



VOTE
26
ENERGY



national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA



Estimates of National Expenditure 2018

National Treasury

Republic of South Africa



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The 2018 Estimates of National Expenditure is 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 this Estimates of National Expenditure publication, the e-publications for each vote contain more comprehensive coverage of all public entities. Also included are tables containing information on programme specific personnel expenditure, conditional grants to provinces and municipalities, public private partnerships and information on donor funding. Expenditure information at the level of site service delivery is included, where appropriate.

Foreword

When the Estimates of National Expenditure (ENE) publication was launched in 2001, we referred to it as “a significant step forward in national budget transparency”. Since then, even though the national budget has undergone many reforms, the ENE publications remain a key indicator and embodiment of the candour of the budgeting process.

The publications provide the media, civil society, the public, Parliament, departments, public entities and ministers with information about how taxpayers’ money is being spent: what it buys and for what purpose. Do not be concerned by the magnitude of this publication. Instead, let us use it as a reference to keep government institutions accountable and ensure that the expenditure of public funds achieves its intended policy outcomes to improve the welfare of citizens.

In the current economic climate, spending priorities and the sequencing of programme implementation are subject to a number of trade-offs. The focus of the 2018 Budget has solely been on the reprioritisation of existing baseline funding. The abridged ENE provides a coherent and summarised account of the priorities, spending plans and service delivery commitments of all 40 national votes and of government agencies. The e-publications for each vote contain more detail on, for example, goods and services, transfers and subsidies, donor funding, public entities, and lower-level spending information on service delivery.

The ENE’s presentation of the detailed expenditure estimates of departments are the result of a lengthy executive and administrative process involving wide-ranging intergovernmental consultation. This process is led by a committee of senior officials in central government departments, under the political guidance of the Ministers’ Committee on the Budget. A special word of thanks is due to all our colleagues from other departments for their contributions. I also wish to express my appreciation to the National Treasury team that worked tirelessly to produce a document of which we are rightly proud.

The independent Open Budget Survey assessment of budget transparency commenced in 2006. It is conducted every two years to measure the accessibility and comprehensiveness of key budget documents and information across the world. In 2010, South Africa was ranked first out of 94 countries surveyed, scoring 92 per cent. In the latest iteration of the survey, which measured 115 countries, South Africa was ranked first again, tied with New Zealand, with a score of 89 per cent. Our country is one of only 11 that publish comprehensive, timely information in all the required budget documents.

Budgets link the outcomes targeted by government with the services that are ultimately delivered. In addition to South African budgets having become more transparent, recent efforts to increase public participation in budgeting are gaining momentum. South Africans are invited to scrutinise budget information and provide opinions on government service delivery. We rely on this participation to strengthen our budgeting system and make it even more reliable.



Dondo Mogajane
Director-General: National Treasury

Introduction

The Estimates of National Expenditure publications

The Estimates of National Expenditure (ENE) publications describe in detail government's expenditure plans over the next three financial years, also known as the medium-term expenditure framework (MTEF) period. The 2018 MTEF period is from 2018/19 to 2020/21.

The ENE publications contain information on how government institutions have spent their budgets in previous years. They explain how these institutions intend to use their allocations over the medium term to achieve their goals, and the outputs and outcomes their spending is expected to lead to. The publications include tables depicting non-financial performance indicators and targets, departmental receipts, personnel, significant as well as detailed expenditure trends and estimates by programme, subprogramme and economic classification for each department and for entities that report to the vote's executive authority. Explanatory narratives detail the institution's mandate, purpose (and that of its programmes), together with programme-level objectives and descriptions of subprogrammes. A more in-depth narrative analyses the institution's expected expenditure over the MTEF period. Summary data tables at the end of each vote contain data on provincial and municipal conditional grants, public private partnerships, donor funding, infrastructure, and expenditure at the level of site service delivery, where applicable.

A separate 2018 ENE Overview publication is also available on www.treasury.gov.za and summarises the ENE information across all votes. The 2018 ENE Overview contains a narrative explanation and budget-wide summary tables; 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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Energy

Budget summary

R million	2018/19				2019/20	2020/21
	Total	Current payments	Transfers and subsidies	Payments for capital assets	Total	Total
MTEF allocation						
Administration	282.6	276.5	1.6	4.5	299.1	314.8
Energy Policy and Planning	53.1	53.1	–	–	56.2	60.3
Petroleum and Petroleum Products Regulation	87.1	84.3	2.9	–	92.7	99.3
Electrification and Energy Programme and Project Management	5 435.4	67.2	5 368.2	–	5 845.4	6 168.4
Nuclear Energy	816.6	49.5	767.0	–	870.3	912.1
Clean Energy	370.2	82.2	288.0	–	409.9	442.7
Total expenditure estimates	7 045.0	612.8	6 427.7	4.5	7 573.6	7 997.6
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 in support of socioeconomic development. It aims to achieve this by developing an integrated energy plan for the entire energy sector and regulating energy industries, and promoting investment in accordance with the integrated resource plan for electricity. A number of acts regulate the energy sector and reflect the legislative measures the department has instituted to govern the 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 transformation in 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	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Number of new petroleum retail site inspections per year	Petroleum and Petroleum Products Regulation	Outcome 6: An efficient, competitive and responsive economic infrastructure network	2 070	1 956	1 515	1 200	1 500	1 500	1 500
Number of additional households electrified with grid electrification per year	Electrification and Energy Programme and Project Management	Outcome 9: Responsive, accountable, effective and efficient developmental local government	233 455	260 000	301 976	235 000	200 000	210 000	215 000
Number of additional substations upgraded per year	Electrification and Energy Programme and Project Management	Outcome 6: An efficient, competitive and responsive economic infrastructure network	4	4	3	4	3	3	3
Number of bulk substations built per year	Electrification and Energy Programme and Project Management		2	6	3	4	2	2	2
Kilometers of new medium voltage power lines constructed per year	Electrification and Energy Programme and Project Management		30	224	295	95	50	50	50
Kilometers of existing medium voltage power lines upgraded per year	Electrification and Energy Programme and Project Management		0	0	9	95	50	50	50
Number of additional households electrified with non-grid electrification per year	Electrification and Energy Programme and Project Management		Outcome 9: Responsive, accountable, effective and efficient developmental local government	3 786	25 076	16 922	15 000	20 000	20 000

Expenditure analysis

The National Development Plan envisages that, by 2030, South Africa will have an adequate supply of electricity and liquid fuels to maintain economic activity and prevent economic disruptions. This is given expression by outcome 6 (an efficient, competitive and responsive economic infrastructure network) and outcome 9 (responsive, accountable, effective and efficient developmental local government) of government's 2014-2019 medium-term strategic framework, which are closely aligned with the work of the Department of Energy. Over the medium term, the department intends to focus on securing energy resources and energy supply, increasing household access to electricity, enhancing energy efficiency, diversifying the energy generation mix, and improving the quality and security of petroleum fuels.

The department's total spending is expected to decrease at an average annual rate of 0.6 per cent over the MTEF period, from R8.1 billion in 2017/18 to R8 billion in 2020/21. This decrease is largely due to Cabinet approved reductions of R1.4 billion in 2018/19, R2.4 billion in 2019/20 and R2.5 billion in 2020/21. These reductions are mostly on the *Electrification and Energy Programme and Project Management* programme, the department's largest programme, which accounts for 76.9 per cent (R17.4 billion) of total projected expenditure over the medium term.

Spending on compensation of employees is expected to increase at an average annual rate of 7.1 per cent over the MTEF period, from R333.2 million in 2017/18 to R409.2 million in 2020/21, in line with adjustments related to inflation. The department's staff complement is expected to decrease by 28 over the medium term, from 595 in 2017/18 to 567 in 2020/21. However, the department expects to fill some critical posts at senior management level in the *Energy Policy and Planning, Petroleum and Petroleum Products Regulation* and *Electrification and Energy Programme and Project Management* programmes. The department's total spending on goods and services is expected to increase at an average annual rate of 7.4 per cent over the

MTEF period, from R239.4 million in 2017/18 to R296.9 million in 2020/21. Expenditure in this regard mainly comprises servicing operating leases as the department's regional offices are relocated, as well as costs related to the inspection of 4 500 petroleum retail sites and the solar water heater programme over the medium term.

Extending access to electricity and enhancing energy efficiency

Despite reductions to the department's budget, an additional 625 000 households are expected to be connected to the electricity grid and 9 additional substations upgraded over the MTEF period. A further 20 000 households per year will be provided with non-grid (mainly solar) electrification. Transfers to municipalities for the integrated national electrification programme are expected to increase at an average annual rate of 2.5 per cent, from R2.1 billion in 2017/18 to R2.2 billion in 2020/21. Transfers to Eskom for the indirect component of the integrated national electrification programme are expected to decrease at an average annual rate of 2 per cent, from R3.8 billion in 2017/18 to R3.6 billion in 2020/21, as a result of Cabinet approved reductions of R2.2 billion over the medium term.

As a result of reductions effected on allocations for the solar water heater programme, expenditure in the *Clean Energy* programme is expected to decrease at an average annual rate of 15.8 per cent, from R742.5 million in 2017/18 to R442.7 million in 2020/21. Despite this decrease, 57 000 solar water heaters are expected to be manufactured over the medium term. To realise 1.5 terawatt hours of energy savings over the MTEF period, allocations to the *energy efficiency and demand side management grant* increase at an average annual rate of 5.6 per cent, from R203.2 million in 2017/18 to R239.6 million in 2020/21. This will enable municipalities to undertake initiatives such as replacing street and traffic signal lights with energy efficient technology, and to retrofit and replace municipal infrastructure that is energy inefficient.

Creating an enabling policy environment for a sustainable and diversified energy mix

Although spending in the *Energy Policy and Planning* programme accounts for 0.7 per cent of the department's total estimated spending over the MTEF period, it is the fastest growing programme, increasing at an average annual rate of 8.9 per cent, from R46.7 million in 2017/18 to R60.3 million in 2020/21. This increase in expenditure is expected to enable the department to focus on finalising and implementing legislation and policy frameworks over the medium term, including the drafting of the National Energy Regulator Amendment Bill, and the Electricity Regulation Second Amendment Bill. In addition, the Gas Amendment Bill is expected to be processed and published for public comment in 2018/19. This legislation will assist in defining the policy and regulatory framework to support the rollout of gas infrastructure and the development of a gas industry.

Nuclear energy

To subsidise the operational costs of the South African Nuclear Energy Corporation and for the decommissioning and decontamination of past nuclear assets, transfers to entities form the bulk of expenditure in the *Nuclear Energy* programme over the MTEF period. Spending in this programme is expected to increase at an average annual rate of 4.9 per cent, from R790.9 million in 2017/18 to R912.1 million in 2020/21. The increase in transfers to departmental agencies and accounts, from R68.6 million in 2017/18 to R84.9 million in 2020/21, is mainly driven by increased allocations to the National Radioactive Waste Disposal Institute to operationalise the public entity. The National Radioactive Waste Disposal Institute Bill, which is expected to be approved in 2018/19, provides for a sustainable funding mechanism for the institute.

Expenditure trends

Table 26.2 Vote expenditure trends 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	Annual budget			Adjusted appropriation			Audited outcome			Annual budget			Adjusted appropriation			Audited outcome			Annual budget			Adjusted appropriation			Revised estimate			Average: Outcome/Annual budget (%)		Average: Outcome/Adjusted appropriation (%)	
R million	2014/15			2015/16			2016/17			2017/18			2014/15 - 2017/18																		
Programme 1	244.1	257.3	257.2	242.6	246.6	277.8	240.1	244.8	282.8	239.5	263.6	263.6	111.9%	106.8%																	
Programme 2	52.6	57.6	41.7	45.1	44.1	38.1	46.7	43.5	39.9	46.7	46.7	46.7	87.1%	86.7%																	
Programme 3	82.7	84.5	64.5	74.4	73.4	69.0	77.9	77.5	79.0	81.8	81.8	81.8	92.9%	92.8%																	
Programme 4	4 199.2	4 208.6	4 181.0	5 778.3	5 813.8	5 820.5	5 699.9	5 705.2	5 678.7	6 184.0	6 220.0	6 220.0	100.2%	99.8%																	
Programme 5	850.5	843.8	845.4	654.4	653.9	655.0	863.6	880.1	872.5	786.9	790.9	790.9	100.3%	99.8%																	
Programme 6	1 986.5	1 986.0	830.3	687.3	435.8	281.8	616.9	599.4	560.1	774.5	742.5	742.5	59.4%	64.2%																	
Total	7 415.6	7 437.8	6 220.1	7 482.1	7 267.6	7 142.1	7 545.2	7 550.6	7 512.8	8 113.5	8 145.4	8 145.4	95.0%	95.5%																	
Change to 2017 Budget estimate											32.0																				
Economic classification																															
Current payments	518.3	530.7	473.6	492.6	508.8	509.3	739.0	714.5	682.0	557.9	572.6	572.6	97.0%	96.2%																	
Compensation of employees	291.9	286.0	264.3	289.5	289.5	296.0	310.8	318.3	321.5	318.2	333.2	333.2	100.4%	99.0%																	
Goods and services	226.4	244.7	209.3	203.1	219.3	213.3	428.2	396.2	360.5	239.7	239.4	239.4	93.2%	93.0%																	
Transfers and subsidies	6 892.1	6 901.9	5 742.7	6 985.5	6 754.8	6 628.4	6 802.1	6 832.0	6 816.1	7 551.2	7 568.5	7 568.5	94.8%	95.4%																	
Provinces and municipalities	1 241.6	1 241.6	1 241.6	2 158.2	2 158.2	2 158.2	2 131.9	2 131.9	2 131.9	2 290.3	2 290.3	2 290.3	100.0%	100.0%																	
Departmental agencies and accounts	196.4	197.3	197.2	87.3	87.1	87.1	38.2	62.5	72.5	129.4	129.4	129.4	–	–																	
Foreign governments and international organisations	12.1	12.1	21.3	16.6	19.6	29.6	17.4	17.4	25.0	17.9	17.9	17.9	146.6%	140.0%																	
Public corporations and private enterprises	5 441.7	5 450.6	4 278.7	4 723.0	4 489.5	4 349.8	4 612.4	4 617.8	4 583.7	5 111.2	5 126.2	5 126.2	92.2%	93.2%																	
Households	0.4	0.4	4.0	0.4	0.4	3.7	2.2	2.4	3.0	2.4	4.7	4.7	284.5%	195.7%																	
Payments for capital assets	5.2	5.2	3.8	4.0	4.0	4.4	4.1	4.1	14.7	4.3	4.3	4.3	154.5%	154.5%																	
Machinery and equipment	5.2	5.2	3.8	4.0	4.0	4.4	4.1	4.1	14.7	4.3	4.3	4.3	154.5%	154.5%																	
Total	7 415.6	7 437.8	6 220.1	7 482.1	7 267.6	7 142.1	7 545.2	7 550.6	7 512.8	8 113.5	8 145.4	8 145.4	95.0%	95.5%																	

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	Revised estimate	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)	
R million	2017/18	2014/15 - 2017/18	2014/15 - 2017/18	2018/19	2019/20	2020/21	2017/18 - 2020/21	2017/18 - 2020/21	
Programme 1	263.6	0.8%	3.7%	282.6	299.1	314.8	6.1%	3.8%	
Programme 2	46.7	-6.7%	0.6%	53.1	56.2	60.3	8.9%	0.7%	
Programme 3	81.8	-1.1%	1.0%	87.1	92.7	99.3	6.7%	1.2%	
Programme 4	6 220.0	13.9%	75.5%	5 435.4	5 845.4	6 168.4	-0.3%	76.9%	
Programme 5	790.9	-2.1%	10.9%	816.6	870.3	912.1	4.9%	11.0%	
Programme 6	742.5	-28.0%	8.3%	370.2	409.9	442.7	-15.8%	6.4%	
Total	8 145.4	3.1%	100.0%	7 045.0	7 573.6	7 997.6	-0.6%	100.0%	
Change to 2017 Budget estimate				(1 424.9)	(2 377.1)	(2 507.6)			

Table 26.3 Vote expenditure estimates by programme and economic classification

Economic classification	Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
				2017/18	2014/15 - 2017/18	2018/19		
R million								
Current payments	572.6	2.6%	7.7%	612.8	656.4	706.1	7.2%	8.3%
Compensation of employees	333.2	5.2%	4.2%	360.5	384.3	409.2	7.1%	4.8%
Goods and services	239.4	-0.7%	3.5%	252.3	272.1	296.9	7.4%	3.4%
Transfers and subsidies	7 568.5	3.1%	92.2%	6 427.7	6 912.5	7 286.4	-1.3%	91.7%
Provinces and municipalities	2 290.3	22.6%	27.0%	2 119.5	2 355.0	2 484.5	2.8%	30.1%
Departmental agencies and accounts	129.4	-13.1%	1.7%	133.4	161.9	164.3	8.3%	1.9%
Foreign governments and international organisations	17.9	14.1%	0.3%	27.9	29.5	31.1	20.2%	0.3%
Public corporations and private enterprises	5 126.2	-2.0%	63.2%	4 146.4	4 365.6	4 606.0	-3.5%	59.3%
Households	4.7	132.3%	0.1%	0.5	0.5	0.5	-52.4%	0.0%
Payments for capital assets	4.3	-6.2%	0.1%	4.5	4.8	5.0	5.6%	0.1%
Machinery and equipment	4.3	-6.2%	0.1%	4.5	4.8	5.0	5.6%	0.1%
Total	8 145.4	3.1%	100.0%	7 045.0	7 573.6	7 997.6	-0.6%	100.0%

Expenditure trends and estimates for significant spending items

Table 26.4 Expenditure trends and estimates for significant spending items

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total Vote (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total vote (%)
	2014/15	2015/16	2016/17				2017/18	2014/15 - 2017/18	2018/19		
R thousand											
Electrification programmes	4 180 973	5 820 485	5 678 659	6 219 980	14.2%	75.5%	5 435 400	5 845 439	6 168 407	-0.3%	76.9%
Clean Energy	830 257	281 783	560 101	742 510	-3.7%	8.3%	370 183	409 901	442 701	-15.8%	6.4%
Total	5 011 230	6 102 268	6 238 760	6 962 490	10.5%	83.8%	5 805 583	6 255 340	6 611 108	-16.1%	83.3%

Goods and services expenditure trends and estimates

Table 26.5 Vote goods and services expenditure trends and estimates

	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2014/15 - 2017/18	2018/19		
R thousand											
Administrative fees	4 453	5 663	4 650	3 771	-5.4%	1.8%	3 764	3 975	4 192	3.6%	1.5%
Advertising	8 652	13 785	8 362	8 525	-0.5%	3.8%	6 774	7 298	7 645	-3.6%	2.9%
Minor assets	367	1 036	833	2 177	81.0%	0.4%	451	486	524	-37.8%	0.3%
Audit costs: External	3 578	4 233	3 805	4 472	7.7%	1.6%	3 909	4 129	4 356	-0.9%	1.6%
Bursaries: Employees	761	610	555	785	1.0%	0.3%	821	867	915	5.2%	0.3%
Catering: Departmental activities	1 032	1 961	2 546	1 992	24.5%	0.7%	1 630	1 721	1 819	-3.0%	0.7%
Communication	7 846	7 613	8 517	6 307	-7.0%	3.0%	6 155	6 499	6 859	2.8%	2.4%
Computer services	10 264	9 839	10 658	6 523	-14.0%	3.6%	7 795	8 221	8 658	9.9%	2.9%
Consultants: Business and advisory services	43 780	25 828	189 849	83 681	24.1%	33.6%	93 799	106 366	122 022	13.4%	38.3%
Legal services	846	924	2 451	458	-18.5%	0.5%	2 190	517	545	6.0%	0.3%
Contractors	1 743	2 560	2 206	1 871	2.4%	0.8%	1 547	1 634	1 723	-2.7%	0.6%
Agency and support/outsourced services	270	3 305	1 096	8 763	219.0%	1.3%	10 308	10 886	11 484	9.4%	3.9%
Entertainment	22	1	8	173	98.9%	-	184	195	206	6.0%	0.1%
Fleet services (including government motor transport)	1 130	1 586	1 275	706	-14.5%	0.5%	571	605	639	-3.3%	0.2%
Consumable supplies	1 582	1 042	1 032	2 357	14.2%	0.6%	2 125	2 246	2 371	0.2%	0.9%
Consumables: Stationery, printing and office supplies	4 119	4 653	4 722	4 260	1.1%	1.7%	3 939	4 160	4 385	1.0%	1.6%
Operating leases	27 145	34 063	38 955	35 348	9.2%	13.3%	45 097	47 538	50 152	12.4%	16.8%
Rental and hiring	15	93	-	349	185.5%	-	-	-	-	-100.0%	-
Property payments	3 849	4 082	8 851	2 718	-11.0%	1.9%	4 934	5 210	5 497	26.5%	1.7%
Transport provided: Departmental activity	1	238	294	-	-100.0%	0.1%	-	-	-	-	-
Travel and subsistence	56 344	65 249	52 019	42 158	-9.2%	21.1%	39 226	41 485	43 779	1.3%	15.7%
Training and development	5 665	4 664	4 041	3 973	-11.2%	1.8%	4 086	4 315	4 552	4.6%	1.6%
Operating payments	6 171	4 898	3 988	6 721	2.9%	2.1%	3 844	4 059	4 282	-14.0%	1.8%
Venues and facilities	19 706	15 373	9 818	11 312	-16.9%	5.5%	9 157	9 686	10 274	-3.2%	3.8%
Total	209 341	213 299	360 531	239 400	4.6%	100.0%	252 306	272 098	296 879	7.4%	100.0%

Transfers and subsidies expenditure trends and estimates

Table 26.6 Vote transfers and subsidies trends and estimates

R thousand	Audited outcome			Adjusted appropriation 2017/18	Average growth rate (%) 2014/15 - 2017/18	Average: Expenditure/ Total (%) 2014/15 - 2017/18	Medium-term expenditure estimate			Average growth rate (%) 2017/18 - 2020/21	Average: Expenditure/ Total (%) 2017/18 - 2020/21
	2014/15	2015/16	2016/17				2018/19	2019/20	2020/21		
Households											
Social benefits											
Current	3 253	2 945	2 001	2 468	-8.8%	-	389	411	434	-44.0%	-
Employee Social Benefits	3 253	2 945	2 001	2 468	-8.8%	-	389	411	434	-44.0%	-
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	85 828	86 762	72 148	128 976	14.5%	1.4%	132 949	161 449	163 820	8.3%	2.1%
Energy and Water Sector Education and Training Authority	812	792	985	1 047	8.8%	-	1 108	1 170	1 234	5.6%	-
National Nuclear Regulator	33 331	21 109	40 538	38 155	4.6%	0.5%	16 068	42 629	44 974	5.6%	0.5%
National Radioactive Waste Disposal Institute	-	-	10 000	30 000	-	0.1%	45 532	43 499	39 397	9.5%	0.6%
South African National Energy Development Institute	51 685	64 861	20 625	59 774	5.0%	0.7%	70 241	74 151	78 215	9.4%	1.0%
Capital	111 366	378	398	418	-84.5%	0.4%	442	467	493	5.7%	-
National Nuclear Regulator	366	378	398	418	4.5%	-	442	467	493	5.7%	-
South African National Energy Development Institute	111 000	-	-	-	-100.0%	0.4%	-	-	-	-	-
Households											
Other transfers to households											
Current	710	711	977	2 220	46.2%	-	65	69	73	-68.0%	-
Employee social benefits	-	-	164	-	-	-	-	-	-	-	-
Employee ex-gratia payments	710	711	58	61	-55.9%	-	65	69	73	6.2%	-
Bursaries for non-employees	-	-	755	2 059	-	-	-	-	-	-100.0%	-
Households: Bursaries (non-employees)	-	-	-	100	-	-	-	-	-	-100.0%	-
Provinces and municipalities											
Municipal bank accounts											
Current	136 905	177 899	185 625	203 236	14.1%	2.6%	215 024	227 065	239 554	5.6%	3.1%
Energy efficiency and demand side management grant	136 905	177 899	185 625	203 236	14.1%	2.6%	215 024	227 065	239 554	5.6%	3.1%
Capital	1 104 658	1 980 340	1 946 246	2 087 048	23.6%	26.6%	1 904 477	2 127 928	2 244 964	2.5%	29.7%
Integrated national electrification programme grant	1 104 658	1 980 340	1 946 246	2 087 048	23.6%	26.6%	1 904 477	2 127 928	2 244 964	2.5%	29.7%
Foreign governments and international organisations											
Current	21 275	29 565	25 003	17 907	-5.6%	0.4%	27 915	29 478	31 099	20.2%	0.4%
International Energy Forum	282	366	3 034	-	-100.0%	-	-	-	-	-	-
African Petroleum Producers Association	2 312	-	-	-	-100.0%	-	2 878	3 038	3 205	-	-
International Atomic Energy Agency	17 003	27 886	19 753	17 207	0.4%	0.3%	21 549	22 756	24 007	11.7%	0.3%
Generation IV International Forum	-	-	-	700	-	-	741	782	825	5.6%	-
International Renewable Energy Agency	1 678	1 313	2 216	-	-100.0%	-	1 137	1 201	1 267	-	-
International Energy Forum	-	-	-	-	-	-	337	356	376	-	-
International Partnership for Energy Efficiency Cooperation	-	-	-	-	-	-	1 273	1 345	1 419	-	-
Public corporations and private enterprises											
Subsidies on products and production											
Capital	570 000	156 179	458 047	615 891	2.6%	6.7%	201 649	212 941	224 653	-28.5%	4.5%
Various institutions: Integrated national electrification programme	70 000	156 179	137 733	221 800	46.9%	2.2%	201 649	212 941	224 653	0.4%	3.1%
Various institutions: Solar water heater project	500 000	-	320 314	394 091	-7.6%	4.5%	-	-	-	-100.0%	1.4%
Public corporations and private enterprises											
Subsidies on products and production											
Current	491 881	498 777	513 461	574 000	5.3%	7.8%	587 313	619 481	653 567	4.4%	8.6%
South African Nuclear Energy Corporation	491 881	498 777	513 461	574 000	5.3%	7.8%	587 313	619 481	653 567	4.4%	8.6%
Capital	3 216 834	3 694 824	3 612 211	3 936 325	7.0%	54.0%	3 357 432	3 533 196	3 727 772	-1.8%	51.6%
Eskom	2 948 037	3 613 243	3 526 334	3 846 154	9.3%	52.1%	3 262 031	3 432 453	3 621 488	-2.0%	50.2%
South African Nuclear Energy Corporation	268 797	81 581	85 877	90 171	-30.5%	2.0%	95 401	100 743	106 284	5.6%	1.4%
Total	5 742 710	6 628 380	6 816 117	7 568 489	9.6%	100.0%	6 427 655	6 912 485	7 286 429	-1.3%	100.0%

Personnel information

Table 26.7 Vote personnel numbers and cost by salary level and programme¹

Programmes		Number and cost ² of personnel posts filled / planned for on funded establishment										Number								
Number of funded posts	Number of posts additional to the establishment	Actual		Revised estimate		Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)							
		2016/17		2017/18		2018/19		2019/20		2020/21				2017/18 - 2020/21						
		Number	Unit Cost cost	Number	Unit Cost cost	Number	Unit Cost cost	Number	Unit Cost cost	Number	Unit Cost cost									
Energy		551	21	589	321.5	0.5	595	333.2	0.6	582	360.5	0.6	574	384.3	0.7	567	409.2	0.7	-1.6%	100.0%
Salary level																				
1 – 6	137	2	138	32.1	0.2	140	30.9	0.2	125	30.4	0.2	122	32.0	0.3	119	33.9	0.3	-5.3%	21.8%	
7 – 10	250	8	267	118.1	0.4	265	116.8	0.4	260	123.7	0.5	256	131.4	0.5	253	140.5	0.6	-1.5%	44.6%	
11 – 12	90	8	96	72.7	0.8	99	80.7	0.8	102	89.1	0.9	101	95.4	0.9	101	103.0	1.0	0.7%	17.4%	
13 – 16	72	3	86	94.3	1.1	89	100.4	1.1	93	112.3	1.2	93	120.1	1.3	92	126.1	1.4	1.1%	15.8%	
Other	2	–	2	4.3	2.2	2	4.5	2.3	2	5.0	2.5	2	5.4	2.7	2	5.8	2.9	–	0.3%	
Programme	551	21	589	321.5	0.5	595	333.2	0.6	582	360.5	0.6	574	384.3	0.7	567	409.2	0.7	-1.6%	100.0%	
Programme 1	256	14	284	149.8	0.5	291	152.9	0.5	279	164.2	0.6	273	174.2	0.6	266	183.0	0.7	-2.9%	47.8%	
Programme 2	51	1	52	32.8	0.6	52	35.3	0.7	54	41.6	0.8	53	44.2	0.8	53	47.6	0.9	0.6%	9.1%	
Programme 3	111	3	118	58.9	0.5	119	60.9	0.5	115	63.4	0.6	114	67.6	0.6	114	72.8	0.6	-1.4%	19.9%	
Programme 4	78	2	79	43.8	0.6	78	45.2	0.6	79	49.6	0.6	79	53.5	0.7	79	57.6	0.7	0.4%	13.6%	
Programme 5	32	–	31	19.8	0.6	31	21.2	0.7	31	21.8	0.7	31	23.4	0.8	31	25.2	0.8	–	5.3%	
Programme 6	23	1	25	16.3	0.7	24	17.7	0.7	24	19.9	0.8	24	21.4	0.9	24	23.1	1.0	–	4.1%	

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

2. Rand million.

Departmental receipts

Table 26.8 Departmental receipts by economic classification

R thousand	Audited outcome			Adjusted estimate	Revised estimate	Average growth rate (%)	Average: Receipt item/ Total (%)	Medium-term receipts estimate			Average growth rate (%)	Average: Receipt item/ Total (%)		
	2014/15	2015/16	2016/17					2017/18	2018/19	2019/20			2020/21	2017/18 - 2020/21
Departmental receipts	5 277	805 987	956 905	6 002	6 002	4.4%	100.0%	6 170	6 309	6 560	3.0%	100.0%		
Sales of goods and services produced by department	3 132	3 885	4 209	3 822	3 822	6.9%	0.8%	3 914	4 027	4 249	3.6%	63.9%		
Sales by market establishments of which:	139	141	144	146	146	1.7%	–	149	156	165	4.2%	2.5%		
<i>Sales by market establishment: Parking</i>	139	141	144	146	146	1.7%	–	149	156	165	4.2%	2.5%		
Administrative fees of which:	2 896	3 631	3 944	3 550	3 550	7.0%	0.8%	3 650	3 750	3 956	3.7%	59.5%		
<i>Administrative fees: Petroleum licence fees</i>	2 896	3 631	3 944	3 550	3 550	7.0%	0.8%	3 650	3 750	3 956	3.7%	59.5%		
Other sales of which:	97	113	121	126	126	9.1%	–	115	121	128	0.5%	2.0%		
<i>Other sales: Garnishee, photocopy, faxes</i>	97	113	121	126	126	9.1%	–	115	121	128	0.5%	2.0%		
Sales of scrap, waste, arms and other used current goods	1	–	–	–	–	-100.0%	–	2	2	2	–	–		
<i>Sales: Waste paper</i>	1	–	–	–	–	-100.0%	–	2	2	2	–	–		
Transfers received	1 587	1 059	1 745	1 750	1 750	3.3%	0.3%	1 750	1 750	1 750	–	28.0%		
Interest, dividends and rent on land	47	489	649	45	45	-1.4%	0.1%	30	32	34	-8.9%	0.6%		
Interest	47	489	649	45	45	-1.4%	0.1%	30	32	34	-8.9%	0.6%		
Sales of capital assets	–	111	–	–	–	–	–	–	–	–	–	–		
Transactions in financial assets and liabilities	510	800 443	950 302	385	385	-8.9%	98.7%	474	498	525	10.9%	7.5%		
Total	5 277	805 987	956 905	6 002	6 002	4.4%	100.0%	6 170	6 309	6 560	3.0%	100.0%		

Programme 1: Administration

Programme purpose

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

Expenditure trends and estimates

Table 26.9 Administration expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2018/19	2019/20		
R thousand											
Ministry	41 767	42 298	39 314	39 294	-2.0%	15.0%	33 272	35 359	37 326	-1.7%	12.5%
Departmental Management	45 787	52 619	72 710	63 576	11.6%	21.7%	73 165	77 825	82 080	8.9%	25.6%
Finance Administration	29 390	33 294	34 695	36 051	7.0%	12.3%	39 338	41 809	44 138	7.0%	13.9%
Audit Services	6 754	6 698	6 934	6 076	-3.5%	2.4%	8 454	8 982	9 482	16.0%	2.8%
Corporate Services	109 053	110 759	98 508	82 753	-8.8%	37.1%	79 232	83 286	87 069	1.7%	28.6%
Office Accommodation	24 417	32 100	30 601	35 811	13.6%	11.4%	49 177	51 847	54 699	15.2%	16.5%
Total	257 168	277 768	282 762	263 561	0.8%	100.0%	282 638	299 108	314 794	6.1%	100.0%
Change to 2017 Budget estimate				24 020			36 690	35 117	33 210		
Economic classification											
Current payments	248 394	268 555	272 282	253 640	0.7%	96.4%	276 537	292 673	308 005	6.7%	97.5%
Compensation of employees	131 521	138 750	149 826	152 919	5.2%	53.0%	164 202	174 155	182 972	6.2%	58.1%
Goods and services ¹	116 873	129 805	122 456	100 721	-4.8%	43.5%	112 335	118 518	125 033	7.5%	39.4%
<i>of which:</i>											
Computer services	10 204	9 807	10 658	6 380	-14.5%	3.4%	7 795	8 221	8 658	10.7%	2.7%
Consultants: Business and advisory services	5 103	4 025	4 722	4 301	-5.5%	1.7%	5 281	5 573	5 879	11.0%	1.8%
Operating leases	26 737	33 165	38 093	35 302	9.7%	12.3%	45 097	47 538	50 152	12.4%	15.4%
Property payments	3 849	4 050	8 827	2 020	-19.3%	1.7%	4 934	5 210	5 497	39.6%	1.5%
Travel and subsistence	27 842	32 467	26 072	20 584	-9.6%	9.9%	17 323	18 269	19 277	-2.2%	6.5%
Training and development	5 636	4 643	4 030	3 849	-11.9%	1.7%	4 086	4 315	4 552	5.8%	1.4%
Transfers and subsidies¹	5 007	4 789	6 833	5 635	4.0%	2.1%	1 562	1 650	1 741	-32.4%	0.9%
Departmental agencies and accounts	812	792	985	1 047	8.8%	0.3%	1 108	1 170	1 234	5.6%	0.4%
Foreign governments and international organisations	282	366	3 034	-	-100.0%	0.3%	-	-	-	-	-
Households	3 913	3 631	2 814	4 588	5.4%	1.4%	454	480	507	-52.0%	0.5%
Payments for capital assets	3 763	4 424	3 634	4 286	4.4%	1.5%	4 539	4 785	5 048	5.6%	1.6%
Machinery and equipment	3 763	4 424	3 634	4 286	4.4%	1.5%	4 539	4 785	5 048	5.6%	1.6%
Payments for financial assets	4	-	13	-	-100.0%	-	-	-	-	-	-
Total	257 168	277 768	282 762	263 561	0.8%	100.0%	282 638	299 108	314 794	6.1%	100.0%
Proportion of total programme expenditure to vote expenditure	4.1%	3.9%	3.8%	3.2%	-	-	4.0%	3.9%	3.9%	-	-
Details of transfers and subsidies											
Households											
Social benefits											
Current	3 212	2 920	2 001	2 468	-8.4%	1.0%	389	411	434	-44.0%	0.3%
Employee Social Benefits	3 212	2 920	2 001	2 468	-8.4%	1.0%	389	411	434	-44.0%	0.3%
Other transfers to households											
Current	701	711	813	2 120	44.6%	0.4%	65	69	73	-67.5%	0.2%
Employee ex-gratia payments	701	711	58	61	-55.7%	0.1%	65	69	73	6.2%	-
Bursaries for non-employees	-	-	755	2 059	-	0.3%	-	-	-	-100.0%	0.2%
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	812	792	985	1 047	8.8%	0.3%	1 108	1 170	1 234	5.6%	0.4%
Energy and Water Sector Education and Training Authority	812	792	985	1 047	8.8%	0.3%	1 108	1 170	1 234	5.6%	0.4%
Foreign governments and international organisations											
Current	282	366	3 034	-	-100.0%	0.3%	-	-	-	-	-
International Energy Forum	282	366	3 034	-	-100.0%	0.3%	-	-	-	-	-

1. Estimates of National Expenditure data tables are available and can be downloaded from www.treasury.gov.za. These data tables contain detailed information by goods and services, and transfers and subsidies item by programme.

Personnel information

Table 26.10 Administration personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2018			Number and cost ² of personnel posts filled / planned for on funded establishment												Number				
Number of funded posts	Number of posts additional to the establishment		Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)			
			2016/17			2017/18			2018/19		2019/20		2020/21				2017/18 - 2020/21		
			Number	Unit	Cost	Number	Unit	Cost	Number	Unit	Number	Unit	Number	Unit					
Administration			284	149.8	0.5	291	152.9	0.5	279	164.2	0.6	273	174.2	0.6	266	183.0	0.7	-2.9%	100.0%
Salary level	256	14																	
1 – 6	85	2	90	22.3	0.2	91	21.1	0.2	78	20.3	0.3	75	21.1	0.3	72	22.1	0.3	-7.5%	28.5%
7 – 10	109	4	119	49.8	0.4	119	48.3	0.4	115	50.0	0.4	113	53.1	0.5	110	56.0	0.5	-2.6%	41.2%
11 – 12	32	5	34	25.6	0.8	37	28.6	0.8	42	34.8	0.8	41	36.7	0.9	41	39.6	1.0	3.5%	14.5%
13 – 16	28	3	39	47.8	1.2	42	50.4	1.2	42	54.1	1.3	42	57.8	1.4	41	59.5	1.5	-0.8%	15.1%
Other	2	–	2	4.3	2.2	2	4.5	2.3	2	5.0	2.5	2	5.4	2.7	2	5.8	2.9	–	0.7%

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

2. Rand million.

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
 - 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
 - publishing an annual energy statistics report to facilitate information-based decision-making
 - addressing 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.
- 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 generation capacity by implementing the integrated resource plan through determinations under section 34 of the Energy Regulation Act (2006), when applicable.

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 analyses 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 constraints in energy supply and distribution, and addresses them through the integrated energy plan; manages the overall collection, collation, validation, integrity and quality of energy data; and manages 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: secure energy supply, well managed demand, and enhanced access to hydrocarbons; a transformed energy sector; and 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 secure energy supply, well managed demand, a transformed energy sector, and energy regulation and competition that improves 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 26.11 Energy Policy and Planning expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2018/19	2019/20		
R thousand											
Policy Analysis and Research	475	1 570	2 056	2 531	74.7%	4.0%	2 623	2 791	2 970	5.5%	5.0%
Energy Planning	23 134	18 429	18 822	22 718	-0.6%	49.9%	25 574	27 014	28 993	8.5%	48.2%
Hydrocarbon Policy	11 695	11 428	11 486	12 770	3.0%	28.5%	15 224	16 133	17 314	10.7%	28.4%
Electricity, Energy Efficiency and Environmental Policy	6 445	6 668	7 514	8 649	10.3%	17.6%	9 657	10 294	10 981	8.3%	18.3%
Total	41 749	38 095	39 878	46 668	3.8%	100.0%	53 078	56 232	60 258	8.9%	100.0%
Change to 2017				-			3 569	3 754	4 095		
Budget estimate											
Economic classification											
Current payments	41 708	38 095	39 878	46 668	3.8%	100.0%	53 078	56 232	60 258	8.9%	100.0%
Compensation of employees	28 754	31 521	32 805	35 283	7.1%	77.1%	41 632	44 183	47 557	10.5%	78.0%
Goods and services ¹	12 954	6 574	7 073	11 385	-4.2%	22.8%	11 446	12 049	12 701	3.7%	22.0%
of which:											
Administrative fees	233	222	365	458	25.3%	0.8%	489	516	546	6.0%	0.9%
Communication	408	265	330	489	6.2%	0.9%	537	567	597	6.9%	1.0%
Consultants: Business and advisory services	8 144	342	1 065	4 442	-18.3%	8.4%	4 274	4 479	4 714	2.0%	8.3%
Travel and subsistence	2 941	4 062	3 234	3 761	8.5%	8.4%	3 816	4 030	4 251	4.2%	7.3%
Operating payments	833	742	707	455	-18.3%	1.6%	514	542	572	7.9%	1.0%
Venues and facilities	212	693	833	640	44.5%	1.4%	1 088	1 147	1 210	23.7%	1.9%
Transfers and subsidies¹	41	-	-	-	-100.0%	-	-	-	-	-	-
Households	41	-	-	-	-100.0%	-	-	-	-	-	-
Total	41 749	38 095	39 878	46 668	3.8%	100.0%	53 078	56 232	60 258	8.9%	100.0%
Proportion of total programme expenditure to vote expenditure	0.7%	0.5%	0.5%	0.6%	-	-	0.8%	0.7%	0.8%	-	-
Details of transfers and subsidies											
Households											
Social benefits											
Current	41	-	-	-	-100.0%	-	-	-	-	-	-
Employee social benefits	41	-	-	-	-100.0%	-	-	-	-	-	-

1. Estimates of National Expenditure data tables are available and can be downloaded from www.treasury.gov.za. These data tables contain detailed information by goods and services, and transfers and subsidies item by programme.

Personnel information

Table 26.12 Energy Policy and Planning personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2018		Number and cost ² of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)				
		2016/17			2017/18			2018/19		2019/20		2020/21				2017/18 - 2020/21			
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost				Number	Cost	Unit cost
Energy Policy and Planning																			
Salary level	51	1	52	32.8	0.6	52	35.3	0.7	54	41.6	0.8	53	44.2	0.8	53	47.6	0.9	0.6%	100.0%
1 – 6	2	–	1	0.1	0.1	1	0.1	0.1	1	0.2	0.2	1	0.2	0.2	1	0.2	0.2	–	1.9%
7 – 10	26	1	28	12.3	0.4	28	13.3	0.5	28	14.4	0.5	27	14.9	0.6	27	16.1	0.6	-1.2%	51.9%
11 – 12	13	–	13	10.6	0.8	13	11.3	0.9	13	12.6	1.0	13	13.6	1.0	13	14.6	1.1	–	24.5%
13 – 16	10	–	10	9.8	1.0	10	10.5	1.0	12	14.5	1.2	12	15.5	1.3	12	16.6	1.4	6.3%	21.7%

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

2. 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 with legislation, specifications, standards and licence conditions annually.
- 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 appropriate returns 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. This subprogramme also processes arbitration requests and the 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 26.13 Petroleum and Petroleum Products Regulation expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation 2017/18	Average growth rate (%) 2014/15 - 2017/18	Average Expenditure/Total (%) 2014/15 - 2017/18	Medium-term expenditure estimate			Average growth rate (%) 2017/18 - 2020/21	Average Expenditure/Total (%) 2017/18 - 2020/21
	2014/15	2015/16	2016/17				2018/19	2019/20	2020/21		
R thousand											
Petroleum Compliance, Monitoring and Enforcement	13 541	13 847	14 189	12 728	-2.0%	18.5%	18 574	19 655	20 800	17.8%	19.9%
Petroleum Licensing and Fuel Supply	19 400	20 740	24 152	26 946	11.6%	31.0%	27 388	29 164	31 129	4.9%	31.8%
Fuel Pricing	9 158	6 839	7 367	8 465	-2.6%	10.8%	6 169	6 554	6 980	-6.2%	7.8%
Regional Petroleum Regulation Offices	22 449	27 532	33 283	33 689	14.5%	39.7%	35 001	37 324	40 396	6.2%	40.6%
Total	64 548	68 958	78 991	81 828	8.2%	100.0%	87 132	92 697	99 305	6.7%	100.0%
Change to 2017 Budget estimate				-			1 591	1 798	2 029		
Economic classification											
Current payments	62 236	68 958	78 819	81 828	9.6%	99.2%	84 254	89 659	96 100	5.5%	97.5%
Compensation of employees	41 927	52 566	58 939	60 917	13.3%	72.8%	63 363	67 599	72 825	6.1%	73.3%
Goods and services ¹	20 309	16 392	19 880	20 911	1.0%	26.3%	20 891	22 060	23 275	3.6%	24.1%
<i>of which:</i>											
Advertising	468	432	756	783	18.7%	0.8%	1 040	1 099	1 159	14.0%	1.1%
Communication	286	675	404	496	20.1%	0.6%	637	673	711	12.8%	0.7%
Consultants: Business and advisory services	9 056	10 023	10 415	10 056	3.6%	13.4%	12 601	13 308	14 041	11.8%	13.9%
Travel and subsistence	5 714	4 270	6 200	4 331	-8.8%	7.0%	4 082	4 307	4 544	1.6%	4.8%
Operating payments	3 036	254	481	2 258	-9.4%	2.0%	540	570	601	-35.7%	1.1%
Venues and facilities	367	218	645	1 333	53.7%	0.9%	1 280	1 351	1 425	2.2%	1.5%
Transfers and subsidies¹	2 312	-	122	-	-100.0%	0.8%	2 878	3 038	3 205	-	2.5%
Foreign governments and international organisations	2 312	-	-	-	-100.0%	0.8%	2 878	3 038	3 205	-	2.5%
Households	-	-	122	-	-	-	-	-	-	-	-
Payments for capital assets	-	-	35	-	-	-	-	-	-	-	-
Machinery and equipment	-	-	35	-	-	-	-	-	-	-	-
Payments for financial assets	-	-	15	-	-	-	-	-	-	-	-
Total	64 548	68 958	78 991	81 828	8.2%	100.0%	87 132	92 697	99 305	6.7%	100.0%
Proportion of total programme expenditure to vote expenditure	1.0%	1.0%	1.1%	1.0%	-	-	1.2%	1.2%	1.2%	-	-
Details of transfers and subsidies											
Households											
Other transfers to households											
Current	-	-	122	-	-	-	-	-	-	-	-
Employee social benefits	-	-	122	-	-	-	-	-	-	-	-
Foreign governments and international organisations											
Current	2 312	-	-	-	-100.0%	0.8%	2 878	3 038	3 205	-	2.5%
African Petroleum Producers Association	2 312	-	-	-	-100.0%	0.8%	2 878	3 038	3 205	-	2.5%

1. Estimates of National Expenditure data tables are available and can be downloaded from www.treasury.gov.za. These data tables contain detailed information by goods and services, and transfers and subsidies item by programme.

Personnel information

Table 26.14 Petroleum and Petroleum Products Regulation personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2018	Number and cost ² of personnel posts filled / planned for on funded establishment															Number			
	Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate					Average growth rate (%)	Average Salary level/Total (%)				
			2016/17	Unit	Cost	2017/18	Unit	Cost	2018/19	Unit	Cost	2019/20	Unit			Cost	2020/21	Unit	Cost
Petroleum and Petroleum Products Regulation			118	58.9	0.5	119	60.9	0.5	115	63.4	0.6	114	67.6	0.6	114	72.8	0.6	-1.4%	100.0%
Salary level	111	3	118	58.9	0.5	119	60.9	0.5	115	63.4	0.6	114	67.6	0.6	114	72.8	0.6	-1.4%	100.0%
1-6	33	-	33	7.2	0.2	33	7.3	0.2	32	7.6	0.2	32	8.2	0.3	32	8.9	0.3	-1.0%	27.9%
7-10	57	2	59	29.1	0.5	60	29.1	0.5	59	31.3	0.5	58	33.1	0.6	58	35.8	0.6	-1.1%	50.9%
11-12	9	1	11	8.3	0.8	11	9.0	0.8	9	8.0	0.9	9	8.7	1.0	9	9.4	1.0	-6.5%	8.2%
13-16	12	-	15	14.3	1.0	15	15.4	1.0	15	16.4	1.1	15	17.5	1.2	15	18.8	1.3	-	13.0%

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

2. 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 on an ongoing basis by:
 - enhancing the application of project management business principles to assist programme and project managers
 - 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.

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 mainstreaming, uplifting and empowering 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 26.15 Electrification and Energy Programme and Project Management expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2018/19	2019/20		
R thousand											
Integrated National Electrification Programme	4 142 550	5 775 682	5 630 619	6 177 659	14.2%	99.2%	5 392 463	5 799 346	6 118 779	-0.3%	99.2%
Energy Regional Offices	17 581	20 271	19 650	16 605	-1.9%	0.3%	18 123	19 799	21 621	9.2%	0.3%
Programme and Project Management Office	7 245	9 095	13 491	11 338	16.1%	0.2%	11 353	12 024	12 788	4.1%	0.2%
Electricity Infrastructure/Industry Transformation	6 575	8 593	9 278	7 713	5.5%	0.1%	8 140	8 631	9 213	6.1%	0.1%
Community Upliftment Programmes and Projects	7 022	6 844	5 621	6 665	-1.7%	0.1%	5 321	5 639	6 006	-3.4%	0.1%
Total	4 180 973	5 820 485	5 678 659	6 219 980	14.2%	100.0%	5 435 400	5 845 439	6 168 407	-0.3%	100.0%
Change to 2017 Budget estimate				35 952			(996 999)	(1 946 299)	(2 052 884)		

Table 26.15 Electrification and Energy Programme and Project Management expenditure trends and estimates by subprogramme and economic classification

Economic classification	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)		
	2014/15	2015/16	2016/17				2018/19	2019/20	2020/21			2017/18	2020/21
	R thousand												
Current payments	58 240	70 718	68 304	64 978	3.7%	1.2%	67 243	72 117	77 302	6.0%	1.2%		
Compensation of employees	36 224	41 796	43 841	45 212	7.7%	0.8%	49 620	53 471	57 619	8.4%	0.9%		
Goods and services ¹	22 016	28 922	24 463	19 766	-3.5%	0.4%	17 623	18 646	19 683	-0.1%	0.3%		
of which:													
Administrative fees	991	1 328	1 213	812	-6.4%	-	863	912	962	5.8%	-		
Catering: Departmental activities	261	1 435	1 381	662	36.4%	-	669	708	748	4.2%	-		
Communication	537	421	746	702	9.3%	-	748	789	833	5.9%	-		
Consultants: Business and advisory services	25	19	182	3 515	420.0%	-	4 111	4 341	4 580	9.2%	0.1%		
Travel and subsistence	14 254	15 700	12 210	6 988	-21.1%	0.2%	8 929	9 463	9 993	12.7%	0.1%		
Venues and facilities	4 447	7 153	4 592	5 132	4.9%	0.1%	1 686	1 780	1 878	-28.5%	-		
Transfers and subsidies¹	4 122 704	5 749 762	5 610 355	6 155 002	14.3%	98.8%	5 368 157	5 773 322	6 091 105	-0.3%	98.8%		
Provinces and municipalities	1 104 658	1 980 340	1 946 246	2 087 048	23.6%	32.5%	1 904 477	2 127 928	2 244 964	2.5%	35.3%		
Public corporations and private enterprises	3 018 037	3 769 422	3 664 067	4 067 954	10.5%	66.3%	3 463 680	3 645 394	3 846 141	-1.9%	63.5%		
Households	9	-	42	-	-100.0%	-	-	-	-	-	-		
Payments for financial assets	29	5	-	-	-100.0%	-	-	-	-	-	-		
Total	4 180 973	5 820 485	5 678 659	6 219 980	14.2%	100.0%	5 435 400	5 845 439	6 168 407	-0.3%	100.0%		
Proportion of total programme expenditure to vote expenditure	67.2%	81.5%	75.6%	76.4%	-	-	77.2%	77.2%	77.1%	-	-		
Details of transfers and subsidies													
Households													
Other transfers to households													
Current	9	-	42	-	-100.0%	-	-	-	-	-	-		
Employee Social Benefits	-	-	42	-	-	-	-	-	-	-	-		
Employee Ex-Gratia payments	9	-	-	-	-100.0%	-	-	-	-	-	-		
Provinces and municipalities													
Municipalities													
Municipal bank accounts													
Capital	1 104 658	1 980 340	1 946 246	2 087 048	23.6%	32.5%	1 904 477	2 127 928	2 244 964	2.5%	35.3%		
Integrated National electrification programme grant	1 104 658	1 980 340	1 946 246	2 087 048	23.6%	32.5%	1 904 477	2 127 928	2 244 964	2.5%	35.3%		
Public corporations and private enterprises													
Private enterprises													
Private enterprises (subsidies on products and production)													
Capital	70 000	156 179	137 733	221 800	46.9%	2.7%	201 649	212 941	224 653	0.4%	3.6%		
Various institutions: Integrated National Electrification Programme	70 000	156 179	137 733	221 800	46.9%	2.7%	201 649	212 941	224 653	0.4%	3.6%		
Public corporations and private enterprises													
Public corporations													
Public corporations (subsidies on products and production)													
Capital	2 948 037	3 613 243	3 526 334	3 846 154	9.3%	63.6%	3 262 031	3 432 453	3 621 488	-2.0%	59.8%		
Eskom	2 948 037	3 613 243	3 526 334	3 846 154	9.3%	63.6%	3 262 031	3 432 453	3 621 488	-2.0%	59.8%		

1. Estimates of National Expenditure data tables are available and can be downloaded from www.treasury.gov.za. These data tables contain detailed information by goods and services, and transfers and subsidies item by programme.

Personnel information

Table 26.16 Electrification and Energy Programme and Project Management personnel numbers and cost by salary level¹

Electrification and Energy Programme and Project Management	Number of posts estimated for 31 March 2018		Number and cost ² of personnel posts filled / planned for on funded establishment										Number						
	Number of funded posts	Number of posts additional to the establishment	Actual		Revised estimate		Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)					
			2016/17		2017/18		2018/19		2019/20		2020/21				2017/18 - 2020/21				
			Number	Unit cost	Number	Unit cost	Number	Unit cost	Number	Unit cost	Number	Unit cost							
Salary level	78	2	79	43.8	0.6	78	45.2	0.6	79	49.6	0.6	79	53.5	0.7	79	57.6	0.7	0.4%	100.0%
1 - 6	13	-	12	2.0	0.2	12	1.9	0.2	11	1.9	0.2	11	2.0	0.2	11	2.2	0.2	-2.9%	14.3%
7 - 10	39	1	40	19.2	0.5	39	18.2	0.5	39	19.4	0.5	39	20.9	0.5	39	22.6	0.6	-	49.5%
11 - 12	18	1	19	14.5	0.8	19	16.1	0.8	19	17.0	0.9	19	18.3	1.0	19	19.8	1.0	-	24.1%
13 - 16	8	-	8	8.1	1.0	8	9.1	1.1	10	11.4	1.1	10	12.2	1.2	10	13.0	1.3	7.7%	12.1%

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

2. Rand million.

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.
- Contribute to ensuring the security of energy supply over the medium term by coordinating all activities of the new nuclear build programme to ensure policy alignment, for which Eskom will be the owner and operator of the nuclear power plants, and the South African Nuclear Energy Corporation the owner of the front-end fuel facilities.
- 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 and 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 the 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 is responsible for the overall coordination and oversight for the new nuclear build programme together with the necessary due diligence on the proposed transaction. This subprogramme also makes transfers to the South African Nuclear Energy Corporation, the National Nuclear Regulator and the National Radioactive Waste Disposal Institute.
- *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 controlling nuclear material through authorisation; ensuring compliance by conducting inspections and audits; and regulating the security of nuclear material by implementing security measures during transportation, use, storage and 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 and legislation, and provides advice accordingly.

Expenditure trends and estimates

Table 26.17 Nuclear Energy expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2018/19	2019/20		
R thousand					2014/15 - 2017/18					2017/18 - 2020/21	
Nuclear Safety and Technology	832 274	641 491	859 003	770 727	-2.5%	98.1%	796 159	850 227	890 921	4.9%	97.6%
Nuclear Non-proliferation and Radiation Security	6 156	7 168	8 303	9 253	14.5%	1.0%	9 074	9 623	10 206	3.3%	1.1%
Nuclear Policy	6 988	6 369	5 145	10 895	16.0%	0.9%	11 353	10 419	11 013	0.4%	1.3%
Total	845 418	655 028	872 451	790 875	-2.2%	100.0%	816 586	870 269	912 140	4.9%	100.0%
Change to 2017 Budget estimate				4 000			(4 809)	(11 893)	(19 026)		

Table 26.17 Nuclear Energy expenditure trends and estimates by subprogramme and economic classification

Economic classification	Audited outcome			Adjusted appropriation 2017/18	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%) 2017/18 - 2020/21	Average Expenditure/ Total (%) 2017/18 - 2020/21
	2014/15	2015/16	2016/17		2014/15 - 2017/18	Average Expenditure/ Total (%)	2018/19	2019/20	2020/21		
R thousand											
Current payments	34 040	25 272	191 393	40 124	5.6%	9.2%	49 540	39 912	42 593	2.0%	5.1%
Compensation of employees	13 446	17 040	19 791	21 181	16.4%	2.3%	21 794	23 445	25 221	6.0%	2.7%
Goods and services ¹	20 594	8 232	171 602	18 943	-2.7%	6.9%	27 746	16 467	17 372	-2.8%	2.4%
of which:											
Advertising	476	1 570	486	3 241	89.5%	0.2%	1 344	1 575	1 606	-20.9%	0.2%
Consultants: Business and advisory services	11 847	752	165 829	10 798	-3.0%	6.0%	21 052	10 986	11 591	2.4%	1.6%
Legal services	–	50	71	–	–	–	1 700	–	–	–	0.1%
Consumables: Stationery, printing and office supplies	468	130	595	465	-0.2%	0.1%	484	511	539	5.0%	0.1%
Travel and subsistence	3 386	3 177	2 181	3 128	-2.6%	0.4%	1 591	1 678	1 771	-17.3%	0.2%
Venues and facilities	3 437	1 791	1 634	811	-38.2%	0.2%	1 081	1 197	1 318	17.6%	0.1%
Transfers and subsidies¹	811 378	629 756	670 027	750 751	-2.6%	90.5%	767 046	830 357	869 547	5.0%	94.9%
Departmental agencies and accounts	33 697	21 487	50 936	68 573	26.7%	5.5%	62 042	86 595	84 864	7.4%	8.9%
Foreign governments and international organisations	17 003	27 886	19 753	17 907	1.7%	2.6%	22 290	23 538	24 832	11.5%	2.6%
Public corporations and private enterprises	760 678	580 358	599 338	664 171	-4.4%	82.3%	682 714	720 224	759 851	4.6%	83.4%
Households	–	25	–	100	–	–	–	–	–	-100.0%	–
Payments for capital assets	–	–	11 031	–	–	0.3%	–	–	–	–	–
Machinery and equipment	–	–	11 031	–	–	0.3%	–	–	–	–	–
Total	845 418	655 028	872 451	790 875	-2.2%	100.0%	816 586	870 269	912 140	4.9%	100.0%
Proportion of total programme expenditure to vote expenditure	13.6%	9.2%	11.6%	9.7%	–	–	11.6%	11.5%	11.4%	–	–
Details of transfers and subsidies											
Households											
Social benefits											
Current	–	25	–	–	–	–	–	–	–	–	–
Employee social benefits	–	25	–	–	–	–	–	–	–	–	–
Households											
Other transfers to households											
Current	–	–	–	100	–	–	–	–	–	-100.0%	–
Households: Bursaries (non-employees)	–	–	–	100	–	–	–	–	–	-100.0%	–
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	33 331	21 109	50 538	68 155	26.9%	5.5%	61 600	86 128	84 371	7.4%	8.9%
National Nuclear Regulator	33 331	21 109	40 538	38 155	4.6%	4.2%	16 068	42 629	44 974	5.6%	4.2%
National Radioactive Waste Disposal Institute	–	–	10 000	30 000	–	1.3%	45 532	43 499	39 397	9.5%	4.7%
Capital	366	378	398	418	4.5%	–	442	467	493	5.7%	0.1%
National Nuclear Regulator	366	378	398	418	4.5%	–	442	467	493	5.7%	0.1%
Foreign governments and international organisations											
Current	17 003	27 886	19 753	17 907	1.7%	2.6%	22 290	23 538	24 832	11.5%	2.6%
International Atomic Energy Agency	17 003	27 886	19 753	17 207	0.4%	2.6%	21 549	22 756	24 007	11.7%	2.5%
Generation IV International Forum	–	–	–	700	–	–	741	782	825	5.6%	0.1%
Public corporations and private enterprises											
Public corporations											
Public corporations (subsidiaries on products and production)											
Current	491 881	498 777	513 461	574 000	5.3%	65.7%	587 313	619 481	653 567	4.4%	71.8%
South African Nuclear Energy Corporation	491 881	498 777	513 461	574 000	5.3%	65.7%	587 313	619 481	653 567	4.4%	71.8%
Capital	268 797	81 581	85 877	90 171	-30.5%	16.6%	95 401	100 743	106 284	5.6%	11.6%
South African Nuclear Energy Corporation	268 797	81 581	85 877	90 171	-30.5%	16.6%	95 401	100 743	106 284	5.6%	11.6%

1. Estimates of National Expenditure data tables are available and can be downloaded from www.treasury.gov.za. These data tables contain detailed information by goods and services, and transfers and subsidies item by programme.

Personnel information

Table 26.18 Nuclear Energy personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2018		Number and cost ² of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)				
		2016/17			2017/18			2018/19		2019/20		2020/21				2017/18 - 2020/21			
		Number	Unit	Cost	Unit	Cost	Unit	Cost	Unit	Cost	Unit	Cost	Unit	Cost	Unit				
Nuclear Energy																			
Salary level	32	–	31	19.8	0.6	31	21.2	0.7	31	21.8	0.7	31	23.4	0.8	31	25.2	0.8	–	100.0%
1–6	3	–	2	0.3	0.1	3	0.4	0.1	3	0.5	0.2	3	0.5	0.2	3	0.5	0.2	–	9.7%
7–10	11	–	11	4.3	0.4	10	4.1	0.4	10	4.4	0.4	10	4.8	0.5	10	5.2	0.5	–	32.3%
11–12	10	–	10	7.0	0.7	10	7.8	0.8	10	7.9	0.8	10	8.5	0.9	10	9.2	0.9	–	32.3%
13–16	8	–	8	8.3	1.0	8	8.8	1.1	8	9.0	1.1	8	9.6	1.2	8	10.3	1.3	–	25.8%

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

2. Rand million.

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, and publishing climate change strategies and plans over the medium term.
- Promote and facilitate energy efficiency and demand management on an ongoing basis by:
 - monitoring and reporting on energy savings
 - coordinating, monitoring and reporting on the progress and impact of energy efficiency and demand management strategies
 - reviewing the energy efficiency tax incentive and energy conservation schemes.
- Improve energy demand side management by facilitating the development of an annual energy management plan.

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. This subprogramme 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 26.19 Clean Energy expenditure trends and estimates by subprogramme and economic classification

Subprogramme	Audited outcome			Adjusted appropriation	Average growth rate (%)	Average Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2014/15 - 2017/18	2018/19		
R thousand											
Energy Efficiency	658 657	206 211	527 139	668 703	0.5%	85.3%	285 720	320 588	348 238	-19.5%	82.6%
Renewable Energy	167 419	69 774	25 240	65 752	-26.8%	13.6%	75 796	80 038	84 492	8.7%	15.6%
Climate Change and Designated National Authority	4 181	5 798	7 722	8 055	24.4%	1.1%	8 667	9 275	9 971	7.4%	1.8%
Total	830 257	281 783	560 101	742 510	-3.7%	100.0%	370 183	409 901	442 701	-15.8%	100.0%
Change to 2017 Budget estimate				(32 000)			(464 968)	(459 605)	(475 030)		
Economic classification											
Current payments	28 989	37 710	31 321	85 409	43.4%	7.6%	82 171	105 783	121 870	12.6%	20.1%
Compensation of employees	12 394	14 336	16 264	17 735	12.7%	2.5%	19 906	21 425	23 055	9.1%	4.2%
Goods and services ¹	16 595	23 374	15 057	67 674	59.8%	5.1%	62 265	84 358	98 815	13.4%	15.9%
of which:											
Advertising	559	4 571	1 864	1 036	22.8%	0.3%	837	871	919	-3.9%	0.2%
Consultants: Business and advisory services	9 605	10 667	7 636	50 569	74.0%	3.3%	46 480	67 679	81 217	17.1%	12.5%
Agency and support/outsourced services	–	1 095	1 094	8 000	–	0.4%	9 529	10 063	10 616	9.9%	1.9%
Consumables: Stationery, printing and office supplies	2	53	83	151	322.7%	–	184	194	205	10.7%	–
Travel and subsistence	2 207	5 573	2 122	3 366	15.1%	0.5%	3 485	3 738	3 943	5.4%	0.7%
Venues and facilities	3 682	415	728	1 289	-29.5%	0.3%	1 317	1 356	1 430	3.5%	0.3%
Transfers and subsidies¹	801 268	244 073	528 780	657 101	-6.4%	92.4%	288 012	304 118	320 831	-21.3%	79.9%
Provinces and municipalities	136 905	177 899	185 625	203 236	14.1%	29.1%	215 024	227 065	239 554	5.6%	45.0%
Departmental agencies and accounts	162 685	64 861	20 625	59 774	-28.4%	12.8%	70 241	74 151	78 215	9.4%	14.4%
Foreign governments and international organisations	1 678	1 313	2 216	–	-100.0%	0.2%	2 747	2 902	3 062	–	0.4%
Public corporations and private enterprises	500 000	–	320 314	394 091	-7.6%	50.3%	–	–	–	-100.0%	20.1%
Total	830 257	281 783	560 101	742 510	-3.7%	100.0%	370 183	409 901	442 701	-15.8%	100.0%
Proportion of total programme expenditure to vote expenditure	13.3%	3.9%	7.5%	9.1%	–	–	5.3%	5.4%	5.5%	–	–
Details of transfers and subsidies											
Departmental agencies and accounts											
Departmental agencies (non-business entities)											
Current	51 685	64 861	20 625	59 774	5.0%	8.2%	70 241	74 151	78 215	9.4%	14.4%
South African National Energy Development Institute	51 685	64 861	20 625	59 774	5.0%	8.2%	70 241	74 151	78 215	9.4%	14.4%
Capital	111 000	–	–	–	-100.0%	4.6%	–	–	–	–	–
South African National Energy Development Institute	111 000	–	–	–	-100.0%	4.6%	–	–	–	–	–
Foreign governments and international organisations											
Current	1 678	1 313	2 216	–	-100.0%	0.2%	2 747	2 902	3 062	–	0.4%
International Renewable Energy Agency	1 678	1 313	2 216	–	-100.0%	0.2%	1 137	1 201	1 267	–	0.2%
International Energy Forum	–	–	–	–	–	–	337	356	376	–	0.1%
International Partnership for Energy Efficiency Cooperation	–	–	–	–	–	–	1 273	1 345	1 419	–	0.2%
Provinces and municipalities											
Municipalities											
Municipal bank accounts											
Current	136 905	177 899	185 625	203 236	14.1%	29.1%	215 024	227 065	239 554	5.6%	45.0%
Energy efficiency and demand side management grant	136 905	177 899	185 625	203 236	14.1%	29.1%	215 024	227 065	239 554	5.6%	45.0%
Public corporations and private enterprises											
Private enterprises											
Private enterprises (subsidies on products and production)											
Capital	500 000	–	320 314	394 091	-7.6%	50.3%	–	–	–	-100.0%	20.1%
Various institutions: Solar water heater project	500 000	–	320 314	394 091	-7.6%	50.3%	–	–	–	-100.0%	20.1%

1. Estimates of National Expenditure data tables are available and can be downloaded from www.treasury.gov.za. These data tables contain detailed information by goods and services, and transfers and subsidies item by programme.

Personnel information

Table 26.20 Clean Energy personnel numbers and cost by salary level¹

Number of posts estimated for 31 March 2018		Number and cost ² of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts additional to the establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average Salary level/Total (%)				
		2016/17			2017/18			2018/19		2019/20		2020/21				2017/18 - 2020/21			
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost				Number	Cost	Unit cost
Clean Energy																			
Salary level	23	1	25	16.3	0.7	24	17.7	0.7	24	19.9	0.8	24	21.4	0.9	24	23.1	1.0		
1-6	1	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7-10	8	-	10	3.4	0.3	9	3.7	0.4	9	4.2	0.5	9	4.5	0.5	9	4.9	0.5	-	37.5%
11-12	8	1	9	6.7	0.7	9	7.8	0.9	9	8.8	1.0	9	9.5	1.1	9	10.3	1.1	-	37.5%
13-16	6	-	6	6.1	1.0	6	6.2	1.0	6	6.9	1.2	6	7.4	1.2	6	7.9	1.3	-	25.0%

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

2. Rand million.

Entities¹

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 eight operating subsidiaries, the entity 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 (PetroSA); the South African Gas Development Company; the Petroleum Agency of South Africa; Oil Pollution Control South Africa; the Strategic Fuel Fund Association; African Exploration Mining Finance Corporation; ETA Energy; and CCE Solutions. The Petroleum Agency of South Africa and the African Exploration Mining and Finance Corporation are in the process of being transferred to the Department of Mineral Resources.

Selected performance indicators

Table 26.21 Central Energy Fund performance indicators by programme/objective/activity and related outcome

Indicator	Programme	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Volume of liquid fuel supplied to South African market per year	Oil and gas, national oil company	Entity mandate	4.4 million	4.7 million	2.5 million	2.5 million	2.6 million	2.7 million	2.9 million
Number of reportable environmental incidents at PetroSA per year	Oil and gas, national oil company		7	8	11	11	11	11	11
Number of crude oil barrels maintained as per ministerial directive per year	Strategic stock and pollution control		10.3 million	10.3 million	- ¹	- ¹	10.3 million	10.3 million	10.3 million
Number of tons (measured per thousand) of coal produced at Vlakkfontein by the African Exploration Mining and Finance Corporation per year	Mining, coal		1 150	1 565	1 389	1 500	2 300	2 500	2 500

1. Stocks were sold in December 2015 and no data is available on the number of barrels replenished.

¹ This section has been compiled with the latest available information from the entities concerned.

Expenditure analysis

The Central Energy Fund manufactures liquid fuels and provides access to other forms of energy, supporting the National Development Plan's vision that, by 2030, South Africa should have an adequate supply of electricity and liquid fuels. Over the medium term, the fund intends to continue focusing on implementing the Vision 2025 strategic roadmap, which is aimed at returning it to commercial viability.

Measures to improve the fund's liquidity and solvency over the MTEF period will focus on PetroSA, the fund's largest entity. Steps include the relocation of PetroSA's head office from Cape Town to Mossel Bay (Western Cape), where its gas to liquid refinery is located, to share services and reduce operational duplications. Securing feedstock for the refinery is a priority as PetroSA has had to contend with decreasing revenues due to a decrease in production. To further contain costs at PetroSA, the fund intends to defer the costs of PetroSA's rehabilitation. Other measures to stabilise its financial position include the disposing of non-core assets. The Petroleum Agency of South Africa is expected to be transferred to the Department of Mineral Resources while the components of the fund's biomass to electricity generation power plant are expected to be disposed of. In addition, the fund plans to expand its Vlakfontein coal mine to supply Eskom's Kusile power station.

As a result of these initiatives, expenditure in the mining, coal programme is expected to increase at an average annual rate of 43.7 per cent, from R581.6 million in 2017/18 to R1.7 billion in 2020/21. During the same period, the acquisition of assets is expected to amount to R4.5 billion. Expenditure in the administration programme is projected to increase at an average annual rate of 2.9 per cent, from R268.8 million in 2017/18 to R293 million in 2020/21, due to the implementation of cost containment measures.

Spending on goods and services is also expected to increase, at an average annual rate of 5.9 per cent, from R16.8 billion in 2017/18 to R19.9 billion in 2020/21, as the fund expands its infrastructure for mining activities, refurbishes the storage tanks of the strategic fuel fund and undertakes activities through Operation Phakisa to develop oil and gas drilling in South Africa. As a result, the fund's total expenditure is expected to increase from R18.8 billion in 2017/18 to R23.4 billion in 2020/21. The number of personnel in the fund decreased from 1 976 in 2016/17 to 1 886 in 2017/18 due to voluntary severance packages and resignations, and vacancies not being filled as the fund attempted to stabilise its financial position. This number is expected to remain constant over the medium term. Spending on compensation of employees is expected to increase at an average annual rate of 8.8 per cent, from R1.6 billion in 2017/18 to R2.1 billion in 2020/21, due to increased spending on voluntary severance packages, cost of living adjustments and additional capacity, such as engineers, required for the expansion of the Vlakfontein coal mine.

Revenue is expected to increase from R18.1 billion in 2017/18 to R24.2 billion in 2020/21, mostly due to increased production capacity in PetroSA's Mossel Bay refinery.

Programmes/objectives/activities

Table 26.22 Central Energy Fund expenditure trends and estimates by programme/objective/activity

	Audited outcome			Revised estimate	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2014/15	2015/16	2016/17		2014/15	2017/18	2018/19	2019/20	2020/21	2017/18	2020/21
R thousand											
Administration	207 868	222 239	280 866	268 849	9.0%	1.3%	261 985	277 704	292 978	2.9%	1.3%
Clean and renewable energy	6 047	16 963	114 614	68 846	125.0%	0.3%	71 320	75 599	79 757	5.0%	0.3%
Oil and gas, national oil company	33 856 378	16 963 062	12 088 225	17 329 572	-20.0%	88.1%	18 064 219	20 277 305	20 701 921	6.1%	90.2%
Strategic stock and pollution control	315 578	4 873 745	679 742	324 568	0.9%	7.3%	328 948	348 685	367 863	4.3%	1.6%
Mining, coal	265 471	383 227	424 636	581 642	29.9%	2.2%	880 730	1 634 395	1 724 287	43.7%	5.5%
Gas and gas infrastructure	20 740	20 336	41 837	33 712	17.6%	0.2%	40 606	35 731	37 696	3.8%	0.2%
Promotion, licensing and regulation	89 218	108 191	152 998	161 891	22.0%	0.7%	180 550	198 065	208 958	8.9%	0.9%
Total	34 761 300	22 587 763	13 782 918	18 769 080	-18.6%	100.0%	19 828 356	22 847 484	23 413 460	7.6%	100.0%

Statements of historical financial performance and position**Table 26.23 Central Energy Fund statements of historical financial performance and position**

Statement of financial performance									
R thousand	Audited		Audited		Audited		Budget	Revised	Average: Outcome/ Budget (%)
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	
	2014/15		2015/16		2016/17		2017/18		2014/15 - 2017/18
Revenue									
Non-tax revenue	19 288 958	19 719 524	19 936 402	22 393 806	18 213 859	13 183 443	23 676 863	18 104 081	90.5%
Sale of goods and services other than capital assets	18 481 286	18 515 161	19 187 205	21 379 462	17 344 253	11 940 101	22 780 920	17 261 496	88.8%
<i>of which:</i>									
<i>Sales by market establishment</i>	18 481 286	18 515 161	19 187 205	21 379 462	17 344 253	11 940 101	22 780 920	17 261 496	88.8%
Other non-tax revenue	807 672	1 204 363	749 197	1 014 344	869 606	1 243 342	895 942	842 585	129.6%
Transfers received	-	-	-	-	-	-	157 100	-	-
Total revenue	19 288 958	20 562 801	19 960 910	22 393 806	18 213 859	13 183 443	23 833 963	18 104 081	91.3%
Expenses									
Current expenses	117 272 125	34 761 300	19 348 749	22 219 434	17 788 520	13 451 908	21 624 484	18 703 607	50.6%
Compensation of employees	1 629 227	1 408 580	1 013 412	1 377 568	1 080 286	1 221 123	1 157 800	1 620 251	115.3%
Goods and services	115 515 548	29 661 870	18 139 574	18 816 388	15 566 428	11 450 386	19 565 544	16 789 685	45.5%
Depreciation	83 465	2 360 326	73 325	1 913 126	1 007 445	103 681	768 298	91 817	231.2%
Interest, dividends and rent on land	43 885	1 330 524	122 438	112 352	134 361	676 718	132 842	201 854	535.5%
Total expenses	117 506 283	34 761 300	19 470 566	22 587 763	17 816 356	13 782 918	21 677 344	18 769 080	50.9%
Surplus/(Deficit)	(98 217 325)	(14 198 499)	490 344	(193 957)	397 503	(599 475)	2 156 618	(664 999)	
Statement of financial position									
Carrying value of assets	25 560 980	11 237 529	14 678 785	12 494 369	14 031 150	10 695 058	17 390 710	17 390 710	72.3%
<i>of which:</i>									
<i>Acquisition of assets</i>	(6 399 902)	(5 975 928)	(3 883 208)	(2 152 920)	(2 382 247)	(853 309)	(4 079 054)	(4 079 054)	78.0%
Investments	12 066 604	3 656 252	7 768 229	1 989 357	5 636 358	2 217 506	5 775 318	5 775 318	43.6%
Inventory	2 163 932	2 213 232	2 290 728	1 992 402	1 986 146	1 880 923	2 216 904	2 216 904	95.9%
Loans	1 409 954	165 867	-	236 062	-	32 829	-	-	30.8%
Receivables and prepayments	3 417 151	3 664 423	2 080 554	2 507 122	1 575 906	2 201 223	1 964 198	1 964 198	114.4%
Cash and cash equivalents	5 000 273	10 364 006	8 085 795	16 153 551	8 799 138	15 694 839	8 667 400	8 667 400	166.5%
Non-current assets held for sale	-	60 669	-	50 000	35 972	88 639	-	-	554.1%
Taxation	5 257	-	5 540	392 158	4 933	349 702	5 540	5 540	3 513.9%
Total assets	49 624 151	31 361 978	34 909 631	35 815 021	32 069 603	33 160 719	36 020 070	36 020 070	89.3%
Accumulated surplus/(deficit)	28 370 915	13 094 835	18 314 501	12 950 318	13 866 245	12 413 560	16 012 796	16 012 796	71.1%
Capital and reserves	2 123 855	1 700 347	275 974	2 070 964	1 704 074	1 844 817	1 704 074	1 704 074	126.0%
Borrowings	4 218 958	1 152 990	1 330 005	1 618 875	1 022 320	866 846	2 196 332	2 196 332	66.6%
Finance lease	-	310	-	-	-	-	-	-	-
Accrued interest	-	-	435	-	-	-	-	-	-
Deferred income	2 334	703	-	-	-	-	-	-	30.1%
Trade and other payables	3 435 354	4 016 444	2 880 392	5 463 354	1 525 420	5 527 817	1 599 291	1 599 291	175.9%
Taxation	1 419 795	1 021 624	1 654 494	1 774 611	1 838 938	1 888 793	1 838 929	1 838 929	96.6%
Provisions	10 052 940	10 327 882	9 882 601	11 864 956	11 555 106	10 431 165	12 104 148	12 104 148	102.6%
Derivatives financial instruments	-	46 843	571 229	71 943	557 500	187 721	564 500	564 500	51.4%
Total equity and liabilities	49 624 151	31 361 978	34 909 631	35 815 021	32 069 603	33 160 719	36 020 070	36 020 070	89.3%

Statements of estimates of financial performance and position**Table 26.24 Central Energy Fund statements of estimates of financial performance and position**

Statement of financial performance									
R thousand	Revised	Average	Average:	Medium-term estimate			Average	Average:	
	estimate	growth	Expen-	2018/19	2019/20	2020/21	growth	Expen-	
	2017/18	rate	diture/ Total				rate	diture/ Total	
		(%)	(%)				(%)	(%)	
		2014/15 - 2017/18		2017/18 - 2020/21					
Revenue									
Non-tax revenue	18 104 081	-2.8%	99.0%	21 220 843	23 924 090	24 247 741	10.2%	100.0%	
Sale of goods and services other than capital assets	17 261 496	-2.3%	92.9%	19 883 342	22 899 110	22 985 905	10.0%	94.9%	
<i>of which:</i>									
<i>Sales by market establishment</i>	17 261 496	-2.3%	92.9%	19 883 342	22 899 110	22 985 905	10.0%	94.9%	
Other non-tax revenue	842 585	-11.2%	6.1%	1 337 501	1 024 980	1 261 836	14.4%	5.1%	
Total revenue	18 104 081	-4.2%	100.0%	21 220 843	23 924 090	24 247 741	10.2%	100.0%	
Expenses									
Current expenses	18 703 607	-18.7%	98.9%	19 630 945	22 599 028	23 255 784	7.5%	99.2%	
Compensation of employees	1 620 251	4.8%	6.9%	1 855 186	1 977 818	2 086 598	8.8%	8.9%	
Goods and services	16 789 685	-17.3%	85.3%	16 483 386	19 440 499	19 923 536	5.9%	85.7%	
Depreciation	91 817	-66.1%	4.1%	1 064 031	960 875	1 013 723	122.7%	3.6%	
Interest, dividends and rent on land	201 854	-46.7%	2.6%	228 341	219 837	231 928	4.7%	1.0%	
Total expenses	18 769 080	-18.6%	100.0%	19 828 357	22 847 484	23 413 460	7.6%	100.0%	
Surplus/(Deficit)	(664 999)			1 392 487	1 076 606	834 281			

Table 26.24 Central Energy Fund statements of estimates of financial performance and position

Statement of financial position	Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
				2017/18	2014/15 - 2017/18	2018/19		
R thousand								
Carrying value of assets	17 390 710	15.7%	37.8%	20 526 262	20 577 785	19 764 062	4.4%	49.4%
of which:								
Acquisition of assets	(4 079 054)	-12.0%	-9.7%	(3 081 488)	(1 190 775)	(200 000)	-63.4%	-5.6%
Investments	5 775 318	16.5%	10.0%	5 925 589	6 068 854	6 068 854	1.7%	15.1%
Inventory	2 216 904	0.1%	6.1%	2 468 548	2 605 117	2 605 117	5.5%	6.2%
Receivables and prepayments	1 964 198	-18.8%	7.7%	2 196 026	2 385 567	2 385 567	6.7%	5.6%
Cash and cash equivalents	8 667 400	-5.8%	37.4%	8 120 642	10 295 841	10 295 841	5.9%	23.6%
Taxation	5 540	-	0.5%	5 540	5 540	5 540	-	0.0%
Total assets	36 020 070	4.7%	100.0%	39 242 607	41 938 704	41 124 981	4.5%	100.0%
Accumulated surplus/(deficit)	16 012 796	6.9%	40.0%	17 439 276	19 218 038	20 052 319	7.8%	45.9%
Capital and reserves	1 704 074	0.1%	5.4%	1 704 074	1 704 074	1 704 074	-	4.3%
Borrowings	2 196 332	24.0%	4.2%	3 177 365	3 358 725	2 446 140	3.7%	7.0%
Trade and other payables	1 599 291	-26.4%	12.3%	1 806 131	1 894 397	1 894 397	5.8%	4.5%
Taxation	1 838 929	21.6%	4.8%	1 838 888	1 838 838	1 838 838	-0.0%	4.7%
Provisions	12 104 148	5.4%	32.8%	12 685 373	13 306 632	12 571 212	1.3%	32.1%
Derivatives financial instruments	564 500	129.3%	0.6%	591 500	618 000	618 000	3.1%	1.5%
Total equity and liabilities	36 020 070	4.7%	100.0%	39 242 607	41 938 704	41 124 981	4.5%	100.0%

Personnel information

Table 26.25 Central Energy Fund personnel numbers and cost by salary level

Number of posts estimated for 31 March 2018		Number and cost ¹ of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)				
		2016/17		2017/18		2018/19		2019/20		2020/21		2017/18 - 2020/21							
Central Energy Fund		Number	Unit cost	Cost	Number	Unit cost	Cost	Number	Unit cost	Cost	Number	Unit cost	Cost	Number	Unit cost	Cost			
Salary level	1 886	1 886	1 976	1 221.1	0.6	1 886	1 620.3	0.9	1 886	1 855.2	1.0	1 886	1 977.8	1.0	1 886	2 086.6	1.1	8.8%	100.0%
7 - 10	418	418	618	111.2	0.2	418	118.1	0.3	418	125.4	0.3	418	132.9	0.3	418	140.3	0.3	5.9%	22.2%
11 - 12	661	661	481	288.4	0.6	661	470.6	0.7	661	507.0	0.8	661	542.6	0.8	661	572.2	0.9	6.7%	35.0%
13 - 16	799	799	869	801.1	0.9	799	1 007.0	1.3	799	1 196.8	1.5	799	1 274.7	1.6	799	1 344.9	1.7	10.1%	42.4%
17 - 22	8	8	8	20.4	2.6	8	24.6	3.1	8	26.1	3.3	8	27.6	3.5	8	29.3	3.7	6.0%	0.4%

1. Rand million.

South African Nuclear Energy Corporation

Mandate

The South African Nuclear Energy Corporation is listed as a schedule 2 public entity, and derives its mandate from the Nuclear Energy Act (1999), the 2008 nuclear energy policy 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. Its subsidiaries include Pelchem and Nuclear Technology Products (NTP) Radioisotopes.

The corporation is also responsible for operating the SAFARI-1 research nuclear reactor, providing irradiation services for the production of radioisotopes, decommissioning and decontaminating nuclear facilities, and contributing to South Africa's obligations in terms of international nuclear treaties and agreements.

Selected performance indicators

Table 26.26 South African Nuclear Energy Corporation performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Number of product and process innovations per year	Administration	Entity mandate	17	12	15	15	15	15	15
Number of scientific articles published per year	Administration		31	55	43	31	31	31	31
Number of days per year that the reactor is operationally available out of the days scheduled for operation	Radiation products and services		303	287	289	287	287	287	287
Maximum allowable annual radiation dose (microsievert) in terms of licence conditions	Radiation products and services		6µSv	6µSv	5.6µSv	5µSv	5µSv	5µSv	5µSv

Expenditure analysis

The South African Nuclear Energy Corporation's activities are geared towards innovation. As such, over the medium term, the corporation intends to continue focusing on radioisotope production, radiation applications, and research and development for new products. The corporation also plans to focus on specialised nuclear manufacturing, the nuclear fuel cycle, and the provision of support for nuclear power generation. This will allow the corporation to align its activities with the 2010-2030 integrated resource plan for electricity, as well as the requirements for the building of new nuclear power reactors.

The corporation aims to strengthen the global market position of NTP Radioisotopes through the production and sale of medical radioisotopes used locally and internationally for the diagnosis and treatment of cancer. As a result, expenditure in the radiation products and services programme is expected to increase at an average annual rate of 8.1 per cent, from R1.3 billion in 2017/18 to R1.6 billion in 2020/21, accounting for 49.5 per cent (R4.5 billion) of the corporation's total expenditure of R9.2 billion over the MTEF period. This programme also enables the SAFARI-1 reactor to be operational for 287 days per year, ensuring the corporation complies with international safety requirements and maintains radiation doses within acceptable levels.

To carry out these activities, the corporation's staff complement is expected to remain constant at 2 033 over the MTEF period. Spending on compensation of employees is expected to increase at an average annual rate of 7.4 per cent, from R990 million in 2017/18 to R1.2 billion in 2020/21, due to adjustments related to the cost of living.

The sale of nuclear technology products, chemical products and nuclear engineering services contributes an estimated 66 per cent (R6.3 billion) of the corporation's total revenue over the MTEF period. The majority of the balance, R2.6 billion, is received through transfers from the department and other entities to fund operations and specific activities such as the decommissioning of plants, waste management at all disused nuclear facilities, the production and conversion of low enriched uranium fuel and nuclear safety.

Cabinet has approved reductions to the corporation's transfers amounting to R64.8 million over the medium term. However, total revenue is projected to increase an average annual rate of 6.1 per cent, from R2.8 billion in 2017/18 to R3.3 billion in 2020/21, as sales of nuclear radiation products are expected to increase as market conditions improve.

Programmes/objectives/activities

Table 26.27 South African Nuclear Energy Corporation expenditure trends and estimates by programme/objective/activity

	Audited outcome			Revised estimate 2017/18	Average growth rate (%) 2014/15 - 2017/18	Average: Expenditure/ Total (%) 2017/18	Medium-term expenditure estimate			Average growth rate (%) 2017/18 - 2020/21	Average: Expenditure/ Total (%) 2020/21
	2014/15	2015/16	2016/17				2018/19	2019/20	2020/21		
R thousand											
Administration	384 344	386 922	442 739	373 656	-0.9%	14.1%	573 311	661 983	661 781	21.0%	19.2%
Nuclear energy	407 712	391 224	409 776	364 899	-3.6%	14.0%	400 022	426 286	468 164	8.7%	14.2%
Radiation products and services	706 863	3 800 512	1 514 435	1 291 480	22.3%	53.6%	1 346 640	1 504 264	1 633 354	8.1%	49.5%
South African Nuclear Energy Corporation as a host of nuclear programmes	637 689	391 382	509 677	452 168	-10.8%	18.4%	486 719	508 728	540 040	6.1%	17.1%
Total	2 136 608	4 970 040	2 876 627	2 482 202	5.1%	100.0%	2 806 692	3 101 261	3 303 339	10.0%	100.0%

Statements of historical financial performance and position

Table 26.28 South African Nuclear Energy Corporation statements of historical financial performance and position

Statement of financial performance									
R thousand	Audited		Audited		Audited		Budget	Revised	Average: Outcome/ Budget (%)
	Budget	outcome	Budget	outcome	Budget	outcome	estimate	estimate	
	2014/15		2015/16		2016/17		2017/18		2014/15 - 2017/18
Revenue									
Non-tax revenue	1 662 199	1 300 646	1 613 276	4 670 010	1 929 057	2 281 747	2 453 490	1 948 885	133.2%
Sale of goods and services other than capital assets	1 567 688	1 265 526	1 511 710	1 509 999	1 883 421	1 610 853	2 340 690	1 736 070	83.8%
<i>of which:</i>									
<i>Sales by market establishment</i>	<i>1 567 688</i>	<i>1 265 526</i>	<i>1 511 710</i>	<i>1 509 999</i>	<i>1 883 421</i>	<i>1 610 853</i>	<i>2 340 690</i>	<i>1 736 070</i>	<i>83.8%</i>
Other non-tax revenue	94 511	35 120	101 566	3 160 011	45 636	670 894	112 800	212 815	1 150.5%
Transfers received	992 295	793 459	650 463	614 268	649 376	637 112	712 898	837 548	95.9%
Total revenue	2 654 494	2 094 105	2 263 739	5 284 278	2 578 433	2 918 859	3 166 388	2 786 433	122.7%
Expenses									
Current expenses	1 947 151	2 100 390	2 382 408	4 888 241	2 598 050	2 805 810	2 869 446	2 395 786	124.4%
Compensation of employees	795 088	797 378	916 852	863 953	916 136	989 397	971 432	990 036	101.1%
Goods and services	1 044 941	1 175 018	1 387 862	3 923 736	1 611 874	1 740 772	1 737 908	1 313 181	141.0%
Depreciation	101 840	63 340	77 694	94 802	65 524	70 764	155 117	87 441	79.1%
Interest, dividends and rent on land	5 282	64 654	–	5 750	4 516	4 877	4 989	5 128	543.8%
Total expenses	2 014 137	2 136 608	2 430 437	4 970 040	2 663 624	2 876 627	2 933 451	2 482 202	124.1%
Surplus/(Deficit)	640 358	(42 503)	(166 698)	314 238	(85 191)	42 232	232 937	304 231	
Statement of financial position									
Carrying value of assets	1 245 762	1 068 556	1 391 386	1 338 158	1 463 356	1 376 599	1 541 213	1 603 016	95.5%
<i>of which:</i>									
<i>Acquisition of assets</i>	<i>(247 645)</i>	<i>(134 883)</i>	<i>(174 404)</i>	<i>(398 688)</i>	<i>(109 964)</i>	<i>(166 240)</i>	<i>(52 633)</i>	<i>(244 444)</i>	<i>161.5%</i>
Investments	265 858	477 961	294 794	3 327 811	3 340 544	3 172 042	3 420 371	3 333 617	140.8%
Inventory	298 716	264 017	221 660	231 886	256 406	238 065	323 836	343 395	97.9%
Loans	–	–	–	–	–	–	–	36 589	–
Receivables and prepayments	316 231	311 076	212 391	407 569	279 899	205 110	382 732	397 548	110.9%
Cash and cash equivalents	621 475	671 828	594 006	781 511	598 334	1 065 283	617 348	531 932	125.5%
Taxation	42 785	31 367	1 257	59 201	15 741	41 016	15 741	32 065	216.7%
Total assets	2 790 827	2 824 805	2 715 494	6 146 136	5 954 280	6 098 115	6 301 241	6 278 162	120.2%
Accumulated surplus/(deficit)	734 674	349 023	482 061	509 265	267 086	502 178	458 992	763 223	109.3%
Capital and reserves	316 877	372 727	367 948	545 729	422 412	602 167	485 446	145 357	104.6%
Capital reserve fund	514 975	–	703 317	–	601 608	–	664 171	198 873	8.0%
Borrowings	72 812	66 219	31 523	82 734	85 238	123 721	99 944	128 010	138.4%
Finance lease	6 830	8 215	10 902	8 202	4 641	5 305	3 830	4 416	99.8%
Deferred income	–	188 080	–	446 339	–	594 362	–	594 366	–
Trade and other payables	331 447	236 716	321 682	252 076	226 887	196 080	255 502	361 385	92.1%
Benefits payable	–	–	–	–	–	23 808	–	–	–
Taxation	1 416	203	–	19 954	–	1 100	–	22 345	3 079.2%
Provisions	779 692	611 568	748 506	691 161	992 714	739 267	1 046 497	972 417	84.5%
Managed funds (e.g. poverty alleviation fund)	21 277	52 390	–	33 049	–	–	–	–	401.6%
Derivatives financial instruments	10 827	939 664	49 555	3 557 627	3 353 694	3 310 127	3 286 859	3 087 770	162.6%
Total equity and liabilities	2 790 828	2 824 805	2 715 494	6 146 136	5 954 280	6 098 115	6 301 241	6 278 162	120.2%

Statements of estimates of financial performance and position

Table 26.29 South African Nuclear Energy Corporation statements of estimates of financial performance and position

Statement of financial performance								
R thousand	Revised	Average	Average:	Medium-term estimate			Average	Average:
	estimate	growth	Expen- diture/ Total	2018/19	2019/20	2020/21	growth	Expen- diture/ Total
	2017/18	rate	(%)				rate	(%)
		(%)	(%)				(%)	(%)
Revenue								
Non-tax revenue	1 948 885	14.4%	74.6%	2 041 454	2 305 800	2 425 374	7.6%	71.9%
Sale of goods and services other than capital assets	1 736 070	11.1%	51.6%	1 875 464	2 138 205	2 256 573	9.1%	66.0%
<i>of which:</i>								
<i>Sales by market establishment</i>	<i>1 736 070</i>	<i>11.1%</i>	<i>51.6%</i>	<i>1 875 464</i>	<i>2 138 205</i>	<i>2 256 573</i>	<i>9.1%</i>	<i>66.0%</i>
Other non-tax revenue	212 815	82.3%	23.0%	165 990	167 595	168 801	-7.4%	6.0%
Transfers received	837 548	1.8%	25.4%	793 110	856 314	904 607	2.6%	28.1%
Total revenue	2 786 433	10.0%	100.0%	2 834 564	3 162 114	3 329 981	6.1%	100.0%
Expenses								
Current expenses	2 395 786	4.5%	97.7%	2 741 023	3 009 695	3 219 755	10.4%	97.2%
Compensation of employees	990 036	7.5%	32.2%	1 065 975	1 142 106	1 225 832	7.4%	38.0%
Goods and services	1 313 181	3.8%	61.8%	1 583 321	1 769 285	1 895 620	13.0%	55.9%
Depreciation	87 441	11.3%	2.7%	87 756	91 933	90 633	1.2%	3.1%
Interest, dividends and rent on land	5 128	-57.0%	0.9%	3 971	6 371	7 670	14.4%	0.2%
Total expenses	2 482 202	5.1%	100.0%	2 806 692	3 101 261	3 303 339	10.0%	100.0%
Surplus/(Deficit)	304 231			27 872	60 853	26 642		

Table 26.29 South African Nuclear Energy Corporation statements of estimates of financial performance and position

Statement of financial position	Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
				2017/18	2014/15 - 2017/18	2018/19		
R thousand								
Carrying value of assets	1 603 016	14.5%	26.9%	1 758 625	1 811 394	1 892 599	5.7%	27.4%
of which:								
Acquisition of assets	(244 444)	21.9%	-4.5%	(160 164)	(58 398)	(86 834)	-29.2%	-2.2%
Investments	3 333 617	91.1%	44.0%	3 455 817	3 549 953	3 657 453	3.1%	54.3%
Inventory	343 395	9.2%	5.6%	336 586	449 092	474 604	11.4%	6.2%
Loans	36 589	–	0.1%	36 589	36 589	36 589	–	0.6%
Receivables and prepayments	397 548	8.5%	6.8%	586 692	614 387	641 547	17.3%	8.7%
Cash and cash equivalents	531 932	-7.5%	15.6%	32 853	19 375	9 114	-74.2%	2.4%
Taxation	32 065	0.7%	0.8%	32 021	32 021	32 021	-0.0%	0.5%
Total assets	6 278 162	30.5%	100.0%	6 239 183	6 512 811	6 743 927	2.4%	100.0%
Accumulated surplus/(deficit)	763 223	29.8%	10.3%	791 095	851 948	878 590	4.8%	12.7%
Capital and reserves	145 357	-26.9%	8.6%	152 589	216 354	264 069	22.0%	3.0%
Capital reserve fund	198 873	–	0.8%	206 960	301 356	367 818	22.7%	4.1%
Borrowings	128 010	24.6%	1.9%	153 461	238 471	425 008	49.2%	3.6%
Finance lease	4 416	-18.7%	0.1%	4 118	3 862	4 111	-2.4%	0.1%
Deferred income	594 366	46.7%	8.3%	575 464	546 906	516 754	-4.6%	8.7%
Trade and other payables	361 385	15.1%	5.4%	519 840	572 263	557 216	15.5%	7.8%
Taxation	22 345	379.2%	0.2%	22 345	22 345	22 345	–	0.3%
Provisions	972 417	16.7%	15.1%	1 028 191	1 088 627	1 152 619	5.8%	16.4%
Derivatives financial instruments	3 087 770	48.7%	48.7%	2 785 120	2 670 679	2 555 397	-6.1%	43.2%
Total equity and liabilities	6 278 162	30.5%	100.0%	6 239 183	6 512 811	6 743 927	2.4%	100.0%

Personnel information**Table 26.30 South African Nuclear Energy Corporation personnel numbers and cost by salary level**

Number of posts estimated for 31 March 2018		Number and cost ¹ of personnel posts filled / planned for on funded establishment										Number							
Number of funded posts	Number of posts on approved establishment	Actual		Revised estimate		Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)						
		2016/17		2017/18		2018/19		2019/20		2020/21				2017/18 - 2020/21					
South African Nuclear Energy Corporation		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
Salary level	2 033	2 033	916.9	0.5	2 033	990.0	0.5	2 033	1 066.0	0.5	2 033	1 142.1	0.6	2 033	1 225.8	0.6	7.4%	100.0%	
1 – 6	551	551	551	119.4	0.2	551	127.8	0.2	551	137.7	0.2	551	147.5	0.3	551	158.3	0.3	7.4%	27.1%
7 – 10	1 069	1 069	1 069	413.9	0.4	1 069	441.9	0.4	1 069	475.8	0.4	1 069	509.7	0.5	1 069	547.1	0.5	7.4%	52.6%
11 – 12	234	234	234	186.3	0.8	234	194.2	0.8	234	209.1	0.9	234	224.0	1.0	234	240.4	1.0	7.4%	11.5%
13 – 16	168	168	168	169.9	1.0	168	197.7	1.2	168	212.9	1.3	168	228.1	1.4	168	244.8	1.5	7.4%	8.3%
17 – 22	11	11	11	27.3	2.5	11	28.4	2.6	11	30.6	2.8	11	32.8	3.0	11	35.2	3.2	7.4%	0.5%

1. Rand 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 in the Public Finance Management Act (1999). The regulator 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 licensee conditions, registering import and production activities, and resolving disputes through mediation, arbitration and the handling of complaints. The regulator must perform the functions assigned to it by the Minister of Energy or under these acts.

Selected performance indicators**Table 26.31 National Energy Regulator of South Africa performance indicators by programme/objective/activity and related outcome**

Indicator	Programme/Objective/Activity	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Number of new technical distribution and transmission audits completed per year	Electricity	Outcome 6: An efficient, competitive and responsive economic infrastructure network	20	22	27	-1	-1	-1	-1
Number of new generation audits completed on power stations per year	Electricity		7	7	-1	-1	-1	-1	-1
Number of consolidated audit reports on the state of compliance of licencees with licence conditions considered by the relevant sub-committee per year	Electricity		-2	-2	3	3	3	3	3
Number of maximum price applications for gas approved within 150 days from date of receipt per year	Piped gas	Entity mandate	3	3	-1	-1	-1	-1	-1
Number of days taken from date of receipt of price application to complete and consider maximum price application per year	Piped gas		150	120	-1	-1	-1	-1	-1
Percentage of maximum price applications considered per year by the relevant sub-committee within 120 days after date of publication of preliminary assessment of maximum price application	Piped gas		-2	-2	100% (6)	100% (8)	100% (10)	100% (12)	100% (14)
Percentage of licence applications per year considered within statutory deadline of 60 days	Petroleum pipelines		100% (28)	100% (18)	100% (18)	100% (19)	100% (19)	100% (20)	100% (20)

1. Indicator discontinued.

2. No historical data available.

Expenditure analysis

Over the medium term, the National Energy Regulator of South Africa intends to continue ensuring the security, accessibility and affordability of energy supply, and fair competition and regulatory certainty in the energy sector. The regulator plans to achieve this by setting and approving energy tariffs, licensing and registering energy service providers, and monitoring and enforcing compliance with regulations. The regulator is expected to prioritise conducting a full analysis of Eskom's performance based on regulatory financial reports submitted by the entity.

Other focus areas include addressing instances of non-compliance with licence conditions through the issuing of notices and remedial action against licenseees. In the piped gas industry, the regulator aims to produce a benchmarking report on the effect of the maximum pricing methodology used to determine the prices for piped gas. Through inspections, the regulator aims to investigate suspected unlicensed activities in the petroleum pipeline industry.

To meet these objectives, total expenditure is expected to increase at an average annual rate of 8.5 per cent, from R305.8 million in 2017/18 to R390.9 million in 2020/21. This includes spending on refurbishing the regulator's offices to comply with health and safety regulations and ensuring that the regulator is accommodated in an environment conducive to it carrying out its duties within statutory deadlines. The refurbishment costs are capped at R60 million.

Spending on compensation of employees is expected to increase at an average annual rate of 9.9 per cent, from R210.6 million in 2017/18 to R279.7 million in 2020/21, due to a planned increase in the regulator's staff complement from 275 in 2017/18 to 282 over the medium term to enhance electricity compliance and monitoring. The increase is pending final approval by the regulator's accounting authority.

The regulator derives its revenue mainly from licence fees and levies on the electricity, piped gas and petroleum pipelines sectors; and interest earned on investments. Total revenue is expected to increase from R308.6 million in 2017/18 to R390.9 million in 2020/21.

Programmes/objectives/activities**Table 26.32 National Energy Regulator of South Africa expenditure trends and estimates by programme/objective/activity**

	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17				2017/18	2018/19	2019/20		
R thousand	2014/15	2015/16	2016/17	2017/18	2014/15 - 2017/18	2018/19	2019/20	2020/21	2017/18 - 2020/21		
Administration	155 707	157 626	165 439	171 448	3.3%	59.8%	188 288	199 063	212 856	7.5%	55.0%
Electricity	53 411	55 890	60 101	76 103	12.5%	22.4%	86 503	92 601	99 241	9.3%	25.2%
Piped gas	22 166	21 360	24 337	31 255	12.1%	9.0%	38 270	40 943	43 860	12.0%	10.9%
Petroleum pipelines	21 030	25 433	21 366	26 968	8.6%	8.7%	30 447	32 606	34 952	9.0%	8.9%
Total	252 313	260 309	271 243	305 774	6.6%	100.0%	343 508	365 213	390 909	8.5%	100.0%

Statements of historical financial performance**Table 26.33 National Energy Regulator of South Africa statements of historical financial performance**

Statement of financial performance	Audited outcome		Audited outcome		Audited outcome		Budget estimate	Revised estimate	Average: Outcome/ Budget (%)
	Budget	2014/15	Budget	2015/16	Budget	2016/17			
R thousand	2014/15	2015/16	2015/16	2016/17	2016/17	2017/18	2017/18	2014/15 - 2017/18	
Revenue									
Non-tax revenue	324 076	296 280	315 693	314 658	296 497	288 698	308 595	308 595	97.1%
Sale of goods and services other than capital assets	320 293	290 263	308 945	305 137	288 937	276 181	302 505	302 505	96.2%
<i>of which:</i>									
Administrative fees	16 615	–	–	–	–	–	–	–	–
Sales by market establishment	303 679	290 263	308 945	305 137	288 937	276 181	302 505	302 505	97.5%
Electricity levies	173 192	154 093	179 666	171 547	166 210	154 012	177 563	177 563	94.3%
Piped gas levies	64 357	66 988	57 702	58 144	55 946	55 426	57 879	57 879	101.1%
Petroleum pipeline levies	66 130	69 181	71 577	75 446	66 781	66 743	67 063	67 063	102.5%
Other non-tax revenue	3 783	6 017	6 748	9 520	7 560	12 517	6 090	6 090	141.2%
Total revenue	324 076	296 280	315 693	314 658	296 497	288 698	308 595	308 595	97.1%
Expenses									
Current expenses	272 354	252 313	285 453	260 309	295 446	271 243	313 862	305 774	93.4%
Compensation of employees	150 400	158 275	175 104	165 250	189 523	179 652	210 606	210 606	98.4%
Goods and services	121 953	86 550	102 442	90 474	96 746	87 105	95 168	95 168	86.3%
Depreciation	–	7 489	7 908	4 585	9 177	4 486	8 087	–	65.8%
Total expenses	272 354	252 313	285 453	260 309	295 446	271 243	313 862	305 774	93.4%
Surplus/(Deficit)	51 723	43 967	30 240	54 349	1 051	17 454	(5 267)	2 821	

Statements of estimates of financial performance**Table 26.34 National Energy Regulator of South Africa statements of estimates of financial performance**

Statement of financial performance	Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
				2018/19	2019/20	2020/21		
R thousand	2017/18	2014/15 - 2017/18	2018/19	2019/20	2020/21	2017/18 - 2020/21		
Revenue								
Non-tax revenue	308 595	1.4%	100.0%	343 509	365 213	390 909	8.2%	100.0%
Sale of goods and services other than capital assets	302 505	1.4%	97.2%	332 164	353 020	377 801	7.7%	97.0%
<i>of which:</i>								
Sales by market establishment	302 505	1.4%	97.2%	332 164	353 020	377 801	7.7%	97.0%
Electricity levies	177 563	4.8%	54.4%	194 487	211 035	224 085	8.1%	57.3%
Piped gas levies	57 879	-4.8%	19.8%	69 356	82 682	89 828	15.8%	21.1%
Petroleum pipeline levies	67 063	-1.0%	23.0%	68 322	59 302	63 888	-1.6%	18.6%
Other non-tax revenue	6 090	0.4%	2.8%	11 345	12 193	13 108	29.1%	3.0%
Total revenue	308 595	1.4%	100.0%	343 509	365 213	390 909	8.2%	100.0%
Expenses								
Current expenses	305 774	6.6%	100.0%	343 509	365 213	390 909	8.5%	100.0%
Compensation of employees	210 606	10.0%	65.3%	242 516	260 463	279 691	9.9%	70.6%
Goods and services	95 168	3.2%	33.1%	100 992	104 751	111 218	5.3%	29.4%
Total expenses	305 774	6.6%	100.0%	343 509	365 213	390 909	8.5%	100.0%
Surplus/(Deficit)	2 821			–	–	–		

Personnel information**Table 26.35 National Energy Regulator of South Africa personnel numbers and cost by salary level**

Number of posts estimated for 31 March 2018		Number and cost ¹ of personnel posts filled / planned for on funded establishment												Number						
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)					
		2016/17		2017/18		2018/19		2019/20		2020/21		2017/18 - 2020/21								
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number		Cost			Unit cost				
National Energy Regulator of South Africa		275	275	257	179.7	0.7	275	210.6	0.8	282	242.5	0.9	282	260.5	0.9	282	279.7	1.0	9.9%	100.0%
Salary level		275		275			275			282			282			282				
1 – 6	26	26	24	3.2	0.1	26	4.8	0.2	26	5.8	0.2	26	6.2	0.2	26	6.6	0.3	11.5%	9.3%	
7 – 10	145	145	151	75.9	0.5	145	73.5	0.5	151	85.5	0.6	150	91.9	0.6	150	98.7	0.7	10.3%	53.2%	
11 – 12	44	44	31	27.5	0.9	44	40.8	0.9	45	47.8	1.1	46	51.3	1.1	46	55.1	1.2	10.5%	16.1%	
13 – 16	59	59	51	72.2	1.4	59	88.1	1.5	59	101.1	1.7	59	108.6	1.8	59	116.6	2.0	9.8%	21.1%	
17 – 22	1	1	–	0.8	–	1	3.4	3.4	1	2.3	2.3	1	2.5	2.5	1	2.7	2.7	-7.9%	0.4%	

1. Rand million.

National Nuclear Regulator**Mandate**

The National Nuclear Regulator is listed as a schedule 3A public entity in the Public Finance Management Act (1999) 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 are in place for nuclear emergency planning.

Selected performance indicators**Table 26.36 National Nuclear Regulator performance indicators by programme/objective/activity and related outcome**

Indicator	Programme/Objective/Activity	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17		2017/18	2018/19	2019/20
Number of compliance assurance inspections conducted per year at the Koeberg nuclear power station	Compliance assurance and enforcement	Entity mandate	46	72	56	56	56	56	56
Number of compliance assurance inspections conducted per year related to nuclear technology and waste products	Compliance assurance and enforcement		126	146	146	144	144	144	144
Number of compliance assurance inspections conducted per year related to naturally occurring radioactive materials	Compliance assurance and enforcement		185	181	126	80	80	80	80
Number of compliance audits conducted per year related to naturally occurring radioactive materials	Compliance assurance and enforcement		12	16	14	12	12	12	12
Number of compliance assurance inspections conducted per year related to nuclear security	Compliance assurance and enforcement		21	21	16	16	16	16	16

Expenditure analysis

Over the medium term, the National Nuclear Regulator is expected to finalise an application from Eskom to license a site for the new nuclear installation, and continue regulatory oversight of the steam generator, at

Eskom's Koeberg nuclear power station. The regulator plans to conduct 56 compliance assurance inspections of the Koeberg power station in each year over the MTEF period to ensure that licence conditions are adhered to and that the handling of nuclear material is done in accordance with stipulated standards. The regulator's compliance inspections of the sector ensure that radioactive materials, nuclear technology and waste products are managed within acceptable safety standards and comply with regulatory practices.

Total expenditure is expected to increase at an average annual rate of 3.1 per cent, from R236.7 million in 2017/18 to R259.5 million in 2020/21. Expenditure in the administration programme is expected to increase from R102.7 million in 2017/18 to R125.4 million in 2020/21 due to the implementation of the integrated management system, which is expected to improve reporting and governance; and the completion of the regulator's new office in Cape Town.

The regulator intends increasing its capacity over the MTEF period to cater for the planned transfer of the radiation control function from the Department of Health. The new function widens the scope of the regulator's activities and involves regulating the use of radiation emitting substances in equipment and radioactive material that are not part of nuclear installations or the nuclear fuel cycle. As a result of this shift, expenditure in the compliance assurance and enforcement programme is expected to increase at an average annual rate of 6.5 per cent, from R39.1 million in 2017/18 to R47.2 million in 2020/21. To absorb the radiation control function, the regulator's staff complement is expected to increase from 163 in 2017/18 to 175 in 2020/21, driving an increase in spending on compensation of employees from R138.2 million in 2017/18 to R161.6 million in 2020/21.

The regulator generates most of its revenue from licence fees, accounting for 78 per cent (R580.8 million) of total projected revenue; and transfers from the department, which account for 14.8 per cent (R105.1 million). Total revenue generated over the medium term is expected to amount to R725.7 million.

Programmes/objectives/activities

Table 26.37 National Nuclear Regulator expenditure trends and estimates by programme/objective/activity

R thousand	Audited outcome			Revised estimate 2017/18	Average growth rate (%)		Medium-term expenditure estimate			Average growth rate (%)	
	2014/15	2015/16	2016/17		2014/15 - 2017/18	Average: Expenditure/ Total (%)	2018/19	2019/20	2020/21	2017/18 - 2020/21	Average: Expenditure/ Total (%)
Administration	85 932	100 450	94 691	102 718	6.1%	49.0%	110 897	113 654	125 394	6.9%	47.0%
Standards authorisations and review assessments	59 024	63 861	68 396	94 901	17.2%	36.0%	76 198	80 465	86 902	-2.9%	35.2%
Compliance assurance and enforcement	25 159	28 808	26 283	39 099	15.8%	15.0%	41 367	43 684	47 178	6.5%	17.8%
Total	170 115	193 119	189 370	236 718	11.6%	100.0%	228 462	237 803	259 475	3.1%	100.0%

Statements of historical financial performance

Table 26.38 National Nuclear Regulator statements of historical financial performance

Statement of financial performance									
R thousand	Budget	Audited outcome	Budget	Audited outcome	Budget	Audited outcome	Budget estimate	Revised estimate	Average: Outcome/Budget (%)
	2014/15	2015/16	2015/16	2016/17	2016/17	2017/18	2017/18	2017/18	2014/15 - 2017/18
Revenue									
Non-tax revenue	137 149	146 679	147 887	159 873	174 534	183 563	198 145	198 145	104.6%
Sale of goods and services other than capital assets	136 581	132 065	143 739	147 443	156 676	161 755	170 776	170 776	100.7%
<i>of which:</i>									
Administrative fees	136 581	132 065	143 739	147 443	156 676	161 755	170 776	170 776	100.7%
Other non-tax revenue	568	14 614	4 148	12 430	17 858	21 808	27 369	27 369	152.6%
Transfers received	33 697	33 697	21 487	21 487	40 936	40 936	38 573	38 573	100.0%
Total revenue	170 846	180 376	169 374	181 360	215 470	224 499	236 718	236 718	103.9%
Expenses									
Current expenses	170 846	170 115	169 374	193 119	215 470	189 370	236 718	236 718	99.6%
Compensation of employees	106 952	105 284	108 716	122 353	118 428	124 331	138 156	138 156	103.8%
Goods and services	49 689	46 446	42 205	52 068	80 402	48 861	84 675	84 675	90.3%
Depreciation	8 373	12 316	13 090	12 774	11 886	10 468	9 801	9 801	105.1%
Interest, dividends and rent on land	5 832	6 069	5 363	5 924	4 754	5 710	4 086	4 086	108.8%
Total expenses	170 846	170 115	169 374	193 119	215 470	189 370	236 718	236 718	99.6%
Surplus/(Deficit)	-	10 261	-	(11 759)	-	35 129	-	-	

Statements of estimates of financial performance

Table 26.39 National Nuclear Regulator statements of estimates of financial performance

Statement of financial performance		Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
					2018/19	2019/20	2020/21		
R thousand		2017/18	2014/15 - 2017/18						
Revenue									
Non-tax revenue		198 145	10.5%	83.7%	211 952	194 707	214 007	2.6%	85.2%
Sale of goods and services other than capital assets		170 776	8.9%	74.7%	180 339	190 438	210 042	7.1%	78.0%
<i>of which:</i>									
Administrative fees		170 776	8.9%	74.7%	180 339	190 438	210 042	7.1%	78.0%
Other non-tax revenue		27 369	23.3%	9.1%	31 613	4 269	3 965	-47.5%	7.2%
Transfers received		38 573	4.6%	16.3%	16 510	43 096	45 467	5.6%	14.8%
Total revenue		236 718	9.5%	100.0%	228 462	237 803	259 474	3.1%	100.0%
Expenses									
Current expenses		236 718	11.6%	100.0%	228 462	237 803	259 474	3.1%	100.0%
Compensation of employees		138 156	9.5%	62.3%	142 350	150 495	161 613	5.4%	61.6%
Goods and services		84 675	22.2%	29.0%	72 025	72 432	82 503	-0.9%	32.4%
Depreciation		9 801	-7.3%	5.9%	10 369	10 950	11 826	6.5%	4.5%
Interest, dividends and rent on land		4 086	-12.4%	2.8%	3 718	3 926	3 533	-4.7%	1.6%
Total expenses		236 718	11.6%	100.0%	228 462	237 803	259 474	3.1%	100.0%
Surplus/(Deficit)		-			-	-	-		

Personnel information

Table 26.40 National Nuclear Regulator personnel numbers and cost by salary level

Number of posts estimated for 31 March 2018		Number and cost ¹ of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)				
		2016/17		2017/18		2018/19		2019/20		2020/21		2017/18 - 2020/21							
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
National Nuclear Regulator																			
Salary level	163	161	155	124.3	0.8	163	138.2	0.8	174	142.4	0.8	173	150.5	0.9	175	161.6	0.9	5.4%	100.0%
1-6	14	14	14	1.9	0.1	14	1.8	0.1	14	1.5	0.1	14	1.8	0.1	14	1.9	0.1	1.3%	8.2%
7-10	67	65	49	25.3	0.5	67	33.8	0.5	67	27.3	0.4	67	29.5	0.4	67	32.0	0.5	-1.8%	39.2%
11-12	13	13	12	10.1	0.8	13	11.1	0.9	18	13.4	0.7	16	11.5	0.7	17	12.4	0.7	3.8%	9.3%
13-16	68	68	79	84.6	1.1	68	88.9	1.3	74	97.4	1.3	75	104.7	1.4	76	112.1	1.5	8.0%	42.8%
17-22	1	1	1	2.5	2.5	1	2.5	2.5	1	2.7	2.7	1	2.9	2.9	1	3.2	3.2	8.0%	0.6%

1. Rand million.

South African National Energy Development Institute

Mandate

The South African National Energy Development Institute is established in terms of the National Energy Act (2008) and is listed as a section 3A public entity in the Public Finance Management Act (1999). The entity directs, monitors and conducts applied energy research and development, and demonstrates and undertakes measures to promote the uptake of green energy and energy efficiency in South Africa.

In relation to energy efficiency, the institute is mandated to undertake energy efficiency measures directed by the Minister of Energy, 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 their 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 26.41 South African National Energy Development Institute performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Number of energy efficiency solutions implemented per year	Working for energy	Entity mandate	10	50	56	43	59	56	56
Number of research development reports completed per year	Working for energy		-1	-1	1	1	1	1	1
Number of energy solutions assessed per year	Working for energy		3	3	3	2	2	2	2

1. No historical data available.

Expenditure analysis

The South African National Energy Development Institute advances energy efficiency and the uptake of green energy by exploring innovative solutions through applied research. Its core projects over the medium term relate to carbon capture and storage, and smart grids. In the pilot carbon capture project, the aim is to reduce greenhouse gas emissions in support of the global efforts to limit the effects of climate change. The donor funded smart grids project aims to integrate clean energy into distribution networks while assisting with asset management. The project also aims to improve electricity tariff designs in 6 municipalities to promote more efficient power use and improve revenue collection.

The institute's total expenditure is expected to decrease at an average annual rate of 8.8 per cent, from R238.9 million in 2017/18 to R181.2 million in 2020/21, mainly due to the conclusion of the smart grids project, which is funded by the European Union.

To fund capacity building projects in energy modelling and data management, and improve efficiencies in the administration of tax incentives for energy efficiency, an additional R22.1 million is allocated to the institute over the MTEF period. Technical support will be provided to National Treasury, the South African Revenue Service and the Department of Trade and Industry for the administration of tax incentives supporting investments in manufacturing and the training of personnel to improve productivity, and for deductions based on energy efficiency savings. Included in the allocation is an amount of R8.7 million in 2020/21, allowing the institute to develop and implement 171 energy efficiency solutions over the medium term.

Expenditure in the cleaner fossil fuels programme is expected to amount to R273.6 million over the MTEF period, allowing for the production of 3 research reports. This programme includes the carbon capture and storage project, the development of a wind atlas for South Africa that can be used for renewable energy planning, the smart grids project, and data knowledge management aimed at providing capacity building in energy modelling and data management.

The institute's staff complement is expected to increase from 59 in 2017/18 to 65 over the medium term, due to the anticipated recruitment of new personnel to work on cleaner mobility in transport. Spending on compensation of employees is, therefore, set to increase at an average annual rate of 11.9 per cent, from R46.5 million in 2017/18 to R65.1 million in 2020/21.

The institute derives the bulk of its revenue from transfers from the department, which is expected to amount to R222.6 million over the medium term. The remainder of the institute's revenue is generated from project-specific donor funding. Total revenue is expected to decrease from R238.9 million in 2017/18 to R181.2 million in 2020/21, as some donor funded projects are concluded over the medium term.

Programmes/objectives/activities**Table 26.42 South African National Energy Development Institute expenditure trends and estimates by programme/objective/activity**

	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2014/15	2015/16	2016/17	2017/18	2014/15 - 2017/18	2017/18	2018/19	2019/20	2020/21	2017/18 - 2020/21	2020/21
R thousand											
Administration	53 480	52 100	80 713	41 881	-7.8%	40.6%	45 123	45 304	50 606	6.5%	24.2%
Cleaner fossil fuels	8 442	12 190	2 997	99 783	127.8%	14.4%	81 408	99 470	92 721	-2.4%	48.8%
Energy efficiency programme	9 058	7 305	4 784	12 315	10.8%	5.2%	7 384	7 790	8 663	-11.1%	4.6%
Smart grids	28 826	81 283	12 885	53 679	23.0%	24.5%	5 433	5 788	6 163	-51.4%	8.1%
Working for energy	2 211	16 875	1 220	4 654	28.2%	3.2%	6 326	6 769	7 141	15.3%	3.3%
Clean energy solutions	9 283	36 252	3 112	21 469	32.2%	9.3%	22 068	6 504	6 959	-31.3%	7.3%
Centre for energy systems analysis and research	1 234	2 157	3 900	5 138	60.9%	1.9%	3 688	4 618	5 984	5.2%	2.5%
Cleaner mobility	-	-	821	-	-	0.2%	2 601	2 762	2 933	-	1.2%
Shale gas	817	4 199	-	-	-100.0%	0.7%	-	-	-	-	-
Total	113 351	212 361	110 432	238 919	28.2%	100.0%	174 031	179 005	181 170	-8.8%	100.0%

Statements of historical financial performance**Table 26.43 South African National Energy Development Institute statements of historical financial performance**

Statement of financial performance	Audited outcome		Audited outcome		Audited outcome		Budget estimate		Average: Outcome/ Budget (%)
	Budget	2014/15	Budget	2015/16	Budget	2016/17	Budget estimate	Revised estimate	
R thousand									
Revenue									
Non-tax revenue	7 277	909	-	19 679	16 130	30 593	4 716	4 716	198.8%
Other non-tax revenue	7 277	909	-	19 679	16 130	30 593	4 716	4 716	198.8%
Transfers received	226 685	112 477	403 550	186 948	308 522	54 177	232 405	234 203	50.2%
Total revenue	233 962	113 386	403 550	206 627	324 652	84 770	237 121	238 919	53.7%
Expenses									
Current expenses	223 955	86 801	316 550	212 361	324 652	110 432	237 121	238 919	58.8%
Compensation of employees	43 800	39 688	45 711	44 638	51 961	49 637	46 512	46 512	96.0%
Goods and services	179 225	42 267	267 091	164 029	267 084	59 450	188 220	190 018	50.5%
Depreciation	930	4 846	3 748	3 694	5 607	1 345	2 389	2 389	96.8%
Transfers and subsidies	-	26 550	87 000	-	-	-	-	-	30.5%
Total expenses	223 955	113 351	403 550	212 361	324 652	110 432	237 121	238 919	56.8%
Surplus/(Deficit)	10 007	35	-	(5 734)	-	(25 662)	-	-	

Statements of estimates of financial performance**Table 26.44 South African National Energy Development Institute statements of estimates of financial performance**

Statement of financial performance	Revised estimate	Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
	2017/18	2014/15 - 2017/18	2017/18	2018/19	2019/20	2020/21	2017/18 - 2020/21	2020/21
R thousand								
Revenue								
Non-tax revenue	4 716	73.1%	12.1%	6 000	6 330	6 678	12.3%	3.2%
Other non-tax revenue	4 716	73.1%	12.1%	6 000	6 330	6 678	12.3%	3.2%
Transfers received	234 203	27.7%	87.9%	168 031	172 675	174 492	-9.3%	96.8%
Total revenue	238 919	28.2%	100.0%	174 031	179 005	181 170	-8.8%	100.0%
Expenses								
Current expenses	238 919	40.1%	94.1%	174 031	179 005	181 170	-8.8%	100.0%
Compensation of employees	46 512	5.4%	30.1%	56 803	60 552	65 094	11.9%	30.5%
Goods and services	190 018	65.0%	62.0%	114 708	115 795	113 271	-15.8%	68.2%
Depreciation	2 389	-21.0%	2.1%	2 520	2 659	2 805	5.5%	1.4%
Total expenses	238 919	28.2%	100.0%	174 031	179 005	181 170	-8.8%	100.0%
Surplus/(Deficit)	-			-	-	-		

Personnel information

Table 26.45 South African National Energy Development Institute personnel numbers and cost by salary level

Number of posts estimated for 31 March 2018		Number and cost ¹ of personnel posts filled / planned for on funded establishment												Number					
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate						Average growth rate (%)	Average: Salary level/Total (%)				
		2016/17		Unit cost	2017/18		Unit cost	2018/19		2019/20		2020/21				2017/18 - 2020/21			
South African National Energy Development Institute		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost			
Salary level	59	59	60	49.6	0.8	59	46.5	0.8	65	56.8	0.9	65	60.6	0.9	65	65.1	1.0	11.9%	100.0%
1 – 6	7	7	8	1.2	0.1	7	1.1	0.2	7	1.2	0.2	7	1.3	0.2	7	1.4	0.2	7.2%	11.0%
7 – 10	29	29	29	13.6	0.5	29	12.7	0.4	29	13.6	0.5	29	14.5	0.5	29	15.6	0.5	7.2%	45.7%
11 – 12	9	9	9	9.0	1.0	9	8.4	0.9	13	12.8	1.0	13	13.6	1.0	13	14.6	1.1	20.4%	18.8%
13 – 16	13	13	13	23.2	1.8	13	21.8	1.7	15	26.5	1.8	15	28.2	1.9	15	30.4	2.0	11.6%	22.8%
17 – 22	1	1	1	2.6	2.6	1	2.5	2.5	1	2.7	2.7	1	2.9	2.9	1	3.1	3.1	7.5%	1.6%

1. Rand million.

National Radioactive Waste Disposal Institute

Mandate

The National Radioactive Waste Disposal Institute was established through the National Radioactive Waste Disposal Institute Act (2008) to fulfil an institutional obligation of the Minister of Energy relating to the management of radioactive waste disposal on a national basis. It is listed as a schedule 3A public entity in the Public Finance Management Act (1999).

The National Radioactive Waste Disposal Institute Act (2008) is the enabling legislation that empowers and mandates the institute to develop and implement a management approach for the long-term care and disposal of radioactive waste that is safe, technically sound, socially acceptable, environmentally responsible and economically feasible.

Selected performance indicators

Table 26.46 National Radioactive Waste Disposal Institute performance indicators by programme/objective/activity and related outcome

Indicator	Programme/Objective/Activity	MTSF outcome	Past			Current	Projections		
			2014/15	2015/16	2016/17		2018/19	2019/20	2020/21
Percentage of knowledge awareness campaign conducted on nuclear energy and waste per year	Administration	Entity mandate	-1	-1	-1	60% (15/25)	70% (21/30)	73% (22/30)	80% (24/30)
Number of safety forum meetings conducted per year	Radwaste operations		-1	-1	-1	4	4	4	4
Number of scientific and technical reports done for the development and maintenance of safety cases per year	Radwaste, technology and siting		-1	-1	-1	1	1	1	2

1. No historical data available.

Expenditure analysis

Over the medium term, the National Radioactive Waste Disposal Institute intends to focus on activities required for it to become operational. While the institute currently deals with waste that emits low levels of radiation, over the MTEF period, the institute intends to address the national inventory of radioactive waste categorised as intermediate-level waste, high-level waste, long-lived waste, spent/used nuclear fuel, and disused sealed radioactive sources for which there is inadequate disposal infrastructure. This will involve researching and designing alternative disposal methods for future use that are appropriate for higher grades of nuclear waste. As a result, expenditure in the radwaste, technology and siting programme is estimated to amount to R14.5 million over the medium term.

Total expenditure is expected to increase from R31.2 million in 2017/18 to R47.1 million in 2020/21, with the bulk of the funds expected to be used for operationalising the institute. This includes setting up internal processes and systems, acquiring research capacity, and developing information management systems. A key priority for the institute over the MTEF period is to become the holder of the nuclear installation licence for

low-level waste, which is currently held by the South African Nuclear Energy Corporation, for the Vaalputs national radioactive waste disposal facility.

Educating people and creating awareness about nuclear safety is a key component of the institute's role. As a result, spending in the radwaste operations programme is expected to amount to R13.6 million over the medium term, and will allow for 12 safety forum meetings to be conducted in areas around disposal sites to make local communities aware of nuclear safety. A projected 67 awareness campaigns on nuclear safety over the MTEF period are expected to drive spending in the administration programme, which has a total allocation of R88.3 million.

The institute expects to receive 93.4 per cent of its revenue over the medium term through transfers from the department. Once the Vaalputs licence has been acquired, the institute expects to generate revenue from waste disposal and related services that will be offered to waste generators, mainly Eskom and the South African Nuclear Energy Corporation. Total revenue is expected to increase from R31.2 million in 2017/18 to R47.1 million in 2020/21 due to additional funding of R20.8 million allocated over the medium term to assist the institute to become fully operational and conduct research related to the long-term disposal of different levels of waste.

The institute's staff complement is expected to increase from 25 in 2017/18 to 36 in 2020/21 as technical and administrative posts are filled. As a result, spending on compensation of employees is expected to amount to 81.4 per cent of total expenditure over the MTEF period, increasing from R26.3 million in 2017/18 to R39.5 million in 2020/21.

Programmes/objectives/activities

Table 26.47 National Radioactive Waste Disposal Institute expenditure trends and estimates by programme/objective/activity

	Audited outcome			Revised estimate	Average growth rate (%)	Average: Expenditure/Total (%)	Medium-term expenditure estimate			Average growth rate (%)	Average: Expenditure/Total (%)
	2014/15	2015/16	2016/17				2017/18	2018/19	2019/20		
R thousand					2014/15 - 2017/18		2018/19	2019/20	2020/21	2017/18 - 2020/21	
Administration	3 605	7 039	24 925	20 781	79.3%	91.7%	29 361	28 672	30 238	13.3%	64.3%
Radwaste Operations	-	-	-	2 926	-	2.3%	4 309	4 536	4 778	17.8%	9.7%
Radwaste, Technology and Siting	-	-	-	3 920	-	3.1%	4 566	4 825	5 099	9.2%	11.0%
Radwaste Compliance Management	-	-	-	3 540	-	2.8%	8 712	6 991	6 955	25.2%	15.1%
Total	3 605	7 039	24 925	31 167	105.2%	100.0%	46 948	45 025	47 069	14.7%	100.0%

Statements of historical financial performance

Table 26.48 National Radioactive Waste Disposal Institute statements of historical financial performance

Statement of financial performance	Audited outcome		Audited outcome		Audited outcome		Budget estimate	Revised estimate	Average: Outcome/Budget (%)
	Budget	2014/15	Budget	2015/16	Budget	2016/17			
R thousand									2014/15 - 2017/18
Revenue									
Non-tax revenue	-	1 080	-	1 030	-	5 525	-	1 167	-
Other non-tax revenue	-	1 080	-	1 030	-	5 525	-	1 167	-
Transfers received	-	19 800	-	-	-	10 000	-	30 000	-
Total revenue	-	20 880	-	1 030	-	15 525	-	31 167	-
Expenses									
Current expenses	-	3 605	-	7 039	-	24 925	-	31 167	-
Compensation of employees	-	67	-	396	-	15 465	-	26 258	-
Goods and services	-	3 536	-	6 614	-	9 383	-	4 684	-
Depreciation	-	2	-	28	-	78	-	226	-
Total expenses	-	3 605	-	7 039	-	24 925	-	31 167	-
Surplus/(Deficit)	-	17 275	-	(6 009)	-	(9 401)	-	-	

Statements of estimates of financial performance

Table 26.49 National Radioactive Waste Disposal Institute statements of estimates of financial performance

Statement of financial performance		Average growth rate (%)	Average: Expenditure/ Total (%)	Medium-term estimate			Average growth rate (%)	Average: Expenditure/ Total (%)
Revised estimate		2014/15 - 2017/18		2018/19	2019/20	2020/21	2017/18 - 2020/21	
2017/18								
R thousand								
Revenue								
Tax revenue		–	–	–	–	6 000	–	3.2%
Non-tax revenue		1 167	2.6%	36.1%	1 416	1 526	1 636	11.9%
Other non-tax revenue		1 167	2.6%	36.1%	1 416	1 526	1 636	11.9%
Transfers received		30 000	14.9%	63.9%	45 532	43 499	39 433	9.5%
Total revenue		31 167	14.3%	100.0%	46 948	45 025	47 069	14.7%
Expenses								
Current expenses		31 167	105.2%	100.0%	46 948	45 025	47 069	14.7%
Compensation of employees		26 258	631.8%	38.4%	35 139	37 233	39 461	14.5%
Goods and services		4 684	9.8%	61.2%	11 480	7 382	7 177	15.3%
Depreciation		226	383.3%	0.4%	329	410	431	24.1%
Total expenses		31 167	105.2%	100.0%	46 948	45 025	47 069	14.7%
Surplus/(Deficit)		–			–	–	–	

Personnel information

Table 26.50 National Radioactive Waste Disposal Institute personnel numbers and cost by salary level

Number of posts estimated for 31 March 2018		Number and cost ¹ of personnel posts filled / planned for on funded establishment															Number			
Number of funded posts	Number of posts on approved establishment	Actual			Revised estimate			Medium-term expenditure estimate									Average growth rate (%)	Average: Salary level/Total (%)		
		2016/17			2017/18			2018/19			2019/20			2020/21					2017/18 - 2020/21	
		Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost	Number	Cost	Unit cost				
National Radioactive Waste Disposal Institute																				
Salary level	25	25	25	15.5	0.6	25	26.3	1.1	36	35.1	1.0	36	37.2	1.0	36	39.5	1.1	14.5%	100.0%	
1 – 6	2	2	2	0.1	0.1	2	0.3	0.1	2	0.3	0.1	2	0.3	0.1	2	0.3	0.2	5.9%	6.2%	
7 – 10	6	6	6	1.9	0.3	6	3.2	0.5	15	8.2	0.5	13	7.4	0.6	4	1.7	0.4	-19.1%	28.2%	
11 – 12	4	4	4	2.5	0.6	4	3.2	0.8	3	2.5	0.8	5	4.0	0.8	12	8.4	0.7	38.4%	17.9%	
13 – 16	12	12	12	9.9	0.8	12	17.5	1.5	14	19.8	1.4	12	16.8	1.4	13	17.6	1.4	0.2%	39.1%	
17 – 22	1	1	1	1.0	1.0	1	2.1	2.1	2	4.4	2.2	4	8.8	2.2	5	11.4	2.3	74.8%	8.6%	

1. Rand million.

Additional tables

Table 26.A Summary of conditional grants to provinces and municipalities¹

R thousand	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Conditional grants to municipalities							
Electrification and Energy Programme and Project Management							
Integrated national electrification programme grant	1 104 658	1 980 340	1 946 246	2 087 048	1 904 477	2 127 928	2 244 964
Clean Energy							
Energy efficiency and demand-side management grant	136 905	177 899	185 625	203 236	215 024	227 065	239 554
Total	1 241 563	2 158 239	2 131 871	2 290 284	2 119 501	2 354 993	2 484 518

1. Detail provided in the Division of Revenue Act (2018).

Table 26.B Summary of expenditure on infrastructure

Project name	Service delivery outputs	Current project stage	Total project cost	Audited outcome			Adjusted appropriation 2017/18	Medium-term expenditure estimate		
				2014/15	2015/16	2016/17		2018/19	2019/20	2020/21
Infrastructure transfers to other spheres, agencies and departments										
Mega projects (total project cost of at least R1 billion over the project life cycle)										
Integrated national electrification programme: Eskom	Provision of capital subsidies to address electrification backlogs for permanently occupied residential dwellings, installation of bulk infrastructure, and rehabilitation of electrification infrastructure	Ongoing	–	2 948 037	3 613 243	3 526 334	3 846 154	3 262 031	3 432 453	3 621 488
Integrated national electrification programme: Municipalities	Provision of capital subsidies to municipalities to address electrification backlogs for permanently occupied residential dwellings, installation of bulk infrastructure, and rehabilitation of electrification infrastructure	Ongoing	–	1 104 658	1 980 340	1 946 246	2 087 048	1 904 477	2 127 928	2 244 964
Large projects (total project cost of at least R250 million but less than R1 billion over the project life cycle)										
Integrated national electrification programme: Non-grid	Provision of capital subsidies to non-grid electrification service providers to address electrification backlogs	Ongoing	–	70 000	156 179	137 733	189 828	201 649	212 941	224 653
Total			–	4 122 695	5 749 762	5 610 313	6 123 030	5 368 157	5 773 322	6 091 105

Table 26.C Summary of donor funding

Donor	Project	Programme	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome			Estimate 2017/18	Medium-term expenditure estimate						
							2014/15	2015/16	2016/17		2018/19	2019/20	2020/21				
R thousand Foreign In cash																	
Switzerland	Support for energy efficiency monitoring and implementation project	Clean Energy	1 August 2010 – 31 December 2013	13 950	Departmental agencies and accounts	Support to the energy efficiency monitoring and implementation project	2 970	2 865	–	–	–	–	–	–	–	–	–
European Union	Smart metering implementation programme (general budget support)	Clean Energy	1 April 2012 – 31 March 2018	179 500	Departmental agencies and accounts	Support to the renewable energy independent power producers programme	117 000	151 593	68 460	18 022	–	–	–	–	–	–	–
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)	15 102	31 079	23 362	15 068	–	–	–	–	–	–	–

Table 26.C Summary of donor funding

Donor	Project	Programme	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome		Estimate	Medium-term expenditure estimate		
							2014/15	2015/16		2016/17	2017/18	2018/19
R thousand												
Local												
In kind												
Sector Education and Training Authorities – Energy and Water	Appointment of interns as part of in-service training programmes, training, bursaries programmes to non-officials	Administration	1 April 2014 – continues based on annual applications approved for assistance by Skills Education Training Authorities	–	Households	Offer training on electrification programmes	–	1 059	1 745	1 750	1 500	1 500
Sector Education and Training Authority, Chemical Industries Education and Training Authority												
Total				233 450			135 072	186 596	93 567	34 840	1 500	1 500



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