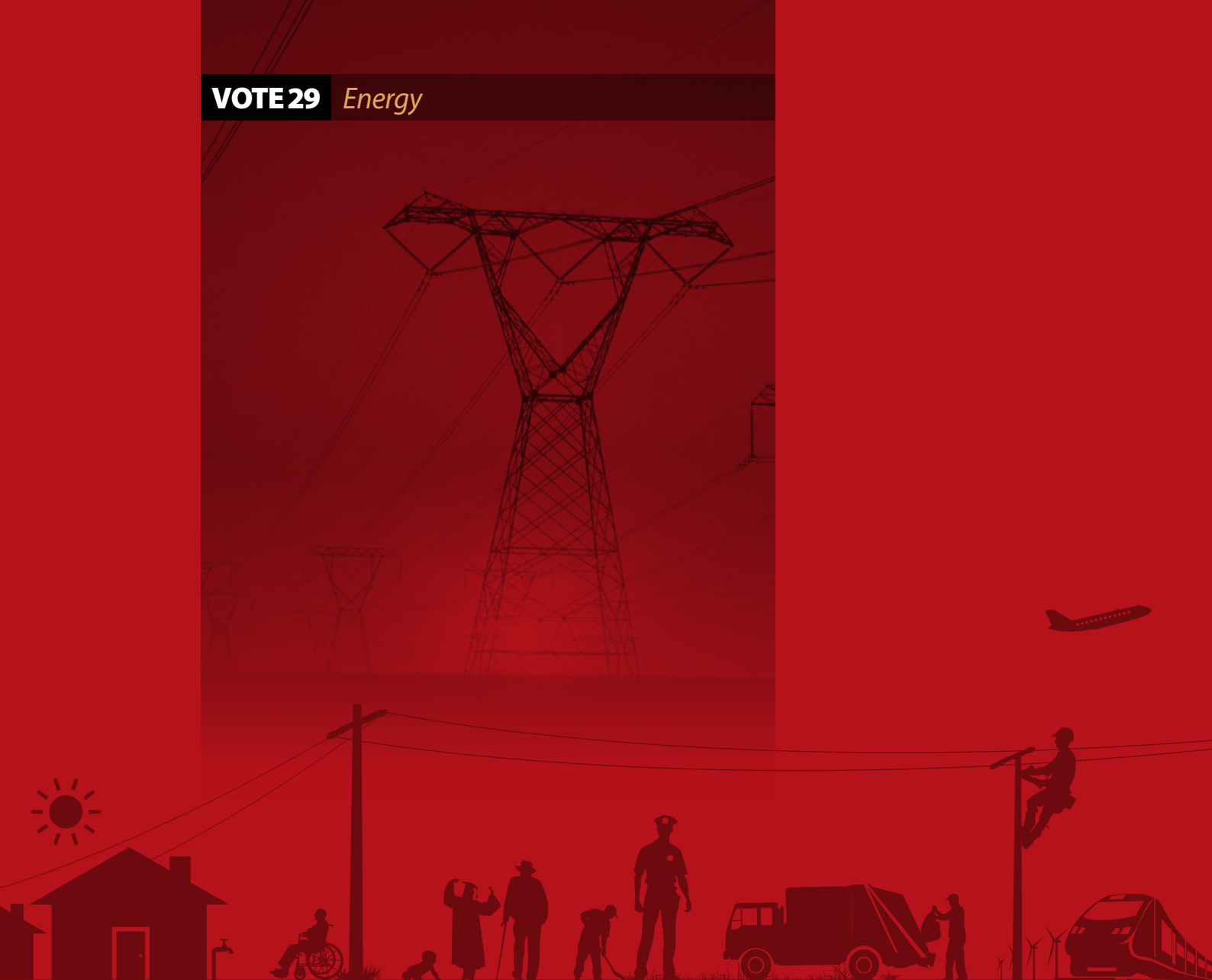


**VOTE 29** *Energy*



National Treasury

# **BUDGET** 2012

*ESTIMATES OF NATIONAL EXPENDITURE*



**national treasury**

Department:  
National Treasury  
**REPUBLIC OF SOUTH AFRICA**



# **Estimates of National Expenditure**

## **2012**

**National Treasury**

**Republic of South Africa**

22 February 2012



**ISBN: 978-0-621-40578-1**

**RP: 01/2012**

The Estimates of National Expenditure 2012 e-publications are compiled with the latest available information from departmental and other sources. Some of this information is unaudited or subject to revision.

The Estimates of National Expenditure e-publications for individual votes are available on [www.treasury.gov.za](http://www.treasury.gov.za).

Compared to the abridged version of the Estimates of National Expenditure, these publications contain more comprehensive coverage of goods and services, transfers and subsidies, and public entities. Additional tables are included containing information on the main and adjusted appropriation, with revised spending estimates for the current financial year, on skills training, conditional grants to provinces and municipalities, public private partnerships and information on donor funding. Expenditure information at the level of service delivery is also included, where appropriate.

# Foreword

The current global economic context is characterised by high levels of uncertainty. Against this backdrop, South Africa's development depends largely on government improving its level and quality of service delivery in support of the inclusive and equitable economic roadmap, as contained in the new growth path. The 2012 Budget is an important tool of government for giving effect to these objectives, and this Budget allocates resources to specific interventions that will be actioned over the period of the medium term expenditure framework (MTEF). Growth in spending focuses particularly on infrastructure development, job creation, enterprise support and the enhancement of local government delivery.

South Africa's fiscal stance and public spending programmes are focused on long term structural transformation. Over the next three years of the MTEF period, government priorities will continue to be realised within a sustainable fiscal trajectory, which balances current needs with intergenerational equity. In line with this, spending baselines have undergone rigorous review, areas of inefficiency and lower priority have been identified, and funds have been redirected towards government's key priorities, both new and existing. This has been done in recognition of the relationship between the composition of spending and fiscal sustainability over the long term. Here, the balance between consumption and investment is extremely important. Even the distribution of consumption spending between wages, goods and services and transfers is significant, as is the balance between the functional categories expenditure (such as education, health and economic services). Underspending on key priorities undermines the aims of the spending proposed within MTEF Budgets.

Since introducing the functional approach to budget decision-making in 2009, transparency and coordination in budgeting has been enhanced, largely due to the participation by the stakeholders responsible for delivery across all spheres of government. South African budget reforms, especially the intensified focus on budget trade-offs and the composition of expenditure, will lead to greater accountability and improved control.

It is not enough to demonstrate a change in the composition of budgeted expenditure; nor is it enough to pinpoint the specific actions required and proposed within the Budget. Success will only be achieved when we can demonstrate that a shift in the composition of actual expenditure has taken place, together with the achievement of improved delivery targets.

This year, the layout of this publication has been altered substantially. The focus is on linking more closely expenditure planned with targeted performance. Specific focus is on the outcomes to which institutions contribute and the output and other performance measures supporting them. The sections covering employee numbers, personnel budgets and the purpose and key activities of each subprogramme within a vote are now more prominent, giving expression to the budget and service delivery. This publication still indicates details per vote of the allocation of new monies, monies reprioritised between or within budget programmes, and Cabinet approved budget reductions over the period ahead. Compared to the abridged version of the Estimates of National Expenditure, the e-publications for each vote contain more comprehensive coverage of goods and services, transfers and subsidies, and public entities. Additional tables are included, containing information on: the main and adjusted appropriation, with revised spending estimates for the current financial year; skills training; conditional grants to provinces and municipalities; public private partnerships; and donor funding. Expenditure information at the level of service delivery is also included, where appropriate.

The expenditure estimates of departments are the outcome of a rigorous administrative and executive process. Treasury budget analysts, under the guidance of the Ministers' Committee on the Budget, follow a wide-ranging intergovernmental consultative process, working closely with the policy and budget teams of departments and entities to ensure that government priorities are appropriately funded within the available resource envelope. The Treasury is grateful for the contribution of these teams. Appreciation is also due to the people in the Treasury team, who worked with great diligence to produce a high quality document that provides a comprehensive account of government's spending and performance plans.



**Lungisa Fuzile**  
**Director General: National Treasury**



# Introduction

## The Estimates of National Expenditure publications

The Estimates of National Expenditure publications are important accountability documents, which set out the details in relation to planned expenditure and planned performance at the time of the tabling of the Budget. Estimates of National Expenditure publications continue to make a significant contribution to the changes relating to budgeting by programme. As part of these ongoing efforts, several changes have been made to the 2012 Estimates of National Expenditure publications. Departments still provide information on the key objectives of each subprogramme within a programme, and note the activities carried out, the number of personnel responsible for undertaking these activities and the funding allocations supporting this. This year in the 2012 publications, information on expenditure and performance is more closely linked under the 'expenditure trends' section, with a brief discussion on the impact of budget allocations on the achievement of outputs over the seven-year period. In addition, an explanation of the personnel trends, per programme by salary level, over the seven years in relation to compensation of employees has also been included. Finally, information on Cabinet approved cost reduction measures and other budget reprioritisation has been included per programme.

The 2012 abridged Estimates of National Expenditure publication, and the separate Estimates of National Expenditure e-publications for each vote are the product of an extensive consultative review process of budgets and policy, and policy implementation by programme, and include the latest improvements in non-financial performance information. These publications provide the details of the spending estimates for the next three financial years (2012/13 to 2014/15), expenditure outcomes for the past three years (2008/09 to 2010/11) and revised estimates for the current financial year (2011/12). Information is provided on performance targets over the seven year period as well as changes in these, as they relate to trends in planned expenditure.

The e-publications for individual votes contain more comprehensive coverage of goods and services, transfers and subsidies, and public entities. Additional tables are included containing information on: the main and adjusted appropriation, with revised spending estimates for the current financial year; skills training; conditional grants to provinces and municipalities; public private partnerships; and donor funding. Expenditure information at the level of service delivery is also included, where appropriate.

A consolidated account, summarising the Estimates of National Expenditure publication information across votes, is provided in the form of a narrative and summary tables in the Introduction chapter, which is included in the front pages of the abridged version of the Estimates of National Expenditure. A write-up containing the explanation of the information that is contained in each section of the publications has also been included in the abridged version of the Estimates of National Expenditure. Like the separate Estimates of National Expenditure e-publications for each vote, the abridged Estimates of National Expenditure publication is also available on [www.treasury.gov.za](http://www.treasury.gov.za).





# Energy

**National Treasury  
Republic of South Africa**



# Contents

<b>Budget summary</b> .....	<b>1</b>
<b>Aim</b> .....	<b>1</b>
<b>Programme purposes</b> .....	<b>1</b>
<b>Strategic overview: 2008/09 – 2014/15</b> .....	<b>2</b>
<b>Selected performance indicators</b> .....	<b>3</b>
<b>Expenditure estimates</b> .....	<b>4</b>
<b>Expenditure trends</b> .....	<b>5</b>
<b>Personnel information</b> .....	<b>6</b>
<b>Departmental receipts</b> .....	<b>7</b>
<b>Programme 1: Administration</b> .....	<b>7</b>
<b>Programme 2: Energy Policy and Planning</b> .....	<b>9</b>
<b>Programme 3: Energy Regulation</b> .....	<b>11</b>
<b>Programme 4: National Electrification Programme</b> .....	<b>14</b>
<b>Programme 5: Nuclear Energy and Regulation</b> .....	<b>16</b>
<b>Public entities and other agencies</b> .....	<b>18</b>
<b>Additional tables</b> .....	<b>35</b>

# Vote 29

## Energy

### Budget summary

R thousand	2012/13				2013/14	2014/15
	Total to be appropriated	Current payments	Transfers and subsidies	Payments for capital assets	Total	Total
<b>MTEF allocation</b>						
Administration	181 745	176 303	370	5 072	184 087	193 702
Energy Policy and Planning	1 541 548	41 548	1 500 000	–	75 213	79 738
Energy Regulation	1 350 028	59 543	1 290 485	–	2 067 180	2 375 276
National Electrification Programme	3 136 294	19 083	3 117 211	–	3 410 148	3 706 096
Nuclear Energy and Regulation	596 288	10 797	585 491	–	653 307	653 713
<b>Total expenditure estimates</b>	<b>6 805 903</b>	<b>307 274</b>	<b>6 493 557</b>	<b>5 072</b>	<b>6 389 935</b>	<b>7 008 525</b>
Executive authority	Minister of Energy					
Accounting officer	Director General of Energy					
Website address	www.energy.gov.za					

### Aim

*Formulate overall energy policies and oversee their implementation to ensure access to affordable and reliable energy for all South Africans. Promote environmentally friendly energy carriers.*

### Programme purposes

#### Programme 1: Administration

**Purpose:** Provide strategic support and management services to the ministry and the department.

#### Programme 2: Energy Policy and Planning

**Purpose:** Provide integrated energy planning to promote the sustainable use of energy resources through energy research and through the development of appropriate policies and regulations that promote the efficient use of petroleum products, coal, gas, renewable energy and electricity sources.

#### Programme 3: Energy Regulation

**Purpose:** Regulate and provide enforcement in the energy sector, develop specifications, standards and conditions for petroleum products; ensure the security of liquid fuels; and facilitate the implementation of renewable energy technologies and clean energy development.

#### Programme 4: National Electrification Programme

**Purpose:** Oversee the planning, funding and implementation of the integrated national electrification programme to ensure universal access to electricity and an effective and efficient electricity distribution industry capable of providing affordable electricity to consumers.

#### Programme 5: Nuclear Energy and Regulation

**Purpose:** Manage the South African nuclear industry and ensure overall control of source and special nuclear materials in terms of nuclear legislation. Manage nuclear safety, technology, non-proliferation and radiation security as required by legislation and international agreements, and provide oversight for statutory bodies and organisations in the nuclear industry.

## **Strategic overview: 2008/09 – 2014/15**

The Department of Energy is responsible for ensuring energy security within the country. This is governed by the provisions contained in the National Energy Act (2008) and the Electricity Regulation Act (2006). The act 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 also taking into account environmental considerations. The acts also provide for the increased use of renewable energies, contingency energy supplies, the holding of strategic energy feedstock and carriers, and adequate investment in energy infrastructure.

Within the outcomes based performance management framework adopted by government, the department contributes mainly to outcome 6, which calls for the development of an efficient, competitive and responsive economic infrastructure network.

### **Priorities over the medium term**

#### **Ensuring the security of energy supply and promoting effective demand management**

The integrated resource plan, which was completed in 2011, guides the development of the electricity sector until 2030. The plan estimates the increase in capacity needed and identifies the appropriate mix of energy sources to fulfil energy demand. Over the medium term, the department will focus on planning for the implementation of new power generation projects, including developing a framework for the participation of independent power producers in the market and establishing an independent market operator. The department will develop policies to guide the maintenance of electricity distribution networks, and upgrading the refining network.

The national strategic fuel stocks policy will be completed by June 2012, outlining the framework for the storage of fuel stocks by government and industry to guide the necessary investment decisions within the liquid fuels sector.

The department has developed a 20-year roadmap for the continued security of supply of liquid fuels, which ensures the security of supply in the short, medium and long term in a way that is cost effective and supportive of the country's growth and development goals. The draft roadmap will be completed by March 2012.

#### **Ensuring an efficient and diverse energy mix for universal access**

The department has begun drafting an integrated energy plan, which details the country's energy plans over the long term. The plan recommends diversifying South Africa's energy mix. In September 2011, it published the draft regulations for the mandatory blending of biofuels with petrol or diesel in the Government Gazette. Final regulations will be completed by the end of March 2012 and implemented over the medium term. The regulations aim to reflect a balanced view of the competing imperatives of social growth, economic development, and environmental responsibility and climate change mitigation. The integrated energy plan will be supportive of broader national objectives such as the new growth path and the move towards the green economy, while also considering the impact of other energy policies on other sectors such as transport and water.

#### **Promoting an efficient, competitive and responsive energy infrastructure network**

With the Electricity Distribution Industry Holdings entity having been dissolved, the maintenance of electricity distribution networks by municipalities is becoming a priority. An electricity distribution asset management programme will be introduced to rehabilitate the municipal infrastructure that poses a risk to energy security.

The department will develop and implement a regulatory accounting system to yield uniform and transparent sets of regulatory accounts where costs are allocated according to predetermined methods. This will provide certainty to investors with regard to the returns on assets throughout the downstream petroleum industry value chain.

#### **Promoting the use of cleaner energy to protect environmental assets and natural resources**

To contribute to promoting clean energy sources, the department has drafted a liquefied petroleum gas strategy, which will be submitted to Cabinet for approval in June 2012. The strategy's main objectives are to provide access to safe, cleaner, efficient, portable, environmentally friendly and affordable thermal fuel for all

households nationally; and to switch low income households away from the use of coal, paraffin and biomass to liquefied petroleum gas within the next five to ten years.

While generating cleaner electricity is one goal, the other is to reduce demand by making households and businesses more efficient. Over the medium term, the scale of the energy efficiency and demand side management programme will expand through the rollout of a million solar water geysers to households and the installation of energy efficient light bulbs in municipalities.

To further improve the quality of transport fuels, the department is reviewing the current fuel specifications and standards to reduce the harmful effects to health and the environment of fuel emissions, and to align standards with global trends in vehicle technology and environmental requirements. This will allow vehicle manufacturers to introduce more fuel efficient engine technologies with lower carbon and noxious emissions. The department's discussion document was published for comment in March 2011. In October 2011, the department published draft amendments to regulations governing fuel specifications and standards. The department is currently reviewing submissions by refiners on investment requirements for refinery upgrades.

#### Mitigating and adapting to the effects of climate change

The energy and transport sectors are the biggest contributors to greenhouse gas emissions and their contribution towards government's climate change targets will be a significant. In developing the integrated energy plan and implementing the integrated resource plan, the department will ensure that the primary and secondary energy mix is configured in a manner that supports the achievement of government's climate change targets.

#### Strengthening energy regulation and competition

The department will review the fuel pricing framework developed in 2003, including the basic fuel price and the magisterial district zones. In conducting this review, the department will use international data sources and conduct research into all the basic fuel price elements to ensure that they reflect current realities.

## Selected performance indicators

**Table 29.1 Energy**

Indicator	Programme	Past			Current	Projections		
		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Number of new petroleum retail site inspections per year	Energy Regulation	1 200	1 200	3 360	1 500	1 500	1 500	1 500
Number of additional petroleum licence applications approved per year	Energy Regulation	13 580	13 800	1 800	1 200	1 200	1 000	800
Number of new operational integrated energy centres established per year	Energy Policy and Planning	3	2	2	2	2	2	2
Number of additional households electrified per year <sup>2</sup>	National Electrification Programme	123 364	145 157	191469	180 000	180 000	180 000	180 000
Number of new bulk substations built per year	National Electrification Programme	6	4	4	7	6	6	6
Number of additional substations upgraded per year	National Electrification Programme	13	3	3	3	10	10	10
Kilometres of new medium voltage power lines constructed per year	National Electrification Programme	140km	310km	350km	350km	350km	350km	350km
Kilometres of existing medium voltage power lines upgraded per year	National Electrification Programme	92km	241km	200km	200km	200km	200km	200km
Value of expenditure on BEE and SMMEs per year	Energy Regulation	R924m	R689m	R933m	R933m	R933m	R933m	R933m
Megawatt reduction in electricity demand per year	Energy Regulation	– <sup>1</sup>	100MW	100MW	100MW	100MW	100MW	100MW

1. Dashes are used to show that data is not available for particular indicator and/or programme has not yet started.

2. Differences from reported numbers in the Annual Report of the Department are due to delayed reporting from municipalities.

## Expenditure estimates

Table 29.2 Energy

Programme	Audited outcome			Adjusted appropriation	Revised estimate	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12		2012/13	2013/14	2014/15
R thousand								
Administration	75 268	98 214	121 602	176 340	156 537	181 745	184 087	193 702
Energy Policy and Planning	69 999	76 498	1 528 451	1 544 708	1 540 984	1 541 548	75 213	79 738
Energy Regulation	313 069	385 139	474 132	573 431	499 961	1 350 028	2 067 180	2 375 276
National Electrification Programme	1 918 540	2 522 096	2 781 519	3 264 555	3 264 209	3 136 294	3 410 148	3 706 096
Nuclear Energy and Regulation	584 803	608 925	599 682	641 875	637 065	596 288	653 307	653 713
<b>Total</b>	<b>2 961 679</b>	<b>3 690 872</b>	<b>5 505 386</b>	<b>6 200 909</b>	<b>6 098 756</b>	<b>6 805 903</b>	<b>6 389 935</b>	<b>7 008 525</b>
Change to 2011 Budget estimate				111 007	8 854	1 230 574	2 085 157	2 445 461

## Economic classification

	213 886	251 398	233 860	309 771	289 847	307 274	415 892	439 072
<b>Current payments</b>								
Compensation of employees	102 975	133 253	142 826	183 317	177 759	196 260	222 855	236 476
Goods and services	110 911	118 145	91 034	126 454	112 088	111 014	193 037	202 596
<i>of which:</i>								
Administrative fees	718	1 223	1 997	2 420	1 968	2 499	3 299	3 496
Advertising	2 551	1 140	2 594	2 760	1 896	3 160	4 654	4 932
Assets less than the capitalisation threshold	620	1 158	753	1 603	864	291	305	326
Audit cost: External	825	1 032	1 879	2 773	2 773	2 294	2 168	2 298
Bursaries: Employees	332	555	416	395	255	31	30	32
Catering: Departmental activities	1 198	1 262	1 435	2 053	1 986	1 611	2 253	2 387
Communication	3 164	4 622	4 236	6 414	5 605	5 894	7 455	7 903
Computer services	4 780	3 092	2 834	5 535	5 498	3 603	3 806	4 026
Consultants and professional services:	13 212	23 851	9 791	29 050	27 073	7 933	44 605	46 937
Business and advisory services								
Consultants and professional services:	7 635	–	–	–	–	–	–	–
Infrastructure and planning								
Consultants and professional services:	–	201	–	–	–	–	–	–
Laboratory services								
Consultants and professional services:	839	2	46	892	732	–	2 222	2 333
Legal costs								
Contractors	4 178	9 130	3 115	2 214	1 761	1 158	1 236	1 309
Agency and support / outsourced services	7 252	498	416	1 159	142	1 318	4 421	4 686
Entertainment	10	9	83	133	104	47	115	122
Housing	–	3	–	–	–	–	–	–
Inventory: Food and food supplies	–	–	–	2	–	–	–	–
Inventory: Fuel, oil and gas	5	4	9	25	22	6	7	8
Inventory: Learner and teacher support material	407	141	49	160	10	11	19	20
Inventory: Materials and supplies	42	116	150	212	123	225	240	254
Inventory: Medical supplies	9	–	–	–	–	–	–	–
Inventory: Medicine	–	–	–	44	44	–	–	–
Inventory: Other consumables	257	98	95	217	213	309	254	269
Inventory: Stationery and printing	2 099	1 572	1 692	5 499	2 199	4 333	4 811	5 102
Lease payments	4 528	12 302	17 284	8 849	8 142	41 223	41 671	42 491
Property payments	849	743	607	1 384	469	163	183	194
Transport provided: Departmental activity	3	–	–	–	–	–	–	–
Travel and subsistence	39 271	45 334	31 820	31 445	29 241	29 953	55 097	58 437
Training and development	1 067	1 208	1 323	3 059	1 962	216	281	297
Operating expenditure	10 717	6 552	3 447	10 737	10 204	2 015	7 543	7 993
Venues and facilities	4 343	2 297	4 963	7 420	8 802	2 721	6 362	6 744
<b>Transfers and subsidies</b>	<b>2 744 147</b>	<b>3 432 476</b>	<b>5 268 206</b>	<b>5 883 267</b>	<b>5 804 851</b>	<b>6 493 557</b>	<b>5 969 142</b>	<b>6 564 258</b>
Provinces and municipalities	589 139	1 074 554	1 253 382	1 376 612	1 376 612	1 351 443	1 514 772	1 687 658
Departmental agencies and accounts	99 583	96 007	81 536	67 288	55 530	81 022	82 021	86 069
Foreign governments and international organisations	–	–	–	–	–	–	33 916	12 302
Public corporations and private enterprises	2 054 890	2 261 780	3 933 209	4 439 018	4 372 698	5 060 722	4 338 073	4 777 847
Households	535	135	79	349	11	370	360	382
<b>Payments for capital assets</b>	<b>3 423</b>	<b>6 752</b>	<b>3 320</b>	<b>7 871</b>	<b>4 058</b>	<b>5 072</b>	<b>4 901</b>	<b>5 195</b>
Machinery and equipment	2 873	6 360	3 320	7 871	4 058	5 072	4 901	5 195
Software and other intangible assets	550	392	–	–	–	–	–	–
<b>Payments for financial assets</b>	<b>223</b>	<b>246</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Total</b>	<b>2 961 679</b>	<b>3 690 872</b>	<b>5 505 386</b>	<b>6 200 909</b>	<b>6 098 756</b>	<b>6 805 903</b>	<b>6 389 935</b>	<b>7 008 525</b>

## Expenditure trends

The spending focus over the medium term will be on making transfer payments to municipalities and public corporations, including Eskom, to allow them to increase electricity connections to households, provide substation infrastructure and promote energy efficiency through the expansion of the solar water geyser programme.

Expenditure increased from R3 billion in 2008/09 to R6.2 billion in 2011/12, at an average annual rate of 27.9 per cent. This growth in expenditure is as a result of allocations to Transnet for the multi-products pipeline and the integrated national electrification programme to increase the number of households connected to the grid. As a result, expenditure in the *Energy Policy and Planning* subprogramme increased from R70 million in 2008/09 to R1.5 billion in 2011/12, at an average rate of 180.5 per cent over the medium term, and is expected to decrease to R79.7 million in 2014/15, at an average annual rate of 62.8 per cent.

Spending in the *National Electrification Programme* increased from R1.9 billion in 2008/09 to R3.3 billion in 2011/12, at an average annual rate of 19.4 per cent, and is expected to increase to R3.7 billion in 2014/15, at an average annual rate of 4.3 per cent. The historical increase is due to the increase in the integrated national electrification programme implemented by municipalities and Eskom to support the target to provide universal access to electricity by 2014.

Transfers increased from R2.7 billion in 2008/09 to R5.9 billion in 2011/12, at an average annual rate 28.9 per cent, due to higher spending in the *National Electrification Programme* and additional allocations to Transnet. R6.5 billion was transferred to Eskom and municipalities, which allowed for the upgrading of substations and the connection of 459 990 households to the electricity grid between 2008/09 and 2011/12. Between 2010/11 and 2012/13, R4.5 billion will be transferred to Transnet for the construction of the multi-products pipeline, which is expected to be completed by December 2013.

Over the medium term, spending is projected to increase from R6.2 billion to R7 billion, at an average annual rate of 4.2 per cent. This is largely driven by additional allocations of:

- R1 billion, R1.7 billion and R2 billion to Eskom for electricity demand side management to cover costs related to the installation of low pressure solar water geysers
- R200 million each year over the MTEF period for the electricity demand side management municipal grant to support energy efficiency projects implemented by municipalities
- R14.2 million in 2012/13 to the South African Nuclear Energy Corporation for a radioactive waste processing facility
- R84 million over the MTEF period to the South African National Energy Development Institute
- R40.2 million over the MTEF period for nuclear safety and regulation
- R68 million over the MTEF period to the National Nuclear Regulator for staff retention and operations
- R13.5 million over the MTEF period for the improved conditions of service in the department.

In addition, Cabinet approved baseline cuts of R54.9 million in 2012/13, R85.2 million in 2013/14 and R94 million in 2014/15, details of which are discussed in the subprogrammes, where applicable.

Expenditure on consultants and professional services increased from R21.7 million in 2008/09 to R29.9 million in 2011/12, at an average annual rate of 11.4 per cent, due to once-off expenditure in 2011/12 for national electricity response team project management. Expenditure on consultants is expected to increase to R49.3 million in 2014/15, at an average annual rate of 18.1 per cent, as specialist consultants are used to develop an energy modelling system, a regulatory accounts framework and a framework for the independent power producers.

### Infrastructure spending

#### Integrated national electrification programme

The department makes transfer payments to Eskom and municipalities through the integrated national electrification programme. The transfers are used to fund infrastructure for the electrification of households, schools and clinics. Between 2008/09 and 2011/12, R10.5 billion was spent on the integrated national electrification programme. Of this, R6.3 billion was allocated to Eskom and R3.6 billion was transferred to

municipalities. Additional transfers of R4.7 billion are allocated to Eskom over the MTEF period to fund the provision of 640 081 low pressure solar geyser systems. Municipalities receive an additional allocation of R200 million per year over the medium term to install energy efficiency lighting and technologies. Between 2008/09 and 2010/11, 463 462 households received electricity connections, 14 new bulk substations were built and 19 were upgraded. Over the MTEF period, expenditure on the integrated national electrification programme is expected to increase from R3.1 billion in 2012/13 to R3.7 billion in 2014/15, at an average annual rate of 6 per cent.

Construction of the new multi-products pipeline by Transnet

The department expects to transfer R4.5 billion between 2010/11 and 2012/13 to Transnet for the construction of the new multi-products pipeline. The trunk line has started operations. All construction work on the pipeline, including support infrastructure, will be concluded in December 2013 instead of December 2011, as had been initially planned. R3.5 billion has been spent in 2011/12.

## Personnel information

**Table 29.3 Details of approved establishment and personnel numbers according to salary level <sup>1</sup>**

	Personnel post status as at 30 September 2011			Number of personnel posts filled / planned for on funded establishment						
	Number of posts on approved establishment	Number of funded posts	Number of posts additional to the establishment	Actual			Mid-year <sup>2</sup>	Medium-term estimate		
				2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Department</b>	<b>516</b>	<b>613</b>	<b>97</b>	–	–	<b>522</b>	<b>523</b>	<b>523</b>	<b>523</b>	<b>523</b>
Salary level 1 – 6	102	182	80	–	–	148	128	128	128	128
Salary level 7 – 10	254	265	11	–	–	228	233	233	233	233
Salary level 11 – 12	87	87	–	–	–	77	86	86	86	86
Salary level 13 – 16	73	79	6	–	–	69	76	76	76	76
<b>Administration</b>	<b>265</b>	<b>313</b>	<b>48</b>	–	–	<b>248</b>	<b>272</b>	<b>272</b>	<b>272</b>	<b>272</b>
Salary level 1 – 6	87	121	34	–	–	90	96	96	96	96
Salary level 7 – 10	110	118	8	–	–	91	105	105	105	105
Salary level 11 – 12	35	35	–	–	–	30	34	34	34	34
Salary level 13 – 16	33	39	6	–	–	37	37	37	37	37
<b>Energy Policy and Planning</b>	<b>69</b>	<b>80</b>	<b>11</b>	–	–	<b>49</b>	<b>69</b>	<b>69</b>	<b>69</b>	<b>69</b>
Salary level 1 – 6	5	15	10	–	–	17	12	12	12	12
Salary level 7 – 10	36	37	1	–	–	18	29	29	29	29
Salary level 11 – 12	14	14	–	–	–	8	15	15	15	15
Salary level 13 – 16	14	14	–	–	–	6	13	13	13	13
<b>Energy Regulation</b>	<b>128</b>	<b>149</b>	<b>21</b>	–	–	<b>159</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>
Salary level 1 – 6	6	27	21	–	–	25	15	15	15	15
Salary level 7 – 10	84	84	–	–	–	93	76	76	76	76
Salary level 11 – 12	19	19	–	–	–	22	18	18	18	18
Salary level 13 – 16	19	19	–	–	–	19	19	19	19	19
<b>National Electrification Programme</b>	<b>34</b>	<b>48</b>	<b>14</b>	–	–	<b>47</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>
Salary level 1 – 6	–	12	12	–	–	12	1	1	1	1
Salary level 7 – 10	18	20	2	–	–	18	17	17	17	17
Salary level 11 – 12	13	13	–	–	–	14	13	13	13	13
Salary level 13 – 16	3	3	–	–	–	3	3	3	3	3
<b>Nuclear Energy and Regulation</b>	<b>20</b>	<b>23</b>	<b>3</b>	–	–	<b>19</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>
Salary level 1 – 6	4	7	3	–	–	4	4	4	4	4
Salary level 7 – 10	6	6	–	–	–	8	6	6	6	6
Salary level 11 – 12	6	6	–	–	–	3	6	6	6	6
Salary level 13 – 16	4	4	–	–	–	4	4	4	4	4

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

2. As at 30 September 2011.



Following the split of the Department of Minerals and Energy in 2009/10, which had 1 428 full time and contract employees, 325 employees were transferred to the Department of Energy. The approved structure of the department, in line with its new mandate, is 516 posts, with 97 posts being additional to the approved establishment. Due to a lack of funding, only 522 posts could be filled in 2010/11. This is expected to increase to 523 over the MTEF period as additional funding has been allocated.

The department began operations at a capacity of 48 per cent in April 2010. The posts of the chief operating officer and the chief financial officer were filled on 1 May 2010 and 1 December 2010. The vacancy rate for 2010/11 was 10.6 per cent. In October 2010, the department received additional funding, which was channelled to fill critical posts to build capacity in the department. The ratio of support staff to line staff is 1:1.27 and the ratio of consultants to department personnel is 1:14.

## Departmental receipts

Table 29.4 Receipts

R thousand	Audited outcome			Adjusted estimate	Revised estimate	Medium-term receipts estimate		
	2008/09	2009/10	2010/11	2011/12		2012/13	2013/14	2014/15
<b>Departmental receipts</b>	<b>3 343</b>	<b>4 429</b>	<b>3 920</b>	<b>3 867</b>	<b>3 867</b>	<b>4 118</b>	<b>4 159</b>	<b>4 202</b>
<b>Sales of goods and services produced by department</b>	<b>3 343</b>	<b>4 429</b>	<b>3 708</b>	<b>3 867</b>	<b>3 867</b>	<b>3 905</b>	<b>3 945</b>	<b>3 984</b>
Sales by market establishments	–	–	169	–	–	–	–	–
<i>of which:</i>								
<i>Sales by market establishment</i>	–	–	169	–	–	–	–	–
Administrative fees	3 300	4 384	3 487	3 820	3 820	3 858	3 897	3 936
<i>of which:</i>								
<i>Administration fees</i>	3 300	4 384	3 487	3 820	3 820	3 858	3 897	3 936
Other sales	43	45	52	47	47	47	48	48
<i>of which:</i>								
<i>Other sales</i>	43	45	52	47	47	47	48	48
<b>Interest, dividends and rent on land</b>	<b>–</b>	<b>–</b>	<b>14</b>	<b>–</b>	<b>–</b>	<b>14</b>	<b>14</b>	<b>15</b>
Interest	–	–	14	–	–	14	14	15
<b>Transactions in financial assets and liabilities</b>	<b>–</b>	<b>–</b>	<b>198</b>	<b>–</b>	<b>–</b>	<b>199</b>	<b>200</b>	<b>203</b>
<b>Total</b>	<b>3 343</b>	<b>4 429</b>	<b>3 920</b>	<b>3 867</b>	<b>3 867</b>	<b>4 118</b>	<b>4 159</b>	<b>4 202</b>

Departmental revenue is derived from the receipt of administration fees for licence applications processed in terms of the Petroleum Products Amendment Act (2003). Revenue increased from R3.3 million in 2008/09 to R3.9 million in 2011/12, at an average annual rate of 5 per cent, as a result of an increase in licence fees in line with inflation. Over the medium term, revenue is expected to increase to R4.2 million, at an average annual rate of 2.8 per cent, in line with projected increases in the number of new applications received.

## Programme 1: Administration

### Expenditure estimates

Table 29.5 Administration

Subprogramme	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
R thousand							
Ministry	–	11 217	17 946	21 549	21 926	22 312	23 651
Management	8 978	11 424	18 613	28 716	30 333	30 874	32 726
Audit Services	2 399	2 240	2 368	2 886	2 830	2 743	2 908
Corporate Services	37 899	44 756	46 447	47 350	46 342	46 373	49 405
Financial Management	21 091	28 566	29 158	68 315	44 377	45 412	48 137
Office Accommodation	4 901	11	7 070	7 524	35 937	36 373	36 875
<b>Total</b>	<b>75 268</b>	<b>98 214</b>	<b>121 602</b>	<b>176 340</b>	<b>181 745</b>	<b>184 087</b>	<b>193 702</b>
Change to 2011 Budget estimate				8 869	31 848	32 584	33 109

Table 29.5 Administration (continued)

R thousand	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Economic classification</b>							
<b>Current payments</b>	<b>71 390</b>	<b>91 873</b>	<b>118 209</b>	<b>168 120</b>	<b>176 303</b>	<b>178 826</b>	<b>188 125</b>
Compensation of employees	25 544	38 730	54 588	83 311	90 521	88 588	94 153
Goods and services	45 846	53 143	63 621	84 809	85 782	90 238	93 972
of which:							
Administrative fees	566	462	1 279	1 438	1 231	1 325	1 404
Advertising	351	247	1 852	1 961	2 511	3 208	3 400
Assets less than the capitalisation threshold	569	1 157	739	1 500	267	263	280
Audit cost: External	825	1 032	1 879	2 773	2 294	2 168	2 298
Bursaries: Employees	262	555	416	380	31	30	32
Catering: Departmental activities	260	141	1 131	1 619	677	759	804
Communication	2 439	3 223	3 551	5 405	5 164	5 312	5 631
Computer services	2 295	3 092	2 830	5 501	2 356	2 501	2 651
Consultants and professional services: Business and advisory services	4 882	7 845	2 460	19 260	3 764	4 192	4 444
Consultants and professional services: Legal costs	789	–	46	892	–	–	–
Contractors	3 673	960	1 012	2 143	1 157	1 219	1 291
Agency and support / outsourced services	46	99	56	73	57	64	68
Entertainment	2	9	61	126	47	115	122
Housing	–	3	–	–	–	–	–
Inventory: Fuel, oil and gas	5	4	9	24	6	7	8
Inventory: Learner and teacher support material	25	19	11	9	11	19	20
Inventory: Materials and supplies	36	116	150	203	225	239	253
Inventory: Medical supplies	9	–	–	–	–	–	–
Inventory: Medicine	–	–	–	43	–	–	–
Inventory: Other consumables	126	98	66	197	87	36	38
Inventory: Stationery and printing	1 558	1 378	1 476	4 543	2 814	2 882	3 056
Lease payments	4 528	5 094	17 284	8 839	41 223	41 671	42 491
Property payments	849	743	607	1 382	163	183	194
Travel and subsistence	19 282	23 898	20 202	18 004	18 374	20 497	21 727
Training and development	733	1 113	1 283	2 768	206	227	240
Operating expenditure	762	1 035	732	1 564	1 468	1 555	1 648
Venues and facilities	974	820	4 489	4 162	1 649	1 766	1 872
<b>Transfers and subsidies</b>	<b>395</b>	<b>135</b>	<b>79</b>	<b>349</b>	<b>370</b>	<b>360</b>	<b>382</b>
Households	395	135	79	349	370	360	382
<b>Payments for capital assets</b>	<b>3 414</b>	<b>5 981</b>	<b>3 314</b>	<b>7 871</b>	<b>5 072</b>	<b>4 901</b>	<b>5 195</b>
Machinery and equipment	2 864	5 589	3 314	7 871	5 072	4 901	5 195
Software and other intangible assets	550	392	–	–	–	–	–
<b>Payments for financial assets</b>	<b>69</b>	<b>225</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Total</b>	<b>75 268</b>	<b>98 214</b>	<b>121 602</b>	<b>176 340</b>	<b>181 745</b>	<b>184 087</b>	<b>193 702</b>

## Details of transfers and subsidies

<b>Households</b>							
<b>Social benefits</b>							
<b>Current</b>	<b>376</b>	<b>133</b>	<b>57</b>	<b>349</b>	<b>370</b>	<b>360</b>	<b>382</b>
Employee social benefits	376	133	57	349	370	360	382
<b>Households</b>							
<b>Other transfers to households</b>							
<b>Current</b>	<b>19</b>	<b>2</b>	<b>22</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
Households	14	2	22	–	–	–	–
Households management	5	–	–	–	–	–	–

## Expenditure trends

Expenditure increased from R75.3 million in 2008/09 to R176.3 million in 2011/12, at an average annual rate of 32.8 per cent. The increase was largely due to additional funds made available to build financial management capacity in the department following the separation of the Department of Minerals and Energy in 2009/10. Included in this increase is a once-off allocation for the establishment of the national energy response team project management office, which led to an increase in spending on consultants and professional services for business and advisory services, from R4.9 million in 2008/09 to R19.3 million in 2011/12, at an average annual rate of 58 per cent.

Expenditure is expected to increase to R193.7 million over the medium term, at an average annual rate of 3.2 per cent, due to the allocation of total additional funding of R84 million over the medium term per year to cater for office accommodation expenditure, which was not provided for within baseline allocations after the department was established.

## Programme 2: Energy Policy and Planning

### Objectives and measures

- Improve the security of energy supply in the liquid fuels sector through the promotion of investment in storage facilities by developing a national strategic fuel stocks policy by February 2013, specifying minimum stock levels needed, thus encouraging companies to invest in storage facilities.
- Strengthen the regulatory framework in the petroleum products industry by implementing the regulatory accounting system and designing an energy modelling system by February 2013.
- Ensure well managed, efficient and safe electricity, nuclear and clean energy industries by:
  - supporting the planning for the commissioning of the next nuclear power plant by 2023
  - developing strategies to achieve electricity savings of 12 per cent by 2015, based on forecast energy demand through the publication of progress reports.

### Subprogrammes

- *Electricity Policy* develops, implements and reviews electrification and electricity supply policy. This subprogramme had a staff complement of 18 and a total budget of R14.9 million in 2011/12, of which 78.1 per cent was used for compensation of employees. Support includes development, implementation and research into national and international trends; and the monitoring of policy relating to the electricity generation and transmission, electricity distribution industry and electricity regulation. No expenditure reductions over the medium term have been approved for this subprogramme.
- *Hydrocarbons Policy* develops, implements and reviews policy and regulations for the petroleum products, coal and gas sectors and promotes transformation in these sectors. This subprogramme had a staff complement of 21 and a total budget of R1.5 billion in 2011/12, of which 99.1 per cent was transferred to Transnet for the construction of the national multi-products pipeline. Expenditure reductions of R2.9 million over the medium term have been approved for this subprogramme (R910 000 in 2012/13, R958 000 in 2013/14 and R1 million in 2014/15). These funds will be reprioritised towards policy reviews and the development of regulations for petroleum products.
- *Nuclear Policy* develops and reviews policies and legislation, as required by international agreements, and ensures governance of the nuclear sector in South Africa. This subprogramme had a staff complement of 16 and a total budget of R2.1 million in 2011/12, of which 77.7 per cent was used for compensation of employees. No expenditure reductions over the medium term have been approved for this subprogramme.
- *Energy Planning and Research* ensures the security of energy supply by: developing, implementing and maintaining a national integrated energy plan for continued access to energy; manages economic research and forecasting of energy demand; and monitors macroeconomic trends and geopolitical issues that impact on the energy industry and supply. This subprogramme had a staff complement of 30 and a total budget of R13.8 million in 2011/12, of which 60 per cent was used for compensation of employees. Over the medium term, the focus will be on finalising the development of standardised tools for connecting data, the

integrated energy plan, centralising the collection and storage of energy data collected within the unit, and automating the submission of energy data by the oil industry. The integrated energy plan aligns with and elaborates on the integrated resource plan and liquid fuels roadmap. It is expected that the plan will be tabled in Cabinet for approval in 2012/13. Expenditure reductions of R3.7 million in 2012/13 have been approved for this subprogramme. These funds will be reprioritised towards energy research.

## Expenditure estimates

**Table 29.6 Energy Policy and Planning**

Subprogramme	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
R thousand							
Electricity Policy	11 549	31 094	15 402	14 869	14 827	21 170	22 441
Hydrocarbons Policy	28 985	20 401	1 506 065	1 513 944	1 509 336	15 095	16 007
Nuclear Policy	15 076	6 643	2 480	2 067	2 070	22 859	24 208
Energy Planning and Research	14 389	18 360	4 504	13 828	15 315	16 089	17 082
<b>Total</b>	<b>69 999</b>	<b>76 498</b>	<b>1 528 451</b>	<b>1 544 708</b>	<b>1 541 548</b>	<b>75 213</b>	<b>79 738</b>
Change to 2011 Budget estimate				(2 250)	(4 654)	(2 679)	(2 827)

### Economic classification

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Current payments</b>	<b>69 754</b>	<b>75 720</b>	<b>28 445</b>	<b>44 708</b>	<b>41 548</b>	<b>75 213</b>	<b>79 738</b>
Compensation of employees	30 257	26 087	20 307	30 355	32 604	44 565	47 239
Goods and services	39 497	49 633	8 138	14 353	8 944	30 648	32 499
of which:							
Administrative fees	143	638	192	341	892	1 160	1 229
Advertising	1 603	596	344	341	369	808	856
Assets less than the capitalisation threshold	–	–	13	36	19	27	30
Bursaries: Employees	70	–	–	15	–	–	–
Catering: Departmental activities	836	1 099	118	214	716	919	975
Communication	552	1 077	173	285	195	629	667
Computer services	2 481	–	4	31	171	192	203
Consultants and professional services:	3 207	12 733	1 698	7 582	440	486	515
Business and advisory services							
Consultants and professional services:	7 635	–	–	–	–	–	–
Infrastructure and planning							
Consultants and professional services: Legal costs	–	–	–	–	–	2 222	2 333
Contractors	64	7 788	2 103	5	–	1	1
Agency and support / outsourced services	7 206	–	2	5	347	2 718	2 881
Entertainment	8	–	–	–	–	–	–
Inventory: Fuel, oil and gas	–	–	–	1	–	–	–
Inventory: Learner and teacher support material	380	91	30	138	–	–	–
Inventory: Materials and supplies	–	–	–	2	–	–	–
Inventory: Other consumables	–	–	29	1	1	–	–
Inventory: Stationery and printing	56	151	95	545	1 421	1 626	1 723
Lease payments	–	7 208	–	–	–	–	–
Transport provided: Departmental activity	3	–	–	–	–	–	–
Travel and subsistence	7 763	12 223	3 289	3 972	4 348	14 718	15 635
Training and development	254	92	22	202	10	54	57
Operating expenditure	5 419	5 222	26	337	15	2 457	2 605
Venues and facilities	1 817	715	–	300	–	2 631	2 789
<b>Transfers and subsidies</b>	<b>100</b>	<b>–</b>	<b>1 500 000</b>	<b>1 500 000</b>	<b>1 500 000</b>	<b>–</b>	<b>–</b>
Public corporations and private enterprises	–	–	1 500 000	1 500 000	1 500 000	–	–
Households	100	–	–	–	–	–	–
<b>Payments for capital assets</b>	<b>9</b>	<b>771</b>	<b>6</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
Machinery and equipment	9	771	6	–	–	–	–
<b>Payments for financial assets</b>	<b>136</b>	<b>7</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Total</b>	<b>69 999</b>	<b>76 498</b>	<b>1 528 451</b>	<b>1 544 708</b>	<b>1 541 548</b>	<b>75 213</b>	<b>79 738</b>

### Details of transfers and subsidies

<b>Households</b>							
<b>Social benefits</b>							
Current	100	–	–	–	–	–	–
Households	100	–	–	–	–	–	–
<b>Public corporations and private enterprises</b>							
<b>Public corporations</b>							
<b>Public corporations - subsidies on products and production</b>							
Capital	–	–	1 500 000	1 500 000	1 500 000	–	–
Transnet pipelines	–	–	1 500 000	1 500 000	1 500 000	–	–

## Expenditure trends

Expenditure increased from R70 million in 2008/09 to R1.5 billion in 2011/12, at an average annual rate of 180.5 per cent, due to payments of R1.5 billion between 2010/11 and 2012/13 in the *Hydrocarbons Policy* subprogramme to Transnet for the construction of the national multi-products pipeline. The pipeline will secure the supply of petroleum products to the inland market over the long term. The 27.6 per cent increase in the *Energy Planning and Research* subprogramme in 2009/10 was used for the development of an integrated resource plan, which identifies the appropriate mix and level of energy needed to meet demand until 2030.

Expenditure on goods and services decreased from R39.5 million in 2008/09 to R14.4 million in 2011/12, at an average annual rate of 28.6 per cent, due to the restructuring of the department and subsequent restatement of expenditure under different programmes based on the new structures. Spending on consultants and professional services decreased from R10.8 million in 2008/09 to R7.6 million in 2011/12, at an average annual rate of 11.2 per cent, due to the split of the departments.

Over the medium term, expenditure is expected to decrease to R79.7 million, at an average annual rate of 62.8 per cent, due to the discontinuation of the payments made to Transnet from 2013/14. To expand the programme is research and modelling capacity, expenditure on compensation of employees is expected to increase from R30.4 million in 2011/12 to R47.2 million in 2014/15, at an average annual rate of 15.9 per cent. Between 2011/12 and 2014/15, expenditure on goods and services is expected to increase, at an average annual rate of 31.3 per cent, from R14.4 million to R32.5 million, driven mainly by increases in travel and subsistence as the department undertakes consultations on the regulatory framework review and integrated energy plan, and participates in forums to meet international nuclear obligations.

## Programme 3: Energy Regulation

### Objectives and measures

- Facilitate the implementation and adoption of new and renewable energy technologies by supporting renewable energy projects, the demand side management programme and the solar water geyser programme, aimed at meeting the 2013 target of 10 000 gigawatt hours generation from clean energy sources through the publication of regular progress reports.
- Oversee the construction of the national multi-purpose petroleum pipeline and related specifically allocated capital transfers over the MTEF period by regularly publishing progress reports.
- Strengthen the regulatory framework in the petroleum products industry by implementing the regulatory accounting system by February 2013.
- Improve the countrywide availability of petroleum products by licensing retail, manufacturing and wholesale operators within 90 days of receiving confirmation of the publication of their licence applications.
- Facilitate the participation of historically disadvantaged individuals in the petroleum sector by licensing 25 per cent of all petroleum licence applications by historically disadvantaged individuals in each year of the MTEF period.

### Subprogrammes

- *Petroleum Licensing and Monitoring* manages petroleum licensing activities; and enforces technical, legal and economic compliance with legislation, specifications, standards and conditions. In addition, specialised administrative support services are provided, petroleum licences are issued, inspections, audits and investigations are conducted to enforce the Petroleum Products Act (2003), and the regional petroleum licensing system and advisory services are managed and coordinated. This subprogramme had a staff complement of 98 and a total budget of R33.6 million in 2011/12, of which 82.1 per cent was used for compensation of employees. No expenditure reductions over the medium term have been made in this subprogramme.
- *Hydrocarbons Operations* regulates the pricing of petroleum products, oversees the security of liquid fuels, promotes public awareness on the safe use of petroleum products and provides energy advisory services.

This subprogramme had a staff complement of 21 and a total budget of R9.1 million in 2011/12, of which 92.5 per cent was used for compensation of employees. Facilitation services include the development of the 20-year liquid fuel infrastructure roadmap, which seeks to map out the long term orderly development of the liquid fuels industry. Over the medium term, the strategic stocks policy and the liquefied petroleum gas strategy will be drafted and finalised. No expenditure cuts over the medium term have been identified in this subprogramme.

- *Clean Energy* facilitates the implementation of renewable energy and energy efficiency technologies, and regulates and promotes clean development mechanism activities. This subprogramme had a staff complement of 29 and a total budget of R498.9 million in 2011/12, of which 97.3 per cent was transferred to municipalities, public enterprises and private enterprises for demand side management and renewable energy projects. In 2011/12, R118 million was transferred to Eskom's electricity demand side management to cover costs related to the installation of the solar water geysers, R61.5 million to private enterprises for the renewable energy subsidy scheme, R25 million to the South African National Energy Development Institute for the Working for Energy programme, and R280 million for the electricity demand side management municipal grant to support energy efficiency projects implemented by municipalities. Expenditure reductions of R910 000 in 2012/13 have been approved in this subprogramme. These funds will be reprioritised for use in the demand side management and renewable energy projects.
- *Public Entity Oversight* makes transfer payments to the South African National Energy Development Institute, and manages and monitors the funding to the entity and funded and non-funded statutory bodies and organisations in support of the department's mandate. This subprogramme shared its staff complement with the *Clean Energy* subprogramme and had a total budget of R31.9 million in 2011/12, of which 63.1 per cent was transferred to the South African National Energy Development Institute to fund its operations. The remaining R11.7 million was transferred to Electricity Distribution Industry Holdings to wind down their operations and settle outstanding liabilities. No expenditure reductions over the medium term have been approved in this subprogramme.

## Expenditure estimates

**Table 29.7 Energy Regulation**

Subprogramme	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
R thousand							
Petroleum Licensing and Monitoring	35 638	27 508	31 113	33 581	33 644	41 584	44 072
Hydrocarbons Operations	10 567	12 219	11 602	9 101	12 957	30 661	32 475
Clean Energy	187 614	273 198	369 835	498 891	1 253 317	1 944 591	2 247 044
Public Entity Oversight	79 250	72 214	61 582	31 858	50 110	50 344	51 685
<b>Total</b>	<b>313 069</b>	<b>385 139</b>	<b>474 132</b>	<b>573 431</b>	<b>1 350 028</b>	<b>2 067 180</b>	<b>2 375 276</b>
Change to 2011 Budget estimate				18 734	1 204 654	1 882 984	2 180 028

### Economic classification

	58 355	57 879	63 163	56 262	59 543	116 836	123 591
<b>Current payments</b>							
Compensation of employees	35 315	44 883	51 225	47 232	49 594	64 605	68 481
Goods and services	23 040	12 996	11 938	9 030	9 949	52 231	55 110
of which:							
Administrative fees	9	123	213	255	137	475	504
Advertising	596	297	236	336	161	472	500
Assets less than the capitalisation threshold	51	1	–	63	4	14	15
Catering: Departmental activities	100	22	141	153	189	524	555
Communication	145	322	257	436	346	1 233	1 307
Computer services	4	–	–	–	1 053	1 109	1 168
Consultants and professional services: Business and advisory services	4 662	2 800	5 429	2 206	3 728	29 927	31 477
Consultants and professional services: Laboratory services	–	201	–	–	–	–	–
Consultants and professional services: Legal costs	50	2	–	–	–	–	–
Contractors	330	264	–	46	1	16	17
Agency and support / outsourced services	–	399	2	4	1	6	6
Entertainment	–	–	–	7	–	–	–
Inventory: Food and food supplies	–	–	–	2	–	–	–

Table 29.7 Energy Regulation (continued)

R thousand	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Economic Classification</b>							
<i>Inventory: Learner and teacher support material</i>	2	31	8	13	–	–	–
<i>Inventory: Materials and supplies</i>	6	–	–	7	–	1	1
<i>Inventory: Medicine</i>	–	–	–	1	–	–	–
<i>Inventory: Other consumables</i>	131	–	–	18	2	6	6
<i>Inventory: Stationery and printing</i>	485	43	89	169	86	284	302
<i>Lease payments</i>	–	–	–	10	–	–	–
<i>Property payments</i>	–	–	–	2	–	–	–
<i>Travel and subsistence</i>	10 340	7 431	2 980	4 579	3 719	14 569	15 444
<i>Training and development</i>	80	3	18	19	–	–	–
<i>Operating expenditure</i>	4 517	295	2 527	283	487	3 477	3 683
<i>Venues and facilities</i>	1 532	762	38	421	35	118	125
<b>Transfers and subsidies</b>	<b>254 696</b>	<b>327 246</b>	<b>410 969</b>	<b>517 169</b>	<b>1 290 485</b>	<b>1 950 344</b>	<b>2 251 685</b>
Provinces and municipalities	–	175 000	220 000	280 000	200 000	200 000	200 000
Departmental agencies and accounts	79 250	72 214	61 582	31 858	50 110	50 344	51 685
Public corporations and private enterprises	175 406	80 032	129 387	205 311	1 040 375	1 700 000	2 000 000
Households	40	–	–	–	–	–	–
<b>Payments for financial assets</b>	<b>18</b>	<b>14</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Total</b>	<b>313 069</b>	<b>385 139</b>	<b>474 132</b>	<b>573 431</b>	<b>1 350 028</b>	<b>2 067 180</b>	<b>2 375 276</b>

## Details of transfers and subsidies

<b>Departmental agencies and accounts</b>							
<b>Departmental agencies (non-business entities)</b>							
<b>Current</b>	<b>79 250</b>	<b>72 214</b>	<b>61 582</b>	<b>31 858</b>	<b>50 110</b>	<b>50 344</b>	<b>51 685</b>
Electricity Distribution Industry Holding Company	79 250	72 214	61 582	11 758	–	–	–
South African National Energy Development Institute	–	–	–	20 100	50 110	50 344	51 685
<b>Households</b>							
<b>Other transfers to households</b>							
<b>Current</b>	<b>40</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
Households	40	–	–	–	–	–	–
<b>Public corporations and private enterprises</b>							
<b>Public corporations</b>							
<b>Public corporations - subsidies on products and production</b>							
<b>Current</b>	<b>170 000</b>	<b>74 475</b>	<b>108 900</b>	<b>118 800</b>	<b>1 000 000</b>	<b>1 700 000</b>	<b>2 000 000</b>
National energy efficiency and demand side management	170 000	74 475	108 900	118 800	1 000 000	1 700 000	2 000 000
<b>Public corporations and private enterprises</b>							
<b>Private enterprises</b>							
<b>Other transfers to private enterprises</b>							
<b>Current</b>	<b>5 406</b>	<b>5 557</b>	<b>20 487</b>	<b>86 511</b>	<b>40 375</b>	<b>–</b>	<b>–</b>
Renewable energy subsidy scheme	5 406	5 557	487	61 511	40 375	–	–
South African National Energy Development Institute	–	–	20 000	25 000	–	–	–
<b>Provinces and municipalities</b>							
<b>Municipalities</b>							
<b>Municipal bank accounts</b>							
<b>Current</b>	<b>–</b>	<b>175 000</b>	<b>220 000</b>	<b>280 000</b>	<b>200 000</b>	<b>200 000</b>	<b>200 000</b>
Electricity demand side management grant	–	175 000	220 000	280 000	200 000	200 000	200 000

## Expenditure trends

Expenditure increased substantially from R313.1 million in 2008/09 to R573.4 million in 2011/12, at an average annual rate of 22.4 per cent. This increase is attributed to the development of regulatory tools and frameworks for renewable energy. As a result, expenditure in the *Clean Energy* subprogramme increased from R187.6 million in 2008/09 to R498.9 million in 2011/12, at an average annual rate of 38.5 per cent, due to the introduction of the energy efficiency and demand side management grant to municipalities and allocations to public enterprises and private enterprises for demand side management and renewable energy projects. As a result of the higher expenditure on demand side management, a 300 megawatt reduction in electricity demand was achieved between 2008/09 and 2011/12.

Expenditure on goods and services decreased from R23 million in 2008/09 to R9 million in 2011/12, at an average annual rate of 26.8 per cent, mainly due to a decline in the use of consultants. Spending on consultants decreased from R4.7 million in 2008/09 to R2.2 million in 2011/12, at an average annual rate of 22.4 per cent. Consultants were used for the implementation of energy efficiency campaigns on behalf of the department.

Over the medium term, expenditure is expected to increase from R573.4 million to R2.4 billion, at an average annual rate of 60.6 per cent, mainly due to additional funding for the expansion of the solar water geyser programme implemented by Eskom, R1 billion in 2012/13, R1.7 billion in 2013/14 and R2 billion in 2014/15. R200 million each year over the MTEF period is allocated to support energy efficiency projects implemented by municipalities, and R28 million each year over the MTEF period is allocated to create a sustainable baseline for the South African National Energy Development Institute.

Expenditure on goods and services is expected to increase from R9.03 million in 2011/12 to R55.1 million in 2014/15, at an average annual rate of 82.7 per cent, due to travel and subsistence over the medium term related to the full implementation of legal, commercial and technical compliance functions of the *Petroleum Licensing and Monitoring* subprogramme. Spending on consultants is expected to increase from R2.2 million in 2011/12 to R31.5 million in 2014/15 as the department retains specialist consultants to support its demand side management initiatives in municipalities and implements renewable energy projects.

## Programme 4: National Electrification Programme

### Objectives and measures

- Increase access to electricity by monitoring the implementation of the integrated national electrification programme, which aims to electrify 540 000 households by 2014/15.
- Address the rehabilitation of municipal electricity distribution assets by regularly monitoring and evaluating distribution asset management to ensure the preservation of distribution infrastructure.

### Subprogrammes

- *Business Planning* manages the electrification planning, funding and implementation process of rehabilitating municipal distribution assets. This subprogramme had a staff complement of 35 and a total budget of R302.3 million in 2011/12, of which 93.3 per cent was used for transfers to the local organising committee for the 2010 FIFA World Cup to pay for the country's obligation to provide back up generation during the tournament. Responsibilities include managing and coordinating technical audits, monitoring, overseeing funding processes, developing electrification infrastructure plans, integrating grid and non-grid electrification and developing electrification sector plans that are aligned with other service sectors. No expenditure reductions over the medium term have been made in this subprogramme.
- *Grant Management and Monitoring* oversees the grant distribution and Division of Revenue Act implementation processes to address the electrification backlog for providing universal access. This subprogramme had no staff complement and a total budget of R3 billion in 2011/12, of which 58.7 per cent was transferred to Eskom, while 37 per cent was transferred to municipalities to electrify households as part of the integrated national electrification programme. In 2010/11, contracts awarded to broad based black economic empowerment businesses and small, medium and micro enterprises amounted to R280 million; and 4 200 temporary and 600 permanent jobs were created through the integrated national electrification programme. In the same year, 2 571 learners took part in electrification projects and municipalities



connected 54 872 households, while Eskom connected 136 597 households. No expenditure reductions over the medium term have been approved for this subprogramme.

## Expenditure estimates

**Table 29.8 National Electrification Programme**

Subprogramme	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
R thousand							
Business Planning	4 643	4 938	18 425	302 270	19 083	21 628	22 914
Grant Management and Monitoring	1 913 897	2 517 158	2 763 094	2 962 285	3 117 211	3 388 520	3 683 182
<b>Total</b>	<b>1 918 540</b>	<b>2 522 096</b>	<b>2 781 519</b>	<b>3 264 555</b>	<b>3 136 294</b>	<b>3 410 148</b>	<b>3 706 096</b>
Change to 2011 Budget estimate				57 000	(2 689)	98 137	195 364

### Economic classification

	4 643	4 938	18 425	20 270	19 083	21 628	22 914
<b>Current payments</b>							
Compensation of employees	2 857	3 040	13 537	14 965	15 713	15 230	16 144
Goods and services	1 786	1 898	4 888	5 305	3 370	6 398	6 770
<i>of which:</i>							
Administrative fees	–	–	261	331	162	261	277
Advertising	–	–	73	54	82	132	140
Assets less than the capitalisation threshold	–	–	1	4	1	1	1
Catering: Departmental activities	–	–	23	32	17	39	41
Communication	–	–	211	214	147	220	233
Computer services	–	–	–	–	20	–	–
Consultants and professional services: Business and advisory services	356	378	200	–	–	1 111	1 166
Contractors	89	95	–	20	–	–	–
Entertainment	–	–	22	–	–	–	–
Inventory: Other consumables	–	–	–	1	–	–	–
Inventory: Stationery and printing	–	–	9	21	10	17	18
Travel and subsistence	1 341	1 425	4 061	4 491	2 914	4 589	4 864
Training and development	–	–	–	50	–	–	–
Operating expenditure	–	–	21	29	17	28	30
Venues and facilities	–	–	6	58	–	–	–
<b>Transfers and subsidies</b>	<b>1 913 897</b>	<b>2 517 158</b>	<b>2 763 094</b>	<b>3 244 285</b>	<b>3 117 211</b>	<b>3 388 520</b>	<b>3 683 182</b>
Provinces and municipalities	589 139	899 554	1 033 382	1 096 612	1 151 443	1 314 772	1 487 658
Public corporations and private enterprises	1 324 758	1 617 604	1 729 712	2 147 673	1 965 768	2 073 748	2 195 524
<b>Total</b>	<b>1 918 540</b>	<b>2 522 096</b>	<b>2 781 519</b>	<b>3 264 555</b>	<b>3 136 294</b>	<b>3 410 148</b>	<b>3 706 096</b>

### Details of transfers and subsidies

<b>Public corporations and private enterprises</b>							
<b>Public corporations</b>							
<b>Public corporations - subsidies on products and production</b>							
<b>Capital</b>	<b>1 240 758</b>	<b>1 616 315</b>	<b>1 719 810</b>	<b>1 737 812</b>	<b>1 879 368</b>	<b>1 982 596</b>	<b>2 098 903</b>
Eskom: Integrated national electrification programme	1 240 758	1 616 315	1 719 810	1 737 812	1 879 368	1 982 596	2 098 903
<b>Provinces and municipalities</b>							
<b>Municipalities</b>							
<b>Municipal bank accounts</b>							
<b>Capital</b>	<b>589 139</b>	<b>899 554</b>	<b>1 033 382</b>	<b>1 096 612</b>	<b>1 151 443</b>	<b>1 314 772</b>	<b>1 487 658</b>
Integrated national electrification programme grant	589 139	899 554	1 033 382	1 096 612	1 151 443	1 314 772	1 487 658
<b>Public corporations and private enterprises</b>							
<b>Private enterprises</b>							
<b>Private enterprises - subsidies on products and production</b>							
<b>Capital</b>	<b>84 000</b>	<b>1 289</b>	<b>9 902</b>	<b>409 861</b>	<b>86 400</b>	<b>91 152</b>	<b>96 621</b>
Integrated national electrification programme grant	84 000	1 289	9 902	127 861	86 400	91 152	96 621
Local Organising Committee for the 2010 FIFA World Cup	–	–	–	282 000	–	–	–

## Expenditure trends

Expenditure increased from R1.9 billion in 2008/09 to R3.3 billion in 2011/12, at an average annual rate of 19.4 per cent, due to the increase in the integrated national electrification programme implemented by municipalities and Eskom to support the target to provide universal access to electricity by 2014. Between 2008/09 and 2011/12, transfers to Eskom for national electrification grew from R1.2 billion to R1.7 billion, at an average annual rate of 12 per cent, while transfers to municipalities increased from R589.1 million to R1.1 billion, at an average annual rate of 23 per cent. Over the same period, expenditure on compensation of employees increased from R2.9 million to R15 million, at an average annual rate of 73.7 per cent, to provide for sufficient capacity.

Between 2011/12 and 2014/15, spending is expected to increase to R3.7 billion, at an average annual rate of 4.3 per cent, due to additional allocations of R100 million in 2013/14 and R200 million in 2014/15 for the integrated national electrification programme in support of informal settlement upgrading. Expenditure on goods and services is expected to increase from R5.3 million in 2012/13 to R6.8 million in 2014/15, at an average annual rate of 9 per cent, due to the projected use of consultants in the *Business Planning* subprogramme.

Spending on consultants is expected to increase from R356 000 in 2008/09 to R1.2 million in 2014/15 for electrification planning and monitoring processes, and the execution of the integrated national electrification programme. This involves technical audits and inspections at implementation sites. The department is responsible for planning, making project allocations, monitoring progress and conducting technical audits of completed electrification projects.

## Programme 5: Nuclear Energy and Regulation

### Objectives and measures

- Ensure a well managed, efficient and safe nuclear energy industry by:
  - implementing the nuclear energy policy by developing appropriate strategies to facilitate the expansion of nuclear energy by 9 600 megawatts, as guided by the integrated resource plan, by 2013/14
  - regulating the security of nuclear material and facilities by developing and publishing appropriate regulations by 2012 for the physical protection of nuclear material
  - strengthening the control and accounting for nuclear materials and related equipment by enforcing the relevant regulations and facilitating the installation of monitoring equipment at identified ports of entry in conjunction with the South African Revenue Service by 2013
  - promoting the safe management and disposal of radioactive waste by establishing the National Radioactive Waste Disposal Institute, as provided for in the radioactive waste management policy and strategy, by 2013.

### Subprogrammes

- *Nuclear Safety and Regulation* aims to improve the governance of the nuclear sector, specifically in relation to nuclear safety and nuclear technology. This subprogramme had a staff complement of 11 and a total budget of R17.3 million in 2011/12, of which 72.4 per cent was used for goods and services. The subprogramme is the anchor point for implementation of the nuclear energy policy, approved in 2008 as a national nuclear programme in line with the integrated resource plan requirements. The national nuclear energy executive coordination committee has been established to lead, monitor, and ensure oversight of the implementation of the nuclear policy. Over the medium term, the department will ensure the implementation of the framework for nuclear energy expansion and infrastructure development in line with the integrated resource plan. R64.4 million over the medium term is allocated for nuclear safety and regulation, of which additional allocations of R33.9 million in 2013/14 and R12.3 million in 2014/15 will be used to pay the membership fees to the International Atomic Energy Agency. Additional allocations of R8.8 million in 2013/14 and R9.3 million in 2014/15 are made for the development and implementation of nuclear activities. No expenditure reductions over the medium term have been made in this subprogramme.

- *Nuclear Non-proliferation and Radiation Security* manages and implements all matters related to nuclear non-proliferation and radiation security, as per legislation and international agreements. This subprogramme had a staff complement of 9 and a total budget of R3.1 million in 2011/12, of which 87.7 per cent was used for compensation of employees. To account for and control nuclear materials and related equipment in South Africa, in 2010/11, 98 authorisations were issued to different organisations for the acquisition, possession, transport, use, and import and export of nuclear material. Over the medium term, preparatory work related to the withdrawal of the nuclear safeguards function from the South African Nuclear Energy Corporation will continue. The withdrawal is essential to ensure a separation of the regulatory function from an operator of nuclear facilities under safeguards. Nuclear security capabilities will also be strengthened to control and monitor source material, nuclear material and equipment to prevent, detect, delay and respond to malicious acts should they occur. No expenditure reductions over the medium term have been made in this subprogramme.
- *Public Entity Oversight* facilitates the oversight of statutory bodies and organisations in the nuclear industry and makes transfer payments to the South African Nuclear Energy Corporation and the National Nuclear Regulator. This subprogramme had no staff complement and a total budget of R621.5 million in 2011/12, which was transferred in full to the South African Nuclear Energy Corporation and the National Nuclear Regulator. In 2011/12, R586 million was transferred to the South African Nuclear Energy Corporation, while R35.4 million was transferred to the National Nuclear Regulator. No expenditure reductions over the medium term have been made in this subprogramme.

## Expenditure estimates

**Table 29.9 Nuclear Energy and Regulation**

Subprogramme	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
R thousand							
Nuclear Safety and Regulation	7 703	13 034	3 068	17 284	7 513	52 704	32 129
Nuclear Non-proliferation and Radiation Security	2 041	7 954	2 550	3 127	3 284	4 601	4 877
Public Entity Oversight	575 059	587 937	594 064	621 464	585 491	596 002	616 707
<b>Total</b>	<b>584 803</b>	<b>608 925</b>	<b>599 682</b>	<b>641 875</b>	<b>596 288</b>	<b>653 307</b>	<b>653 713</b>
Change to 2011 Budget estimate				28 654	1 415	74 131	39 787

### Economic classification

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Current payments</b>	<b>9 744</b>	<b>20 988</b>	<b>5 618</b>	<b>20 411</b>	<b>10 797</b>	<b>23 389</b>	<b>24 704</b>
Compensation of employees	9 002	20 513	3 169	7 454	7 828	9 867	10 459
Goods and services	742	475	2 449	12 957	2 969	13 522	14 245
of which:							
Administrative fees	–	–	52	55	77	78	82
Advertising	1	–	89	68	37	34	36
Catering: Departmental activities	2	–	22	35	12	12	12
Communication	28	–	44	74	42	61	65
Computer services	–	–	–	3	3	4	4
Consultants and professional services:	105	95	4	2	1	8 889	9 335
Business and advisory services							
Contractors	22	23	–	–	–	–	–
Agency and support / outsourced services	–	–	356	1 077	913	1 633	1 731
Inventory: Other consumables	–	–	–	–	219	212	225
Inventory: Stationery and printing	–	–	23	221	2	2	3
Travel and subsistence	545	357	1 288	399	598	724	767
Training and development	–	–	–	20	–	–	–
Operating expenditure	19	–	141	8 524	28	26	27
Venues and facilities	20	–	430	2 479	1 037	1 847	1 958
<b>Transfers and subsidies</b>	<b>575 059</b>	<b>587 937</b>	<b>594 064</b>	<b>621 464</b>	<b>585 491</b>	<b>629 918</b>	<b>629 009</b>
Departmental agencies and accounts	20 333	23 793	19 954	35 430	30 912	31 677	34 384
Foreign governments and international organisations	–	–	–	–	–	33 916	12 302
Public corporations and private enterprises	554 726	564 144	574 110	586 034	554 579	564 325	582 323
<b>Total</b>	<b>584 803</b>	<b>608 925</b>	<b>599 682</b>	<b>641 875</b>	<b>596 288</b>	<b>653 307</b>	<b>653 713</b>

**Table 29.9 Nuclear Energy and Regulation (continued)**

R thousand	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Details of transfers and subsidies</b>							
<b>Departmental agencies and accounts</b>							
<b>Departmental agencies (non-business entities)</b>							
<b>Current</b>	<b>19 713</b>	<b>22 940</b>	<b>19 093</b>	<b>34 960</b>	<b>30 547</b>	<b>31 325</b>	<b>34 011</b>
National Nuclear Regulator	19 713	22 940	19 093	34 960	30 547	31 325	34 011
<b>Capital</b>	<b>620</b>	<b>853</b>	<b>861</b>	<b>470</b>	<b>365</b>	<b>352</b>	<b>373</b>
National Nuclear Regulator	620	853	861	470	365	352	373
<b>Foreign governments and international organisations</b>							
<b>Current</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>33 916</b>	<b>12 302</b>
International Atomic Energy Agency	-	-	-	-	-	33 916	12 302
<b>Public corporations and private enterprises</b>							
<b>Public corporations</b>							
<b>Public corporations - subsidiaries on products and production</b>							
<b>Current</b>	<b>465 550</b>	<b>475 425</b>	<b>490 508</b>	<b>505 798</b>	<b>476 122</b>	<b>474 243</b>	<b>501 920</b>
South African Nuclear Energy Corporation	465 550	475 425	490 508	505 798	476 122	474 243	501 920
<b>Capital</b>	<b>89 176</b>	<b>88 719</b>	<b>83 602</b>	<b>80 236</b>	<b>78 457</b>	<b>90 082</b>	<b>80 403</b>
South African Nuclear Energy Corporation	89 176	88 719	83 602	80 236	78 457	90 082	80 403

## Expenditure trends

Expenditure increased from R584.8 million in 2008/09 to R641.9 million in 2011/12, at an average annual rate of 3.2 per cent, due to the increase in spending in the *Nuclear Safety and Regulation* subprogramme, which is attributable to expenditure on activities related to the development and implementation of the nuclear energy policy. Funds under the *Nuclear Safety and Regulation* subprogramme were used to consult on and draft regulations under the Nuclear Energy Act (1999). Spending on consultants and professional services decreased from R105 000 in 2008/09 to R2 000 in 2011/12, due to efficiency savings implemented in 2010/11 and a decline in the use of consultants for the implementation of activities related to nuclear policy.

Over the medium term, expenditure is expected to increase to R653.7 million, due to the expected increase on compensation of employees from R7.5 million in 2011/12 to R10.5 million in 2014/15 as a result of salary adjustments and the additional allocations to this programme to strengthen nuclear safety and regulation. The *Nuclear Safety and Regulation* subprogramme receives additional allocations of R33.9 million in 2013/14 and R12.3 million in 2014/15 to pay the International Atomic Energy Agency membership fees.

R1.7 billion will be disbursed to the South African Nuclear Energy Corporation, consisting of R554.6 million in 2012/13, R564.3 million in 2012/13 and R582.3 million in 2014/15. An additional allocation of R14.2 million in 2013/14 is also provided to the corporation to build the waste processing facility. The National Nuclear Regulator receives R101.5 million over the medium term (R35.4 million, R31.7 million and R34.4 million), which includes an additional allocation of R68 million for staff retention.

## Public entities and other agencies

### South African Nuclear Energy Corporation

#### Overview: 2008/09 – 2014/15

The South African Nuclear Energy Corporation derives its mandate from the Nuclear Energy Act (1999), the nuclear energy policy of 2008 and directives conferred on it by the Minister of Energy. The corporation serves as the anchor for nuclear energy research, development and innovation in South Africa, and executes nuclear fuel cycle activities. Its research, development, demonstration and business activities are therefore directed

mainly at applications of nuclear and radiation science and technology, particularly relating to the production of medical radioisotopes, the nuclear fuel cycle, including waste management, and the beneficial uses of nuclear technologies.

Responsibilities also include: operating the SAFARI-1 research nuclear reactor for research and development, and irradiation services for the production of radioisotopes; the decommissioning and decontamination of nuclear facilities; and contributing to South Africa's obligations in terms of international nuclear treaties and agreements. The latter includes the comprehensive safeguards agreement with the International Atomic Energy Agency, the Africa Regional Cooperative Agreement for research, development and training related to nuclear science and technology, the Comprehensive Nuclear Test Ban Treaty and the Pelindaba Treaty.

Over the medium term, the corporation will focus on: developing and demonstrating nuclear fuel cycle capabilities aligned with the integrated resource plan for electricity, and new nuclear build requirements; expanding research and development programmes in support of the corporation's core activities and in contributing to the national system of innovation; developing nuclear equipment, components and fuel manufacturing capabilities to leverage off localisation opportunities that would arise out of South Africa's nuclear power expansion programme; strengthening and consolidating NTP Radioisotopes' global market position in the supply of medical radioisotopes and related products; and developing the diversification strategy of Pelchem, a subsidiary of the corporation, into the pharmaceutical products domain.

In response to the expected increase in nuclear electricity production resulting from the integrated resource plan, the corporation will work to retain and increase the nuclear skills capacity in the country.

## Performance

The corporation measures itself against the performance indicators on financial information; commitment to research, development and innovation to support sustainable growth of South African economy; and improvement on creating awareness and knowledge of nuclear technologies.

Between 2008/09 and 2011/12, the corporation's research output, measured in terms of the number of scientific articles published, increased from 21 to 22. Over the medium term, research output is expected to increase from 22 to 34. Sales of medical radioisotopes increased from R621.3 million in 2008/09 to R1.2 billion in 2011/12. Growth in sales is expected to continue to grow over the medium term, reaching R1.9 billion in 2014/15.

## Selected performance indicators

**Table 29.10 South African Nuclear Energy Corporation**

Indicator	Programme/Activity/Objective	Past			Current	Projections		
		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Annual sales for the Nuclear Energy Corporation of South Africa as a per cent of total group annual sales per year	All	20.5% (R621 394)	20.4% (R1 049 014)	5.5% (R1 107 135)	5.7% (R1 170 439)	23.71% (R1 448 027)	14.5% (R1 658 954)	12.2% (R1 860 968)
Number of published scientific articles per year	Research and development	21	26	17	22	28	32	34
Number of product and process innovations per year	Research and development	7	8	31	10	12	14	17
Maximum allowable annual dose in terms of licence conditions (micro Sv)	Research and development	–	5.5	9	6.3	6.3	5.8	6

## Programmes/activities/objectives

**Table 29.11 South African Nuclear Energy Corporation**

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Nuclear Power Programme Cluster	–	–	347 077	397 635	389 941	408 247	431 442
Radiation Science and Applications, Programmes Cluster	–	–	705 202	726 526	878 881	991 801	1 094 492
Necsa as a Host of Nuclear Programme Cluster	–	–	331 262	384 191	380 531	396 910	408 680
Support Services	–	–	237 309	298 544	341 793	342 275	357 078
Total amounts are disclosed due to restructuring of Necsa	1 073 486	1 448 911	–	–	–	–	–
<b>Total expense</b>	<b>1 073 486</b>	<b>1 448 911</b>	<b>1 620 850</b>	<b>1 806 896</b>	<b>1 991 146</b>	<b>2 139 233</b>	<b>2 291 692</b>

The South African Nuclear Energy Corporation had a total budget of R1.8 billion in 2011/12, of which 40.2 per cent was used for radiation science and applications.

### Savings and cost effectiveness measures

In an effort to curtail growth in compensation of employees, the corporation negotiated a salary increase of 7 per cent for lower level staff and 5.6 per cent for professional and senior staff in 2011/12. To fund these salary increases, the corporation effected operational expenditure savings and reduced spending on consultants and contract workers. Budget reductions of R27.3 million over the MTEF period were effected and are spread as follows: R18.4 million, R3.9 million and R4.9 million.

### Expenditure estimates

**Table 29.12 South African Nuclear Energy Corporation**

#### Statement of financial performance

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Revenue</b>							
<b>Non-tax revenue</b>	<b>714 067</b>	<b>1 140 704</b>	<b>1 245 409</b>	<b>1 236 396</b>	<b>1 527 360</b>	<b>1 745 079</b>	<b>1 949 189</b>
Sale of goods and services other than capital assets	621 394	1 049 014	1 107 135	1 170 439	1 448 027	1 658 954	1 860 968
<i>of which:</i>							
<i>Sales by market establishments</i>	621 394	1 049 014	1 107 135	1 170 439	1 448 027	1 658 954	1 860 968
<i>Other non-tax revenue</i>	92 673	91 690	138 274	65 957	79 333	86 125	88 221
<b>Transfers received</b>	<b>439 748</b>	<b>471 927</b>	<b>504 900</b>	<b>590 495</b>	<b>696 103</b>	<b>632 093</b>	<b>583 246</b>
<b>Total revenue</b>	<b>1 153 815</b>	<b>1 612 631</b>	<b>1 750 309</b>	<b>1 826 891</b>	<b>2 223 463</b>	<b>2 377 172</b>	<b>2 532 435</b>
<b>Expenses</b>							
<b>Current expenses</b>	<b>1 009 319</b>	<b>1 401 125</b>	<b>1 506 033</b>	<b>1 707 881</b>	<b>1 870 036</b>	<b>1 991 972</b>	<b>2 113 751</b>
Compensation of employees	423 743	525 170	587 035	723 189	719 193	736 593	753 017
Goods and services	525 115	807 565	831 775	901 083	1 063 124	1 176 561	1 290 271
Depreciation	39 599	47 435	72 406	79 308	83 458	73 952	66 213
Interest, dividends and rent on land	20 862	20 955	14 817	4 301	4 261	4 866	4 250
<b>Transfers and subsidies</b>	<b>–</b>	<b>–</b>	<b>43 912</b>	<b>34 486</b>	<b>32 208</b>	<b>27 891</b>	<b>28 227</b>
<b>Total expenses</b>	<b>1 073 486</b>	<b>1 448 911</b>	<b>1 620 850</b>	<b>1 806 896</b>	<b>1 991 146</b>	<b>2 139 233</b>	<b>2 291 692</b>
<b>Surplus / (Deficit)</b>	<b>80 329</b>	<b>163 720</b>	<b>129 459</b>	<b>19 995</b>	<b>232 317</b>	<b>237 939</b>	<b>240 743</b>
<b>Statement of financial position</b>							
Carrying value of assets	361 133	744 082	805 282	921 991	1 154 776	1 489 537	1 655 734
<i>of which:</i>							
<i>Acquisition of assets</i>	113 513	96 518	97 798	196 017	316 243	408 713	232 410
Investments	51 466	77 919	69 059	112 716	151 504	182 913	191 851
Inventory	100 810	93 698	161 286	188 204	202 181	222 973	252 966
Receivables and prepayments	169 401	236 484	266 759	248 587	292 923	333 589	371 434
Cash and cash equivalents	222 699	326 372	482 732	368 707	443 365	413 111	553 582
Non-current assets held for sale	–	–	2 130	–	–	–	–
Taxation	13 278	18 388	16 926	13 053	13 053	13 053	13 053
Derivatives financial instruments	3 360	5 447	3 872	0	0	0	0
<b>Total assets</b>	<b>922 147</b>	<b>1 502 390</b>	<b>1 808 046</b>	<b>1 853 257</b>	<b>2 257 801</b>	<b>2 655 175</b>	<b>3 038 619</b>

**Table 29.12 South African Nuclear Energy Corporation (continued)**

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Statement of financial position</b>							
Accumulated surplus / (deficit)	56 220	218 548	356 057	376 052	608 369	846 311	1 087 054
Capital and reserves	4 562	340 564	335 830	335 825	335 820	335 816	335 816
Capital reserve fund	179 277	222 022	356 738	403 295	493 889	582 921	685 862
Borrowings	8 430	10 541	17 688	28 014	40 817	47 904	47 353
Finance lease	820	2 471	2 525	1 195	355	–	–
Trade and other payables	197 795	218 082	169 088	91 747	118 066	142 037	164 680
Taxation	34 359	9 298	1 537	5 445	5 445	5 445	5 445
Provisions	437 324	475 417	564 711	611 685	655 041	694 742	712 410
<b>Total equity and liabilities</b>	<b>918 787</b>	<b>1 496 943</b>	<b>1 804 174</b>	<b>1 853 258</b>	<b>2 257 802</b>	<b>2 655 176</b>	<b>3 038 620</b>

## Expenditure trends

The corporation's spending focus over the medium term will be on nuclear research and, in particular, the development of new products and processes. Over the medium term, the corporation will also focus on increasing skills and capacity in the field of nuclear energy in anticipation for the expansion programme. As the entity's expenditure grows, performance grows, with scientific articles published increasing from 21 to 34 and innovations from 7 to 17 over the seven-year period.

The corporation derives its revenue from the sale of nuclear technology products, chemical products, nuclear engineering services and transfer payments received from government. Revenue increased from R1.2 billion in 2008/09 to R1.8 billion in 2011/12, at an average annual rate of 16.6 per cent. Growth in 2009/10 and 2010/11 relates to normal inflation increases in the transfer from government, while growth in 2011/12 was due to transfers received for decommissioning and decontamination, the conversion of the South African Fundamental Atomic Research Installation Reactor, and the conversion and maintenance of the South African Fundamental Atomic Research Installation's nuclear reactor's fuel.

The 68.8 per cent increase in sales by market establishments in 2009/10 is mainly attributable to the significant increase in the sales of NTP Radioisotopes, which is wholly owned by the corporation. The sales performance was achieved largely as a result of NTP Radioisotopes' response to the global supply shortage of medical radioisotopes and its ability to increase capacity accordingly. In addition, NTP Radioisotopes also acquired a 55 per cent shareholding in the Gammatec group in October 2009. Hence, consolidated sales for the group included R123.5 million, which represents annual sales for Gammatec group. The acquisition had a material effect on the sales increase in the consolidated entity.

Over the medium term, revenue is expected to grow to R2.5 billion, at an average annual rate of 11.5 per cent. The increase in revenue is attributed to the expected increase in sales within the group, which is projected to rise from R1.2 billion in 2011/12 to R1.9 billion in 2014/15, at an average annual rate of 16.7 per cent, as a result of the increase in sales of NTP Radioisotopes, of R202 million.

Expenditure increased from R1.1 billion in 2008/09 to R1.8 billion in 2011/12, at an average annual rate of 19 per cent. Expenditure on goods and services grew from R525.1 million in 2008/09 to R901.1 million in 2011/12, at an average annual rate of 19.7 per cent, due to the higher spending on outsourced services costs as a result of the advanced metal initiative project. Expenditure on consultants increased from R16 million in 2008/09 to R24.8 million in 2011/12, at an average annual rate of 15.6 per cent. Compensation of employees increased from R423.7 million in 2008/9 to R723.2 million in 2011/12, at an average annual rate of 19.5 per cent. The increase in spending on compensation of employees is due to the corporation absorbing employees from the Pebble Bed Modular Reactor, which was placed into its care and maintenance in 2010/11.

Over the medium term, expenditure is expected to increase from R1.8 billion in 2011/12 to R2.3 billion in 2014/15, at an average annual rate of 8.2 per cent. Spending on compensation of employees is expected to grow to R753.2 million in 2014/15, at an average annual rate of 1.4 per cent, due to the absorption of staff from the Pebble Bed Modular Reactor and the effect of future salary increases. The main rise in expenditure over the medium term is in goods and services, which is expected to increase from R901.1 million in 2011/12 to R1.3 billion in 2014/15, at an average annual rate of 12.7 per cent.

The largest contributing items are consultants, on which expenditure grew from R16 million in 2008/09 to R24.8 million in 2011/12, at an average annual rate of 15.6 per cent, due to the development of workflows and the implementation of a human resources system. Over the medium term, this is expected to increase to R34.4 million, at an average annual rate of 11.5 per cent, due to the use of external consultants in the low enriched uranium plant and spending on repairs and maintenance, which increase from R64.1 million in 2011/12 to R75.5 million in 2014/15, at an average annual rate of 5.6 per cent.

## Personnel information

**Table 29.13 South African Nuclear Energy Corporation**

	Personnel post status as at 30 September 2011			Number of personnel posts filled / planned for on funded establishment						
	Number of posts on approved establishment	Number of funded posts	Number of vacant posts	Actual			Mid- year <sup>1</sup>	Medium-term estimate		
				2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Executive board members	21	21	–	20	23	23	21	21	21	21
Executive management	22	22	–	9	6	22	22	22	22	22
Senior management	30	25	5	48	40	25	25	25	30	30
Middle management	112	92	20	82	80	85	92	95	97	97
Professionals	262	248	14	315	313	320	248	251	250	255
Skilled	1 008	960	48	906	954	966	960	963	965	966
Semi-skilled	436	415	21	296	305	310	415	440	467	482
Very low skilled	50	40	10	40	30	35	40	42	44	60
<b>Total</b>	<b>1 941</b>	<b>1 823</b>	<b>118</b>	<b>1 716</b>	<b>1 751</b>	<b>1 786</b>	<b>1 823</b>	<b>1 859</b>	<b>1 896</b>	<b>1 933</b>
Compensation (R thousand)				423 743	525 170	587 035	723 189	719 193	736 593	753 017
Unit cost (R thousand)				247	300	329	397	387	388	390

1. As at 30 September 2011.

In 2009/10 and 2010/11, the corporation was required to respond to the drastic downscaling of the Pebble Bed Modular Reactor programme by taking on staff with valuable and highly scarce nuclear skills who had been retrenched as a result of the programme's closure. The increase in staff is also in recognition of government's adopted policy of expanding its nuclear generation capacity, as expressed in the integrated resource plan. The corporation had an establishment of 1 941 posts as at 30 September 2011. The number of filled posts increased from 1 716 in 2008/09 to 1 823 in 2011/12. Over the MTEF period, the number of posts filled is expected to increase from 1 859 in 2012/13 to 1 933 in 2014/15 due to the absorption of staff from the Pebble Bed Modular Reactor. Expenditure on consultants equated to 3.4 per cent of expenditure on compensation on employees in 2011/12.

## Central Energy Fund

### Overview: 2008/09 – 2014/15

The Central Energy Fund is listed in schedule 2A of the Public Finance Management Act (1999) and is a private company, which is governed by the Central Energy Fund Act (1977). The company's 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. In terms of its governing legislation, the company is also mandated to manage the Equalisation Fund, which collects levies from the retail sales of petroleum products to eliminate unnecessary fluctuations in the retail price of liquid fuel and to give tariff protection to the synthetic fuel industry.

The group consists of 10 operating subsidiaries: the Petroleum, Oil and Gas Corporation of South Africa; the South African Gas Development Company; the Petroleum Agency of South Africa; Oil Pollution Control South Africa; the Strategic Fuel Fund Association; African Exploration; ETA Energy; the South African Supplier Development Agency; the Central Energy Fund Carbon; and CCE Solutions. The group's structure is under review with the objective of designing a more effective organisational structure.

Over the medium term, the fund will focus on improving the security of energy supply by diversifying sources of energy. Changes in the operating environment have led to a review of the strategic and operational direction,



particularly for renewable energy activities. A number of investigative initiatives are under way to identify new opportunities that the company should consider for investment.

Greater emphasis will also be placed on supply side interventions by building and managing strategic energy stocks and energy infrastructure, investing in and developing renewable and alternative energy sources and equipment, investing in energy efficiency, developing human capacity and investing in energy research and development activities, managing and exploiting local strategic energy and related resources, and mitigating environmental impacts and maximising sustainable development. The company is managing the feasibility study for a solar park in Upington, which will be completed by October 2012 for the introduction of utility scale renewable energy on the grid.

## Performance

The company measures itself against indicators that ensure that the quantity of crude oil storage is maintained. Over the medium term, crude oil stock will be maintained at 10.3 million barrels per year. The company will also focus on investment in alternative and cleaner technologies that will improve the quality of life for low income households through more affordable and safer energy sources.

## Selected performance indicators

**Table 29.14 Central Energy Fund**

Indicator	Programme/Activity/Objective	Past			Current	Projections		
		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Number of crude oil barrels maintained as per ministerial directive per year, measured in millions of barrels (mdbl)	Security of supply	10.3 mdbl	10.3 mdbl	10.3 mdbl	10.3 mdbl	10.3 mdbl	10.3 mdbl	10.3 mdbl
Number of demonstrations of Basa Njengo Magogo method for cleaner coal use in townships per year	Diversity of energy sources	50 000	40 000	50 000	30 000	40 000	40 000	40 000
Number of new solar water heating units installed per year <sup>1</sup>	Diversity of energy sources	500	500	–	500	1 500	6 600	9 300
Number of tons (measured per thousands) of coal produced at Vlakfontein by the African Exploration Mining and Finance Corporation <sup>2</sup>	Security of supply	–	–	–	750	1 200	1 200	1 200

1. The target for 2010/11 was not achieved due to delays in the implementation process.

2. As the mining activity in Vlakfontein only started in February 2011, there was no activity in prior years.

## Programmes/activities/objectives

**Table 29.15 Central Energy Fund**

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Effectively manage the finances of CEF	658 177	473 239	471 390	221 175	331 955	333 736	374 409
Provide corporate services to subsidiaries	1 452 733	1 044 536	1 040 454	2 162 907	2 568 293	2 548 474	3 204 311
Manage and develop projects	7 533 526	6 932 694	7 670 380	9 125 714	10 731 818	13 911 548	15 392 579
Develop human capital	3 174 993	2 477 103	2 508 772	1 257 726	1 407 606	1 562 510	1 629 888
<b>Total expense</b>	<b>12 819 428</b>	<b>10 927 572</b>	<b>11 690 996</b>	<b>12 767 522</b>	<b>15 039 673</b>	<b>18 356 267</b>	<b>20 601 187</b>

The Central Energy Fund had a total budget of R12.8 billion in 2011/12, of which 71.5 per cent was used for managing and developing projects.

## Savings and cost effectiveness measures

The fund has implemented systems to control and contain operational costs. Since 2009/10, more effective cost management strategies have ensured that operational costs are held below budget.

## Expenditure estimates

**Table 29.16 Central Energy Fund**

Statement of financial performance				Revised estimate	Medium-term estimate		
R thousand	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Revenue</b>							
<b>Non-tax revenue</b>	<b>15 133 895</b>	<b>10 561 786</b>	<b>12 672 270</b>	<b>14 973 848</b>	<b>16 477 182</b>	<b>18 049 662</b>	<b>20 550 353</b>
Sale of goods and services other than capital assets	12 360 861	8 559 043	11 067 630	12 924 428	15 753 648	17 555 783	20 255 838
<i>of which:</i>							
<i>Sales by market establishments</i>	12 360 861	8 559 043	11 067 630	12 435 278	15 753 648	17 555 783	20 255 838
<i>Other sales</i>	–	–	–	489 150	–	–	–
<i>Other non-tax revenue</i>	2 773 034	2 002 743	1 604 640	2 049 420	723 534	493 879	294 515
<b>Total revenue</b>	<b>15 133 895</b>	<b>10 853 453</b>	<b>12 947 250</b>	<b>14 973 848</b>	<b>16 477 182</b>	<b>18 049 662</b>	<b>20 550 353</b>
<b>Expenses</b>							
<b>Current expenses</b>	<b>12 790 410</b>	<b>10 926 719</b>	<b>11 681 795</b>	<b>12 767 522</b>	<b>15 039 672</b>	<b>18 356 267</b>	<b>20 601 187</b>
Compensation of employees	2 227 000	1 323 972	1 392 223	1 168 180	1 313 583	1 463 315	1 525 436
Goods and services	9 827 993	8 399 783	8 563 346	10 697 402	12 718 474	14 212 612	15 884 925
Depreciation	441 013	764 376	1 266 871	883 109	888 122	2 570 750	3 052 443
Interest, dividends and rent on land	294 404	438 588	459 355	18 831	119 494	109 589	138 383
<b>Total expenses</b>	<b>12 819 428</b>	<b>10 927 572</b>	<b>11 690 996</b>	<b>12 767 522</b>	<b>15 039 672</b>	<b>18 356 267</b>	<b>20 601 187</b>
<b>Surplus / (Deficit)</b>	<b>2 314 467</b>	<b>(74 119)</b>	<b>1 256 254</b>	<b>2 206 326</b>	<b>1 437 510</b>	<b>(306 605)</b>	<b>(50 834)</b>
<b>Statement of financial position</b>							
Carrying value of assets	6 364 225	6 972 324	7 478 260	7 975 084	13 765 375	16 905 676	18 086 562
<i>of which:</i>							
<i>Acquisition of assets</i>	1 992 001	1 445 622	243 072	1 379 929	6 678 413	5 711 051	4 233 329
Investments	725 441	674 410	740 226	739 885	2 884 328	4 290 037	7 047 183
Inventory	3 567 227	3 480 138	3 637 462	3 812 494	2 064 214	2 064 214	2 064 214
Receivables and prepayments	2 287 430	3 616 457	2 185 333	2 542 207	3 212 013	3 425 217	2 661 881
Cash and cash equivalents	16 143 359	15 303 085	17 531 732	18 662 736	7 924 214	4 884 418	3 445 164
Non-current assets held for sale	2 052 302	988 186	1 168 838	448 377	773 402	775 457	774 269
Taxation	1 075 904	1 299 183	424 161	32 260	–	–	–
Derivatives financial instruments	14 341	287 145	418 602	26 923	–	–	–
<b>Total assets</b>	<b>32 230 229</b>	<b>32 620 928</b>	<b>33 584 614</b>	<b>34 239 966</b>	<b>30 623 546</b>	<b>32 345 019</b>	<b>34 079 273</b>
Accumulated surplus/(deficit)	23 359 070	23 285 804	24 532 857	26 739 183	28 176 693	28 483 298	28 534 132
Capital and reserves	116 915	(80 804)	(46 963)	107 857	(77 252)	(77 252)	(77 252)
Borrowings	419 284	431 494	263 274	206 980	1 641 831	1 307 513	895 630
Finance lease	–	–	–	–	34 204	–	–
Deferred income	5 904	48 821	3 476	13 769	13 769	13 769	13 769
Trade and other payables	2 001 991	3 140 799	1 580 301	1 233 632	1 411 923	1 215 937	1 388 038
Taxation	1 068 264	960 952	28 268	41 004	–	–	–
Provisions	5 405 494	5 010 062	7 232 851	6 537 974	6 537 973	6 537 973	6 537 973
<b>Total equity and liabilities</b>	<b>32 376 922</b>	<b>32 797 128</b>	<b>33 594 064</b>	<b>34 880 399</b>	<b>37 739 141</b>	<b>37 481 238</b>	<b>37 292 290</b>

## Expenditure trends

The spending focus over the medium term will be on developing and managing energy efficiency projects, and supporting subsidiaries. As expenditure grows, solar water heating units installed will increase from 500 in 2011/12 to 9 300 in 2014/15.

The fund derives its revenue from the sale of energy products, services rendered, royalty receipts and tank rentals. Revenue decreased from R15.1 billion in 2008/09 to R15 billion in 2011/12, at an average annual rate of 0.4 per cent, due to weak economic conditions experienced in 2009/10. Over the MTEF period, revenue is expected to increase to R20.6 billion in 2014/15, at an average annual rate of 11.1 per cent. The projected growth is due to increases in the oil price and demand for storage.

Expenditure decreased from R12.8 billion in 2008/09 to R12.8 billion in 2011/12, at an average annual rate of 0.1 per cent, because the rollout of projects following the implementation of the renewable energy feed in tariff was delayed. Spending is expected to increase to R20.6 billion over the medium term, at an average annual rate of 17.3 per cent. The increase over the medium term relates to the fund's aim to invest in energy infrastructure and develop renewable and alternative energy sources such as a solar park in Upington.

The fund will incur R75 million in 2012/13 on the solar park project, with costs including consulting, legal fees, and travel and subsistence. As a result, cash and cash equivalents are expected to decrease from R18.7 billion in 2011/12 to R3.4 billion in 2014/15 to finance investment in infrastructure, which is expected to increase the carrying value of assets from R8 billion in 2011/12 to R18.1 billion in 2014/15. Expenditure on consultants over the medium term is expected to decrease from R161.8 million in 2011/12 to R135.3 million in 2014/15 due to the finalisation of the first phase of the project's feasibility studies.

## Personnel information

**Table 29.18 Central Energy Fund**

	Personnel post status as at 30 September 2011			Number of personnel posts filled / planned for on funded establishment						
	Number of posts on approved establishment	Number of funded posts	Number of vacant posts	Actual			Mid-year <sup>1</sup> 2011/12	Medium-term estimate		
				2008/09	2009/10	2010/11		2012/13	2013/14	2014/15
Executive board members	1	1	–	1	1	1	2	2	2	2
Executive management	5	5	–	5	4	5	9	10	10	10
Senior management	5	5	1	5	5	5	10	11	11	11
Middle management	5	5	–	5	5	5	26	27	27	27
Professionals	7	7	2	3	4	5	9	12	12	12
Skilled	13	13	1	9	10	13	76	79	79	79
Semi-skilled	19	19	–	17	18	19	32	35	35	35
Very low skilled	17	17	–	15	16	17	21	21	21	21
<b>Total</b>	<b>72</b>	<b>72</b>	<b>4</b>	<b>60</b>	<b>63</b>	<b>70</b>	<b>185</b>	<b>197</b>	<b>197</b>	<b>197</b>
Compensation (R thousand)				2 227 000	1 323 972	1 392 223	1 168 180	1 313 583	1 463 315	1 525 436
Unit cost (R thousand)				37 117	21 015	19 889	6 314	6 668	7 428	7 743

1. As at 30 September 2011.

The fund had an establishment of 72 posts as at 30 September 2011. The number of posts filled increased from 60 in 2008/09 to 185 in 2011/12 as a result of the inclusion of most of the subsidiaries' employees, excluding PetroSA as part of the group's consolidated accounts. The number is expected to increase to 197 over the MTEF period. There are no vacancies. Expenditure on consultants is 13.9 per cent of expenditure on compensation of employees in 2011/12.

## National Nuclear Regulator

### Overview: 2008/09 – 2014/15

The National Nuclear Regulator derives its mandate from the National Nuclear Regulator Act (1999) and is responsible for providing for the protection of persons, property, and the environment against nuclear damage.

The regulator monitors and enforces regulatory safety standards for the achievement of safe operating conditions, prevention of nuclear accidents and mitigation of nuclear accident consequences. The regulator grants nuclear authorisation and exercises regulatory control related to safety over the site, design, operation and manufacture of nuclear component parts; and the decontamination, decommissioning and closure of nuclear installations. The facilities and actions regulated by the entity are diverse and include the operation of nuclear reactors, research reactors, nuclear technology applications and radio waste management. The regulator engages in a series of compliance assurance activities through a combination of inspections, audits and reviews of the conditions of licences, and that these conditions are effectively complied with and that they achieve the required level of safety.

In 2011/12, the regulator undertook an International Atomic Energy Agency self-assessment. This highlighted gaps in the regulatory processes, for which recommendations were made. The regulator is in the process of restructuring its operations which, among others, is to gear itself to effectively regulate the changing nature and expansion of the industry.

The regulator's strategic objectives over the medium are to: develop an effective regulatory oversight and framework to assure nuclear safety and security; strengthen stakeholder relations; create a high performance culture; ensure financial viability and sustainability of the organisation; develop and maintain sound organisational infrastructure; enhance good governance; and ensure effective human capital management.

Over the medium term, the regulator will: develop and implement a programme for regulating the fuel cycle, enhance regulatory programmes and undertake safety focused research, roll out stakeholder engagement programmes, establish internal service standards to create a high performance culture, develop a funding model to ensure financial viability and sustainability of the organisation, implement a knowledge management system, and implement best practice management structures.

## Performance

The regulator will measure itself against the provision of accurate financial information for the projects to the International Atomic Energy Agency, safety guarantees in the use of nuclear sites, improved regulatory controls that are required for emergency plans, and the number of reports from engagement with other state agencies.

Between 2008/09 and 2010/11, the turnaround time for reviewing the authorisation applications for certificate of registration has been maintained at 90 days. In 2008/09, the turnaround time to grant the certificate of exemption was issued in 180 days. Between 2008/09 and 2011/12, the nuclear regulator issued a nuclear vessel licence in 180 days. Over the MTEF period, turnaround times for certificates of regulation, certificates of exemptions and nuclear vessel licences are expected to remain constant. Stakeholder awareness of the regulator's activities is expected to increase from 60 per cent in 2011/12 to 74 per cent in 2014/15.

The reduction in current and projected inspections over the medium term to 341 is as a result of the adoption of the group inspections approach. The team approach is deemed to be more effective and comprehensive than deploying a single inspector. The emphasis is thus on the quality of inspections, as opposed to quantity. This approach was motivated by the often large number of facilities and actions under one certificate of registration.

## Selected performance indicators

**Table 29.19 National Nuclear Regulator**

Indicator	Programme/Activity/Objective	Past			Current	Projections		
		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Number of days taken to issue certificate of registration per year	Standards, authorisations, reviews and assessments	90 days	90 days	90 days	90 days	90 days	90 days	90 days
Number of days taken to issue certificate of exemption per year		180 days	180 days	180 days	180 days	180 days	180 days	180 days
Number of days taken to issue nuclear vehicle licence per year		180 days	180 days	180 days	180 days	180 days	180 days	180 days
Number of compliance assurance inspections per year	Compliance assurance and enforcement	609	441	507	341	341	341	341
Number of compliance assurance inspections relating to naturally occurring radioactive material per year		–	190	260	214	214	214	214
Number of compliance assurance inspections relating to nuclear technology and waste products per year		–	100	202	76	76	76	76
Number of compliance assurance inspections conducted at the Koeberg Nuclear Power Station per year		–	57	45	51	51	51	51

1. Disaggregated data by type of compliance assurance inspection is not available for 2008/09.

## Programmes/activities/objectives

**Table 29.20 National Nuclear Regulator**

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Review and assess the authorisation applications and associated safety cases (including the Dedicated Isotope Production Reactor project)	-	-	-	-	7 723	8 695	9 210
Review safety assessments and other safety case submissions related to authorisation facilities	-	-	-	-	32 698	36 813	39 159
Implement the NNR specific SAT plan	-	-	-	-	4 217	4 627	4 901
Develop and implement a nuclear safety strategy	-	-	-	-	5 258	5 769	6 110
Undertake regulatory research that ensures that the regulatory regime is strengthened	-	-	-	-	1 451	1 592	1 687
Ensure that the NNR is positioned to respond to initiatives relating to nuclear expansion	-	-	-	-	1 451	1 592	1 687
Conduct inspections, audits, investigations and taking of enforcement action for identified non-compliance	-	-	-	-	21 774	25 902	27 457
Develop and implement a harmonised compliance assurance and enforcement program that is consistent, effective and efficient	-	-	-	121 109	6 207	6 687	7 081
Other objectives	94 195	104 625	112 266	-	56 176	62 149	69 838
<b>Total expense</b>	<b>94 195</b>	<b>104 625</b>	<b>112 266</b>	<b>121 109</b>	<b>136 956</b>	<b>153 826</b>	<b>167 129</b>

The National Nuclear Regulator had a total budget of R121.1 million in 2011/12, of which 70.2 per cent was spent on compensation of employees.

## Savings and cost effectiveness measures

The regulator has implemented systems to control and contain operational costs. More effective cost management strategies have ensured that operational costs are held below budget. Savings of R4.1 million over the MTEF period have been identified as follows: R1.1 million, R1.3 million and R1.6 million.

## Expenditure estimates

**Table 29.21 National Nuclear Regulator**

Statement of financial performance				Revised estimate	Medium-term estimate		
R thousand	Audited outcome			2011/12	2012/13	2013/14	2014/15
	2008/09	2009/10	2010/11				
<b>Revenue</b>							
<b>Non-tax revenue</b>	<b>74 268</b>	<b>90 333</b>	<b>94 649</b>	<b>84 581</b>	<b>106 044</b>	<b>122 149</b>	<b>132 746</b>
Sale of goods and services other than capital assets	65 471	84 882	89 856	82 081	102 115	120 361	132 196
<i>of which:</i>							
Administration fees	64 513	84 127	89 505	79 726	102 115	120 361	132 196
Sales by market establishments	958	755	351	2 355	-	-	-
Other non-tax revenue	8 797	5 451	4 793	2 500	3 929	1 788	550
<b>Transfers received</b>	<b>20 333</b>	<b>23 793</b>	<b>19 954</b>	<b>35 430</b>	<b>30 912</b>	<b>31 677</b>	<b>34 384</b>
<b>Total revenue</b>	<b>94 601</b>	<b>114 126</b>	<b>114 603</b>	<b>120 011</b>	<b>136 956</b>	<b>153 826</b>	<b>167 130</b>
<b>Expenses</b>							
<b>Current expenses</b>	<b>94 195</b>	<b>104 625</b>	<b>112 266</b>	<b>121 109</b>	<b>136 956</b>	<b>153 826</b>	<b>167 130</b>
Compensation of employees	58 241	74 751	74 083	85 042	105 654	111 982	122 200
Goods and services	33 898	27 937	35 209	31 830	26 107	36 508	39 453
Depreciation	1 782	1 820	2 678	4 216	5 183	5 323	5 463
Interest, dividends and rent on land	274	117	296	21	12	13	13
<b>Total expenses</b>	<b>94 195</b>	<b>104 625</b>	<b>112 266</b>	<b>121 109</b>	<b>136 956</b>	<b>153 826</b>	<b>167 130</b>
<b>Surplus / (Deficit)</b>	<b>406</b>	<b>9 501</b>	<b>2 337</b>	<b>(1 098)</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Expenditure trends

The regulator's spending focus over the medium term is on reviewing safety assessments and conducting compliance assurance inspections, audits, investigations and taking enforcement action for identified non-compliance.

Revenue is generated mainly from authorisation fees, state grants and donations. Revenue increased from R94.6 million in 2008/09 to R120 million in 2011/12, at an average annual rate of 8.3 per cent, and is expected to increase to R167.1 million over the medium term, at an average annual rate of 11.7 per cent. The increases in both periods relate to an increase in authorisation fees, mainly due to the new approach the regulator has developed for the compliance, assurance and enforcement division. The transfer from the department is expected to decrease marginally from R35.4 million in 2011/12 to R34.4 million in 2014/15, at an average annual rate of 1 per cent.

Expenditure increased from R94.2 million in 2008/9 to R121.1 million in 2011/12, at an average annual rate of 8.7 per cent, due to increase in building repairs and maintenance. Expenditure on compensation of employees increased from R58.2 million in 2008/09 to R85 million in 2011/12, at an average annual rate of 13.4 per cent, due to the payment of retrenchment packages. Capital expenditure has increased from R2.3 million in 2008/09 to R110.8 million in 2011/12, at an average annual rate of 264.9 per cent, funded through borrowing, which increased to R99 million in 2011/12. Over the MTEF period, spending is projected to increase from R121.1 million to R167.1 million, at an average annual rate of 11.3 per cent, due to growth in expenditure in compensation of employees from R85 million in 2011/12 to R122.2 million in 2014/15, at an average annual rate of 12.8 per cent, and an increase in expenditure on consultants from R2 million to R5.5 million in preparation for the nuclear expansion programme.

## Personnel information

**Table 29.22 National Nuclear Regulator**

	Personnel post status as at 30 September 2011			Number of personnel posts filled / planned for on funded establishment						
	Number of posts on approved establishment	Number of funded posts	Number of vacant posts	Actual			Mid-year <sup>1</sup>	Medium-term estimate		
				2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Executive board members	13	13	–	13	10	9	–	13	13	13
Executive management	1	1	–	1	1	1	–	1	1	1
Senior management	4	3	1	4	7	7	4	4	4	4
Middle management	25	25	–	10	10	12	10	25	28	28
Professionals	42	42	–	55	55	55	53	53	60	60
Skilled	6	6	–	21	22	14	21	7	7	8
Semi-skilled	9	9	–	–	–	–	–	9	9	9
Very low skilled	3	3	–	–	–	–	–	3	3	3
<b>Total</b>	<b>103</b>	<b>102</b>	<b>1</b>	<b>104</b>	<b>105</b>	<b>98</b>	<b>88</b>	<b>115</b>	<b>125</b>	<b>126</b>
Compensation (R thousand)				58 241	74 751	74 083	85 042	105 654	111 982	122 200
Unit cost (R thousand)				560	712	756	966	919	896	970

1. As at 30 September 2011.

The department had an establishment of 103 posts as at 30 September 2011. The number of posts filled decreased from 104 in 2008/09 to 88 in 2011/12, due to the personnel that were retrenched during restructuring. Over the MTEF period, the number of filled posts is expected to increase from 115 in 2012/13 to 126 in 2014/15 due to additional capacity needed to execute major projects that are under way. There are no vacancies in the current structure. Expenditure on consultants was 2.3 per cent of expenditure on compensation of employees in 2011/12.

## National Energy Regulator of South Africa

### Overview: 2008/09 – 2014/15

The National Energy Regulator of South Africa was established in terms of the National Energy Regulator Act (2004). Its mandate is to regulate the electricity, piped gas and petroleum pipelines industries in terms of the Electricity Regulation Act (2006), the Gas Act (2001) and the Petroleum Pipelines Act (2003).

To deliver on its mandate, the regulator has developed five strategic goals: to facilitate the security of supply to support sustainable economic development in South Africa, to facilitate investment in infrastructure in the energy industry to support sustainable economic development, to promote competitive and efficient functioning of the energy industry to sustain economic development, to facilitate affordability and accessibility in the energy industry to balance economic interests of all stakeholders in support of economic development, and to position and establish the regulator as a credible and reliable regulator in order to create regulatory certainty.

The regulator's main activities over the medium term are: issuing licences with conditions; setting and/or approving tariffs and prices; monitoring and enforcing compliance with licence conditions; dispute resolution including mediation, arbitration and the handling of complaints; gathering, storing and disseminating industry information; setting rules, guidelines and codes for the regulation of the electricity, gas and petroleum pipelines industries; determining conditions of supply and applicable standards; consulting with government departments and other bodies on industry development and any matter covered in the three industry acts; and expropriating land as necessary to meet the objectives of the relevant legislation.

### Performance

The regulator measures itself against the indicator of the accuracy of audits completed, ensuring that internal audits are adequate and effective. The number of technical distribution and transmission audits completed per year has remained constant between 2009/10 and 2011/12 at five audits conducted per year. The number of compliance audits completed for electricity remains unchanged at 20 over the seven year period. Compliance audits are conducted on electricity distribution systems and the targeted number of audits remains unchanged from 2008/09 to 2014/15. The number of generation audits completed on power stations per year has decreased from 12 in 2008/09 to 2 in 2011/12 due to a change in the audit approach by the regulator. Over the medium term, the regulator expects to conduct two generation audits per year.

### Selected performance indicators

Table 29.23 National Energy Regulator of South Africa

Indicator	Programme/Activity/Objective	Past			Current	Projections		
		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Number of new technical distribution and transmission audits completed per year	Electricity regulation	–	5	5	5	5	5	5
Number of new compliance audits completed per year	Electricity regulation	20	20	20	20	20	20	20
Number of new generation audits completed on power stations per year	Electricity regulation	12	2	2	2	2	2	2

### Programmes/activities/objectives

Table 29.24 National Energy Regulator of South Africa

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Electricity division	71 838	87 377	100 023	124 464	139 056	146 105	109 265
Piped gas division	19 158	29 675	26 673	45 065	50 348	52 900	70 920
Petroleum pipelines division	28 735	28 576	40 009	45 065	41 901	42 556	70 920
<b>Total expense</b>	<b>119 731</b>	<b>145 628</b>	<b>166 705</b>	<b>214 594</b>	<b>231 305</b>	<b>241 561</b>	<b>251 105</b>

The National Energy Regulator of South Africa had a total budget of R214.6 million in 2011/12, of which 53.8 per cent was used for goods and services.

### Savings and cost effective service delivery

The regulator has implemented systems to control and contain operational costs. More effective cost management strategies have ensured that operational costs are held below budget.

### Expenditure estimates

**Table 29.25 National Energy Regulator of South Africa**

Statement of financial performance				Revised estimate 2011/12	Medium-term estimate		
R thousand	Audited outcome				2012/13	2013/14	2014/15
	2008/09	2009/10	2010/11				
<b>Revenue</b>							
<b>Non-tax revenue</b>	<b>116 349</b>	<b>138 114</b>	<b>164 344</b>	<b>154 909</b>	<b>219 526</b>	<b>241 535</b>	<b>258 088</b>
Sale of goods and services other than capital assets	110 031	127 027	155 197	147 409	211 926	233 835	250 288
<i>of which:</i>							
<i>Sales by market establishments</i>	110 031	127 027	155 197	147 409	211 926	233 835	250 288
<i>Other non-tax revenue</i>	6 318	11 087	9 147	7 500	7 600	7 700	7 800
<b>Total revenue</b>	<b>116 349</b>	<b>138 114</b>	<b>164 344</b>	<b>154 909</b>	<b>219 526</b>	<b>241 535</b>	<b>258 088</b>
<b>Expenses</b>							
<b>Current expenses</b>	<b>119 731</b>	<b>145 628</b>	<b>166 705</b>	<b>214 593</b>	<b>231 305</b>	<b>241 561</b>	<b>251 105</b>
Compensation of employees	56 838	79 690	95 059	95 048	108 042	112 498	116 247
Goods and services	55 904	63 600	71 646	115 542	113 225	120 755	125 756
Depreciation	3 729	962	–	4 003	10 038	8 308	9 102
Interest, dividends and rent on land	3 260	1 376	–	–	–	–	–
<b>Total expenses</b>	<b>119 731</b>	<b>145 628</b>	<b>166 705</b>	<b>214 593</b>	<b>231 305</b>	<b>241 561</b>	<b>251 105</b>
<b>Surplus / (Deficit)</b>	<b>(3 382)</b>	<b>(7 514)</b>	<b>(2 361)</b>	<b>(59 684)</b>	<b>(11 779)</b>	<b>(26)</b>	<b>6 983</b>

### Expenditure trends

Over the medium term, the regulator will continue to focus on ensuring effective economic regulation, particularly in the electricity sector, by developing appropriate regulatory frameworks. Revenue will be used to assist in stabilising the performance on the entity over the MTEF period.

The regulator mainly derives its revenue from imposing prescribed levies on the regulated industries and through interest on investments. Levies are charged by the regulator to recover the costs involved in administering regulation in the electricity, gas and petroleum pipelines. Levies are annually based on a cost allocation methodology, which allocates direct and indirect costs involved in regulating each industry. Revenue increased from R116.3 million in 2008/09 to R154.9 million in 2011/12, at an average annual rate of 10 per cent, and is expected to increase to R258.1 million in 2014/15, at an average annual rate of 18.5 per cent. The increase in both periods is mainly due to average annual revenue increases from the electricity levy of 23.4 per cent, and increases in piped gas and petroleum levy income.

Expenditure rose from R119.7 million in 2008/09 to R214.6 million in 2011/12, at an average annual rate of 21.5 per cent, and is expected to grow to R251.1 million over the medium term, at an average annual rate of 5.4 per cent. This increase in both periods is attributable to the increase in expenditure on compensation of employees, which grew from R56.8 million in 2008/09 to R95 million in 2011/12, at an average annual rate of 18.7 per cent, and to R116.2 million over the medium term, at an average annual rate of 6.9 per cent, due to growth in the organisational structure and the provision for inflation related adjustments to salaries.

Expenditure on consultants is expected to increase to R26.3 million in 2011/12 as a result of a regulatory benchmarking study undertaken by the regulator and the implementation of the regulatory accounting and reporting framework. Over the medium term, spending on consultants is expected to reach R27.7 million in 2014/15, increasing at an average annual rate of 1.5 per cent, as the implementation of the regulatory accounting framework nears an end.



## Personnel information

**Table 29.26 National Energy Regulator of South Africa**

	Personnel post status as at 30 September 2011			Number of personnel posts filled / planned for on funded establishment						
	Number of posts on approved establishment	Number of funded posts	Number of vacant posts	Actual			Mid- year <sup>1</sup>	Medium-term estimate		
				2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Executive board members	4	4	–	4	4	4	4	4	4	4
Senior management	6	6	2	2	2	4	5	7	7	7
Professionals	73	73	14	59	59	59	57	65	65	65
Skilled	67	67	7	60	60	60	60	66	66	66
Semi-skilled	25	25	4	22	22	22	22	33	33	33
Very low skilled	2	2	–	2	2	2	2	2	2	2
<b>Total</b>	<b>177</b>	<b>177</b>	<b>27</b>	<b>149</b>	<b>149</b>	<b>151</b>	<b>150</b>	<b>177</b>	<b>177</b>	<b>177</b>
Compensation (R thousand)				56 838	79 690	95 059	95 048	108 042	112 498	116 247
Unit cost (R thousand)				381	535	630	634	610	636	657

1. As at 30 September 2011.

As at 30 September 2011, the regulator had a staff complement of 177 posts, 4 of which are at board level, 6 in senior management and 73 are professionals. The number of post filled increased from 149 in 2008/09 to 150 in 2011/12. Over the MTEF period, the number of filled posts is expected to increase to 177. Expenditure on consultants was 27.9 per cent of expenditure on compensation of employees in 2011/12.

## South African National Energy Development Institute

### Overview: 2008/09 – 2014/15

The National Energy Act (2008) makes provision for the establishment of The South African National Energy Development Institute as a successor to the South African National Energy Research Institute and the National Energy Efficiency Agency. The institute was listed as a new schedule 3A public entity on 31 December 2010, and came into operation on 1 April 2011.

The mandate of the South African National Energy Development Institute was to stimulate innovation in energy research and development, transform the gender and race profile of researchers in the sector, and improve South Africa's competitiveness in energy research internationally.

The work and research previously undertaken by the South African National Energy Research Institute and the National Energy Efficiency Agency will now be done within divisions in the newly formed institute.

The South African National Energy Research Institute receives its grant from the Department of Science and Technology, while the South African National Energy Development Institute receives its grant from the Department of Energy. The Department of Science and Technology makes a contribution to the centre for carbon capture and storage, the hub of energy efficiency and demand side management, and the centre for energy systems and analysis.

The institute's key activities include energy research, targeted skills development, information dissemination and the promotion of cooperation with key stakeholders. Its research agenda has nine themes: energy infrastructure optimisation, energy efficiency and demand side management, productive use of energy, impact of energy use on the environment, renewable energy, alternative sources of energy, cleaner fossil fuels, energy modelling, and energy policy and planning.

To contribute to alleviating skills shortages in the energy sector, the institute has supported postgraduate research students, promoted career development and assisted internationally renowned researchers to return to or remain in South Africa. The institute specifically focused on promoting the participation of historically disadvantaged South Africans and women in the energy sector. However the institute was not in a position to offer bursaries in 2009/10 and thus the human capital development function was retained by the Department of Science and Technology with effect from 1 April 2010.

Over the medium term, the South African National Energy Development Institute will focus on research and promoting energy efficiency initiatives and demand side management. It is expected to build on its predecessor's work by continuing to develop an energy research and development knowledge management system. It will also emphasise developing cooperative research and development activities with government, universities, the private sector, non-governmental organisations, other countries, and regional and international organisations.

## Performance

Energy efficiency and demand side management was a key research and development theme for South Africa, and the University of Pretoria was awarded the bid to host the national hub of energy efficiency and demand side management, which was launched in 2008/2009. The hub's responsibility is to develop and enhance national capacity in energy efficiency, including fuel switching to renewable technologies and demand side management. In 2010/11, there were 20 postgraduates studying in the energy efficiency demand side management postgraduate programme. The course attracted 11 registrations and 29 research projects were undertaken. The number of hybrid renewable energy projects is expected to increase from six in 2011/12 to nine in 2014/15 to facilitate the access of low income earners to forms of efficient energy use.

## Selected performance indicators

**Table 29.27 South African National Energy Development Institute**

Indicator	Programme/Activity/Objective	Past			Current	Projections		
		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Number of new research projects funded per year	Research and development	3	-	-	5	5	5	5
Number of new research projects completed per year	Research and development	16	13	0	0	0	2	3
Number of additional research papers published per year	Research and development	7	10	15	5	5	5	5
Number of new bursaries provided per year	Capacity building	27	-	0	6	4	4	4
Number of new bursaries provided to historically disadvantaged individuals per year	Capacity building	11	-	0	0	4	4	4
Number of energy efficiency tax applications processed per year	Receive, process, review and report on applications received for energy efficiency tax incentives 12i and 12l	-	-	3	35	40	50	100
Number of energy efficiency databases completed per year	Overall administration of energy efficiency database, including measurement and verification	-	-	-	20% complete	70% complete	100% operational	-
Number of energy clusters developed per year	Increase in the awareness of the working for energy programme	-	-	-	6	7	7	7
Number of hybrid renewable energy projects per year	Working for Energy programme	-	-	-	6	7	8	9

## Programmes/activities/objectives

**Table 29.28 South African National Energy Development Institute**

R thousand	Audited outcome			Revised estimate	Medium-term estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Develop human capacity and invest in relevant energy research and development	39 830	35 344	36 997	51 592	62 545	53 488	48 592
To effectively and efficiently manage the energy entity	1 938	2 103	2 091	2 324	2 556	2 812	3 093
<b>Total expense</b>	<b>41 768</b>	<b>37 447</b>	<b>39 088</b>	<b>53 916</b>	<b>65 101</b>	<b>56 300</b>	<b>51 685</b>

The South African National Energy Development Institute had a total budget of R53.9 million in 2011/12, of which 95.7 per cent was used to develop human capacity and invest in relevant energy research and development.

### Savings and cost effectiveness measures

No savings were effected. However, the institute will continuously monitor cost performance on a monthly basis to identify costs that can be reduced.

### Expenditure estimates

**Table 29.29 South African National Energy Development Institute**

Statement of financial performance				Revised estimate	Medium-term estimate		
R thousand	Audited outcome			2011/12	2012/13	2013/14	2014/15
	2008/09	2009/10	2010/11				
<b>Revenue</b>							
<b>Non-tax revenue</b>	<b>2 847</b>	<b>1 853</b>	<b>1 313</b>	<b>1 291</b>	<b>9 000</b>	-	-
<i>Other non-tax revenue</i>	2 847	1 853	1 313	1 291	9 000	-	-
<b>Transfers received</b>	<b>31 077</b>	<b>32 500</b>	<b>25 654</b>	<b>52 625</b>	<b>56 100</b>	<b>56 300</b>	<b>51 685</b>
<b>Total revenue</b>	<b>33 924</b>	<b>34 353</b>	<b>26 967</b>	<b>53 916</b>	<b>65 100</b>	<b>56 300</b>	<b>51 685</b>
<b>Expenses</b>							
<b>Current expenses</b>	<b>41 768</b>	<b>37 074</b>	<b>39 088</b>	<b>53 620</b>	<b>65 100</b>	<b>56 300</b>	<b>51 685</b>
Compensation of employees	12 721	12 571	14 793	29 676	21 000	22 113	23 108
Goods and services	28 137	22 732	20 432	21 330	43 862	34 187	28 287
Depreciation	625	547	392	864	238	-	290
Interest, dividends and rent on land	285	1 224	3 471	1 750	-	-	-
<b>Total expenses</b>	<b>41 768</b>	<b>37 447</b>	<b>39 088</b>	<b>53 916</b>	<b>65 100</b>	<b>56 300</b>	<b>51 685</b>
<b>Surplus / (Deficit)</b>	<b>(7 844)</b>	<b>(3 094)</b>	<b>(12 121)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

### Expenditure trends

Over the medium term, the South African National Energy Development Institute will focus on setting up operations and implementing projects in the area of energy efficiency. Expenditure over the MTEF period stabilises and energy efficiency tax applications processed are set to increase from 35 in 2011/12 to 100 in 2014/15.

The institute generates revenue from a transfer from the departments of energy, and science and technology. Revenue increased from R33.9 million in 2008/09 to R53.9 million in 2011/12, at an average annual rate of 16.7 per cent, and is expected to decrease to R51.7 million in 2014/15, at an average annual rate of 1.4 per cent. The increase between 2008/09 and 2011/12 is mainly due to an additional allocation of R25 million in 2011/12 from the Department of Energy to create a sustainable and functional baseline for the entity to fund its operational activities, while the projected decrease over the medium term is as a result of the discontinuation of transfers from the Department of Science and Technology.

Expenditure increased from R41.8 million in 2008/09 to R53.9 million in 2011/12, at an average annual rate of 8.9 per cent, due to an increase in funding disbursed to research projects during the initial stage of institute's existence. The growth on compensation of employees from R12.7 million in 2008/09 to R29.7 million in 2011/12 is due to the expansion of the institute. Over the medium term, expenditure is expected to decrease to R51.7 million, at an average annual rate of 1.4 per cent, as the South African National Energy Development Institute will have internal capacity and reduce its reliance on external consultants.

## Personnel information

**Table 29.30 South African National Energy Development Institute**

	Personnel post status as at 30 September 2011			Number of personnel posts filled / planned for on funded establishment						
	Number of posts on approved establishment	Number of funded posts	Number of vacant posts	Actual			Mid- year <sup>1</sup>	Medium-term estimate		
				2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Executive board members	6	6	1	7	7	6	6	10	10	10
Executive management	1	1	–	1	1	1	1	1	1	1
Senior management	4	4	–	3	3	4	4	5	5	5
Middle management	2	2	–	2	2	2	2	3	3	3
Professionals	12	12	–	11	16	14	31	34	37	38
<b>Total</b>	<b>25</b>	<b>25</b>	<b>1</b>	<b>24</b>	<b>29</b>	<b>27</b>	<b>44</b>	<b>53</b>	<b>56</b>	<b>57</b>
Compensation (R thousand)				12 721	12 571	14 793	29 676	21 000	22 113	23 108
Unit cost (R thousand)				530	433	548	674	396	395	405

1. As at 30 September 2011.

The institute had an establishment of 25 posts as at 30 September 2011. The number of posts filled increased from 24 in 2008/09 to 44 in 2011/12. Over the MTEF period, the number of filled posts is expected to increase from 53 in 2012/13 to 57 in 2014/15 due to the appointment of additional staff to assist with financial matters and research.

## Additional tables

**Table 29.A Summary of expenditure trends and estimates per programme and economic classification**

Programme	Appropriation		Audited outcome	Appropriation			Revised estimate
	Main	Adjusted		Main	Additional	Adjusted	
R thousand	2010/11		2010/11	2011/12			2011/12
Administration	104 205	125 679	121 602	167 471	8 869	176 340	156 537
Energy Policy and Planning	1 540 655	1 548 635	1 528 451	1 546 958	(2 250)	1 544 708	1 540 984
Energy Regulation	467 822	488 442	474 132	554 697	18 734	573 431	499 961
National Electrification Programme	2 823 345	2 884 545	2 781 519	3 207 555	57 000	3 264 555	3 264 209
Nuclear Energy and Regulation	599 363	601 363	599 682	613 221	28 654	641 875	637 065
<b>Total</b>	<b>5 535 390</b>	<b>5 648 664</b>	<b>5 505 386</b>	<b>6 089 902</b>	<b>111 007</b>	<b>6 200 909</b>	<b>6 098 756</b>

### Economic classification

<b>Current payments</b>	<b>202 123</b>	<b>254 147</b>	<b>233 860</b>	<b>297 188</b>	<b>12 583</b>	<b>309 771</b>	<b>289 847</b>
Compensation of employees	132 994	147 928	142 826	181 718	1 599	183 317	177 759
Goods and services	69 129	106 219	91 034	115 470	10 984	126 454	112 088
<b>Transfers and subsidies</b>	<b>5 328 667</b>	<b>5 389 667</b>	<b>5 268 206</b>	<b>5 784 884</b>	<b>98 383</b>	<b>5 883 267</b>	<b>5 804 851</b>
Provinces and municipalities	1 240 104	1 240 104	1 253 382	1 376 612	–	1 376 612	1 376 612
Departmental agencies and accounts	81 536	81 536	81 536	46 096	21 192	67 288	55 530
Public corporations and private enterprises	4 006 698	4 067 698	3 933 209	4 361 827	77 191	4 439 018	4 372 698
Households	329	329	79	349	–	349	11
<b>Payments for capital assets</b>	<b>4 600</b>	<b>4 850</b>	<b>3 320</b>	<b>7 830</b>	<b>41</b>	<b>7 871</b>	<b>4 058</b>
Machinery and equipment	4 600	4 850	3 320	7 830	41	7 871	4 058
<b>Total</b>	<b>5 535 390</b>	<b>5 648 664</b>	<b>5 505 386</b>	<b>6 089 902</b>	<b>111 007</b>	<b>6 200 909</b>	<b>6 098 756</b>

**Table 29.B Summary of expenditure on training**

	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Compensation of employees (R thousand)	102 975	133 253	147 928	183 317	200 260	222 855	236 475
Training expenditure (R thousand)	1 642	2 067	2 103	3 059	3 004	3 343	3 547
Training as percentage of compensation	1.6%	1.6%	1.4%	1.7%	1.5%	1.5%	1.5%
Total number trained in department (head count)	84	84	–	163			
<i>of which:</i>							
Employees receiving bursaries (head count)	21	20	24	42			
Internships trained (head count)	84	84	55	65			
Households receiving bursaries (R thousand)	100 000	85 000	182 594	193 547	–	–	–
Households receiving bursaries (head count)	2	2	4	3			

**Table 29.C Summary of conditional grants to provinces and municipalities<sup>1</sup>**

R thousand	Audited outcome			Adjusted appropriation	Medium-term expenditure estimate		
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Conditional grants to municipalities</b>							
<b>Energy Regulation</b>							
Electricity demand side management grant	–	175 000	220 000	280 000	200 000	200 000	200 000
<b>National Electrification Programme</b>							
Integrated national electrification programme grant	589 139	899 554	1 033 382	1 096 612	1 151 443	1 314 772	1 487 658
<b>Total</b>	<b>589 139</b>	<b>1 074 554</b>	<b>1 253 382</b>	<b>1 376 612</b>	<b>1 351 443</b>	<b>1 514 772</b>	<b>1 687 658</b>

<sup>1</sup> Detail provided in the Division of Revenue Act (2012).

**Table 29.D Summary of donor funding**

Donor	Project	Departmental Programme name	Period of commitment	Amount committed	Main economic classification	Spending focus	Audited outcome		Estimate	Medium-term expenditure estimate			
							2008/09	2009/10		2010/11	2011/12	2012/13	2013/14
R thousand													
Foreign In cash													
Norway	Petroleum sector policy capacity building	Energy Policy and Planning	1 April 2008 - 31 March 2011	25 397	Public corporations and private enterprises	Develop petroleum sector policies, conduct further research and build capacity	14 891	5 849	2 142	-	-	-	-
Norway	Electricity sector policy capacity building	Energy Policy and Planning	1 April 2005 - 31 March 2008	89	Goods and services	Train and build capacity in nuclear fields	-	-	-	-	-	-	-
Denmark	Designated national authority capacity building	Energy Policy and Planning	1 April 2005 - 31 March 2008	1 001	Goods and services	Establish designated national authority	285	-	-	-	-	-	-
Denmark	Darling wind farm project	Energy Regulation	1 April 2008 - 31 March 2009	2 527	Goods and services	Develop Darling wind farm as part of a pilot project in the fields of energy	2 527	-	-	-	-	-	-
Switzerland	Support for energy efficiency monitoring and implementation project	Energy Regulation	01 August 2010- 31 December 2013	13 950	Goods and services	Support energy efficiency monitoring and implementation project	-	-	3 400	3 805	3 065	3 680	-
Local In cash													
European Union	Smart Metering Implementation Programme	Energy Regulation	1 April 2012- 31 March 2015	179 500	Goods and services	Support to the Renewable Energy Independent Power Producers Programme	-	-	-	-	71 800	71 800	35 900
<b>Total</b>				<b>222 464</b>			<b>17 703</b>	<b>5 849</b>	<b>5 542</b>	<b>3 805</b>	<b>74 865</b>	<b>75 480</b>	<b>35 900</b>

**Table 29.E Summary of expenditure on infrastructure**

Project name	Service delivery outputs	Current project stage	Total project cost	Audited outcome		Adjusted appropriation	Medium-term expenditure estimate						
				2008/09	2009/10		2010/11	2012/13	2013/14	2014/15			
R thousand													
<b>Infrastructure transfers to other spheres, agencies and departments</b>													
Integrated national electrification programme: Eskom	Provision of capital subsidies to Eskom to address electrification backlogs for permanently occupied residential dwellings, install bulk infrastructure and rehabilitate electrification infrastructure	Various	-	1 150 758	1 467 365	1 719 810	1 879 368	1 982 596	2 098 903				
Integrated national electrification programme: Municipalities	Provision of capital subsidies to municipalities to address electrification backlogs for permanently occupied residential dwellings, install bulk infrastructure and rehabilitate electrification infrastructure	Various	-	589 138	932 957	1 020 104	1 151 443	1 314 772	1 487 658				
Petronet (Transnet pipelines)	Construction of petroleum pipeline, branch lines and storage facilities	Various	-	-	-	1 500 000	1 500 000	-	-				
<b>Total</b>			-	<b>1 739 896</b>	<b>2 400 322</b>	<b>4 239 914</b>	<b>4 530 811</b>	<b>3 297 368</b>	<b>3 586 561</b>				



National Treasury  
**BUDGET 2012**  
*ESTIMATES OF NATIONAL EXPENDITURE*

Private Bag X115, Pretoria, 0001, **Tel:** +27 12 395 6697, **Fax:** +27 12 315 5126



**national treasury**

Department:  
National Treasury  
**REPUBLIC OF SOUTH AFRICA**