/
		growth	Total:				growth	Total:
	Revised	rate	Average				rate	Average
	estimate	(%)	(%)		lium-term estimat		(%)	(%)
R thousand	2015/16	2012/13	- 2015/16	2016/17	2017/18	2018/19	2015/16 - 2	018/19
Expenses								
Current expenses	19 348 749	-2.0%	99.7%	20 193 855	21 079 512	21 115 375	3.0%	71.9%
Compensation of employees	1 013 412	-1.0%	4.3%	1 080 286	1 157 800	1 242 241	7.0%	5.4%
Goods and services	18 139 574	-0.4%	90.2%	18 849 851	19 622 201	19 408 749	2.3%	92.2%
Depreciation	73 325	-42.4%	2.3%	174 891	182 003	184 787	36.1%	0.7%
Interest, dividends and rent on land	122 438	-45.2%	2.9%	88 828	117 508	279 597	31.7%	0.7%
Total expenses	19 470 566	-1.8%	100.0%	20 352 306	21 281 441	21 409 247	3.2%	100.0%
Surplus/(Deficit)	490 344	_	_	(87 968)	(781 138)	(268 981)	-181.9%	_
							<u>.</u>	
Statement of financial position								
Carrying value of assets	14 678 785	-5.3%	40.9%	18 333 931	18 239 365	19 028 298	9.0%	45.8%
of which:								
Acquisition of assets	(3 883 208)	-30.0%	-17.1%	(4 657 842)	(3 323 878)	(1 600 008)	-25.6%	-9.0%
Investments	7 768 229	28.8%	14.5%	8 014 748	8 320 022	9 272 498	6.1%	21.8%
Inventory	2 290 728	-28.2%	8.5%	2 429 287	2 620 036	2 711 414	5.8%	6.6%
Receivables and prepayments	2 080 554	-17.3%	8.3%	2 134 765	2 599 835	3 560 815	19.6%	6.7%
Cash and cash equivalents	8 085 795	-14.8%	27.6%	5 063 601	8 125 364	8 160 704	0.3%	19.2%
Taxation	5 540	-41.6%	0.0%	19 302	20 507	27 309	70.2%	0.0%
Total assets	34 909 631	-7.3%	100.0%	35 995 634	39 925 129	42 761 038	7.0%	100.0%
Accumulated surplus/(deficit)	18 314 501	-12.5%	54.6%	19 146 904	22 248 255	24 199 737	9.7%	54.5%
Capital and reserves	275 974	23.5%	2.4%	275 974	275 974	275 974	-	0.7%
Borrowings	1 330 005	_	1.4%	1 847 997	2 281 475	2 427 156	22.2%	5.1%
Accrued interest	435	_	0.0%	292	149	149	-30.0%	0.0%
Trade and other payables	2 880 392	-6.7%	9.2%	2 777 907	2 803 302	2 947 398	0.8%	7.5%
Taxation	1 654 494	-2.2%	4.0%	1 865 781	2 131 424	2 216 806	10.2%	5.1%
Provisions	9 882 601	3.7%	25.1%	9 504 550	9 606 321	10 088 589	0.7%	25.6%
Derivatives financial instruments	571 229	-35.5%	3.3%	576 229	578 229	605 229	1.9%	1.5%
Total equity and liabilities	34 909 631	-7.3%	100.0%	35 995 634	39 925 129	42 761 038	15.6%	100.0%

#### **Personnel information**

Table 26.22 Central Energy Fund personnel numbers and cost by salary level<sup>1</sup>

				•															
	Numb	er of posts																	
estimated for																			
31 March 2016				Number and cost of personnel posts filled / planned for on funded establishment										Number					
-					Nullik	or and co	at or pera	omici p	Joto IIIIcu	piannea	101 011 10	illucu cou	abilioninici						
	Number Number																	Average	Salary
	of	of																growth	level/Total:
	funded	posts																rate	Average
	posts	on approved		Actual		Povid	sed estima	ato.			Modi	ım-tarm a	vnanditu	a actima	to			(%)	(%)
	establishmen								Medium-term expenditure estima				e esuilla				2015/16 - 2018/19		
	Cotabiloninent			2014/15		2015/16		2016/17			2017/18		2018/19		2015/16	- 2018/19			
					Unit			Unit			Unit			Unit			Unit		
Central E	nergy Fun	d	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary	1 886	1 886	2 047	1 408.6	0.7	1 886	1 013.4	0.5	1 886	1 080.3	0.6	1 886	1 157.8	0.6	1 886	1 242.2	0.7	7.0%	100.0%
level																			
1 – 6	252	252	252	30.6	0.1	252	24.6	0.1	252	26.2	0.1	252	28.1	0.1	252	30.1	0.1	7.0%	13.4%
7 – 10	895	895	988	547.1	0.6	895	340.3	0.4	895	362.7	0.4	895	388.7	0.4	895	417.1	0.5	7.0%	47.5%
11 – 12	406	406	419	289.9	0.7	406	247.8	0.6	406	264.1	0.7	406	283.1	0.7	406	303.7	0.7	7.0%	21.5%
13 – 16	333	333	388	541.0	1.4	333	400.8	1.2		427.3	1.3	333	457.9	1.4	333	491.3	1.5		17.7%
1. Rand m	illion.		1			1			1										

### **South African Nuclear Energy Corporation**

#### Mandate

The South African Nuclear Energy Corporation is a schedule 2 public entity and derives its mandate from the Nuclear Energy Act (1999), the Nuclear Energy Policy of 2008, and directives conferred on it by the Minister of Energy. The corporation is responsible for research on nuclear energy and radiation science, the development and innovation of nuclear related products in South Africa, and the execution of nuclear fuel cycle activities. Subsidiaries include Pelchem and Nuclear Technology Products Radioisotopes (NTP).

Responsibilities also include: operating the SAFARI-1 research nuclear reactor for research and development purposes, and to provide irradiation services for the production of radioisotopes; the decommissioning and decontamination of nuclear facilities; and contributing to South Africa's obligations in terms of international nuclear treaties and agreements.

### Selected performance indicators

Table 26.23 South African Nuclear Energy Corporation performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome		Past		Current	Projections			
			2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	
Percentage of annual sales for the South African Nuclear Energy Corporation of the total group annual sales per year	Administration		9.1% (R1 184 969)	13.9% (R1 528 443)	18.5% (R2 238 182)	20% (R3 540 296)	26% (R2 630 121)	26.3% (R2 950 564)	27% (R3 323 916)	
Number of product and process innovations per year	Administration		12	14	17	12	12	12	12	
Number of scientific articles published per year	Administration	Outcome 6: An efficient,	36	40	31	28	28	28	28	
Number of days per year that the reactor is operationally available out of the days scheduled for operation	Radiation products and services	competitive and responsive infrastructure network	303	303	303	287	287	287	287	
Maximum allowable annual radiation dose (microsievert) in terms of licence conditions	South African Nuclear Energy Corporation as a host of nuclear programmes		6.3 µSv	6 µSv	6 µSv	6 µSv	6 µSv	6 μSv	6 μSv	
Performance percentage in terms of the annual safeguards activity plan to be achieved	South African Nuclear Energy Corporation as a host of nuclear programmes		100%	100%	100%	100%	100%	100%	100%	

### **Expenditure analysis**

The South African Nuclear Energy Corporation contributes to the national development plan's vision of providing quality health care; creating an economy that will give rise to more jobs; improving the quality of education, training and innovation; and expanding infrastructure. The Department of Energy's integrated resource plan for electricity lists nuclear as a power supply priority, and this is a key part of the corporation's mandate.

The focus of the corporation over the medium term will continue to be on radioisotope production, radiation applications, research and development, specialised nuclear manufacturing, the nuclear fuel cycle, and support for the generation of nuclear power. The first three are the priority focus areas for 2015/16, and aim to expand research and development programmes in support of the corporation's core activities, contribute to the national system of innovation, and strengthen the global market position of NTP Radioisotopes, the corporation's wholly owned subsidiary. The subsequent three focus areas are aligned with the 2010-2030 integrated resource plan for electricity, and the requirements for building new nuclear power reactors. In light of this, the bulk of expenditure is expected to go towards research and development, and identified critical site infrastructure, including repairs and maintenance, and inventory. In working towards these priorities, expenditure in the administration programme is expected to grow at an average annual rate of 20 per cent over the medium term.

The corporation contributes to the health component of the national development plan's priorities through NTP Radioisotopes, which produces medical radioisotopes, some of which are used in South Africa's health system for diagnostic studies and cancer treatments. This accounts for the largest proportion of spending within the corporation, with the radiation products and services programme expected to grow from R1.2 billion in 2015/16 to R1.5 billion in 2018/19 at an average annual rate of 7 per cent. This will allow the SAFARI-1 reactor to be operationally available for 287 days per year, and will allow the corporation to maintain performance safeguards and radiation doses within acceptable limits.

The corporation has embarked on several key infrastructure projects. These include securing the supply of low enriched uranium fuel and target plates; continuing work on a multipurpose research reactor project as a replacement for SAFARI-1; leveraging the accreditation from the American Society of Mechanical Engineers for the corporation's nuclear manufacturing centre so that South Africa can procure the benefits of localisation through its nuclear energy expansion programme; and investigating the feasibility of a facility to manufacture fuel components for pressurised water reactors.

Over the medium term, the corporation will continue with the installation of technologies related to the small angle neutron scattering and neutron radiography facilities to further enhance its research capabilities. It will also continue to implement its critical site infrastructure upgrades and refurbishment programme, which includes liquid effluent management services, analytical and calibration services, material test reactor fuel facilities, site security upgrades, and other site infrastructure upgrades. As a result, acquisition of assets is expected to amount to R220.5 million over the medium term, while expenditure on goods and services is expected to grow by 11.6 per cent, partly because this expenditure is influenced by costs associated with regulatory tariffs imposed by the National Nuclear Regulator and Eskom. The corporation will also focus on decommissioning some strategic nuclear facilities, for which R54.4 million has been allocated over the medium term.

The number of personnel in the corporation is expected to remain constant over the medium term. Expenditure on compensation of employees is expected to increase from R916.9 million in 2015/16 to R1.1 billion in 2018/19 due to general inflationary increases.

The corporation derives its revenue from the sale of nuclear technology products, chemical products and nuclear engineering services, and from transfer payments received from the department. This funds operational requirements and specific activities such as the decommissioning of strategic plants, the production and conversion of low enriched uranium fuel, and nuclear safety. This is based on a plan to manage nuclear liabilities, which outlines the activities to be carried out to quantify total nuclear liability, and includes the decommissioning, decontamination and waste management of all disused nuclear facilities. Total revenue is projected to grow from R2.3 billion in 2015/16 to R3.2 billion over the medium term at an average annual rate of 12.5 per cent, driven by higher projected sales of nuclear radiation products and an increase in the transfer from the department following budget reductions in previous years.

### Programmes/objectives/activities

Table 26.24 South African Nuclear Energy Corporation expenditure trends and estimates by programme/objective/activity

				Revised	Average growth rate	Expen- diture/ Total: Average	Mediun	n-term expend	liture	Average growth rate	Expen- diture/ Total: Average
	Au	dited outcome	е	estimate	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 - 2	018/19
Administration	459 451	283 637	384 344	387 091	-5.6%	19.5%	409 956	621 033	668 068	20.0%	18.1%
Nuclear energy	344 200	324 486	416 828	325 380	-1.9%	18.1%	379 434	327 144	360 619	3.5%	12.3%
Radiation products and services	522 396	928 909	890 930	1 238 329	33.3%	44.1%	1 401 708	1 488 098	1 516 496	7.0%	49.8%
South African Nuclear Energy	304 368	311 563	375 296	479 637	16.4%	18.4%	527 862	556 139	697 061	13.3%	19.8%
Corporation as a host of nuclear											
programmes											
Total	1 630 415	1 848 595	2 067 398	2 430 437	14.2%	100.0%	2 718 960	2 992 414	3 242 244	10.1%	100.0%

### Statements of historical financial performance and position

Table 26.25 South African Nuclear Energy Corporation statements of historical financial performance and position

Statement of financial performance		-				-		-	Outcome/ Budget
		Audited		Audited		Audited	Budget	Revised	Average
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	
R thousand	2012	/13	2013	/14	2014	/15	2015/	16	2012/13 - 2015/16
Revenue									
Non-tax revenue	1 527 360	1 311 212	1 462 078	1 334 710	1 662 199	1 529 874	1 885 070	1 613 276	88.6%
Sale of goods and services other than	1 448 027	1 184 969	1 390 577	1 148 001	1 567 688	1 339 107	1 741 645	1 511 710	84.3%
capital assets of which:									
Sales by market establishment	1 448 027	1 184 969	1 390 577	1 148 001	1 567 688	1 339 107	1 741 645	1 511 710	84.3%
Other non-tax revenue	79 333	126 243	71 501	186 709	94 511	190 767	143 425	101 566	155.7%
Transfers received	696 103	496 293	583 637	522 637	992 295	507 582	626 301	650 463	75.1%
Total revenue	2 223 463	1 807 505	2 045 715	1 857 347	2 654 494	2 037 456	2 511 371	2 263 739	84.4%
Expenses									
Current expenses	1 870 036	1 572 620	1 895 477	1 790 717	1 947 151	2 031 469	2 382 408	2 382 408	96.1%
Compensation of employees	719 193	695 340	786 454	674 787	795 088	789 094	916 852	916 852	95.6%
Goods and services	1 063 124	763 440	1 008 705	1 027 532	1 044 941	1 106 366	1 387 862	1 387 862	95.1%
Depreciation	83 458	93 800	92 642	74 266	101 840	63 340	77 694	77 694	86.9%
Interest, dividends and rent on land	4 261	20 040	7 676	14 132	5 282	72 669	-	-	620.5%
Transfers and subsidies	32 208	_	30 313	_	-	-	-	-	_
Total expenses	1 991 146	1 630 415	1 971 428	1 848 595	2 014 137	2 067 398	2 430 437	2 430 437	94.9%
Surplus/(Deficit)	232 317	177 090	74 287	8 752	640 358	(29 941)	80 934	(166 698)	-

Table 26.25 South African Nuclear Energy Corporation statements of historical financial performance and position

Statement of financial position									Outcome/
		Audited		Audited		Audited	Budget	Revised	Budget Average
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	(%)
R thousand	2012/	13	2013/	/14	2014	/15	2015/	16	2012/13 - 2015/16
Carrying value of assets	1 154 776	1 009 957	1 167 148	1 022 839	1 245 762	1 079 913	1 269 872	1 391 386	93.1%
Acquisition of assets	(209 649)	(209 649)	(167 593)	(129 740)	(247 645)	(146 981)	(217 104)	(174 404)	78.5%
Investments	151 504	146 522	153 567	195 379	265 858	228 951	272 482	294 794	102.6%
Inventory	202 181	266 281	288 224	206 055	298 716	239 259	346 264	221 660	82.2%
Receivables and prepayments	292 923	352 838	255 546	353 993	316 231	312 979	374 209	212 391	99.5%
Cash and cash equivalents	443 365	475 974	496 893	489 281	621 475	671 828	658 453	594 006	100.5%
Taxation	13 053	21 039	19 153	8 051	42 785	16 515	386	1 257	62.2%
Total assets	2 257 802	2 272 611	2 381 559	2 275 598	2 790 827	2 549 445	2 934 947	2 715 494	94.7%
Accumulated surplus/(deficit)	608 369	538 318	537 871	591 627	734 674	528 363	629 034	482 061	85.3%
Capital and reserves	335 820	347 090	366 980	320 417	316 877	330 587	371 701	367 948	98.2%
Capital reserve fund	493 889	405 037	357 627	427 506	514 975	615 586	740 648	703 317	102.1%
Borrowings	40 817	16 275	119 572	21 902	72 812	66 219	64 597	31 523	45.6%
Finance lease	355	7 587	6 264	7 759	6 830	8 215	7 759	10 902	162.5%
Trade and other payables	118 066	277 980	379 218	261 859	331 447	241 777	549 890	321 682	80.0%
Taxation	5 445	29 489	1 525	83	1 416	1 654	_	_	372.4%
Provisions	655 040	617 990	612 502	535 614	779 692	653 003	500 497	748 506	100.3%
Managed funds (e.g. poverty alleviation	-	21 015	_	66 813	21 277	70 896	21 030	_	375.2%
fund)									
Derivatives financial instruments	-	11 830	-	42 018	10 827	33 145	49 791	49 555	225.3%
Total equity and liabilities	2 257 801	2 272 611	2 381 559	2 275 598	2 790 828	2 549 445	2 934 947	2 715 494	94.7%

# Statements of estimates of financial performance and position

Table 26.26 South African Nuclear Energy Corporation statements of estimates of financial performance and position

Statement of financial performance	Revised	Average growth rate	Expen- diture/ Total: Average		-		Average growth rate	Expen- diture/ Total: Average
	estimate	(%)	(%)	Medi	um-term estimate	•	(%)	(%)
R thousand	2015/16	2012/13 - 20	015/16	2016/17	2017/18	2018/19	2015/16 - 20	18/19
Revenue								
Non-tax revenue	1 613 276	7.2%	72.7%	1 958 081	2 197 077	2 460 283	15.1%	74.5%
Sale of goods and services other than capital assets	1 511 710	8.5%	65.0%	1 912 445	2 072 653	2 312 634	15.2%	70.7%
of which:								
Sales by market establishment	1 511 710	8.5%	65.0%	1 912 445	2 072 653	2 312 634	15.2%	70.7%
Other non-tax revenue	101 566	-7.0%	7.7%	45 636	124 424	147 649	13.3%	3.8%
Transfers received	650 463	9.4%	27.3%	649 376	720 099	761 800	5.4%	25.5%
Total revenue	2 263 739	7.8%	100.0%	2 607 457	2 917 176	3 222 083	12.5%	100.0%
Expenses								
Current expenses	2 382 408	14.8%	97.4%	2 653 975	2 928 409	3 133 502	9.6%	140.0%
Compensation of employees	916 852	9.7%	38.8%	972 061	1 030 395	1 092 224	6.0%	35.4%
Goods and services	1 387 862	22.0%	53.3%	1 611 874	1 737 908	1 928 656	11.6%	58.5%
Depreciation	77 694	-6.1%	4.0%	65 524	155 117	109 063	12.0%	3.5%
Interest, dividends and rent on land	-	-100.0%	1.4%	4 516	4 989	3 559	_	0.1%
Total expenses	2 430 437	14.2%	100.0%	2 718 960	2 992 414	3 242 244	10.1%	100.0%
Surplus/(Deficit)	(166 698)	(2)	_	(111 502)	(75 238)	(20 161)	-50.5%	-
Statement of financial position								
Carrying value of assets	1 391 386	11.3%	45.7%	1 491 839	1 520 814	1 550 501	3.7%	48.8%
of which:	1 00 1 000	11.070	10.1 70	1 101 000	1 020 011	1 000 001	0.170	10.070
Acquisition of assets	(174 404)	-6.0%	-6.8%	(109 964)	(52 633)	(57 876)	-30.8%	-3.4%
Investments	294 794	26.2%	8.7%	371 483	453 051	539 416	22.3%	13.4%
Inventory	221 660	-5.9%	9.6%	262 674	279 723	297 392	10.3%	8.7%
Receivables and prepayments	212 391	-15.6%	12.8%	270 526	312 366	373 105	20.7%	9.4%
Cash and cash equivalents	594 006	7.7%	22.7%	554 179	583 070	664 652	3.8%	19.6%
Taxation	1 257	-60.9%	0.5%	1 253	1 253	1 253	-0.1%	0.0%
Total assets	2 715 494	6.1%	100.0%	2 951 954	3 150 277	3 426 319	8.1%	100.0%
Accumulated surplus/(deficit)	482 061	-3.6%	22.0%	537 835	629 117	800 016	18.4%	19.8%
Capital and reserves	367 948	2.0%	14.0%	402 874	423 839	425 937	5.0%	13.3%
Capital reserve fund	703 317	20.2%	21.7%	764 292	780 259	802 275	4.5%	25.0%
Borrowings	31 523	24.7%	1.4%	30 641	26 329	8 749	-34.8%	0.8%
Finance lease	10 902	12.8%	0.3%	9 956	9 778	8 746	-7.1%	0.3%
Trade and other payables	321 682	5.0%	11.3%	370 616	404 462	448 857	11.7%	12.6%
Provisions	748 506	6.6%	26.0%	800 706	856 690	919 704	7.1%	27.2%
Derivatives financial instruments	49 555	61.2%	1.4%	35 034	19 803	12 035	-37.6%	1.0%
Total equity and liabilities	2 715 494	6.1%	100.0%	2 951 954	3 150 277	3 426 319	-32.7%	100.0%

#### Personnel information

Table 26.27 South African Nuclear Energy Corporation personnel numbers and cost by salary level<sup>1</sup>

		er of posts																					
		arch 2016			Numb	er and cos	t <sup>1</sup> of perso	onnel po	sts filled /	planned	for on fu	inded esta	blishmen	t				Nu	ımber				
	Number	Number																Average	Salary				
	of	of																growth	level/Total:				
	funded	posts																rate	Average				
	posts	on approved		Actual		Revised estimate Medium-term expenditure estimate								(%)	(%)								
		establishment		2014/15		2015/16 2016/17 2017/18 2018/19							2015/1	6 - 2018/19									
South Af	ıfrican Nuclear Energy Unit Unit Unit Unit Unit																						
Corporat	ion		Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost						
Salary	2 269	2 269	2 386	789.1	0.3	2 269	916.9	0.4	2 269	972.1	0.4	2 269	1 030.4	0.5	2 268	1 092.2	0.5	6.0%	100.0%				
level																							
1 – 6	672	672	904	89.8	0.1	672	74.6	0.1	672	79.1	0.1	672	83.8	0.1	671	88.8	0.1	6.0%	29.6%				
7 – 10	1 113	1 113	1 116	379.6	0.3	1 113	399.2	0.4	1 113	423.0	0.4	1 113	448.4	0.4	1 113	475.3	0.4	6.0%	49.1%				
11 – 12	300	300	233	160.5	0.7	300	210.6	0.7	300	223.3	0.7	300	236.7	0.8	300	250.9	0.8	6.0%	13.2%				
13 - 16	165	165	126	143.7	1.1	165	187.8	1.1	165	199.4	1.2	165	211.4	1.3	165	224.1	1.4	6.1%	7.3%				
17 - 22	19	19	7	15.4	2.2	19	44.6	2.3	19	47.3	2.5	19	50.2	2.6	19	53.2	2.8	6.0%	0.8%				
1. Rand r	million																						

# **National Energy Regulator of South Africa**

#### **Mandate**

The National Energy Regulator of South Africa was established in 2005 in terms of the National Energy Regulator Act (2004) and is listed as a schedule 3A public entity. The entity is mandated to regulate the electricity industry in terms of the Electricity Regulation Act (2006), regulate the piped gas industry in terms of the Gas Act (2001), and regulate the petroleum pipelines industry in terms of the Petroleum Pipelines Act (2003). This includes issuing licences, setting or approving tariffs and prices, monitoring and enforcing compliance with licence conditions, registering import and production activities, and dispute resolution including mediation, arbitration and the handling of complaints.

#### Selected performance indicators

Table 26.28 National Energy Regulator of South Africa performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome		Past		Current	P	rojections	
			2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of new technical distribution and transmission audits completed per year	Electricity	Outcome 6: An efficient,	5	9	20	20	22	27	30
Number of new generation audits completed on power stations per year	Electricity	competitive and responsive economic infrastructure network	2	6	7	7	10	12	15
Number of maximum price applications for gas approved within 150 days from date of receipt per year	Piped gas	Outcome 4: Decent	_1	3	3	3	3	3	3
Number of days taken from the date of receipt of price application to complete and consider maximum price application per year	Piped gas	employment through inclusive economic growth	_1	150	120	120	120	120	120
Percentage of licence applications per year considered within statutory deadline of 60 days	Petroleum pipelines	Entity mandate	_1	93%	100%	100%	100%	100%	100%

<sup>1.</sup> No historical data is available as these indicators were introduced in 2013/14.

#### **Expenditure analysis**

The national development plan envisages an energy sector that promotes economic growth and development, social equity and environmental sustainability by 2030; and that more than 90 per cent of the population should have access to grid connected or off grid electricity by then.

To achieve this vision, the National Energy Regulator of South Africa plans to build its capacity over the medium term to ensure better regulation of the price, supply and quality in the electricity, piped gas and petroleum pipeline sectors. In addition, the regulator will contribute to outcome 6 (an efficient, competitive and responsive economic infrastructure network) of government's 2014-2019 medium term strategic framework. It will do this by setting and approving cost reflective tariffs and prices that encourage investment, facilitating third party access to petroleum storage facilities, setting rules and frameworks that facilitate the building of new energy infrastructure, and monitoring compliance through technical audits to ensure the regular maintenance and refurbishment of energy infrastructure.

In line with this, the regulator's focus over the medium term will be on ensuring the security, accessibility and affordability of energy supply, and fair competition and regulatory certainty in the energy sector. It will continue to do this by setting and approving energy tariffs, licensing and registering energy service providers, and monitoring and enforcing compliance with regulations. The regulator will also embark on special projects to support the effective regulation of the industry. This includes setting guidelines for municipal tariff increases and benchmarks, and approving and monitoring the implementation of growing block tariffs. To support this, expenditure in the regulator's electricity programme is expected to increase to R74 million in 2018/19.

Further regulatory tasks entail projects such as integrated demand management; multi-year price determinations; the industry network code for third party access to gas transmission infrastructure; tariff guideline reviews; regulatory impact assessments; the development of a new multi-product pipeline and methodology to determine uncommitted capacity in storage facilities; the development of an electronic data collection tool to analyse electricity distribution; and the decommissioning of the Durban-Johannesburg pipeline. To meet these objectives, expenditure on goods and services is expected to increase from R102.4 million in 2015/16 to R118.6 million in 2018/19, and this is expected to allow the regulator to approve all of the licence applications it receives within the statutory deadlines, complete 79 electricity compliance audits, and conduct 37 new generation audits on power stations over the medium term. The regulator is undergoing a building improvement project, which includes compliance updates and refurbishments. It is expected that the project will begin in 2016/17, and will be implemented over 2 years.

The regulator derives its revenue mainly from imposing prescribed levies on the electricity, piped gas and petroleum pipeline industries, as well as from interest earned on investments. Levies are charged by the regulator to recover the costs involved in administering and regulating these industries. Annual levies are based on a methodology that allocates direct and indirect costs involved in regulating each industry. As a result, revenue is expected to increase at an average annual rate of 2.5 per cent from R315.7 million in 2015/16 to R339.6 million in 2018/19.

The number of personnel in the regulator is expected to increase from 258 in 2015/16 to 272 over the medium term, due to new positions being filled for permanent and temporary employees in human resources and compliance monitoring, as well as learners and interns joining the regulator for a period. This will result in increased expenditure on compensation of employees from R175.1million in 2015/16 to a projected R220.2 million in 2018/19.

# Programmes/objectives/activities

Table 26.29 National Energy Regulator of South Africa expenditure trends and estimates by programme/objective/activity

						Expen-					Expen-
					Average	diture/				Average	diture/
					growth	Total:				growth	Total:
				Revised	rate	Average	Medium	term expendi	iture	rate	Average
	Aud	dited outcome		estimate	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 - 2	018/19
Administration	124 319	137 377	155 707	173 671	11.8%	61.4%	178 964	193 165	204 572	5.6%	60.6%
Electricity	41 863	49 490	53 411	61 286	13.5%	21.4%	64 129	69 142	73 992	6.5%	21.7%
Piped gas	16 881	19 313	22 166	23 172	11.1%	8.5%	25 314	27 242	29 121	7.9%	8.5%
Petroleum pipelines	15 305	20 995	21 030	27 324	21.3%	8.7%	27 039	29 118	31 139	4.5%	9.3%
Total	198 369	227 176	252 313	285 453	12.9%	100.0%	295 446	318 666	338 823	5.9%	100.0%

# Statements of historical financial performance

Table 26.30 National Energy Regulator of South Africa statements of historical financial performance

Statement of financial performance						-			Outcome/ Budget
		Audited		Audited		Audited	Budget	Revised	Average
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	(%)
R thousand	2012/1	13	2013/	14	2014	l/15	2015/1	6	2012/13 - 2015/16
Revenue									
Non-tax revenue	219 526	209 046	275 908	231 490	324 076	296 280	315 693	315 693	92.7%
Sale of goods and services other than	211 926	204 224	271 767	226 977	320 293	290 263	308 945	308 945	92.6%
capital assets									
of which:									
Administrative fees	-	_	34 981	_	16 615	-	_	-	-
Sales by market establishment	211 926	204 224	236 786	226 977	303 679	290 263	308 945	308 945	97.1%
Other non-tax revenue	7 600	4 822	4 141	4 513	3 783	6 017	6 748	6 748	99.2%
Total revenue	219 526	209 046	275 908	231 490	324 076	296 280	315 693	315 693	92.7%
Expenses									
Current expenses	231 305	198 369	252 828	227 176	272 354	252 313	285 453	285 453	92.5%
Compensation of employees	108 042	121 838	128 039	139 000	150 400	158 275	175 104	175 104	105.8%
Goods and services	113 225	72 999	124 789	83 060	121 953	86 550	102 442	102 442	74.6%
Depreciation	10 038	3 531	_	5 116	-	7 489	7 908	7 908	134.0%
Total expenses	231 305	198 369	252 828	227 176	272 354	252 313	285 453	285 453	92.5%
Surplus/(Deficit)	(11 779)	10 677	23 080	4 315	51 723	43 967	30 240	30 240	-

# Statements of estimates of financial performance

Table 26.31 National Energy Regulator of South Africa statements of estimates of financial performance

Statement of financial performance			Expen-					Expen-
·		Average	diture/				Average	diture/
		growth	Total:				growth	Total:
	Revised	rate	Average				rate	Average
	estimate	(%)	(%)	Medi	um-term estimate		(%)	(%)
R thousand	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 - 2	
Revenue								
Non-tax revenue	315 693	14.7%	100.0%	296 497	319 273	339 615	2.5%	100.0%
Sale of goods and services other than capital	308 945	14.8%	97.9%	288 937	311 275	331 154	2.3%	97.6%
assets								
of which:								
Sales by market establishment	308 945	14.8%	97.9%	288 937	311 275	331 154	2.3%	97.6%
Other non-tax revenue	6 748	11.9%	2.1%	7 560	7 998	8 461	7.8%	2.4%
Total revenue	315 693	14.7%	100.0%	296 497	319 273	339 615	2.5%	100.0%
Expenses								
Current expenses	285 453	12.9%	100.0%	295 446	318 666	338 824	5.9%	126.2%
Compensation of employees	175 104	12.9%	61.7%	189 523	205 253	220 237	7.9%	63.7%
Goods and services	102 442	12.0%	35.9%	96 746	103 715	118 587	5.0%	34.0%
Depreciation	7 908	30.8%	2.4%	9 177	9 698	-	-100.0%	2.2%
Total expenses	285 453	12.9%	100.0%	295 446	318 666	338 824	5.9%	100.0%
Surplus/(Deficit)	30 240	_	_	1 051	606	791	-70.3%	_

# **Personnel information**

Table 26.32 National Energy Regulator of South Africa personnel numbers and cost by salary level<sup>1</sup>

Number of posts estimated for 31 March 2016																				
Number of funded posts on approved establishment   2014/15   2015/16   2015/16   2016/17   2017/18   2017/18   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   2015/16   2018/19   201		estin	nated for																	
National Energy Regulator of South Africa   Actual   Cost   Cos		31 Ma	arch 2016			Numb	er and cos	st1 of pers	onnel p	osts filled	/ planned	for on f	unded esta	blishmer	ıt				Nur	nber
National Energy Regulator of South Africa   Actual   Cost   Cos	N	umber	Number																Average	Salary
Funded posts on approved establishment   Funded posts on approved establishment   Funded																			-	
Posts   On approved establishment   Posts   On approved   On approved establishment   On approved establishment   On approved   On approved establishment   On approved establishmen		-																		
National Energy Regulator of South Africa   Salary   Level   Salary   Level   Salary   Level   Salary   Level   Salary   Level   Salary   Level   Le	T	unaea	posts																	Average
National Energy Regulator of South Africa   Number   Cost   Cost   Number   Cost   Cost   Cost   Number   C		posts			Actual		Revis	ed estima	ate			Med	ium-term e	xpenditu	re estim	ate			(%)	(%)
South Africa   Number   Cost   Number   Cost			establishment		2014/15		2	2015/16										2015/16	- 2018/19	
South Africa   Sout	National Er	nerav Re	gulator of			Unit			Unit			Unit			Unit			Unit		
level         40         40         28         2.5         0.1         40         4.5         0.1         39         4.6         0.1         39         4.9         0.1         39         5.3         0.1         5.2%         14.6%           7 - 10         112         112         111         111         41.8         0.4         112         45.5         0.4         122         54.4         0.4         122         58.4         0.5         7.9%         44.5%           11 - 12         48         48         38.3         0.8         48         40.6         0.8         52         46.5         0.9         52         50.4         1.0         52         54.1         1.0         10.0%         19.0%           13 - 16         52         52         50         61.9         1.2         52         68.3         1.3         53         72.9         1.4         53         78.9         1.5         53         84.7         1.6         7.4%         19.7%			<b>J</b>	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
level         40         40         28         2.5         0.1         40         46.5         0.1         39         4.6         0.1         39         4.9         0.1         39         5.3         0.1         5.2%         14.6%           7 - 10         112         112         111         111         41.8         0.4         112         46.5         0.4         122         50.3         0.4         122         54.4         0.4         122         58.4         0.5         7.9%         44.5%           11 - 12         48         48         38.3         0.8         48         40.6         0.8         52         46.5         0.9         52         50.4         1.0         52         54.1         1.0         10.0%         19.0%           13 - 16         52         52         50         61.9         1.2         52         68.3         1.3         53         72.9         1.4         53         78.9         1.5         53         84.7         1.6         7.4%         19.7%	Salary	258	258	243	158.3	0.7	258	175.1	0.7	272	189.5	0.7	272	205.3	0.8	272	220.2	0.8	7.9%	100.0%
7-10     112     112     111     41.8     0.4     112     46.5     0.4     122     50.3     0.4     122     54.4     0.4     122     58.4     0.5     7.9%     44.5%       11-12     48     48     48     38.3     0.8     48     40.6     0.8     52     46.5     0.9     52     50.4     1.0     52     54.1     1.0     10.0%     19.0%       13-16     52     52     50     61.9     1.2     52     68.3     1.3     53     72.9     1.4     53     78.9     1.5     53     84.7     1.6     7.4%     19.7%	•																	***	110,10	
11 - 12     48     48     48     38.3     0.8     48     40.6     0.8     52     46.5     0.9     52     50.4     1.0     52     54.1     1.0     10.0%     19.0%       13 - 16     52     52     50     61.9     1.2     52     68.3     1.3     53     72.9     1.4     53     78.9     1.5     53     84.7     1.6     7.4%     19.7%	1 – 6	40	40	28	2.5	0.1	40	4.5	0.1	39	4.6	0.1	39	4.9	0.1	39	5.3	0.1	5.2%	14.6%
13 - 16   52   52   50   61.9   1.2   52   68.3   1.3   53   72.9   1.4   53   78.9   1.5   53   84.7   1.6   7.4%   19.7%	7 – 10	112	112	111	41.8	0.4	112	46.5	0.4	122	50.3	0.4	122	54.4	0.4	122	58.4	0.5	7.9%	44.5%
	11 – 12	48	48	48	38.3	0.8	48	40.6	0.8	52	46.5	0.9	52	50.4	1.0	52	54.1	1.0	10.0%	19.0%
17-22   6   6   6   13.7   2.3   6   15.2   2.5   6   15.3   2.6   6   16.6   2.8   6   17.8   3.0   5.4%   2.2%	13 – 16	52	52	50	61.9	1.2	52	68.3	1.3	53	72.9	1.4	53	78.9	1.5	53	84.7	1.6	7.4%	19.7%
	17 – 22	6	6	6	13.7	2.3	6	15.2	2.5	6	15.3	2.6	6	16.6	2.8	6	17.8	3.0	5.4%	2.2%

## **National Nuclear Regulator**

#### Mandate

The National Nuclear Regulator is listed as a schedule 3A public entity, and derives its mandate from the National Nuclear Regulator Act (1999). In terms of the act, the regulator is mandated to:

- provide protection to persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory practices
- exercise regulatory control related to safety over the setting, design, construction, operation, and manufacture of component parts; and the decontamination, decommissioning and closure of nuclear installations
- exercise regulatory control through the granting of nuclear authorisations
- provide assurance of compliance with the conditions of nuclear authorisations by implementing a system of compliance inspections
  - fulfil national obligations in relation to international legal instruments governing nuclear safety
  - ensure that provisions for nuclear emergency planning are in place.

### Selected performance indicators

Table 26.33 National Nuclear Regulator performance indicators by programme/objective/activity and related outcome

	<u> </u>		<del>, , , , , , , , , , , , , , , , , , , </del>						
Indicator	Programme/Objective/Activity	Outcome		Past		Current		Projections	
			2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of days taken to issue certificates of registration per year <sup>1</sup>	Compliance assurance and enforcement		90 days	90 days	90 days	_1	_1	_1	_1
Number of days taken to issue certificates of exemption per year <sup>1</sup>	Compliance assurance and enforcement		180 days	180 days	180 days	_1	_1	_1	_1
Number of days taken to issue nuclear vehicle licence per year <sup>1</sup>	Compliance assurance and enforcement		180 days	180 days	180 days	_1	_1	_1	_1
Number of compliance assurance inspections conducted per year related to nuclear technology and waste products	Compliance assurance and enforcement	Entity mandate	72	114	126	146	146	146	146
Number of compliance assurance inspections conducted per year related to naturally occurring radioactive materials	Compliance assurance and enforcement		252	190	185	181	181	181	181
Number of compliance assurance inspections conducted per year at the Koeberg nuclear power station	Compliance assurance and enforcement		58	56	46	72	72	72	72

<sup>1.</sup> These indicators are discontinued from 2015/16 onwards as it was found that each case is unique with varying complexities and timelines. Time taken is now determined by agreement with clients, depending on the complexity of cases

## **Expenditure analysis**

The national development plan cites infrastructure as being among the country's critical requirements, and notes that investment in the improvement of infrastructure and its correct use and implementation are essential to development. In line with this emphasis, over the medium term the National Nuclear Regulator will undertake research to ensure that safety regulation is strengthened, and establish capacity to independently analyse environmental samples and ensure compliance by licensees.

The need for specialised skills associated with the oversight of the replacement of the steam generator at the Koeberg nuclear power station and the new nuclear build programme is expected to drive an increase in expenditure on goods and services from R169.4 million in 2015/16 to R225.7 million in 2018/19, at an average annual rate of 10 per cent. Expenditure will be particularly on consultants, contractors, and travel and subsistence. The regulator plays a pivotal role in the planning, execution and commissioning of these generators as it must review and assess all activities involved in this process, from design to manufacturing, logistics, installation and switch-on. Accordingly, to allow for 72 inspections per year over the medium term at Koeberg, expenditure in the compliance assurance and enforcement programme is expected to grow from R31.7 million in 2015/16 to R41.4 million in 2018/19. This allocation is also expected to allow for 438 inspections related to nuclear technology and waste products, and 543 inspections related to naturally occurring radioactive materials over the medium term.

The regulator is in the process of establishing the Centre for Nuclear Safety and Security, which will be at the heart of research on nuclear regulation at the national level. This will be funded through a reprioritisation of the regulator's available funds, donations, industry buy-in, and all other possible avenues available within the legislative framework. Other focus areas include finalising the upgrading of the regulatory emergency control centre, and the provision of adequate office space in Cape Town. To support these projects, expenditure in the administration programme is expected to grow at an average annual rate of 13.1 per cent over the medium term.

To exercise proper oversight and ensure that all safety regulations are abided by, the number of personnel in the regulator is expected to increase from 128 in 2015/16 to 146 in 2018/19. This will build capacity in preparation for the new nuclear build programme, and result in increased expenditure on compensation of employees from R108.7 million in 2015/16 to a projected R139.1 million in 2018/19, at an average annual rate of 8.6 per cent.

To fund its operational activities and upgrades to critical infrastructure, the regulator generates revenue mostly from authorisation fees, accounting for a projected 83.2 per cent of total revenue over the medium term; and transfer payments from the Department of Energy, accounting for 14.5 per cent. Revenue generated over the medium term is expected to increase to R225.7 million by 2018/19 at an average annual rate of 10 per cent, mostly due to the 23.8 per cent growth rate in transfer payments following budget reductions in 2015/16 and 2016/17.

# Programmes/objectives/activities

Table 26.34 National Nuclear Regulator expenditure trends and estimates by programme/objective/activity

				Revised	Average growth rate	Expen- diture/ Total: Average		-term expend	iture	Average growth rate	Expen- diture/ Total: Average
_		lited outcome		estimate	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -		2016/17	2017/18	2018/19	2015/16 - 2	
Administration	58 350	70 274	85 932	74 809	8.6%	48.3%	76 420	102 718	108 146	13.1%	45.8%
Standards authorisations and review assessments	40 635	47 594	59 024	62 826	15.6%	34.9%	66 334	72 137	76 198	6.6%	35.5%
Compliance assurance and enforcement	21 249	22 819	25 159	31 739	14.3%	16.9%	34 934	39 099	41 367	9.2%	18.8%
Total	120 234	140 687	170 115	169 374	12.1%	100.0%	177 688	213 954	225 711	10.0%	100.0%

### Statements of historical financial performance

Table 26.35 National Nuclear Regulator statements of historical financial performance

Statement of financial performance									Outcome/
		Audited		Audited		Audited	Budget	Revised	Budget Average
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	•
R thousand	2012/	13	2013/	14	2014/	15	2015/1	6	2012/13 - 2015/16
Revenue									
Non-tax revenue	106 044	103 977	120 348	135 939	137 149	146 679	151 245	147 887	103.8%
Sale of goods and services other than capital assets	102 115	99 068	118 773	115 411	136 581	132 065	148 190	143 739	97.0%
of which:									
Administrative fees	102 115	99 068	118 773	115 411	136 581	132 065	148 190	143 739	97.0%
Other non-tax revenue	3 929	4 909	1 575	20 528	568	14 614	3 055	4 148	484.3%
Transfers received	30 912	30 912	48 360	31 012	33 697	33 697	34 887	21 487	79.2%
Total revenue	136 956	134 889	168 708	166 951	170 846	180 376	186 132	169 374	98.3%
Expenses									
Current expenses	136 956	120 234	168 708	140 687	170 846	170 115	169 374	169 374	93.0%
Compensation of employees	105 654	75 105	96 951	87 889	106 952	105 284	108 716	108 716	90.1%
Goods and services	26 107	31 322	60 366	36 868	49 689	46 446	42 205	42 205	87.9%
Depreciation	5 183	9 154	5 031	9 763	8 373	12 316	13 090	13 090	139.9%
Interest, dividends and rent on land	12	4 653	6 360	6 167	5 832	6 069	5 363	5 363	126.7%
Total expenses	136 956	120 234	168 708	140 687	170 846	170 115	169 374	169 374	93.0%
Surplus/(Deficit)	_	14 655	_	26 264	_	10 261	16 758	_	-

## Statements of estimates of financial performance

Table 26.36 National Nuclear Regulator statements of estimates of financial performance

Statement of financial performance	Revised estimate	Average growth rate (%)	Expen- diture/ Total: Average (%)		edium-term estima	ate	Average growth rate (%)	Expen- diture/ Total: Average (%)
R thousand	2015/16		- 2015/16	2016/17	2017/18	2018/19	2015/16 - 2	
Revenue	20.07.0	20.2,10	20.07.0	20.0,	20,.0	2010/10	2010/10	0.0,.0
Non-tax revenue	147 887	12.5%	81.8%	161 052	175 381	184 901	7.7%	85.5%
Sale of goods and services other than capital	143 739	13.2%	75.2%	156 676	170 776	180 339	7.9%	83.2%
assets								
of which:								
Administrative fees	143 739	13.2%	75.2%	156 676	170 776	180 339	7.9%	83.2%
Other non-tax revenue	4 148	-5.5%	6.6%	4 376	4 605	4 562	3.2%	2.3%
Transfers received	21 487	-11.4%	18.2%	16 636	38 573	40 810	23.8%	14.5%
Total revenue	169 374	7.9%	100.0%	177 688	213 954	225 711	10.0%	100.0%
Expenses								
Current expenses	169 374	12.1%	100.0%	177 688	213 954	225 711	10.0%	127.0%
Compensation of employees	108 716	13.1%	62.8%	116 228	131 556	139 063	8.6%	63.2%
Goods and services	42 205	10.5%	26.1%	44 820	68 511	72 561	19.8%	28.6%
Depreciation	13 090	12.7%	7.4%	11 886	9 801	10 369	-7.5%	5.9%
Interest, dividends and rent on land	5 363	4.8%	3.7%	4 754	4 086	3 718	-11.5%	2.3%
Total expenses	169 374	12.1%	100.0%	177 688	213 954	225 711	10.0%	100.0%
Surplus/(Deficit)	-	(1)	_	-	-	-	-	_

#### Personnel information

Table 26.37 National Nuclear Regulator personnel numbers and cost by salary level<sup>1</sup>

	estir	er of posts nated for																	
	31 M	arch 2016			Num	ber and co	ost1 of pe	ersonne	el posts fil	led / plar	ned for	on funde	d establi	shment				Num	ıber
N	lumber	Number																Average	Salary
	of	of																growth	level/Total:
	funded	posts																rate	Average
	posts	on approved		Actual		Revis	ed estim	ate			Med	ium-term	expendit	ure esti	mate			(%)	(%)
		establishment		2014/15		2	2015/16		:	2016/17			2017/18			2018/19		2015/16 -	2018/19
					Unit			Unit			Unit			Unit			Unit		
National	Nuclear	Regulator	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary	129	129	134	105.3	0.8	128	108.7	0.8	130	116.2	0.9	143	131.6	0.9	146	139.1	1.0	8.6%	100.0%
level																			
1 – 6	11	11	13	1.6	0.1	11	2.0	0.2	14	2.5	0.2	19	3.4	0.2	22	4.1	0.2	27.9%	9.5%
7 – 10	38	38	40	17.8	0.4	37	18.5	0.5	37	19.8	0.5	43	24.6	0.6	43	25.6	0.6	11.6%	22.7%
11 – 12	27	27	27	18.2	0.7	27	21.0	0.8	27	22.5	0.8	29	25.6	0.9	29	27.0	0.9	8.7%	15.8%
13 – 16	52	52	53	65.2	1.2	52	64.8	1.2	51	68.9	1.4	51	75.1	1.5	51	79.3	1.6	7.0%	51.5%
17 – 22	1	1	1	2.4	2.4	1	2.5	2.5	1	2.5	2.5	1	2.8	2.8	1	3.0	3.0	6.1%	0.6%
1. Rand n	nillion.																		

# **South African National Energy Development Institute**

#### **Mandate**

The South African National Energy Development Institute was established in terms of the National Energy Act (2008). The institute's mandate is divided into two main categories: energy efficiency, and energy research and development.

In relation to energy efficiency, the institute is mandated to: undertake energy efficiency measures directed by the minister; increase energy efficiency throughout the economy; increase GDP per unit of energy consumed; and optimise the use of finite energy resources.

In relation to energy research and development, the institute is mandated to: stimulate innovation in energy research and development; conduct and implement energy research in all energy fields other than nuclear energy; register patents and intellectual property from its activities and issue licences for its use; make grants available for research; promote the training of research workers; and advise the Minister of Energy and the Minister of Science and Technology on research in the field of energy technology.

### Selected performance indicators

Table 26.38 South African National Energy Development Institute performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	Outcome		Past		Current	P	Projections	
			2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Percentage data accurately completed on the database per year	Working for Energy	Outcome 10: Protect and enhance our environmental assets and natural resources	_1	_1	100%	100%	100%	100%	100%
Number of demonstration Renewable Energy Projects commissioned in low income rural and urban communities per year <sup>2</sup>	Working for Energy	Outcome 12: An efficient, effective and development oriented public service and an empowered and fair, inclusive citizenship	_1	9	12	20	_2	_2	_2
Number of demonstration Energy Management Projects commissioned in low income rural and urban communities per year <sup>2</sup>		Outcome 11: Create a better South Africa and contributing to a better and safer Africa in a better world	_1	4	6	6	_2	_2	_2

<sup>1.</sup> No historical data is available as these are new indicators.

#### **Expenditure analysis**

The national development plan envisages a move towards less carbon intensive electricity production in the long term, and greater measures to reduce the demand for electricity. The plan further states that South Africa will have to improve energy efficiency to take advantage of the country's mineral resources while maintaining a less energy and carbon intensive economy. In support of this, the main aims of the South African National Energy Development Institute are to undertake measures to promote the uptake of green energy and energy efficiency in South Africa. The main focus of the institute over the medium term will be on conducting research and development related to the carbon capture and storage project, managing the database for tax incentives for energy efficiency, and completing the pilot project on smart grids.

Technology used in the carbon capture and storage project has the potential to take carbon dioxide from large emission sources, such as fossil fuel power plants and industrial facilities, and store it in geological formations to avoid emitting it into the atmosphere, thereby mitigating the negative impact on climate change. This is currently a pilot project, and aims to demonstrate the potential viability of carbon dioxide storage in South African conditions, including in South African geology. The project is supported by an allocation of R172 million from the Department of Energy and US\$27 million from the World Bank. The pilot phase was completed at Bongwana, in KwaZulu-Natal, in 2015, and an environmental and social impact assessment was completed and sent to the World Bank. The institute will aim to secure permits to conduct exploration activities, engage with traditional leaders and their communities, assist government in developing an appropriate regulatory framework, and understand the movement of carbon dioxide through a natural reservoir of water. Projected spending of R127.6 million in 2016/17 in the applied energy research programme as a result of this project is expected to decline at an average annual rate of 16.5 per cent over the medium term to R80.9 million, as it draws to its conclusion.

The institute was allocated R179.5 million between 2012/13 and 2014/15 in donor funding to support the implementation of smart metering, which will allow users to monitor and manage their electricity usage, and address challenges in municipalities' capabilities for managing their electricity revenue. This programme was formally initiated in September 2014 with the revised end date of June 2016. One of the outputs includes a survey to help power utilities adopt a programmatic approach in implementing and tracking the deployment of smart grid technologies. This project accounts for the R93.8 million estimated expenditure in the smart grids programme in 2015/16. The institute is currently in talks with potential donors for support to launch the second phases of the smart grids project.

In maintaining an energy efficiency database of companies that invest capital in energy saving measures to 100 per cent accuracy over the medium term, other notable expenditure will be incurred on research and development in the energy efficiency programme.

<sup>2.</sup> There are no targets over medium term as funding for projects have not been finalised.

Due to the additional capacity required to implement various projects, the number of personnel in the institute increased from 53 in 2014/15 to 60 in 2015/16, and is expected to remain constant over the medium term. Expenditure on compensation of employees is expected to increase from R45.7 million in 2015/16 to R56.5 million in 2018/19 at an average annual rate of 7.3 per cent due to inflationary increases.

The institute expects to derive 100 per cent of its revenue over the medium term from transfers from the Department of Energy. Revenue is expected to decrease from R403.6 million in 2015/16 to R144.2 million in 2018/19 due to the conclusion of projects, such as the carbon capture and storage project, from 2017/18 onwards.

# Programmes/objectives/activities

Table 26.39 South African National Energy Development Institute expenditure trends and estimates by programme/objective/activity

					Average growth	Expen- diture/ Total:				Average growth	Expen- diture/ Total:
				Revised	rate	Average	Medium	-term expend	iture	rate	Average
	Auc	lited outcome		estimate	(%)	(%)		estimate		(%)	(%)
R thousand	2012/13	2013/14	2014/15	2015/16	2012/13 -	2015/16	2016/17	2017/18	2018/19	2015/16 - 2	018/19
Administration	14 011	62 376	53 480	68 952	70.1%	39.8%	55 807	57 896	55 552	-6.9%	40.8%
Applied energy research	34 336	4 266	8 442	139 213	59.5%	25.0%	127 600	11 158	80 942	-16.5%	43.1%
Energy efficiency programme	16 329	8 448	9 058	2 000	-50.3%	10.9%	2 000	_	3 000	14.5%	0.9%
Smart grids	-	675	28 826	93 800	-	12.4%	_	_	500	-82.5%	5.9%
Working for Energy	_	1 890	2 211	20 075	_	2.3%	_	_	3 000	-46.9%	1.8%
Clean energy solutions	-	7 414	9 283	70 741	-	8.6%	2 838	3 508	1 189	-74.4%	6.1%
Centre for Energy systems Analysis	-	_	1 234	2 000	-	0.4%	3 000	1 227	-	-100.0%	0.9%
and Research											
Shale gas	_	_	817	6 769	-	0.6%	_	_	-	-100.0%	0.4%
Total	64 676	85 069	113 351	403 550	84.1%	100.0%	191 245	73 789	144 183	-29.0%	100.0%

## Statements of historical financial performance

Table 26.40 South African National Energy Development Institute statements of historical financial performance

Statement of financial performance		эстоюр.				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ioiai poi ioiii		Outcome/
Statement of infancial performance									Budget
		Audited		Audited		Audited	Budget	Revised	
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	
R thousand	2012/	13	2013/	14	2014	1/15	2015/1	16	2012/13 - 2015/16
Revenue									
Non-tax revenue	9 000	15 234	_	2 260	7 277	909	_	-	113.1%
Other non-tax revenue	9 000	15 234	_	2 260	7 277	909	-	-	113.1%
Transfers received	56 100	66 638	206 144	91 372	226 685	112 477	106 263	403 550	113.2%
Total revenue	65 100	81 872	206 144	93 632	233 962	113 386	106 263	403 550	113.2%
Expenses									
Current expenses	65 100	64 676	206 144	85 069	223 955	86 801	301 074	316 550	69.5%
Compensation of employees	21 000	35 096	31 567	34 032	43 800	39 688	45 711	45 711	108.8%
Goods and services	43 862	28 867	174 085	47 997	179 225	42 267	251 615	267 091	59.5%
Depreciation	238	713	492	3 040	930	4 846	3 748	3 748	228.3%
Transfers and subsidies	_	-	_	_	-	26 550	87 000	87 000	130.5%
Total expenses	65 100	64 676	206 144	85 069	223 955	113 351	403 550	403 550	74.2%
Surplus/(Deficit)	-	17 196	_	8 563	10 007	35	(297 287)	-	_

### Statements of estimates of financial performance

Table 26.41 South African National Energy Development Institute statements of estimates of financial performance

Statement of financial performance			Expen-					Expen-
		Average	diture/				Average	diture/
		growth	Total:				growth	Total:
	Revised	rate	Average				rate	Average
	estimate	(%)	(%)	Med	dium-term estimat	е	(%)	(%)
R thousand	2015/16	2012/13	- 2015/16	2016/17	2017/18	2018/19	2015/16 - 2	2018/19
Revenue								
Transfers received	403 550	82.3%	94.5%	191 245	73 789	144 183	-29.0%	100.0%
Total revenue	403 550	70.2%	100.0%	191 245	73 789	144 183	-29.0%	100.0%
Expenses								
Current expenses	316 550	69.8%	88.8%	191 245	73 789	144 183	-23.1%	217.8%
Compensation of employees	45 711	9.2%	35.2%	48 911	52 335	56 548	7.3%	36.8%
Goods and services	267 091	109.9%	51.1%	136 727	19 065	86 202	-31.4%	55.8%
Depreciation	3 748	73.9%	2.5%	5 607	2 389	1 433	-27.4%	2.0%
Transfers and subsidies	87 000	-	11.2%	-	-	-	-100.0%	5.4%
Total expenses	403 550	84.1%	100.0%	191 245	73 789	144 183	-29.0%	100.0%
Surplus/(Deficit)	-	(1)	-	-	-	-	-	-

# **Personnel information**

Table 26.42 South African National Energy Development Institute personnel numbers and cost by salary level<sup>1</sup>

-	Numb	er of posts				J)													
	estir	nated for																	
	31 Ma	arch 2016			Num	ber and co	st1 of pe	rsonne	l posts fill	ed / plar	ned for	on funde	d establi	shment				Num	ıber
Nı	umber	Number																Average	Salary
	of	of																growth	level/Total:
fı	unded	posts																rate	Average
	posts	on approved		Actual		Revise	ed estim	ate			Med	ium-term e	xpendit	ure esti	mate			(%)	(%)
		establishment	- 2	2014/15		2	015/16		2	2016/17		2	017/18			2018/19		2015/16 -	- 2018/19
South Afri	ican Na	tional Energy			Unit			Unit			Unit			Unit			Unit		
Developm	ent Ins	titute	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost	Number	Cost	Cost		
Salary	61	61	53	39.7	0.7	60	45.7	0.8	60	48.9	0.8	60	52.3	0.9	60	56.5	0.9	7.3%	100.0%
level																			
1 – 6	16	16	10	0.6	0.1	16	0.8	0.1	16	0.9	0.1	16	1.0	0.1	16	1.0	0.1	7.0%	26.7%
7 – 10	22	22	21	8.4	0.4	22	9.3	0.4	22	9.9	0.5	22	10.6	0.5	22	11.3	0.5	7.0%	36.7%
11 – 12	12	12	11	10.5	1.0	12	12.5	1.0	12	13.3	1.1	12	14.3	1.2	12	15.8	1.3	8.3%	20.0%
13 – 16	10	10	10	17.0	1.7	9	17.8	2.0	9	19.1	2.1	9	20.4	2.3	9	21.8	2.4	7.0%	15.0%
17 - 22	1	1	1	3.3	3.3	1	5.3	5.3	1	5.7	5.7	1	6.1	6.1	1	6.5	6.5	7.0%	1.7%

<sup>1.</sup> Rand million.

# **Additional tables**

Table 26.A Summary of conditional grants to provinces and municipalities<sup>1</sup>

				Adjusted		
	Aud	dited outcome		appropriation	Medium-term e	xpenditure estimate
R thousand	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18 2018/19
Conditional grants to municipalities						
Electrification and Energy Programme and Project Management						
Integrated national electrification programme grant	1 151 443	1 314 772	1 104 658	1 980 340	1 946 246	2 087 048 2 204 477
Integrated national electrification programme: Approach to distribution asset	-	320 000	-	-	_	
management						
Clean Energy						
Energy efficiency and demand side management grant	200 000	180 718	136 905	177 899	185 625	203 236 215 024
Total	1 351 443	1 815 490	1 241 563	2 158 239	2 131 871	2 290 284 2 419 501

<sup>1.</sup> Detail provided in the Division of Revenue Act (2016).

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Project name	Service delivery	Current	Total				Adjusted			
	outputs	project stage	project cost	Anc	Audited outcome		appropriation	Medium-ter	Medium-term expenditure estimate	imate
R thousand				2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Infrastructure transfers to other spheres, agencies and departments	theres, agencies and departments									
Mega projects (total project cost or	Mega projects (total project cost of at least R1 billion over the project life cycle)	(e):								
Integrated national electrification	Provision of capital subsidies to Eskom to	Ongoing	-	1 879 368	2 141 027	2 948 037	3 613 243	3 526 334	3 876 154	3 995 031
programme: Eskom	address electrification backlogs for									
	permanently occupied residential									
	dwellings, install bulk infrastructure, and									
	rehabilitate electrification infrastructure									
Integrated national electrification	Provision of capital subsidies to	Ongoing	ı	1 151 443	1 314 772	1 104 658	1 980 340	1 946 246	2 087 048	2 204 477
programme: Municipalities	municipalities to address electrification									
	backlogs for permanently occupied									
	residential dwellings, install bulk									
	infrastructure and rehabilitate electrification									
	infrastructure									
Petronet: Transnet pipelines	Construction of petroleum pipeline, branch	Ongoing	ı	1 500 000	1	1	1	1	1	1
	lines and storage facilities									
Large projects (total project cost o	Large projects (total project cost of at least R250 million but less than R1 billion over the project life	on over the project life cycle)								
Integrated national electrification	Provision of capital subsidies to non-grid	Ongoing	I	58 328	110 320	20 000	166 592	166 424	189 828	201 649
programme: Non-grid	electrification service providers to address									
	electrification backlogs									
Total			ı	4 589 139	3 566 119	4 122 695	5 760 175	5 639 004	6 153 030	6 401 157

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Donor	Project	Programme	Period of	ڡ	Spending				_			
			commitment	committed classification	focus	Audit	Audited outcome	-	Estimate	Medium-term expenditure estimate	xpenditure es	stimate
R thousand						2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Foreign In cash												
Switzerland	Support for energy efficiency monitoring and implementation project	Petroleum and Petroleum Products Regulation	1 August 2010 - 31 December 2013	13 950 Departmental agencies and accounts	Support to the energy efficiency monitoring and implementation project	2 400	1 685	2 970	2 865	ı	ı	1
European Union	Smart metering implementation programme (general budget support)	Petroleum and Petroleum Products Regulation	1 April 2012 - 31 March 2015	179 500 Departmental agencies and accounts	Support to the renewable energy independent power producers programme	71 800	71 800	117 000	151 592	1	1	1
Danish Government	South African-Danish renewable energy development programme	Clean Energy	1 April 2014 - November 2017	40 000 Departmental agencies and accounts	Wind Atlas for South Africa: (phase 2)	ı	1	15 102	31 080	ı	ı	I
Local In kind												
Energy and Water Sector Education and Training Authority	Appointment of 33 interns as part of 18 months in-service training programme within various municipalities under the integrated national electrification programme	Electrification and Energy Programme and Project Management	1 April 2014 - November 2017	2 777 Goods and services	Offer training on electrification programmes	1 984	793	1	I	1	1	1
Total				236 227		76 184	74 278	135 072	185 537	-	-	-



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