# **Energy**

### **Budget summary**

		2010	)/11		2011/12	2012/13
	Total to be	Current	Transfers and	Payments for		
R million	appropriated	payments	subsidies	capital assets	Total	Total
MTEF allocation						
Administration	104.2	99.3	0.3	4.6	127.7	106.9
Hydrocarbons and Energy Planning	1 558.6	58.6	1 500.0	-	1 564.6	1 571.2
Electricity, Nuclear and Clean Energy	408.8	44.2	364.6	-	513.7	116.5
Associated Services	3 463.8	_	3 463.8	-	3 533.6	3 744.0
Total expenditure estimates	5 535.4	202.1	5 328.7	4.6	5 739.6	5 538.7
Executive authority	Minister of Energy	, II.			"-	
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Executive authority Minister of Energy
Accounting officer Director-General of Energy
Website address www.dme.gov.za

#### **Aim**

The aim of the Department of Energy is to formulate and exercise oversight regarding the implementation of overall energy policies to ensure access to affordable and reliable energy by all South Africans and to promote environmentally friendly energy carriers.

## **Programme purposes**

#### **Programme 1: Administration**

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

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

**Purpose:** Integrated energy planning to promote the sustainable use of energy resources by developing appropriate policies and regulations that promote the efficient use of petroleum products, coal, gas and renewable energy sources.

#### **Programme 3: Electricity, Nuclear and Clean Energy**

**Purpose:** Monitor developments in the electricity, nuclear and clean energy sectors. Improve and implement appropriate policies governing these sectors. Oversee relevant public entities. Promote universal access to electricity by the broader South African population.

#### **Programme 4: Associated Services**

**Purpose:** Transfer, manage and monitor funds in support of the department's mandates to funded and nonfunded statutory bodies and organisations.

The Estimates of National Expenditure booklets for individual votes are available on <a href="www.treasury.gov.za">www.treasury.gov.za</a>. They provide more comprehensive coverage of vote specific information, particularly about goods and services, transfers, public entities and lower level institutional information.

### Strategic overview: 2006/07 - 2012/13

The Department of Energy was established in May 2009, as a result of the separation of the energy and minerals mandates of its predecessor, the Department of Minerals and Energy. The restructuring was informed by the increasing recognition of the importance of energy in achieving government priorities as well as the particular challenges faced by the sector. The Department of Energy is responsible for ensuring the security of energy supply within the country. It does this by undertaking integrated energy planning, regulating energy industries, and promoting universal access to electricity and the use of clean energy.

Between 2006/07 and 2009/10, emphasis was placed on developing and strengthening the legislative and regulatory framework governing the energy sector. In November 2008, the National Energy Act (2008) was promulgated. The act allows for improved coordination within the energy sector, and integrates the various energy planning initiatives. In relation to the hydrocarbons sector, the petroleum pipeline regulations were promulgated in 2007 and the licensing criteria for biofuels were published in 2008.

The department continues with the implementation of the Electricity Regulation Act (2006) by instituting appropriate interventions such as the drafting of regulations on the new generation capacity in August 2009. These regulations are aimed at creating an enabling environment for independent power producers to enter the electricity market.

#### Ensuring a security of energy supply

The department is planning to develop a draft integrated energy planning strategy by September 2010. The strategy is expected to outline the requisite processes, systems and structures that will lead to the development of a comprehensive integrated energy plan. A national integrated energy modelling system, which is required to provide statistical information for the integrated energy planning strategy, is planned for completion by 2012/13. The department is also planning to review the 1998 White Paper on the Energy Policy of the Republic of South Africa over the medium term.

#### Integrated resource plan

In September 2009, the department drafted the integrated resource plan and submitted it for Cabinet approval. However, Cabinet recommended that the department continue to engage in an extensive consultation process to ensure that all interested and affected parties are given ample opportunity to contribute in the finalisation of a comprehensive integrated resource plan. The department expects to finalise the plan and have it ready for implementation by June 2010. The aim of the plan is to develop an electricity generation matrix that outlines the energy mix from a combination of diverse sources, by also factoring in the implications of each source for the overall carbon footprint of the country.

#### National strategic fuel stocks policy

The energy security master plan for liquid fuel identified a number of capacity constraints and challenges faced by the petroleum sector in meeting energy demand. In responding to these challenges, the department plans to publish the national strategic fuel stocks policy for public comment by the end of 2010. This policy sets out the framework for the storage of fuel stocks by government as well as industry, to guide the necessary investment decisions within the liquid fuels sector. The department will continue to promote the expansion of refining capacity in the petroleum sector by engaging the relevant stakeholders.

#### Promoting clean and renewable energy sources

Promoting the development and usage of clean and renewable energy resources remains a key priority for the department. The renewable energy feed-in tariffs incentivise producers to invest in renewable energy by setting a tariff that covers the cost of generation plus a reasonable profit. The tariffs are set for a diverse array of renewable energy sources including wind, solar, biomass and small scale hydro.

Energy efficiency programmes are initiated based on the understanding that demand side management is generally less costly than supply side interventions within the electricity industry. The department has developed a solar water heating framework, which consolidates all solar water heating programmes currently run by various municipalities, public entities and the private sector. This framework also proposes a viable funding mechanism that will allow for the accelerated installation of 1 million solar water heaters by 2014. A

standard offer framework that provides incentives for interventions that improve energy efficiency in the domestic, industrial and commercial sectors is being developed and will be published in April 2010.

The department plans to embark on a process of reviewing the South African fuel specifications and standards to align them with global vehicle technology trends and environmental requirements. This will allow vehicle manufacturers to introduce engine technologies that are more fuel efficient and result in lower carbon emissions. The new fuel specifications will then be promulgated before the end of 2010/11 and guide the investment decision of companies in the motor industry.

#### Accelerated access to electricity

In terms of the 2007 community survey carried out by Statistics South Africa, out of the 9.2 million households, approximately 80 per cent are already electrified. The highest percentage of electrified households is found in Western Cape (86 per cent) and the lowest is in Eastern Cape (60 per cent). All existing clinics in the country have already been electrified. Since 2001/02, 4 957 schools have been electrified. The school electrification programme is planned for completion by 2010/11.

#### Nuclear energy

The department continues with the implementation of the 2008 nuclear energy policy. The implementation of the nuclear energy policy requires a coordinated approach due to the multifaceted nature and complexities of deploying nuclear energy. These include the decision relating to the deployment of new nuclear power stations, determining the funding and procurement frameworks, and the industrialisation and localisation strategy. The nuclear energy policy implementation committee, comprising of government departments and organisations in the nuclear sector, was established in 2009.

#### Regional electricity distributors

The department submitted its proposed amendments to the Constitution Seventeenth Amendment Bill to Cabinet in May 2009. The amendments contained in the bill are regarded as the key enabler in the establishment of regional electricity distributors.

#### Review of the liquid fuels charter

During this current financial year, the department will be conducting a comprehensive review, to determine the status of compliance with empowerment commitments that were made 10 years ago when the charter was agreed to. Following the outcome of the review a new empowerment framework will be developed and will be concluded during this financial year.

## Savings and cost effective service delivery

The department will implement cost containment initiatives over the MTEF period, having identified efficiency savings of R79.8 million in 2010/11, R137.7 million in 2011/12 and R146.1 million in 2012/13. These cost savings are mainly driven by reductions in expected expenditure on travel, consulting services, and venue and facilities hire. Over the MTEF period, significant savings of R320.3 million are derived from the *Associated Services* programme, which transfers funds to public entities. Transfer payments to the Electricity Distribution Holdings Company are reduced by R44 million and R31 million in 2011/12 and 2012/13 as the allocations from government are being phased out.

## **Selected performance indicators**

Table 28.1 Energy

Indicator	Programme		Past		Current		Projections	
		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Number of new petroleum retail site inspections per year	Hydrocarbons and Energy Planning	-	360	1 200	1 200	1 200	1 200	1 200
Number of additional petroleum licence applications accepted per year	Hydrocarbons and Energy Planning	13 300	13 300	13 580	13 800	15 000	15 150	15 300
Number of new operational integrated energy centres established per year	Hydrocarbons and Energy Planning	5	5	3	2	2	2	2
Number of additional households electrified per year	Associated Services	122 711	187 925	123 364	150 000	150 000	180 000	180 000
Number of additional schools electrified per year	Associated Services	372	948	712	1 313	-	-	-
Number of additional clinics electrified per year	Associated Services	10	112	-	_	-	-	-
Number of new bulk substations built per year	Associated Services	4	7	6	10	6	6	6
Number of additional substations upgraded per year	Associated Services	-	2	13	10	10	10	10
Amount of new medium voltage power lines constructed per year (km)	Associated Services	-	95	140	310	350	350	350
Amount of existing medium voltage power lines upgraded per year (km)	Associated Services	-	132	92	241	200	200	200
Number of additional temporary jobs created per year	Associated Services	4 729	5 035	5 298	4 500	4 500	4 500	4 500
Number of additional full time jobs created per year	Associated Services	526	559	589	500	500	500	500
Number of new learners working on electrification projects per year	Associated Services	1 389	1 599	2 368	800	800	800	800
Amount of expenditure on BEE and black women owned enterprises and SMMEs per year	Electricity, Nuclear and Clean Energy	R560m	R894 m	R924m	R933m	R933m	R933m	R933m
Number of new renewable energy projects subsidised per year	Electricity, Nuclear and Clean Energy	1	2	2	1	2	3	3
Number of new green certificates issued per year	Electricity, Nuclear and Clean Energy	_	-	-	_	2	5	5
Reduction in electricity demand per year (MW)	Electricity, Nuclear and Clean Energy	_	_	-	100	100	100	100

## **Expenditure estimates**

Table 28.2 Energy

Programme				Adjusted	Revised			
	Aud	ited outcome		appropriation	estimate	Medium-term	expenditure es	stimate
R million	2006/07	2007/08	2008/09	2009/10		2010/11	2011/12	2012/13
1. Administration	34.8	40.1	53.4	68.2	68.2	104.2	127.7	106.9
2. Hydrocarbons and Energy Planning	31.2	35.6	44.2	55.3	54.4	1 558.6	1 564.6	1 571.2
3. Electricity, Nuclear and Clean Energy	65.0	86.7	262.6	340.0	327.5	408.8	513.7	116.5
4. Associated Services	1 799.8	2 026.7	2 558.2	3 293.4	3 290.1	3 463.8	3 533.6	3 744.0
Total	1 930.8	2 189.1	2 918.4	3 756.9	3 740.2	5 535.4	5 739.6	5 538.7
Change to 2009 Budget estimate				14.6	(2.1)	1 400.2	1 279.1	1 571.5

Table 28.2 Energy (continued)

				Adjusted	Revised			
	Aud	ited outcome		appropriation	estimate	Medium-term	expenditure es	stimate
R million	2006/07	2007/08	2008/09	2009/10		2010/11	2011/12	2012/13
Economic classification								
Current payments	128.5	157.3	170.6	195.4	194.5	202.1	235.6	220.7
Compensation of employees	49.7	68.2	84.6	113.1	112.1	133.0	140.4	142.8
Goods and services	78.8	89.0	86.0	82.4	82.4	69.1	95.1	77.9
of which:								
Computer services	2.3	2.0	4.8	9.3	9.3	7.0	13.3	10.0
Consultants and professional services: Business and advisory services	32.8	29.4	8.2	1.7	1.7	7.3	7.2	6.4
Lease payments	5.6	5.0	4.5	0.7	0.7	7.2	10.7	6.1
Travel and subsistence	19.9	22.5	20.6	13.0	13.0	9.0	11.2	8.7
Transfers and subsidies	1 800.4	2 030.3	2 744.1	3 558.9	3 543.1	5 328.7	5 499.1	5 312.8
Provinces and municipalities	390.8	462.5	589.1	1 108.0	1 092.2	1 240.1	1 376.6	1 151.4
Departmental agencies and accounts	77.5	84.0	99.6	96.0	96.0	81.5	26.4	34.4
Public corporations and private enterprises	1 331.8	1 483.6	2 054.9	2 354.6	2 354.6	4 006.7	4 095.7	4 126.6
Payments for capital assets	1.9	1.6	3.4	2.6	2.6	4.6	5.0	5.3
Machinery and equipment	1.8	1.1	2.9	2.2	2.2	4.6	5.0	5.3
Land and sub-soil assets	0.1	_	_	_	_	_	_	_
Software and other intangible assets	0.0	0.5	0.6	0.4	0.4	_	_	_
Payments for financial assets	0.0	-	0.2	_	-	-	-	_
Total	1 930.8	2 189.1	2 918.4	3 756.9	3 740.2	5 535.4	5 739.6	5 538.7

Expenditure increased significantly from R1.9 billion in 2006/07 to R3.8 billion in 2009/10, at an average rate of 24.8 per cent. This is mainly due to the restructuring of the department and the need to build capacity to respond to challenging developments within the energy sector.

The Associated Services programme, which includes transfer payments to public entities and other organisations, accounts for 71 per cent of total departmental expenditure. Transfer payments increased substantially from R1.8 billion in 2006/07 to R3.3 billion in 2009/10, at an average annual rate of 22.5 per cent. This increase is attributable to the additional funding of R180 million allocated through the 2008/09 adjusted estimates process to cover costs related to the implementation of a dedicated programme to roll out compact fluorescent light bulbs. The funds are earmarked for transfers to Eskom and municipalities to roll out energy efficiency initiatives, including the demand side management programme. Additional funding was also allocated towards the integrated national electrification programme, the demand side management programme and the South African National Nuclear Energy Corporation in previous budget cycles.

An additional R4.5 billion has been allocated to Transnet Pipelines, spread as R1.5 billion per year over the MTEF period. These funds are earmarked for the construction of the national multipurpose petroleum pipelines to ensure the secure supply of petroleum products.

Expenditure on goods and services increased marginally from R78.8 million in 2006/07 to R82.4 million in 2009/10, at an average annual rate of 1.5 per cent compared to a projected decrease at an average annual rate of 1.9 per cent over the MTEF period.

Over the medium term, overall spending for the department is projected to grow from R3.8 billion in 2009/10 to R5.5 billion in 2012/13, at an average annual rate of 13.8 per cent. This strong growth is largely driven by an increase in transfer payments to public entities and the integrated national electrification programme. Additional funding of R27 million has been provided over the MTEF period to build organisational capacity building in the department to cater for expenditure for the new ministry and support staff, and to strengthen the department's

support service structure, including the appointment of staff in key positions such as the chief financial officer, and internal audit and human resources managers.

Spending in compensation of employees increased significantly from R49.7 million in 2006/07 to R113.1 million in 2009/10, at an average annual rate of 31.5 per cent. Over the same period, the total number of employees grew by 18.1 per cent, from 302 to 497, mainly due to the recruitment of senior management personnel. The *Hydrocarbons and Energy Planning* programme accounts for 36 per cent of all employees in the department. Over the MTEF period, expenditure in compensation of employees is expected to grow at an average annual rate of 8.1 per cent, driven by additional staff recruited for the corporate services function.

#### Infrastructure spending

The Department of Energy does not undertake the construction of infrastructure itself. It makes transfer payments to Eskom and municipalities through the integrated national electrification programme, which are used to fund infrastructure for the electrification of households, schools and clinics. Between 2006/07 and 2009/10, R6.9 billion was spent on the integrated national electrification programme. Of this, R4.5 billion was allocated to Eskom while the remaining R2.4 billion was transferred to municipalities.

In 2008/09, electricity was provided to an additional 123 364 households and 712 schools. By October 2009, 65 339 additional households and 340 new schools were connected to the national grid. A further 190 schools have been connected using non-grid (mainly solar) technology. Additional funding of R150 million was made available in 2009/10 for the eradication of backlogs in electrifying schools. The department has projected that the electrification of the remaining backlog of 1 313 schools will be eradicated by the end of 2009/10.

R586 million and R698 million were used for bulk infrastructure in 2008/09 and 2009/10. In 2009/10, 7 bulk substations were completed and ready for operation. The remaining substations are all at different stages of construction and will be completed by the end of June 2010.

Over the MTEF period, expenditure on the integrated national electrification programme is expected to increase from R2.4 billion in 2009/10 to R3.1 billion in 2012/13, at an average annual rate of 6.6 per cent.

## **Departmental receipts**

Departmental revenue is derived from the receipt of administration fees for licence applications processed in terms of the Petroleum Products Amendment Act (2003). Revenue has grown from R1.2 million in 2007/08 to R3.5 million 2009/10, at an average annual rate of 71 per cent as a result of the increase in licensee fees. Revenue is expected to increase marginally over the MTEF period to an estimated R4.1 million, at an average annual rate of 5 per cent.

**Table 28.3 Departmental receipts** 

				Adjusted	Revised			<u> </u>	
	Aud	Audited outcome			estimate	Medium-term receipts estimate			
R thousand	2006/07	2007/08	2008/09	2009/1	0	2010/11	2011/12	2012/13	
Departmental receipts	58	1 201	3 343	3 510	3 510	3 684	3 867	4 058	
Sales of goods and services produced by department	58	1 201	3 343	3 510	3 510	3 684	3 867	4 058	
Total	58	1 201	3 343	3 510	3 510	3 684	3 867	4 058	

## **Programme 1: Administration**

#### **Expenditure estimates**

**Table 28.4 Administration** 

Subprogramme				Adjusted			
	Audited outcome			appropriation	Medium-tern	n expenditure est	imate
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Minister <sup>1</sup>	-	-	-	1.7	1.8	1.9	2.0
Management	2.8	3.1	4.2	7.7	15.7	33.5	18.2
Corporate Services	27.2	32.5	44.3	52.4	79.7	84.7	78.8
Office Accommodation	4.7	4.5	4.9	6.4	7.1	7.5	7.9
Total	34.8	40.1	53.4	68.2	104.2	127.7	106.9
Change to 2009 Budget estimate				13.0	43.6	63.3	52.7

<sup>1.</sup> From 2008/09, the current payments relating to the total remuneration package of political office bearers are shown, before this, only salary and car allowance are included. Administrative and other subprogramme expenditure may in addition include payments for capital assets as well as transfers and subsidies.

#### **Economic classification**

Current payments	33.2	38.3	49.5	65.3	99.3	122.4	101.3
Compensation of employees	11.5	14.7	20.1	29.2	46.8	49.4	51.9
Goods and services	21.6	23.6	29.4	36.1	52.5	73.0	49.4
of which:							
Computer services	2.3	2.0	2.3	9.0	3.8	9.0	4.0
Consultants and professional services: Business and advisory services	1.4	1.6	1.6	0.7	4.9	4.0	2.5
Lease payments	5.6	5.0	4.5	0.7	7.1	10.5	5.9
Travel and subsistence	5.4	5.5	7.0	5.3	6.5	8.0	4.3
Transfers and subsidies	0.3	0.2	0.4	0.3	0.3	0.3	0.4
Households	0.3	0.2	0.4	0.3	0.3	0.3	0.4
Payments for capital assets	1.3	1.6	3.4	2.6	4.6	5.0	5.3
Machinery and equipment	1.3	1.1	2.9	2.2	4.6	5.0	5.3
Land and sub-soil assets	0.1	_	_	_	_	_	-
Software and other intangible assets	0.0	0.5	0.6	0.4	_	_	_
Payments for financial assets	0.0	-	0.1	-	-	_	_
Total	34.8	40.1	53.4	68.2	104.2	127.7	106.9

#### **Expenditure trends**

Spending in the *Administration* programme increased from R34.8 million in 2006/07 to R68.2 million in 2009/10, at an average annual rate of 25.1 per cent. This was mainly due to the expansion of the corporate services function to provide support services to the higher number of employees recruited within the core programmes of the department. Expenditure in compensation of employees in the *Administration* programme increased significantly, from R11.5 million in 2006/07 to R29.2 million in 2009/10, at an average annual rate of 36.3 per cent. Over the same period, expenditure on goods and services increased from R21.6 million to R36.1 million at an average annual rate of 18.7 per cent to cater for additional equipment and related expenses for the new staff.

Expenditure is expected to rise further over the medium term from R68.2 million in 2009/10 to R106.9 million in 2012/13, at an average annual rate of 16.2 per cent. This is partly due to a reprioritisation of R96 million from the *Associated Services* programme to the *Administration* programme to expand the staff complement to enable the newly established department to carry out its mandate effectively. Over the medium term, the department will develop organisational capacity to cater for expenditure for the new ministry and strengthen the department's support service structure. This includes appointing new staff in key positions, such as the chief financial officer, and internal audit and human resources managers.

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

- Hydrocarbons and Energy Planning Management provides for the overall management of the programme.
- Energy Planning promotes the sustainable use of energy resources through integrated energy planning.
- *Hydrocarbons* develops policy and regulations to manage petroleum, coal, and natural gas. The Controller of Petroleum Products is currently included in this subprogramme and is responsible for the implementation of the Petroleum Product Amendments Act (2003).

#### **Objectives and measures**

- Ensure the sustainable supply and demand of energy by developing the integrated energy planning strategy by September 2010, which will guide the development of a national integrated energy plan.
- Improve the security of energy supply through fostering investments in storage for liquid fuels by developing the national strategic fuel stocks policy by March 2010.
- Provide oversight over the construction of the national multipurpose petroleum pipeline and capital transfers specifically allocated for the pipeline over the MTEF period by regularly publishing progress reports.
- Encourage research and development for energy related technologies with a key focus on energy efficiency and mitigating greenhouse gases by establishing the South African National Energy Development Institute by March 2011.
- Strengthen the regulatory framework in the petroleum products industry by implementing the regulatory accounting system before March 2011.
- Improve the countrywide availability of petroleum products by licensing retail, manufacturing and wholesale operators within 90 days of receiving confirmation of the publication of licensee applications.
- Facilitate the participation of historically disadvantaged individuals in the petroleum sector by licensing 25 per cent of all licence applications by historically disadvantaged individuals in each year of the MTEF period.

#### Service delivery focus

As at 30 November 2009, the petroleum licence applications database revealed that 14 890 applications were received and processed by the Controller of Petroleum Products and 11 575 licences were granted, with the remaining applications not approved as they did not meet the legislative requirements. A licence was granted to PetroSA for Project Mthombo, an initiative to build a world class crude refinery in the Coega industrial development zone in Eastern Cape. In 2008, a licence was issued to Rainbow National Renewable Fuels to manufacture biodiesel.

In collaboration with oil companies, local municipalities and other development agencies, the department is establishing integrated energy centres countrywide as part of implementing government's mandate to promote access to clean and affordable energy services. 6 centres have been established thus far and 4 additional sites in Qunu, Bizana, Ulundi and Qamatha are at advanced stages of development and expected to be operational in 2010.

The National Energy Act (2008) makes provision for the establishment of the South African National Energy Development Institute with the aim of promoting energy efficiency and research within the sector. A business case for listing the institute as a public entity was developed and submitted to National Treasury in November 2009 and the listing is expected to take place in 2010/11.

Given the hazardous nature of illuminating paraffin, in 2008, in collaboration with the Central Energy Fund, the department initiated a pilot programme to assess the efficacy of new, safer illuminating paraffin appliances in township areas previously devastated by paraffin related fires.

#### **Expenditure estimates**

**Table 28.5 Hydrocarbons and Energy Planning** 

Subprogramme				Adjusted			
	Aud	lited outcome		appropriation	Medium-terr	n expenditure es	timate
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Hydrocarbons and Energy Planning Management	4.8	5.2	4.6	4.5	1.7	1.8	2.0
Energy Planning	6.5	8.7	8.9	14.9	20.8	24.6	27.9
Hydrocarbons	19.9	21.8	30.7	35.9	1 536.2	1 538.3	1 541.3
Total	31.2	35.6	44.2	55.3	1 558.6	1 564.6	1 571.2
Change to 2009 Budget estimate				-	1 498.1	1 500.5	1 503.9
Economic classification							
Current payments	30.8	35.6	44.0	55.3	58.6	64.6	71.2
Compensation of employees	14.1	20.4	29.3	47.0	50.8	53.6	56.3
Goods and services	16.6	15.2	14.8	8.3	7.9	11.0	15.0
of which:							
Computer services	_	_	0.2	0.2	3.2	4.3	6.0
Consultants and professional services: Business and advisory services	9.2	2.3	2.2	0.8	0.4	0.4	0.5
Travel and subsistence	5.4	6.0	4.6	1.6	1.3	1.8	2.6
Transfers and subsidies	0.0	0.0	0.1	-	1 500.0	1 500.0	1 500.0
Public corporations and private enterprises	-	-	-	-	1 500.0	1 500.0	1 500.0
Households	_	0.0	0.1	_	-	_	-
Payments for capital assets	0.4	0.0	-	-	-	-	-
Machinery and equipment	0.4	0.0	-	-	-	_	-
Payments for financial assets	-	-	0.1	-	-	-	-
Total	31.2	35.6	44.2	55.3	1 558.6	1 564.6	1 571.2
Details of selected transfers and subsidies  Public corporations and private enterprises							
Public corporations							
Other transfers							
Capital	_	_	_	_	1 500.0	1 500.0	1 500.0
Transnet Pipelines			_		1 500.0	1 500.0	1 500.0

#### **Expenditure trends**

Spending in the *Hydrocarbons and Energy Planning* programme increased from R31.2 million in 2006/07 to R55.3 million in 2009/10, at an average annual rate of 21 per cent. The increase is mostly due to the restructuring of the programme to implement the Petroleum Products Amendment Act (2003). Spending in the *Hydrocarbons* subprogramme increased significantly from R19.9 million in 2006/07 to R35.9 million in 2009/10, at an average annual rate of 21.8 per cent, partly due to the establishment of the Controller of Petroleum Products, which is responsible for issuing licences for the liquid fuels industry.

Expenditure is expected to increase substantially over the MTEF period, from R55.3 million to R1.6 billion, at an average annual rate of 205.2 per cent. This is mainly due to the transfer payments of R1.5 billion in each year of the MTEF period allocated to Transnet for the construction of the national multipurpose petroleum pipeline.

Spending in the *Energy Planning* subprogramme is also expected to increase significantly, at an average annual rate of 23.4 per cent over the medium term, as a result of the procurement of a national integrated energy modelling system. Additional allocations of R20 million in 2010/11, R30 million in 2011/12 and R30 million in 2012/13 are made for this modelling system. The development of the system is expected to increase expenditure on computer services. This results in an increase in expenditure on goods and services over the medium term at an average annual rate of 21.5 per cent.

In 2009/10, expenditure in compensation of employees for this programme increased significantly, from R29.4 million to R40 million, because of the additional personnel recruited to strengthen the department's capacity to carry out integrated planning functions and fill vacancies in the Controller of Petroleum Products.

## **Programme 3: Electricity, Nuclear and Clean Energy**

- Electricity and Nuclear Management provides overall management of the programme.
- *Electricity* develops, implements and monitors electricity policy and programmes. The integrated national electrification programme business planning unit manages the electrification planning, funding and implementation process, including the addressing of electrification backlogs in the quest to achieve universal access to electricity.
- *Nuclear* aims to improve the governance of the nuclear sector, specifically in relation to nuclear safety, nuclear non-proliferation and nuclear technology.
- *Clean Energy* facilitates the implementation of renewable energy and energy efficiency technologies and also regulates and promotes the clean development mechanism activities.

Funding in these subprogrammes will mainly be used for compensation of employees and the acquisition of related goods and services.

#### **Objectives and measures**

- Ensure well managed, efficient and safe electricity, nuclear and clean energy industries by:
  - implementing the nuclear energy policy through developing an implementation strategy by June 2010
  - implementing energy efficiency policies and issuing regulations and strategies to achieve electricity savings of 12 per cent by 2015, based on forecast energy demand
  - regulating the security of nuclear material and facilities by developing appropriate regulations for the physical protection of nuclear material by March 2011.
- Promote the sustainable use of electricity to achieve a 100MW saving in each year of the MTEF period by:
  - publishing the solar water heating framework by June 2010
  - ensuring the use of compact fluorescent light bulbs in public buildings and reducing the power used for domestic and street lighting
  - facilitating the development and implementation of energy efficiency technologies and programmes by developing the energy efficiency standards for appliances and publishing them by 2010/11.
- Increase access to electricity by monitoring the implementation of the integrated national electrification programme, which aims to connect 3.2 million households by 2012.
- Facilitate the implementation and adoption of new and renewable energy technologies to meet the 2013 target of 10 000GWh generation from clean energy sources by providing increased support through the renewable energy finance and subsidy scheme and other support programmes.

#### Service delivery focus

In 2009/10, contracts awarded to broad based black economic empowerment (BEE) companies, black women owned firms and small, medium and micro enterprises amounted to R261.1 million. 3 954 temporary and 371 permanent jobs were created through the integrated national electrification programme. In 2009/10, 741 learners took part in electrification projects against a targeted 800.

Since its inception in 2005, the Renewable Energy Finance and Subsidy Office has subsidised 6 projects with a power generation capacity of 23.9MW. However, in 2009/10, the office subsidised 2 projects worth 9MW involving landfill gas in KwaZulu-Natal and a small scale hydro project in Free State. Collectively, these projects amount to 45 per cent of subsidised renewable energy production, lower than the targeted 20MW in 2009/10. In 2009, the department completed the institutional arrangements to prepare for the launch of the Working for Energy programme.

A national target of 400MW in electricity savings was set in 2009/10, based on the possible implementation of energy efficiency and demand side management programmes and the national power conservation programme. Estimates for 2009/10 indicate that 100MW savings were achieved through fiscal funding to Eskom and the municipality energy efficiency and demand side management programme, which was allocated R250 million. In 2009, the department established necessary systems for monitoring and managing the municipal and Eskom energy efficiency and demand side management programme. 17 contracts with municipalities to the value of R100 million were signed and funds have been transferred.

The nuclear energy policy implementation committee was established in March 2009 to conduct a review of nuclear energy policy implementation readiness to evaluate the country's readiness to implement or expand its nuclear programme, enhance implementation planning, and ensure a holistic understanding by all involved in the nuclear programme. The department is in the process of finalising the national nuclear energy communication strategy and the national nuclear fuel supply strategy for implementation in 2010/11.

In 2009, 32 authorisations were issued for the acquisition, possession, transport, use, and import and export of nuclear material. All exports of nuclear material were to countries that are Nuclear Non-Proliferation Treaty states and have safeguard agreements with the International Atomic Energy Agency. The radioactive waste management policy and strategy is currently being implemented and the establishment of the National Radioactive Waste Disposal Institute should be completed by March 2011. The department is developing the national nuclear skills development, acquisition, and retention strategy for the sector and an analysis of skills requirements until 2030 was performed to inform the basis for engagement with education authorities. In 2009, the directorate of nuclear non-proliferation continued to host training sessions related to nuclear security in cooperation with the International Atomic Energy Agency.

#### **Expenditure estimates**

Table 28.6 Electricity, Nuclear and Clean Energy

Subprogramme				Adjusted			
	Aud	dited outcome		appropriation	Medium-tern	n expenditure est	imate
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Electricity and Nuclear Management	4.4	5.1	4.7	6.2	1.5	1.7	1.8
Electricity	41.8	53.6	43.0	38.1	25.1	27.4	24.9
Nuclear	9.7	11.1	18.2	17.2	7.5	8.6	9.7
Clean Energy	9.2	16.8	196.7	278.4	374.7	476.1	80.1
Total	65.0	86.7	262.6	340.0	408.8	513.7	116.5
Change to 2009 Budget estimate				1.6	(49.2)	(50.2)	(55.6)
Economic classification							
Current payments	64.6	83.3	77.0	74.8	44.2	48.6	48.1
Compensation of employees	24.1	33.1	35.2	36.9	35.5	37.4	34.6
Goods and services	40.6	50.2	41.8	37.9	8.8	11.1	13.5
of which:							
Computer services	_	_	2.3	0.1	0.0	0.0	0.0
Consultants and professional services: Business and advisory services	22.2	25.4	4.4	0.3	2.0	2.8	3.4
Travel and subsistence	9.2	10.9	9.0	6.1	1.2	1.5	1.8
Transfers and subsidies	0.3	3.3	185.4	265.2	364.6	465.1	68.4
Provinces and municipalities	0.0	-	-	175.0	220.0	280.0	-
Departmental agencies and accounts	_	_	10.0	_	-	-	-
Public corporations and private enterprises	0.3	3.3	175.4	90.2	144.6	185.1	68.4
Payments for capital assets	0.1	-	0.0	-	_	_	-
Machinery and equipment	0.1	-	0.0	-	-	-	_
Payments for financial assets	-	-	0.1	-	-	-	-
Total	65.0	86.7	262.6	340.0	408.8	513.7	116.5

Table 28.6 Electricity, Nuclear and Clean Energy (continued)

				Adjusted			
	Audit	ed outcome		appropriation	Medium-tern	n expenditure es	timate
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Details of selected transfers and subsidies							
Provinces and municipalities							
Municipalities							
Municipal bank accounts							
Current	_	-	-	175.0	220.0	280.0	-
Electricity Demand Side Management	-	-	-	175.0	220.0	280.0	_
Public corporations and private enterprises							
Public corporations							
Other transfers							
Capital	-	-	170.0	74.5	108.9	118.8	-
National Energy Efficiency and Demand Side Management (EEDMS) (Eskom) Grant Public corporations and private enterprises	-	-	170.0	74.5	108.9	118.8	-
Private enterprises							
Other transfers							
Current	0.3	3.3	5.4	15.7	35.7	66.3	68.4
Renewable Energy Subsidy Scheme	0.3	3.3	5.4	10.7	20.7	41.3	68.4
Renewable Energy: Working for Energy	_	_	_	5.0	15.0	25.0	_

Spending in the *Electricity, Nuclear and Clean Energy* programme increased significantly from R65 million in 2006/07 to R340 million in 2009/10, at an average annual rate of 73.6 per cent. This is mainly due to the allocation of additional funding of R175.4 million in 2008/09 and R90.2 million in 2009/10 to cover the costs related to the electricity demand side management programme located within the *Clean Energy* subprogramme. The funds are earmarked for a transfer to Eskom to implement the rollout of compact fluorescent light bulbs.

The increase in spending in the *Nuclear* subprogramme, from R9.7 million in 2006/07 to R17.2 million in 2009/10, is attributable to expenditure on activities related to the development and implementation of the nuclear energy policy.

Expenditure in compensation of employees grew strongly between 2006/07 and 2009/10, at an average annual rate of 15.3 per cent due to salary adjustments. It is projected to decline at an average annual rate of 2.1 per cent per year over the MTEF period.

Expenditure is projected to decrease over the MTEF period, from R340 million to R116.5 million, at an average annual rate of 30 per cent. This is mainly due to the phasing out of additional allocations for the demand side management programme for Eskom in 2012/13.

## **Programme 4: Associated Services**

- National Nuclear Regulator provides for the protection of persons, property and the environment against nuclear damage through establishing safety standards and regulatory practices. Funding is used for compensation of employees and the procurement of goods and services.
- South African Nuclear Energy Corporation undertakes and promotes research and development in the field of nuclear energy and radiation science. The corporation is also responsible for various institutional obligations on nuclear matters on behalf of the state.
- *Electricity Distribution Industry Holdings Company* is mandated to restructure the electricity distribution industry as outlined in the 1998 White Paper on the Energy Policy of the Republic of South Africa.

• The Integrated National Electrification Programme manages the electrification planning, funding and implementation process with the aim of addressing the electrification backlog in the quest to attain universal access to electricity.

## **Expenditure estimates**

**Table 28.7 Associated Services** 

Subprogramme				Adjusted			
D william		lited outcome	0000/00	appropriation		m expenditure e	
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
South African Nuclear Energy Corporation	356.4	388.3	554.7	564.1	574.1	601.9	589.7
National Nuclear Regulator	14.7	18.0	20.3	23.8	20.0	14.6	11.4
Electricity Distribution Industry Holdings Company	62.8 1 365.9	65.9	69.3 1 913.9	72.2 2 633.3	61.6 2 808.1	11.8 2 905.3	23.0
National Electrification Programme  Total	1 799.8	1 554.5	2 558.2	3 293.4	3 463.8	3 533.6	3 119.9 <b>3 744.</b> 0
	1 /99.0	2 026.7	2 330.2	3 293.4			
Change to 2009 Budget estimate				-	(92.2)	(234.6)	70.5
Economic classification							
Transfers and subsidies	1 799.8	2 026.7	2 558.2	3 293.4	3 463.8	3 533.6	3 744.0
Provinces and municipalities	390.7	462.5	589.1	933.0	1 020.1	1 096.6	1 151.4
Departmental agencies and accounts	77.5	84.0	89.6	96.0	81.5	26.4	34.4
Public corporations and private enterprises	1 331.5	1 480.3	1 879.5	2 264.5	2 362.1	2 410.6	2 558.2
Total	1 799.8	2 026.7	2 558.2	3 293.4	3 463.8	3 533.6	3 744.0
Details of selected transfers and subsidies							
Provinces and municipalities							
Municipalities							
Municipal bank accounts							
Capital	390.7	462.5	589.1	933.0	1 020.1	1 096.6	1 151.4
Integrated National Electrification Programme Grant	390.7	462.5	589.1	933.0	1 020.1	1 096.6	1 151.4
Departmental agencies and accounts							
Departmental agencies (non-business entities)							
Current	76.5	83.0	88.5	94.7	80.2	25.2	33.2
Electricity Distribution Industry Holdings Company	62.4	65.5	68.8	71.8	61.1	11.4	22.6
National Nuclear Regulator	14.1	17.4	19.7	22.9	19.1	13.9	10.6
Capital	1.1	1.0	1.1	1.3	1.4	1.1	1.2
Electricity Distribution Industry Holdings Company	0.4	0.4	0.4	0.5	0.5	0.4	0.4
National Nuclear Regulator	0.7	0.6	0.6	0.9	0.9	0.8	0.0
Public corporations and private enterprises							
Public corporations							
Subsidies on production or products							
Capital	893.2	1 018.1	1 240.8	1 616.3	1 719.8	1 737.8	1 882.1
ESKOM - Integrated National Electrification Programme	893.2	973.1	1 150.8	1 467.4	1 719.8	1 737.8	1 882.
ESKOM - Integrated National Electrification Programme (Backlogs)	-	45.0	90.0	149.0	-	-	-
Public corporations and private enterprises							
Public corporations							
Other transfers							
Current	301.0	369.1	534.7	540.5	554.0	580.6	568.8
NECSA - Activities	261.2	277.5	438.6	447.3	466.1	489.7	486.0
NECSA - Decommissioning Projects	24.4	78.0	81.9	78.8	75.3	78.0	70.0
NECSA - SAFARI Reactor Conversion	15.4	13.6	14.2	14.4	12.5	13.0	12.8

Table 28.7 Associated Services (continued)

				Adjusted			
	Aud	lited outcome		appropriation	Medium-ter	m expenditure e	stimate
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Capital	43.9	8.9	9.3	12.8	10.7	11.6	11.4
NECSA - Activities	39.0	6.9	7.2	9.9	8.3	9.0	8.8
NECSA - Decommissioning Projects	4.9	2.0	2.1	2.9	2.4	2.6	2.6
Public corporations and private enterprises							
Private enterprises							
Subsidies on production or products							
Capital	82.0	73.9	84.0	84.0	68.2	70.9	86.4
Integrated National Electrification Programme: Non-grid Electrification Service Providers Public corporations and private enterprises	82.0	73.9	84.0	84.0	68.2	70.9	86.4
Private enterprises							
Other transfers							
Current	11.5	10.2	10.7	10.8	9.4	9.7	9.6
NECSA - Security	11.5	10.2	10.7	10.8	9.4	9.7	9.6

Expenditure in the *Associated Services* programme is dominated by transfers to Eskom and municipalities through the integrated national electrification programme, which accounted for 97.1 per cent of total spending in 2009/10. Between 2006/07 and 2009/10, expenditure increased significantly from R1.8 billion to R3.3 billion, at an average annual rate of 22.3 per cent. This substantial rise is due to additional allocations for the integrated national electrification programme, which rose from R1.4 billion in 2006/07 to R2.6 billion in 2009/10 at an average annual rate of 22.9 per cent. Additional allocations were used to cover costs associated with the rehabilitation of electricity infrastructure and capital inflation adjustments.

In 2008/09, expenditure in the *South African Nuclear Energy Corporation* subprogramme rose sharply by 42.9 per cent, from R388.2 million to R554.7 million, as a result of additional allocations provided to strengthen the corporation's security systems.

Expenditure is expected to increase marginally over the MTEF period, from R3.3 billion to an estimated R3.7 billion, at an average annual rate of 4.4 per cent. This is driven mainly by the integrated national electrification programme, which is expected to grow at an average annual rate of 5.8 per cent over the medium term

#### **Public entity**

#### **Nuclear Energy Corporation of South Africa**

Strategic overview: 2006/07 – 2012/13

The Nuclear Energy Corporation of South Africa was established in terms of the Nuclear Energy Act (1999). Its functions are: to undertake and promote research on nuclear energy, radiation sciences and technology; to process source, special, and restricted nuclear material, including uranium enrichment; and to collaborate with other entities. The act also delegates specific responsibilities to the corporation, including: the operation of the SAFARI-1 reactor; applying radiation technology for medical and scientific purposes; managing nuclear waste disposal nationally; and implementing and executing national safeguards.

The adoption of the 2008 nuclear energy policy reconfirmed the Nuclear Energy Corporation of South Africa's mandate, and designated the organisation as the lead agency in nuclear research and development. The policy also highlighted the need for the corporation to develop viable nuclear fuel cycle options to support the new nuclear build programme.

Over the MTEF period, the corporation will focus on: radiation products and services; nuclear fuel development and production capabilities and nuclear component manufacturing facilities to support future nuclear

programmes and the localisation of nuclear manufacturing. Moreover, as the host of the nuclear programmes cluster, which aims to promote knowledge sharing, capacity building and safety in nuclear industry, the corporation uses its capacity to ensure compliance with the conditions of nuclear authorisations. This is achieved through an approved safety, health, environment and quality management licensing, security and safeguard systems and the Pelindaba campus.

#### Savings and cost effective service delivery

Over the MTEF period, savings of R42.3 million will be realised on appropriated funds (R11.1 million, R13.2 million and R18 million) through reductions in expenditure on goods and services. The corporation will implement a number of cost containment measures, with particular emphasis on overhead costs.

#### Selected performance indicators

**Table 28.8 Nuclear Energy Corporation of South Africa** 

Indicator	Programme/Activity		Past		Current		Projections	
		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Amount of new sales of radiochemical products and services per year	Commercial exploitation of nuclear and related products an services	R257m	R313m	R422m	R623m	R795m	R839m	R940m
Number of days per year SAFARI-1 reactor is available out of days scheduled)	Research and development	286/310 (92%)	305/308 (99%)	304/304 (100%)	305/305 (100%)	307/307 (100%)	304/304 (100%)	305/305 (100%)
Number of low and intermediate radioactive waste drums received and disposed of at Vaalputs repository per year	National radioactive waste storage	818	1 409	1 420	1 500	2 660	3 260	3 500
Number of innovations delivering economic value (3-year moving average)	Research and development	3	4	4	4	5	6	7
Number of published scientific articles per researcher per year	Research and development	0.2	0.3	0.4	0.5	0.7	1	1.2
Amount spent on decommissioning and decontaminating closed down nuclear plants and facilities per year	Decommissioning and decontamination	R19.8m	R59.1m	R73.6m	R71.6m	R75.2m	R79.4m	R84.1m
Total number of security projects completed out of 338 planned projects (and cumulative percentage completion)	Security system upgrade	87/338 26%	148/338 44%	236/338 70%	287/338 85%	321/338 95%	338/338 100%	-
Percentage of annual safeguards plan activities achieved as per agreed plan with the International Atomic Energy Agency	Research and development	100%	100%	100%	100%	100%	100%	100%
Percentage audited compliance with the 224 elements of the safety, health, environment and quality system and related legal requirements (norm for satisfactory compliance is 80%)	Safety, health, environment and quality management compliance	65%	76%	80%	80%	81%	82%	83%

#### Service delivery focus

In 2009/10, NTP Radioisotopes, a subsidiary of the corporation, played a key role in alleviating the global shortage of Mo-99 (and the imaging agent Tc-99), a key isotope used in medical imaging procedures, caused by outages of reactors and production facilities abroad. NTP Radioisotopes was able to do this due to its ability to increase the productivity and improve the performance of the SAFARI-1 reactor. NTP Radioisotopes achieved sales of R623 million in 2009/10, exceeding its sales target by 21 per cent. NTP Radioisotopes is the global leader in Mo-99 supply and aims to achieve R1 billion in sales in 2013/14. In 2009/10, SAFARI-1 met its operational availability target to convert the reactor to enable it to function with low enriched uranium. The programme was successfully completed with the first full fuel element load, which was started up in June 2009. The fully converted reactor was the first to produce Mo-99 on a commercial scale.

The second round of nuclear fuel cycle pre-feasibility studies was completed and a concept roadmap for establishing fuel cycle facilities in South Africa was defined in 2008/09. This work served as the major input for the department's policy implementation readiness evaluation. Priority has now shifted to establishing a uranium enrichment development programme and uranium processing capability. Skills development in the uranium

enrichment development programme has been expanded and work in preparing the fuel processing laboratories is ongoing.

The development of the safety, health and environment quality management system continues and all quality management system requirements for compliance with the RD-0034 standard, set by the South African National Nuclear Regulator, were achieved in 2008/09. The corporation experienced a backlog in the transfer of waste from Pelindaba to Vaalputs due to licensing constraints in 2009/10. The challenges were resolved and the backlog will be eradicated over the MTEF period. Progress continues with planning for the repatriation of SAFARI-1 spent fuel to the United States. The programme will start in the latter part of 2010/11 and will lead to savings in waste management expenditure.

#### Expenditure estimates

**Table 28.9 South African Nuclear Energy Corporation: Financial information** 

Statement of financial performance	Auc	dited outcome		Revised estimate	Medi	um-term estimate	
R million	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Revenue							
Non-tax revenue	479.8	503.6	631.6	911.6	991.9	1 059.3	1 187.1
Sale of goods and services other than capital assets of which:	437.2	443.8	538.9	845.2	922.6	1 008.3	1 089.4
Sales by market establishments	437.2	443.8	538.9	845.2	922.6	1 008.3	1 089.4
Other non-tax revenue	42.6	59.8	92.7	66.4	69.2	51.0	97.8
Transfers received	326.6	417.1	585.1	616.3	666.2	675.9	695.0
Total revenue	806.4	920.6	1 216.7	1 527.9	1 658.0	1 735.2	1 882.2
Expenses							
Current expense	690.9	857.4	1 066.2	1 437.8	1 540.5	1 668.5	1 789.4
Compensation of employees	335.3	376.4	423.7	580.2	633.9	668.1	698.8
Goods and services	301.7	412.8	517.2	749.9	809.3	889.6	977.4
Depreciation	29.3	32.2	40.2	55.0	58.7	59.8	57.6
Interest, dividends and rent on land	9.4	10.1	20.9	0.6	2.9	6.0	10.4
Transfers and subsidies	13.9	15.2	7.9	-	-	-	-
Total expenses	704.9	872.6	1 074.1	1 437.8	1 540.5	1 668.5	1 789.4
Surplus / (Deficit)	101.5	48.0	142.6	90.1	117.5	66.7	92.7
Statement of financial position							
Carrying value of assets	212.6	242.8	305.0	343.1	425.6	473.6	530.5
of which: Acquisition of assets	58.9	63.7	113.1	99.4	141.3	107.8	116.3
Investments	43.3	45.0	48.2	60.5	76.2	89.1	102.4
Inventory	63.8	62.5	100.8	105.1	105.9	103.3	114.4
Receivables and prepayments	94.8	150.8	182.7	236.9	265.9	298.1	317.7
Cash and cash equivalents	134.2	167.2	222.7	223.1	267.4	324.4	393.7
Assets not classified elsewhere	-	_	3.2	20.0	20.0	20.0	20.0
Total assets	548.8	668.4	862.7	988.8	1 161.1	1 308.5	1 478.6
Accumulated surplus/deficit	(5.1)	41.0	177.2	260.9	386.2	485.6	586.5
Capital and reserves	21.4	23.6	6.7	19.8	19.8	19.8	19.8
Borrowings	14.8	10.6	9.3	10.5	39.5	71.9	113.7
Post-retirement benefits	312.2	329.6	331.2	336.3	341.3	346.6	352.1
Trade and other payables	177.5	179.4	232.2	240.8	244.9	246.0	258.2
Provisions	27.9	84.3	106.2	120.5	129.4	138.6	148.3
Total equity and liabilities	548.8	668.4	862.7	988.8	1 161.1	1 308.5	1 478.6

The South African Nuclear Energy Corporation derives its revenue from the sale of nuclear technology products, chemical products, nuclear engineering services and transfers payments received from government. Sales of isotopes and related products account for 55.3 per cent of total revenue while transfers received from government account for 40.3 per cent in 2009/10.

Revenue increased from R806.3 million in 2006/07 to R1.5 billion in 2009/10, at an average annual rate of 23.7 per cent. The strong increase is driven by increases in the transfers received from government, and rising sales of isotopes and related products. Over the medium term, revenue is expected to grow at an average annual rate of 7.2 per cent to reach R1.9 billion. This growth is mainly driven by increases in the sale of nuclear technology, which is expected to account for 57.9 per cent by 2012/13.

Expenditure increased from R704.9 million in 2006/07 to R1.4 billion in 2009/10, at an average annual rate of 26.8 per cent. This is mainly due to an increase in expenditure on goods and services, which grew at an average annual rate of 35.5 per cent. This is mainly due to the extensive upgrades undertaken by the corporation on its security system as well as rising expenditure in decommissioning activities. Over the medium term, expenditure is expected to grow at an average annual rate of 7.6 per cent, largely driven by the expansion of the corporation to develop viable fuel cycle options.

## **Additional tables**

Table 28.A Summary of expenditure trends and estimates per programme and economic classification

Programme	Appro	priation	Audited		Appropriation		Revised
	Main	Adjusted	outcome	Main	Additional	Adjusted	estimate
R million	200	8/09	2008/09		2009/10		2009/10
1. Administration	62.7	63.0	53.4	55.2	13.0	68.2	68.2
2. Hydrocarbons and Energy Planning	65.1	45.9	44.2	55.3	-	55.3	54.4
3. Electricity, Nuclear and Clean Energy	62.0	261.4	262.6	338.4	1.6	340.0	327.5
4. Associated Services	2 564.7	2 564.7	2 558.2	3 293.4	-	3 293.4	3 290.1
Total	2 754.5	2 935.0	2 918.4	3 742.3	14.6	3 756.9	3 740.2
		<u> </u>				II.	
Economic classification							
Current payments	180.9	184.4	170.6	180.9	14.6	195.4	194.5
Compensation of employees	96.1	96.0	84.6	105.2	7.9	113.1	112.1
Goods and services	84.8	88.5	86.0	75.7	6.7	82.4	82.4
Transfers and subsidies	2 570.5	2 750.6	2 744.1	3 558.9	-	3 558.9	3 543.1
Provinces and municipalities	595.6	595.6	589.1	1 108.0	-	1 108.0	1 092.2
Departmental agencies and accounts	89.6	106.8	99.6	96.0	-	96.0	96.0
Public corporations and private enterprises	1 884.9	2 047.8	2 054.9	2 354.6	-	2 354.6	2 354.6
Households	0.4	0.4	0.5	0.3	-	0.3	0.3
Payments for capital assets	3.1	-	3.4	2.6	0.0	2.6	2.6
Machinery and equipment	2.9	_	2.9	2.2	0.0	2.2	2.2
Software and other intangible assets	0.2	_	0.6	0.4	_	0.4	0.4
Payments for financial assets	-	-	0.2	-	-	-	-
Total	2 754.5	2 935.0	2 918.4	3 742.3	14.6	3 756.9	3 740.2

Table 28.B Detail of approved establishment and personnel numbers according to salary level <sup>1</sup>

	Personnel post	status as at 30	September 2009	Number	of personn	el posts fil	led / planned	d for on fund	led establis	hment
	Number of posts		Number of posts							
	on approved	Number of	additional to the		Actual		Mid year <sup>2</sup>	Mediu	m-term estii	mate
	establishment	funded posts	establishment	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Department	361	361	30	349	350	350	392	440	440	440
Salary level 1 – 6	75	75	12	83	148	110	89	107	107	107
Salary level 7 – 10	178	178	14	192	83	151	192	178	178	178
Salary level 11 – 12	60	60	1	37	89	46	62	86	86	86
Salary level 13 – 16	48	48	3	37	30	42	51	69	69	69
Administration	117	117	20	112	122	138	138	204	204	204
Salary level 1 – 6	50	50	12	51	68	66	64	75	75	75
Salary level 7 – 10	45	45	5	43	28	51	50	75	75	75
Salary level 11 – 12	12	12	1	8	18	9	14	26	26	26
Salary level 13 – 16	10	10	2	10	8	11	12	28	28	28
Hydrocarbons and	140	140	1	-	-	99	141	148	148	148
Energy Planning										
Salary level 1 – 6	14	14	-	-	-	26	14	14	14	14
Salary level 7 – 10	89	89	-	-	-	41	89	80	80	80
Salary level 11 – 12	17	17	-	-	-	19	17	30	30	30
Salary level 13 – 16	20	20	1	-	-	13	21	24	24	24
Electricity, Nuclear	104	104	9	237	228	113	113	88	88	88
and Clean Energy	44	44		20	00	40	44	40	40	40
Salary level 1 – 6	11	11	_	32	80	18	11	18	18	18
Salary level 7 – 10	44	44	9	149	55	59	53	23	23	23
Salary level 11 – 12	31	31	_	29	71	18	31	30	30	30
Salary level 13 – 16	18	18	_	27	22	18	18	17	17	17

<sup>1.</sup> Data has been provided by the department and may not necessarily reconcile with official government personnel data. 2. As at 30 September 2009.

Table 28.C Summary of expenditure on training

				Adjusted			
	Aud	ited outcome		appropriation	Medium-term	expenditure e	stimate
	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Compensation of employees (R million)	49.7	95.2	100.1	120.2	352.3	392.1	414.7
Training expenditure (R million)	0.6	0.7	1.6	2.1	3.5	3.9	4.1
Training as percentage of compensation	1.3%	0.8%	1.6%	1.7%	1.0%	1.0%	1.0%
Total number trained in department (head count)	187	84	84	84			
of which:							
Employees receiving bursaries (head count)	32	20	20	20			
Internships trained (head count)	55	84	84	84			

Table 28.D Summ	Table 28.D Summary of expenditure on infrastructure	cture								
Project name	Service delivery	Current	Total				Adjusted			
	outputs	project stage	project cost	Andi	Audited outcome		appropriation	Medium-term	Medium-term expenditure estimate	timate
R million				2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Departmental infrastructure	ucture									
Eskom national electrification programme	Address the electrification backlogs of permanently occupied residential dwellings, the installation of bulk infrastructure and rehabilitation of electrification infrastructure.	Various	1	893.2	973.1	1 150.8	1 467.4	1 751.8	1 769.8	1 914.1
Municipalities' national electrification programme		Various	1	390.7	462.5	589.1	933.0	1 020.1	1 096.6	1 151.4
Transnet pipelines	Construction of petroleum pipeline, branch lines and storage facilities	Construction	ı	1	I	ı	I	1 500.0	1 500.0	1 500.0
Eradication of backlogs in electrification on schools and clinics (as part of the national electrification programme)		Various	1	45.0	0.06	149.0	I	1	1	1
Total			I	1 328.9	1 525.6	1 888.8	2 400.3	4 271.9	4 366.4	4 565.5