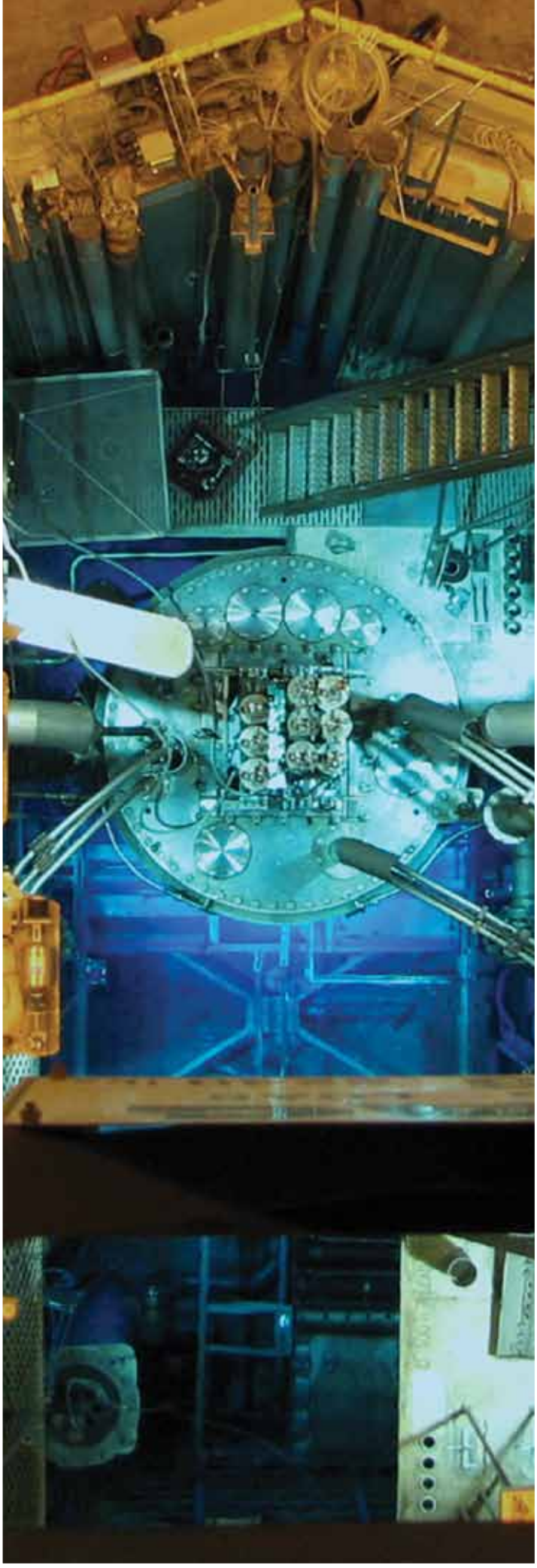
2012 Annual Report

necsa
We're in your world



The **F**uture of the South African nuclear industry is under construction. This nuclear power expansion, in accordance with the IRP 2010–2030, aims to deliver a modern nuclear power generation fleet which will ensure a low cost and low carbon base load electricity supply for decades to come.

South African **U**ranium reserves are abundant enough to carry us through to the next millennium and beyond. The long-term future prospects for South Africa in infrastructure development, job creation, and economic expansion, all depend on a constant, reliable, clean energy supply ... and nuclear power guarantees this.

South Africa has been in the nuclear business for nearly 50 years and has experienced the multiple benefits of nuclear **T**echnology in mining, agriculture, industry, medicine, and power generation to mention but a few.

Public engagement, participation and **U**nderstanding of basic nuclear concepts remain pivotal in providing an informed, safe and secure nuclear energy future.

Through innovation and technological breakthroughs, Necsa will play an integral role in **R**e-engineering South Africa's nuclear legacy, which has positioned our country as a leading supplier of vital nuclear medicines to the world using non-proliferation compliant nuclear materials.

From the microchip of the machine that adjusted the thickness of this page to the 'jab' for your next bone imaging scan, Necsa has laid the foundation for the **E**nhancement of the lives of South Africans through the safe and responsible use of nuclear technology – *"We're in your world"*

South African Nuclear Energy Corporation (Necsa)

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Mandate

In terms of Section 13 of the Nuclear Energy Act, No. 46 of 1999, the South African Nuclear Energy Corporation SOC Limited (Necsa) is mandated to:

- Undertake and promote research and development (R&D) in the field of nuclear energy and radiation sciences and technology and, subject to the Safeguards Agreement, to make these generally available;
- Process source material, special nuclear material and restricted material and to reprocess and enrich source material and nuclear material; and
- Co-operate with any person or institution in matters falling within these functions, subject to the approval of the Minister.

Vision

To pursue nuclear technology excellence for sustainable social and economic development

Mission

To develop, utilise and manage nuclear technology for national and regional socio-economic development through:

- Applied R&D;
- Commercial application of nuclear and associated technology;
- Fulfilling the State's nuclear obligations;
- Contributing to the development of skills in science and technology;
- Total commitment to health, safety and care for the environment;
- Developing and empowering our human resource base; and
- Satisfying stakeholder expectations.

Business

Necsa is a state-owned company responsible for undertaking and promoting R&D in the field of nuclear energy and radiation sciences. It is also responsible for processing source material, including uranium enrichment, and co-operating with other institutions, locally and abroad, on nuclear and related matters.

Apart from its main activities at Pelindaba, which include operation and utilisation of the SAFARI-1 research reactor, Necsa also manages and operates the Vaalputs National Radioactive Waste Disposal Facility in the Northern Cape on behalf of the National Radioactive Waste Disposal Institute (NRWDI).

Necsa engages in commercial business mainly through its wholly-owned commercial subsidiaries NTP Radioisotopes SOC Ltd (NTP), which is responsible for a range of radiation-based products and services for healthcare, life sciences and industry, and Pelchem SOC Ltd (Pelchem), which supplies fluorine and fluorine-based products. Both subsidiaries, together with their subsidiaries, supply local and foreign markets, earning valuable foreign exchange for South Africa.

In addition to the above, the Company promotes the public understanding of nuclear science and technology and facilitates regular communication with the public and its stakeholders.

Stakeholder Matrix

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The following diagram provides a depiction of Necsa's business in terms of its broad stakeholder base, how the organisation communicates with its stakeholders; the organisational offering; and the intended outcome in line with its mandate.

Highlights 03

- As a result of an effective maintenance programme, its fully trained reactor operations group and the implementation of a Reactor Ageing Management Programme, the SAFARI-1 research reactor achieved the best ever operational availability of 101.6% against schedule at an average reactor power of 19.98 MW.
- A post-Fukushima Daiichi safety re-assessment, conducted on the SAFARI-1 research reactor and its operational systems in response to a National Nuclear Regulator (NNR) directive, confirmed the fundamental safety and integrity of the reactor and its operations.
- In line with its core R&D Mandate, Necsa recorded 11 new innovation disclosures and 39 peer reviewed publications.
- The NTP Group achieved sales of R842 million, some 5% below budget as a result of challenging global market conditions. NTP however remains one of the world leaders in the supply of medical isotopes and the only company in the world that produces Molybdenum-99 (^{99}Mo) using a fully Low Enriched Uranium (LEU)-based process.
- NTP proudly achieved 2 million disabling injury free hours.
- The state-of-the-art Necsa Visitor Centre, which incorporates interactive displays on nuclear technologies, received nearly 10,000 visitors since February 2011.
- A total of 447 apprentices completed semester training programmes offered by Necsa's Nuclear Skills Development Centre.
- A Radiation Protection Training Centre has been established with support from the Department of Trade and Industry (**the dti**) for the nationwide training of employees from various industries.
- Pelchem achieved sales of R186.1 million, some 4.9% better than budget.
- The strategic inter-organisational Nuclear Technologies in Medicine and the Biosciences Initiative (NTeMBI) functioned effectively and efficiently.
- Necsa remained the only entity in South Africa to achieve American Society of Mechanical Engineers (ASME) III certification, a qualification developed by the American Society of Mechanical Engineers, thereby positioning it to manufacture nuclear components and equipment for the local nuclear power expansion programme.

Salient Features and Value Added

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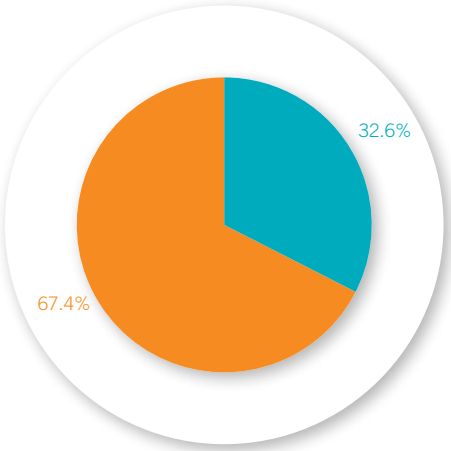
Salient Features of 2012

Group	Nominal %	Real %
State dependence for operating costs – Increased	9	2
Group sales – Increased/(decreased)	1	(5)
Group sales per capita – Increased/(decreased)	4	(1)
Group expenses – Increased/(decreased)	4	(2)
Group personnel costs – Increased	10	4
Group operating expenses (salaries and allowances excluded) – Increased/(decreased)	1	(5)
Corporation sales – Increased	10	4
Corporation sales per capita – Increased	9	3
Company expenses – Increased	12	5
Company personnel costs – Increased	12	5
Company operating expenses (salaries and allowances excluded) – Increased	12	5

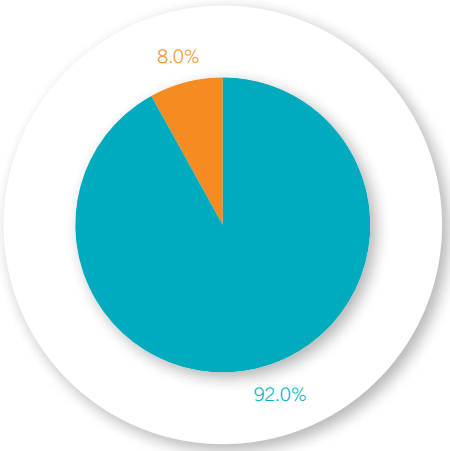
Note: Inflation adjustment used in all calculations is 6.0%

Sales

Group – 2012



Company – 2012



Sales – Foreign Sales – Local

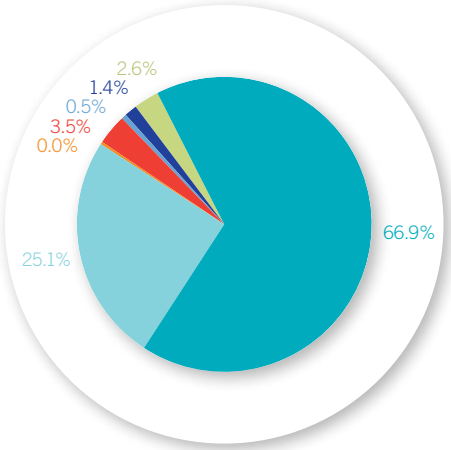
Value-added Statements as at 31 March 2012

Group	2012 R'000	2011 R'000	2010 R'000	2009 R'000	2008 R'000
Income generated					
Sales and other income	1,163,240	1,112,621	1,085,881	651,732	535,780
Government grant					
Operating activities	436,144	401,429	362,766	316,362	245,886
LEU fuel conversion	87	36	7,202	1,982	2,419
Decommissioning and decontamination	60,550	67,069	67,049	81,633	59,128
Security	8,357	8,246	9,468	9,350	8,962
Other grants	25,114	28,120	25,442	30,421	28,820
Income from investments	44,785	52,480	54,823	62,336	34,077
	1,738,277	1,670,001	1,612,631	1,153,816	915,072
Income distributed					
Employees	442,245	431,567	396,552	316,524	244,324
Providers of services, materials and products	797,179	722,569	753,153	510,205	420,932
Training and development	11,973	12,516	11,236	7,925	9,151
Government	203,962	191,164	145,635	141,763	86,932
National facilities	130,571	110,320	94,899	57,469	73,206
Depreciation	79,533	72,406	47,435	39,601	32,028
Retained income	65,403	127,474	162,329	75,647	46,669
Minority interest share of profit	7,411	1,985	1,392	4,682	1,830
	1,738,277	1,670,001	1,612,631	1,153,816	915,072

Group	2012 %	2011 %	2010 %	2009 %	2008 %
Income generated					
Sales and other income	66.9	66.7	67.3	56.5	58.6
Government grant					
Operating activities	25.1	24.0	22.5	27.4	26.8
LEU fuel conversion	0.0	0.0	0.4	0.2	0.3
Decommissioning and decontamination	3.5	4.0	4.2	7.1	6.5
Security	0.5	0.5	0.6	0.8	1.0
Other grants	1.4	1.7	1.6	2.6	3.2
Income from investments	2.6	3.1	3.4	5.4	3.6
	100.00	100.00	100.00	100.00	100.00
Income distributed					
Employees	25.4	25.9	24.6	27.4	26.7
Providers of services, materials and products	45.9	43.3	46.7	44.2	46.0
Training and development	0.7	0.7	0.7	0.7	1.0
Government	11.7	11.5	9.0	12.3	9.5
National facilities	7.5	6.6	5.9	5.0	8.0
Depreciation	4.6	4.3	2.9	3.4	3.5
Retained income	3.8	7.6	10.1	6.6	5.1
Minority interest share of profit	0.4	0.1	0.1	0.4	0.2
	100.00	100.00	100.00	100.00	100.00

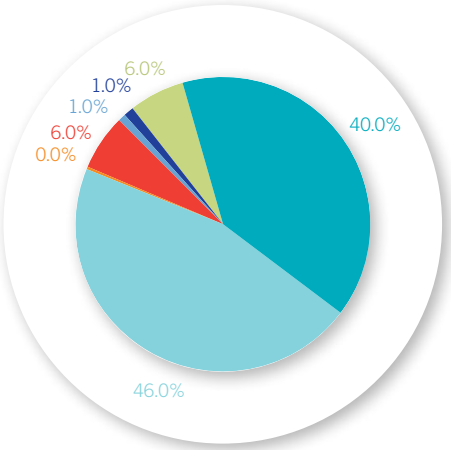
Revenue per the Statement of Comprehensive Income

Group – 2012



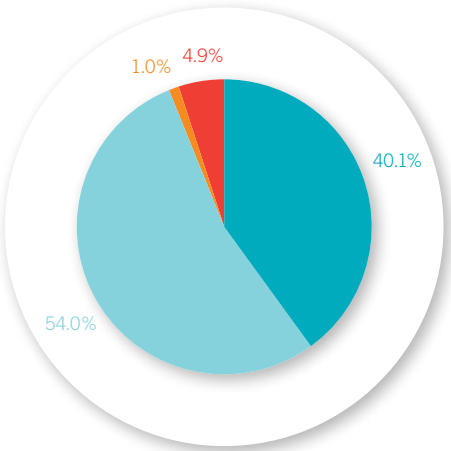
- Sales and other income
- Government grant – Operating activities
- Government grant – LEU fuel conversion
- Government grant – Decommissioning and decontamination
- Government grant – Security
- Other grants
- Income from investments

Company – 2012



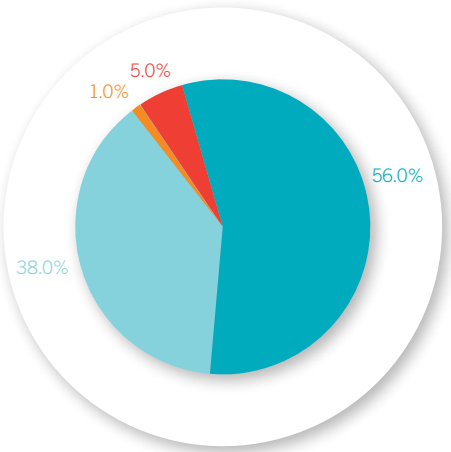
Expenses per the Statement of Comprehensive Income

Group – 2012



- Personnel
- Operating expenditure
- Other
- Depreciation

Company – 2012



Chairperson's Review

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International Developments

The events at the Fukushima Daiichi nuclear power station in Japan, following the massive earthquake and tsunami on 11 March 2011, have dominated the global nuclear discourse during the past year. This has featured equally prominently in South African political, public and industry discussions relating to the envisaged nuclear expansion programme.

Predictably, there has been an increased emphasis on the safety of nuclear power plants. This has resulted, among other things, in requirements from nuclear regulatory authorities for operators of nuclear facilities to perform stress tests to prove that threats to the safety of plants from a multitude of possible events have been catered for sufficiently in the safety case and emergency preparedness of facilities.

The international radioisotope market has undergone noticeable changes since the supply crisis of some years ago. Market shrinkage and strong downward pressure on prices have been evident. Furthermore, the conversion of research reactor fuel and medical radioisotope production processes from highly enriched uranium (HEU) to LEU have progressed slowly, placing those producers that have demonstrated their commitment to LEU conversion (including Necsa/NTP) at a disadvantage from a production cost perspective.

National Developments

The promulgation of the Integrated Resource Plan 2010–2030 (IRP 2010), specifically providing for the addition of 9.6 GW of nuclear power generating capacity to the country's electricity grid, heralded the beginning of an extremely important expansion phase for the South African energy and nuclear industries. At the same time, a number of socio-economic challenges remain, complicated by the impact of the global recession which started in 2008, on South Africa.

Necsa has participated in a variety of activities with government departments, Eskom, industry at large and the higher education sector to prepare for the roll-out of the nuclear component of the IRP 2010. We are looking forward to clear decision-making regarding the Nuclear New-Build Programme and to taking up Necsa's mandated role in this expansion programme. Of significance was Cabinet's establishment of the National Nuclear Energy Executive Co-ordination Committee (NNEECC) and the Nuclear Energy Technical Committee (NETC) during November 2011. The NNEECC, which is chaired by the Deputy President, will facilitate the implementation of South Africa's nuclear power expansion programme.

Necsa Group Developments

Our subsidiaries, NTP and Pelchem, have been hard hit by the challenging global market conditions, but NTP has retained its prominent position in the global radioisotope market and Pelchem has shown good progress in both its existing business portfolio and in developing new growth opportunities.

Necsa Corporate has continued to deliver on its mandate and performance targets, as agreed with the Shareholder. Whilst Necsa has experienced increasing pressure on its financial, human and infrastructure resources due to a combination of rising operating costs, a declining government grant (in real terms) and pressure on its non-grant revenue streams, these risks are being addressed through its risk management processes. Research and innovation outputs have grown well, but the development of new business opportunities has not proceeded as quickly as planned. Necsa has continued to support the National System of Innovation (NSI) through initiatives such as the launch of a micro-focus X-ray instrument for use in collaborative research and the continued partnership with iThemba LABS, while also continuing its involvement in strategic international collaborative programmes relating to the application of nuclear and radiation science and technology.

As a result of serious financial constraints facing Necsa over the past few years, primarily due to successive reductions in the government grant over the past three years as well as more challenging market conditions for HEU subsidiaries, the organisation has had to embark on a Section 189 (Labour Relations Act) consultation process with staff to ensure a sustainable future.

While Necsa has been assessed as a going concern, management has identified inherent risks for the 2012/13 and future years adding pressure to its financial sustainability. Management has approved an action plan to manage this for the short- to medium-term.

During the reporting year the Board of Directors approved a long-term strategy for the Necsa Group which lays the foundation for the organisation's response to its growing mandate and its envisaged role in the national nuclear expansion programme. For the near term, careful prioritisation will be required to handle current operational challenges while preparing for future growth.

I thank my fellow members of the Necsa Board of Directors, the members of the boards of Necsa subsidiaries, as well as Necsa management and employees for their commitment to the Necsa Group and its role in national socio-economic development.

Dr Manne Dipico
Chairperson

Acting CEO's Review

06

The year under review has been a challenging but successful one for the Necsa Group and the main programme clusters achieved satisfactory results.

Radiation Science and Applications Cluster

The Necsa Group, through NTP and with the SAFARI-1 research reactor playing a key role, continued to be a reliable, leading supplier of radiochemicals to the global healthcare market. NTP remained the only supplier in the world with the ability to produce ^{99}Mo at industrial scale using a process entirely based on LEU.

The SAFARI-1 research reactor achieved its best ever operational availability of 308.3 days against scheduled availability of 303 days at an average reactor power of 19.98 MW. The world average for research reactors with a high utilisation rate is only 235 days per annum. This achievement was the result of a closely managed and effective maintenance programme, and the implementation of a reactor ageing management programme. A safety re-assessment conducted on the SAFARI-1 research reactor and its operational systems, in response to a NNR directive, confirmed the fundamental safety and integrity of the reactor and its operations. These safety re-assessments have been carried out on all major research reactors worldwide subsequent to the events at the Fukushima Daiichi nuclear plant in Japan.

Excellent progress was made within this cluster in developing new radiopharmaceutical products. Some of the achievements include:

- The ^{195m}Pt labelled cisplatin cancer treatment agent was tested successfully on 10 patients at the Nuclear Medicine Department of the Steve Biko Academic Hospital in Pretoria through a collaborative study with the said department and the Australian Nuclear Science and Technology Organisation (ANSTO);
- Development of F-18 labelled fluoroethylcholine, a positron emission tomography (PET) imaging agent, for *inter alia* prostate cancer, was completed with good clinical results. Clinical trials will follow at the Steve Biko Academic Hospital. This major achievement is a culmination of developmental work that has spanned a number of years; and
- A fully operational carbon-14 labelling facility at Necsa was used to radio-label various promising new pharmaceuticals, including anti-TB drugs, anti-fungal compounds for people living with HIV/AIDS and anti-cancer agents. This work is critical to ascertain biodistribution of the compounds.

NTP donated a Positron Emission Tomography-Computed Tomography (PET-CT) scanner to the Western Cape PET-CT Academic Centre at Tygerberg Hospital. This was successfully commissioned and the first patient was scanned on 30 March 2012.

Necsa participated in NTeMBI which, through its high level co-ordinating, was very successful in opening new strategic opportunities in this sector with initiatives to expand the range of medical radiopharmaceuticals; an International Atomic Energy Agency (IAEA) project on captive breeding of mosquitoes in a bid to better deal with malaria; and the co-ordination of facilities that offer South Africa a world-leading capability in diagnostic brain scanning.

Necsa's Radiation Science Department retained high visibility through numerous collaborative projects with South African universities, the IAEA and international nuclear institutes. Training and capacity building were maintained at a high level through lectures presented to post-graduate students at various universities and the provision of ongoing supervision and study support to students in Necsa laboratories.

A new micro-focus X-ray machine was officially launched on 1 July 2011 thanks to substantial financial support from the National Research Foundation (NRF). Feedback from the science community emphasised Necsa's R&D role as the "science council equivalent" for radiation, reactor and nuclear industry related research. The new system is also utilised by post-graduate students from various universities for final year projects, theses or dissertations.

Continued management interaction has taken place to establish a model for national accelerator infrastructure management as part of the ongoing Necsa/iThemba LABS collaboration.

It is gratifying to report that Necsa, in line with its core R&D mandate, has grown its scientific and technology development outputs, with 11 new innovation disclosures recorded, as well as 39 peer reviewed publications disseminated during the 2012 financial year.

Nuclear Power Cluster

Activities in this Cluster include nuclear fuel development and production in support of its own requirements for SAFARI-1 research reactor operations and isotope production, as well as projects to support the planned South African Nuclear Power Programme expansion.

The final stage of the full conversion of SAFARI-1 research reactor fuel and ^{99}Mo target plates to utilise LEU is the establishment of a dedicated LEU fuel plant to become available by 2015/16. This project remained on track with the completion date for the basic design set for mid 2012 to allow for completion

of the Safety Analysis Report and submission to the NNR later in 2012.

Numerous carbonate leachings to remove enriched uranium from decayed ^{99}Mo production process residue, followed by further purification, were successfully performed on gram-size samples. In all cases it was confirmed that uranium is 100% leachable. According to information in the public domain this is the first time that enriched uranium has been recovered successfully from an irradiated matrix with such high aluminium content. This is an important breakthrough in the recovery of enriched uranium for reuse as target plates for ^{99}Mo production.

Government's approval of the IRP 2010, which includes 9,600 MW of nuclear power, paved the way for exciting new growth prospects for the South African nuclear industry and will provide an additional platform for the country's economic growth. Necsa's support of this programme includes the establishment of capabilities to roll out nuclear fuel production and PWR fuel fabrication facilities in the longer term to ensure eventual security of fuel supply for South Africa. Necsa made good progress with pre-feasibility studies in co-operation with potential partners on the establishment of a uranium enrichment facility in South Africa and it was agreed that the study would be reviewed every two years.

Good progress was also made with the development of facilities to contribute towards localisation opportunities arising from the envisaged nuclear power expansion programme in response to government's localisation objectives outlined in the Industrial Policy Action Plan for 2011/12 – 2013/14 (IPAP2) . Necsa achieved a significant milestone in this regard by attaining the critically important ASME III certification in May 2011; that will enable component and equipment manufacturing according to nuclear quality standards.

Necsa Group Commercial Cluster

Necsa subsidiary, NTP Radioisotopes, continued to be the Group's main source of external revenue and achieved sales of R842 million during the 2012 financial year (5% below budget) in the face of challenging global market conditions.

Pelchem achieved sales of R186.1 million for the 2012 financial year and outperformed budget by 4.9%. Pelchem sales were 14.9% higher than in the previous financial year which constitutes real growth for this subsidiary and indicates that its Turnaround Strategy, which was implemented in 2011, has begun to yield results. Pelchem has started to include technology transfer opportunities into its Strategy for Growth and Sustainability by utilising Pelchem intellectual property in the form of patents, know-how, technology packages and trade secrets to enhance market share.

Pelchem's involvement with the government-supported Ketlaphela project for the manufacturing of active pharmaceutical ingredients for anti-retrovirals (ARVs) was announced through a ministerial press conference in Parliament on 10 February 2012.

Pelchem has signed a new Fluorochemical Expansion Initiative (FEI) R&D contract with the Department of Science and Technology (DST) for R41.6 million that runs from January 2012 to March 2015. Pelchem has also been contracted by **the dti** to develop a 10-year FEI Business Plan for fluorochemical manufacturing in South Africa.

Necsa's sales for the manufacturing of mechanical and process equipment were recorded at R55.7 million compared to the target of R75 million. The shortfall is mainly due to depressed market conditions experienced for coded manufactured equipment and the high costs associated with the attainment and maintenance of ASME III certification.

Necsa as Host of Nuclear Programmes Cluster

Necsa, as a Competent Authority, participated successfully in the IAEA's Incident and Emergency Centre exercise to test the effectiveness of the Unified System for Information Exchange in Incidents and Emergencies (USIE) during April 2011.

Approval was obtained from the NNR to transfer Necsa waste, accumulated since the 1960s, to Vaalputs. The first consignment was transferred during May 2011 and 3,079 waste packages were transported and disposed of at the repository without incident during the 2012 financial year.

Investment in training amounted to 7.8% of total staff expenditure. Necsa's Nuclear Skills Development (NSD) Centre deserves special mention as it continued to grow and fulfil its mandate in responding to the call made by government through the National Skills Development Strategy. The NSD Centre partnered with various organisations such as the Department of Public Works, the Development Bank of Southern Africa, Alstom, DB Thermal and others on job creation projects. A total of 447 apprentices benefited from the semester training programmes offered by the Centre.

A Radiation Protection Training Centre has been established with support from **the dti** for the nationwide training of government employees. Sixty South African Police Services officers have already received training in radiation protection at this facility.

The Necsa Visitor Centre, which was officially launched in February 2011 and opened its doors to the public in May 2011,

has already hosted 10,000 visitors. The Centre aims to improve understanding of the true value and benefits of nuclear technologies.

Financial constraints resulted in postponement of components of the Necsa infrastructure upgrade programme. Construction of the urgently needed new sewerage works at Pelindaba West site is, however, progressing well.

Looking to the Future

From an overall perspective, Necsa's performance for the 2011/12 financial year was satisfactory and the organisation was able to achieve most of its objectives. Necsa nevertheless continued to face a financial deficit at year-end, primarily due to successive reductions in the government grant over the past three years, as well as more challenging market conditions. Special arrangements had to be put in place to meet commitments, including:

- Implementation of drastic measures to achieve operational expenditure savings;
- A voluntary severance package (VSP) process (as approved by the Board) to curtail the high level of fixed costs;
- The initiation of consultations in accordance with Section 189 of the Labour Relations Act aimed at organisational downsizing to further reduce fixed costs (this action was necessitated as a result of the VSP process not meeting requisite financial savings targets);
- Preparations for an organisational restructuring process to give effect to the "Shape and Size" exercise recommendations previously approved by the Board; and
- A concerted income drive.

The main focus in the year ahead will be to further align the organisation's expenditure framework with the available resource base, to ensure that Necsa continues to remain a going concern which is able to service the current and future nuclear research needs of our nation. While Necsa has been assessed as a going concern for the reporting period, major risks are evident in this regard for 2012/13 and future years; necessitating the continued implementation of identified measures over the short- to medium-term.

The Acting CEO and Executive Management of Necsa and its subsidiaries reaffirm their commitment to sustainability and to ensuring that the Necsa Group's primary focus going forward is for all businesses and functions to operate sustainably and on the basis of sound governance and to achieve their targets on safety, cost optimisation, profit, transformation and the environment.

Don Robertson
Chief Executive Officer (Acting)

Nuclear Technology Report

07

Research and Development

Key Achievements

During 2011 Necsa compiled its first, dedicated R&D annual report covering its activities and outputs, which emulate those of a "Science Council" in Nuclear and Radiation Sciences, particularly with respect to human capacity building, basic and value-added applied science and development. A similar publication will be published in 2012 providing a more comprehensive overview of R&D at Necsa and will be made available on the website at www.necsa.co.za.

The following strategic achievements, in line with the R&D mandate and objectives, are highlighted:

Radiation Science and Products

On the Research Infrastructure Development front the upgraded Neutron Radiography and Tomography facility at SAFARI-1 research reactor, using the R13.18 million grant allocation received from the NRF National Equipment Programme, progressed well, with commissioning planned for March 2013. The design of the facility and its support infrastructure was completed and experimentally verified.

The new Neutron Diffraction facility upgrade also made excellent progress with all components ordered or received. High precision granite instrumentation floors were successfully installed at the SAFARI-1 research reactor, which now boasts the most accurately flat and level neutron instrumentation floors on the African continent. Facility commissioning is planned for December 2012. The addition of the new Neutron Diffraction and Radiography facilities will provide greatly improved research capabilities in a wide range of fundamental- and applied material-related studies to the whole South African research community in support of the NSI.

Three new research collaborations were initiated and Necsa expert instrument scientist support was provided to 24 collaborative research projects ranging across a host of disciplines including engineering, material science, anthropology, paleoanthropology, anatomy, forensic science, agricultural science and geosciences. Academic and institutional partners, representative of the wider South African science community, included the University of Pretoria (UP), North West University, the University of the Western Cape, Stellenbosch University, the University of the Witwatersrand, DITSONG Museums, MINTEK and iThemba LABS.

The Necsa/UP/ANSTO pilot project on the use of ^{195m}Pt cisplatin as a chemotherapeutic agent was initiated with 10 healthy volunteers being injected with GMP prepared ^{195m}Pt cisplatin. This pilot study will determine the feasibility of using the tracer to individualise patient doses. Initial results are very promising, but full data analyses will only be done in the forthcoming months.

The PCT patent application "Establishment of a suitable means for producing ^{117m}Sn with high specific activity, employing the Szilard-Chalmers effect" was awarded *in toto*. It discloses a novel production route for isotopes of the metal elements ranging from scandium (Sc), to bismuth (Bi).

The first prostate cancer patient in a 50-patient clinical trial at the Steve Biko Academic Hospital was successfully injected with GMP-compliant ^{18}F-fluoroethylcholine produced at Necsa. The PET-CT image obtained clearly indicated specific uptake of this compound in the prostate region.

The nuclear and radiation science collaboration with Commissariat a l'Energie Atomique et aux Energies Alternatives (CEA), France, made good and steady progress, with agreements reached to place Necsa scientists at their facilities for extended periods to gain research experience in areas of reactor physics and engineering and nuclear materials-related spectroscopic analysis.

A first draft plan for the establishment of a Necsa/iThemba LABS research consortium, with the aim of having one national strategy for nuclear and radiation science in the country, has been prepared. Emphasis for short-term collaboration is on established areas of mutual research interest or existing collaboration such as small accelerator and neutron beam line-based materials (with emphasis on nuclear materials) research, environmental radiation science and nuclear applications in medicine and biology (including medical isotope production).

The collaboration partnership between Physikalisch-Technische Bundesanstalt (PTB) and RI Research Instruments, GmbH, Germany and Necsa, for research on the Radio Frequency Quadrupole (RFQ) fast neutron accelerators, is now ready for co-operative research and value addition within the NSI.

NTeMBI continued to facilitate several national collaborative projects where radiochemistry and radio-labelling are playing key roles in the development of new diagnostic and therapeutic pharmaceuticals and radiopharmaceuticals. Several promising compounds for early diagnosis of, and therapy for, cancer and communicable diseases such as tuberculosis, have been tested at the pre-clinical level.

NTeMBI is also assessing the use of a Sterile Insect Technique as a control mechanism for mosquitoes, to reduce malaria in the South African setting. The project is in the pre-feasibility

stage where various entomological aspects are being considered relating to rearing competitive strains of *Anopheles arabiensis* in captivity. The project has attracted funding from the IAEA and the Industrial Development Corporation.

Nuclear Energy Programme

Numerous carbonate leachings to remove enriched uranium from decayed ^{99}Mo production process residue, followed by further purification, were successfully performed on gram-size samples. In all cases it was confirmed that uranium is 100% leachable. According to information in the public domain this is the first time that enriched uranium has been recovered successfully from an irradiated matrix with such high aluminium content. This is an important breakthrough in the recovery of enriched uranium for reuse as target plates for ^{99}Mo production.

A plasma-based, nuclear-waste volume reduction system was demonstrated for the conversion of non-nuclear waste to energy. This technology was used in the waste-to-energy concept, BeauTi-fueL™, which was exhibited by Necsa and its collaborating partner, the University of the Witwatersrand's Centre of Material and Process Synthesis (COMPS), at the 17th Conference of the Parties (COP17) in December 2011. The exhibit drew very favourable national and international attention. Meetings have subsequently been held with many prospective clients, who are negotiating to purchase their own units, with capacities ranging from 1 to 100 tonnes per day. Since February 2012, the collaborative partners are in the process of constructing a fully operational pilot module, funded by the Technology Innovation Agency (TIA). When fully developed, such a system can be constructed for nuclear waste volume reduction and energy generation.

Commercial Activities

The Fluorochemical Expansion Initiative (FEI) has met all agreed targets and deadlines, and the DST has agreed to fund the next phase of this initiative. Necsa participates in the lithium battery (Li-battery) project through the synthesis of $LiPF_6$, the electrolyte used in most Li-batteries. Necsa also participates in the beneficiation of Rare Earths and its strategic repositioning to manufacture intermediate pharmaceutical compounds will strengthen its position in extending and widening the scope of the FEI. Pelchem is supported with the synthesis of neodymium trifluoride (NdF_3), the main component of the strong magnets used in electric cars and wind turbine generators.

Phase 3 of the Advanced Metals Initiative, in which Necsa is responsible for the New Metals Development Network (NMDN), was approved by the DST. Significant progress has been made with the plasma synthesis of zirconium (Zr) metal powder. This new development improves on the conventional batch process of manufacturing Zr metal by establishing a continuous method of production. Through the work of the NMDN, three Patent Co-operation Treaty (PCT) patents on the use of fluoride technology for the processing of ore concentrates were granted in the period.

A process was developed to recover a propriety fluoro-surfactant from a resin, using an existing underutilised plant at Pelchem. The client that commissioned the work has subsequently signed a contract with Pelchem for the recovery of the surfactant and also nominated the project for a 6 Sigma award.

Staff Achievements and Development

Twenty-two R&D staff members were enrolled for post-graduate studies. Four MSc students and one PhD student completed their studies during the year. MSc degrees were awarded *cum laude* to J Topkin, C Nothnagel and L Moloko.

Mr E Chinaka, an MSc student at the University of Johannesburg (UJ), who has undertaken his research at Necsa, won the best poster award on two occasions during 2011, firstly at the SANHARP Conference and then at the DST/NRF Research Day.

Mr T Ntsoane, Necsa scientist and Chairman of the National Synchrotron Radiation Roadmap Implementation Committee, played a leading role in arranging a Synchrotron Workshop during which the South African synchrotron community established a National Strategy for approval by the DST.

Necsa researchers continued to receive international recognition with invitations to review beam line research proposals for the Australian Brag Institute, as well as to present at conferences/ workshops on process tomography and neutron stress diffractometry.

Dr JR Zeevaart was appointed to the position of Extraordinary Associate Professor in the Drug Research and Development focus area of the North West University.

Dr N Jarvis was inducted into the Academy of Science for South Africa by the Minister of Science and Technology.

Human Resource Development in R&D

Training involvement	Number of post-graduate students	Description
Formal lectures by Necsa staff:		
MARST	9	Masters in Applied Radiation Science and Technology, North West University (NWU), Mafikeng
MSONE	7	Masters in the Science and Organisation of Nuclear Energy, University of Johannesburg (UJ)
Post-graduates supported with research projects at Necsa	45	Full-time research projects at Necsa, or use of Necsa beam line and other techniques to add unique, specialised value to the research
Post-graduates supported at universities and affiliated to Necsa projects	42	Financially supported and working on Necsa-related and identified research projects

Outputs

The list of peer reviewed publications is provided in the 2012 R&D annual report.

The innovation disclosures cover the following technology fields:

Field	Number of innovation disclosures
Radiochemistry/radiopharmaceuticals	3
Nuclear waste	5
Minerals beneficiation/plasmas	2
Instrumentation	1

Nuclear Technology Industrialisation

Several initiatives were launched during the period to support the provision of new nuclear power plants. These included:

- The manufacturing of new line items, products and components, such as radioactive waste related components, isotope shielding and transport containers;
- The signing of co-operation agreements with partners and clients;
- The signing of Memorandums of Understanding (MoUs) with potential nuclear power plant vendors and manufacturers; and
- Certification and approval as a manufacturing supplier, certified to the highest international standard and capable of entering the global supply chain.

Engineering

Engineering at Necsa includes feasibility studies, design and draughting, 3D-modelling, engineering studies, simulation, PLC and SCADA programming and the application of isotope technology in industry. (The latter technology utilises short-lived radioisotopes in problem solving, i.e. to trace complicated flows in processes).

Sewage Plant

One of the larger projects undertaken during the year comprised the construction of a new sewage plant for Necsa, which commenced in March 2011, to replace aging infrastructure. It is anticipated that construction will be completed in November 2012, to be followed by commissioning.

Manufacturing

The main focus areas of manufacturing are:

- Nuclear manufacturing;
- Pressure vessels, tanks, containers, heat exchangers and piping to ASME III, ASME VIII or ISO 9001;
- Industrial manufacturing;
- Machined components;
- Flosep; and
- Filters and dryers.

Necsa held several discussions with potential nuclear power plant vendors to establish co-operation as a precursor to localisation once the successful bidder for the South African Nuclear Power Plant Expansion Programme has been selected. These discussions not only covered localisation, but also globalisation (access to global supply chains) which will be essential to ensure a sustainable nuclear manufacturing industry.

The first important step in localisation is certification to an appropriate quality management standard. This is necessary to ensure that manufactured components comply fully with the very high quality standards required by the nuclear industry for

nuclear installations. To this end, Necsa's Nuclear Manufacturing Department attained ASME III NPT, NA and NS certifications for the manufacturing of components in the nuclear island in May 2011. This is a first for South Africa and was made possible with a contribution from the DST towards the National Nuclear Manufacturing Centre (NNMC).

Nuclear and Radiation Review

SAFARI-1 Research Reactor

The SAFARI-1 research reactor achieved its best ever operation of 308.3 days versus the scheduled 303 days, which represents a utilisation level of 101.6% of planned operation during 2011/12 at an average reactor power of 19.98 MW. This success can be ascribed to the effective maintenance programme, the fully trained reactor operations group and to the effective reactor Ageing Management Programme.

The Ageing Management Programme progressed slower than planned, due in part to an underestimation of the time and effort needed to establish the required project management infrastructure and systems. At financial year-end the bulk of the project management systems (such as project management, calculation control, configuration management and design control processes) were in place, though the human resource capacity needs to be bolstered.

Projects completed or which achieved major progress during the year include the replacement of beryllium reflector elements, replacement of the two main electrical supply transformers and the extension of the maintenance workshop facilities.

The repatriation of USA-origin fuel, irradiated in the SAFARI-1 research reactor, was undertaken in collaboration with the United States of America Department of Energy (USA DoE) under the USA Foreign Research Reactor Spent Nuclear Fuel Acceptance Programme, and successfully completed during the year.

The directive received from the NNR to undertake a post-Fukushima Daiichi safety re-assessment on the SAFARI-1 research reactor was executed and the subsequent reports were submitted to the NNR according to their schedule and requirements. The tests confirmed the safety and integrity of the reactor and its operations.

The SAFARI-1 research reactor maintained its quality management system ISO 9001:2008 and environmental management system ISO 14001 certification, and during the year also achieved OHSAS 18001 certification.

LEU Fuel Plant

The SAFARI-1 research reactor continued to operate with a fully converted LEU core and routine manufacture of components and assembly of fuel continued according to schedule, using imported LEU fuel plates.

Necsa has, to date, made the following progress with conversion from HEU to LEU:

- SAFARI-1 research reactor continued to operate with a core fully converted to LEU;
- NTP produces ^{99}Mo with targets made from LEU;
- As the final phase in converting to LEU, Necsa has embarked on a project to design, construct and commission a LEU Fuel and Target Plate manufacturing facility; and
- Fuel plates are built into fuel assemblies for the SAFARI-1 research reactor, and target plates are irradiated in the SAFARI-1 research reactor to act as feedstock for ^{99}Mo production by NTP.

The LEU manufacturing facility is the first Necsa production facility to be licensed under the new NNR regulatory requirement, primarily RD0034, and hence has provided an opportunity to test Necsa's quality management systems and procedures against these stringent requirements. This offers Necsa a unique development opportunity in terms of its nuclear engineering and licensing capabilities in preparation for building other nuclear material processing facilities.

Completion of the basic engineering package was delayed by 2.5 months as a result of an enforced revision to the plant layout due to equipment footprints being larger than anticipated, and Hazard and Operability (HAZOP 3) evaluations taking considerably longer than anticipated. Submission to the NNR is planned for mid-2012.

The project to localise LEU fuel and target manufacturing capability is in the basic design phase with the submission of the Basic Design and Pre-Construction Safety Analysis Report to the NNR scheduled for later in 2012. Good progress was made with the first phase of inter-laboratory comparisons with a technology partner that assisted Necsa to identify and initiate implementation of analytical techniques and equipment to meet the precision and accuracy required for LEU fuel and targets. Phase 2, the dismantling and decontamination of the identified site for the fuel plant, progressed according to schedule. Phase 3, including initiation of the refurbishment phase, can now commence as required.

The manufacturing of depleted uranium components for NTP transport containers continued according to client requirements

and Necsa continued to provide research reactor end-fitting components to an international fuel manufacturer.

Furnaces for the production of UF_4 in the enriched uranium recovery facility were upgraded and commissioning is due to commence in the second quarter of 2012.

Smelter Project

The SAR and Design Package for the smelter, proposed for the smelting of components from the historic fuel cycle programmes, was approved by the NNR. This means that all regulatory approvals for the commissioning of the smelter have now been obtained, including the Record of Decision (RoD) by the Department of Environmental Affairs which was obtained in August 2007. The related Public Information Document was updated for a second time and is currently with the NNR for final approval. Public Hearings regarding the smelter are scheduled to be undertaken by the NNR in July 2012.

Nuclear Liabilities Management

IAEA/AFRA-related Activities

A number of consultations and meetings were held at the IAEA. Two training courses for African countries and one training workshop for an international audience were hosted at Necsa during the review period. The training courses were highly successful, resulting in a letter from the IAEA commending Necsa's excellent work and assistance.

Borehole Disposal Concept

The borehole disposal concept was developed by Necsa for the IAEA to provide facilities for the safe disposal of disused, sealed radioactive sources.

Necsa has undertaken various IAEA expert missions to Ghana during the past few years to evaluate progress made with the site characterisation for the first Borehole Disposal Unit and was requested by the IAEA to assist in the further training of eight persons from Ghana, in the predisposal management aspects of the borehole disposal activities. This was completed in August 2011. The IAEA still regards the concept as very important worldwide and various projects for further implementation are foreseen for 2012.

SHARS Mobile Hot Cell

Necsa has designed and manufactured a mobile hot cell specifically for the handling and conditioning of spent high activity sealed radioactive sources (SHARS) from teletherapy units and dry irradiators.

The success of the first three mobile hot cell operations in Sudan, Tanzania and Uruguay resulted in the US National Nuclear Security Administration (NNSA) expressing interest in working with Necsa to perform more of these operations worldwide. To this extent Necsa was contracted by Sandia Laboratories in the USA to manufacture three Long-Term Storage Shields (LTSSs) for future work. A further contract involved the replacement of the LTSS in Tanzania with a higher security version. A preparatory mission to Brazil took place in February 2012 and a mobile hot cell will be commissioned there in November 2012.

Nuclear Forensics

An assessment of Necsa's capacity to service South Africa with regard to nuclear forensics requirements revealed inadequate requisite expertise for nuclear forensics samples processing and analyses; inadequate or total absence of certain key facilities and instrumentation that will provide credible attribution of nuclear material origin; and clean laboratory spaces for processing of forensic samples.

Nuclear Forensics Capacity Building and Enhancement at Necsa

Having identified the need for a nuclear forensics capability as a strategic requirement for South Africa in the global landscape of nuclear security and safety, Necsa has initiated preparatory work to strengthen this position nationally.

Sustainability Report

08

Economic Sustainability

Strategy and Performance

Necsa has a dedicated division which is responsible for the integrated development and implementation of a coherent strategy for the Necsa Group in order to achieve its business, social and environmental objectives and its mandate as South Africa's primary nuclear research institution. Performance is evaluated against predetermined objectives and key indicators as agreed with the Minister of Energy. The division also supports a range of Necsa Group activities including risk management, business planning, intellectual property and knowledge management.

Strategy Development and Participation in National Nuclear Initiatives

Main activities during the review period included the following:

- The Necsa Group Corporate Plan was compiled, in close collaboration with Necsa divisions and subsidiaries, in accordance with all compliance requirements and was approved by the Minister of Energy;
- The Necsa Group Long-term Strategy was approved by the Board in July 2011;
- Localisation strategies for the Nuclear New-build Programme, as envisaged in the Nuclear Energy Policy and the IRP 2010, were developed and implemented. This included representing Necsa in the Department of Energy (DoE) working group performing the Integrated Nuclear Infrastructure Review in accordance with IAEA guidelines;
- Co-ordination of continued development and submission of proposals for a national Nuclear Energy Research, Development and Innovation Strategy to the DST;
- Co-ordination and compilation of Necsa Group inputs for the review of state-owned enterprises (SOEs) by the Presidential SOE Review Committee;
- Facilitation of participation by South African institutions in projects of the Euratom Seventh Framework Programme for Research on behalf of the DST, and support for the DoE in South Africa's participation in activities of the Generation IV International Forum;
- Pre-feasibility studies with potential international partners were completed or are under way to evaluate options and models for the establishment of nuclear fuel facilities in support of the envisaged South African nuclear expansion programme; and
- Involvement in the working group on the Minimisation of Civilian use of HEU of the Nuclear Industry Summit in preparation for the Seoul 2012 Nuclear Security Summit.

Group Performance Management

Performance management processes were implemented to manage and report on Necsa Group performance in terms of its predetermined goals and objectives, as reflected elsewhere in this annual report. A Necsa Group Performance Management Procedure was drafted and approved in support of performance management for the Group. All required performance reports were successfully prepared and submitted to the accounting authority and the executive authority according to compliance requirements.

Group Risk Management

Necsa Group risk and fraud prevention management strategies and plans were successfully implemented according to best practice and stakeholder requirements. The Necsa Group Risk Management Process is further elaborated on in the Corporate Governance section of this annual report.

Intellectual Property and Strategic Knowledge Management

The Necsa Group Intellectual Property (IP) management responsibility was transferred from the R&D Division to the Strategy and Performance Division to facilitate the establishment of the required functionalities of an Office of Technology Transfer (OTT) according to the provisions of the Intellectual Property Rights from Publicly Financed Research and Development Act, No. 51 of 2008. Activities included the finalisation of a set of IP management procedures, the establishment of an IP Steering Committee and regular engagement with the National Intellectual Property Management Organisation.

Strategic Business Development Support

Business development initiatives, aimed at the expansion of Necsa's commercial portfolio, were supported, and extensive support was rendered to various divisions and Pelchem on the development of potential business opportunities, the compilation of business plans and the development of funding proposals.

Financial, Risk and Information Technology Management

Resources are allocated to support Necsa's strategic objectives and priorities in terms of the following priorities:

Financial

- Developing an integrated Financial Strategy and Model that is aligned with Necsa Group priorities;
- Assisting in the implementation of Necsa's strategy by quantifying operational intentions and interpreting the financial implications thereof;

- Providing the required analysis and information to be a key business enabler for decision making; and
- Implementing cost control measures to ensure budget adherence as well as optimisation and prioritisation.

Financial Risk and Governance

- Reviewing, improving and maintaining financial controls, policies and procedures to comply with relevant regulations and guidelines;
- Producing financial statements that comply with the Treasury Guidelines, South African Statements of Generally Accepted Accounting Practice (SA GAAP), the Public Finance Management Act (PFMA), the Companies Act and other relevant legislation and practices; and
- Developing and implementing a financial risk framework to prevent fruitless expenditure, inappropriate exposure to risks and reckless use or application of resources.

Systems and Controls

- Implementation of appropriate systems and controls to ensure Necsa Group compliance with all internal policies and procedures; and
- Relevant legislation and regulations with regard to the financial, Information Technology (IT) and property management environment.

Supply Chain Management

- Developing policies and procedures for various aspects of the supply chain management process;
- Managing compliance with all relevant legislation, internal policies and procedures and codes of good practice; and
- Providing contract management and financial advisory support.

Information Systems

In order to enhance the integrity, efficiency and cost-effectiveness of Necsa's financial and related systems a number of projects were initiated, including Expanded Workflows, Server Virtualisation System (VMWare), Intrusion Detection and Prevention System and IT Disaster Recovery Plan.

Business Indicators

Purchases

Purchases for the Necsa Group amounted to R898 million, reflecting a 9.91 % increase compared to the previous reporting period. This resulted from price increases in products, materials and equipment, as well as non-routine purchases.

The top ten suppliers, as well as their products and/or services supplied to Necsa are tabled below, with the amounts spent on purchases expressed as a percentage of Necsa's total purchases for the reporting period:

Top 10 Suppliers for the Necsa Group

	Supplier	Product/Service rendered	R'000	%
1	Institut National Des Radioele	^{99}Mo isotopes	101,064	11.26
2	Areva-Cerca	Radiation material and equipment	100,513	11.20
3	Eskom	Electricity	52,425	5.84
4	ANSTO	^{99}Mo	43,629	4.86
5	National Nuclear Regulator	Nuclear licensing	25,183	2.81
6	Vergenoeg Mining Company (Pty) Ltd	Raw materials	23,328	2.60
7	Sasol Oil Fuel Marketing (Pty) Ltd	Fuel	17,124	1.91
8	Philips Medical Systems	Medical equipment	13,696	1.53
9	Safcrete Construction cc	Civil construction	9,556	1.06
10	Glenrand MIB	Insurance	8,178	0.91
Total			**394,695**	**43.98**

Broad-based Black Economic Empowerment

In support of government's economic transformation and the Broad-based Black Economic Empowerment (BBBEE) Act, No. 53 of 2003, Necsa endeavours to foster business relationships with companies that include Black participation within their organisational structures. Necsa's policy for preferential procurement from BBBEE companies is based on **the dti** Codes of Good Practice and within the levels specified.

BBBEE Spend

As at 31 March 2012, the Necsa Group had a total of 1,140 suppliers, representing an increase of 1.97 % over the previous reporting period. Of these, 448 or 39.3% are BBBEE rated suppliers, with accreditation levels ranging from 1 to 8. Purchases from BBBEE suppliers amounted to 64.38% (R264.8 million) of the Necsa Group procurement spend (excluding foreign orders), as indicated in the table below:

Procurement Spend on BBBEE Companies

	Total 2012			Total 2011		
	Orders	Suppliers	Value	Orders	Suppliers	Value
No. of orders	8,202	448	R264.8 million	7,369	498	R238.3 million
% of total orders	50.85%	39.30 %	64.38%	43.3%	44.5 %	29.2%

The number of BBBEE suppliers decreased, due mainly to the BBBEE ratings of some suppliers having expired during the financial year.

Necsa BBBEE Ratings

The annual BBBEE Evaluation Process was undertaken by an independent agency, accredited by the South African National Accreditation System (SANAS). All subsidiary companies within the Group apply the Necsa Group rating except for NTP Radioisotopes, NTP Logistics and AEC-Amersham which are accredited separately.

Necsa Group

The Necsa Group was assessed as a Level 5 contributor with a BBBEE procurement recognition level of 80%. As a value-adding supplier, a final BBBEE procurement recognition of 100% was recorded. Areas that require improvement in the future relate mainly to employment equity, skills development and enterprise development. The Group performed well in terms of preferential procurement and socio-economic development.

Necsa

Necsa was assessed as a Level 3 contributor with a BBBEE procurement recognition level of 110%. Further, as a value-adding supplier, Necsa received a final BBBEE procurement recognition of 137.5%. Areas that require improvement in the future relate mainly to employment equity and skills development. Necsa has performed well on preferential procurement, enterprise development and socio-economic development.

NTP

NTP was assessed as a Level 4 contributor with a BBBEE procurement recognition level of 100%. Further, as a value-adding supplier, NTP received a final BBBEE procurement recognition of 125%. Enterprise development and employment equity were identified as areas for improvement going forward.

Other Subsidiary Companies

All other subsidiary companies apply the Necsa Group scorecard.

Information Technology Indicators

IT Governance

The Necsa Board requires assurance of the effectiveness of the organisation's IT Governance. Accordingly, management continuously assesses, improves and aligns the existing governance structures, IT Strategy, policies and procedures to support the Necsa Group Strategy.

Management has taken the necessary steps to align Necsa IT Governance with the King III requirements in terms of:

- Executive responsibility for IT;
- The alignment of IT to the business objectives;
- The monitoring and evaluation of IT investments;
- IT risks; and
- Information and IT asset management

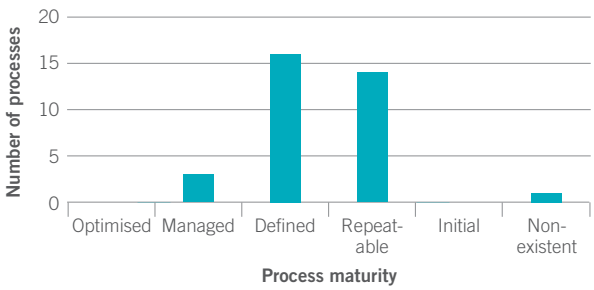
This work was still in progress at the time of reporting.

Compliance and accountability, as directed in the newly developed IT Governance Framework, will be monitored and reported at IT Steering Committee level and through the performance of Board Level Assessments.

The maturity of Necsa's IT Governance was independently assessed using Control Objectives for Information Technology (Cobit). The thirty four Cobit processes are assessed in four areas, namely Plan & Organise, Acquire & Implement, Deliver & Support and Monitoring.

The following were noted for the 34 Cobit processes:

- There is one process at level 0;
- There are zero processes at level 1;
- There are 14 processes at level 2;
- There are 16 processes at level 3;
- There are three processes at level 4; and
- There are zero processes at level 5.



IT Projects Completed

Human Resource and Payroll System

Phase II of the system was completed and includes Manager Self Service and Employee Self Service modules.

Necsa Knowledge Management System

The final testing and commissioning was completed and the system went live.

IT Disaster Recovery Plan

The implementation of the IT Disaster Recovery Plan was completed and successfully tested.

The Disaster Recovery Plan is aligned with the Necsa Emergency Procedure, as well as the Necsa Business Continuity Plan.

Research Information Management System

The Research Information Management System of the DST was successfully commissioned.

Information Security

- A new Intrusion Detection System was deployed at Necsa;
- All laptop devices were encrypted to secure information in the event of theft or loss; and
- No incident of Information Security breach occurred during the reporting period.

IT Systems Management

A new system was deployed enabling Necsa to:

- Monitor application, network and server capacity and availability live on a large video wall;
- Perform software release management to all network attached devices;
- Perform software patch management; and
- Report on service level availability on all applications.

Compliance with Nuclear Licences and Permit Requirements

Nuclear Installation Licences

The NNR issued a total of 41 Nuclear Installation Licences (NILs) to Necsa. The status of compliance with NNR requirements as laid out in the NILs is assessed on an annual basis and reported to the NNR.

NNR Approval Requests (NARs)

Annually, various submissions are made to the NNR for approval. Not all these submissions are processed in the course of the year and approvals received during the year can include submissions dating back a number of years. The following table summarises the submission and approval of NARs:

Activity	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
Number of submissions to the NNR	65	90	60	95	80
Number of approvals (including submissions submitted previously)	10	35	24	26	4
Number of submissions awaiting approval by the NNR	95	78	70	98	113

The Licensing Department has continued to reduce the number of open submissions by closing obsolete/redundant submissions in co-operation with the NNR. The priority and commitment list continues to contribute to improving the rate of authorisations. The NNR has met 69% of the targets and Necsa 89%. A significant improvement was observed in the NNR's compliance with agreed targets during the financial year.

Safeguards and Nuclear Non-Proliferation

Safeguards and Nuclear Non-Proliferation activities were performed on behalf of the South African government, in accordance with the DoE delegated functions under the Nuclear Energy Act, No. 46 of 1999, to meet the obligations of the Comprehensive Safeguards Agreement between South Africa and the IAEA. This is required in terms of the Non-Proliferation Treaty (NPT) which was acceded to by South Africa in 1991 and the Additional Protocol to the Agreement signed in 2002.

The annual Physical Inventory Verification (PIV) of nuclear material was concluded in August and October 2011 and gave a positive conclusion on the effectiveness of the State System of Accounting and Control (SSAC) for nuclear material and South Africa's compliance with its international safeguards obligations.

Progress was made in measuring the Thabana inventory using the IQ3 Drum Scanner, with about 18,000 drums containing LEU waste being declared and verified by the IAEA.

The IAEA reported in May 2011 that they found no indication of the diversion of declared nuclear material from peaceful purposes and no indication of undeclared nuclear material or activities in South Africa. Through Necsa's efforts, the Agency concluded that all nuclear material remained in peaceful activities.

The annual bilateral meeting between IAEA management officials and Safeguards Personnel was held in South Africa to discuss safeguards-related matters such as addressing the Thabana inventory resolution, the IAEA's development of the

State Level Concept and progress updates on Necsa nuclear fuel cycle-related research and development activities.

Necsa continues to enjoy technical co-operation with Oakridge National Laboratory in the USA to develop Safeguards Non-Destructive Assay capability in South Africa.

Standing Advisory Group for Safeguards Implementation

The Standing Advisory Group for Safeguards Implementation (SAGSI) reports directly to the Director-General of the IAEA. The South African representative participated in two work group and two plenary meetings in Austria. Amongst other things, advice was provided by SAGSI during the year on:

- The project for evolving the State-level concept;
- The conceptual framework for the IAEA safeguards system;
- Development of elements of the State-level concept;
- Guidelines for addressing high purity uranium ore concentrates;
- Guidance for States implementing comprehensive safeguards agreements and additional protocols (Published in March 2012 as Service Series 21);
- Safeguards cost methodology; and
- Structure and content of future Safeguards Implementation Reports (SIRs).

Five States were selected as test cases for the State-level concept, including South Africa, where the State-level approach is now well advanced.

Additional Protocol

Eight (8) Complementary Access inspections were carried out by the IAEA during the period in terms of the Additional Protocol Agreement. Two were carried out at Necsa and others at Rheinmetall Denel Munitions, First Uranium's Ezulwini Operations, Pretoria Metal Pressings, Avalloy, Denel Aviation and Denel Aerostructures. Various gold mines, uranium concentration plants and private companies were also inspected to ensure compliance with safeguards requirements.

Remote Monitoring System

The remote monitoring systems installed at key facilities have functioned well over the period, with no reported downtime.

Member State Support Programme (MSSP)

The 2011/12 financial year was marked by a number of changes in the RSA Support Programme (SP) functions. A new RSA National Co-ordinator was appointed with effect from 1 June 2011. In September 2011, the IAEA and the RSA SP revised the "South African Support Programme to the IAEA" co-operation document, which highlights the continuous commitment of the South African government to IAEA activities and indicates South Africa's fulfilment of its nuclear related obligations with the IAEA and other related stakeholders.

The 2011/12 annual report of the RSA Support Programme to the IAEA was issued in October 2011 and distributed to relevant MSSP stakeholders.

An MSSP meeting on some "softer" nuclear-related trade information task sharing was held in December 2011 with relevant national authorities.

Open source information was submitted to the IAEA on a quarterly basis as required in terms of the MSSP tasks agreed to by the RSA SP.

Analytical and Calibration Services

The extensive range of chemical, radio-analytical and instrument calibration services, facilities and expertise available at Necsa have been customised to uniquely meet the specific needs of the nuclear, uranium mining, fluorine production and related industries in South Africa. Necsa's laboratories play a crucial role in the various value chains of Necsa through support of safety, health and environmental control, and the certification of product radioactivity and/or elemental content against specification in the R&D and production facilities of Necsa and other South African industries. These include the nuclear industry (R&D, medical isotope manufacturing, power generation and waste management); gold, uranium and coal mines; power stations; environmental consultants; government departments; and the NNR.

Accreditation

The Analytical and Calibration laboratories are SANAS accredited to the ISO 17025 standard for competence of testing and calibration laboratories for the analysis of radioactivity and chemical content of environmental (geological, biological, water, gas), production and waste materials, with the additional accreditation of a new technology method for fast and accurate analysis of uranium and thorium isotopes during 2011/12; and calibration of a wide range of nuclear radiation and contamination monitors.

The laboratories gained registration as an analysis operations establishment with the Food and Drug Administration (FDA) – as required in terms of the 21st Code of Federal Regulations (CFR) 207.40 – on 20 September 2011. This is a requirement for service providers to medical radioisotope production.

Institutional Contributions

Two experts were appointed as members on the SANAS Chemical Specialist Technical Committee and SANAS Ionising Radiation Specialist Technical Committee respectively.

An analytical and calibration expert provided training to an IAEA/AFRA fellow from the Ghana Atomic Energy Institute in alpha-spectrometry and radio-chemical techniques, while another expert represented Africa at the 8th co-ordination meeting of the IAEA Analytical Laboratories for the Measurement of Environmental Radioactivity (ALMERA) in Vienna in September 2011. IAEA-ALMERA laboratory members are capable of providing reliable and timely analysis of environmental samples in the event of an accidental or intentional release of radioactivity in the environment. The purpose of the meeting was to plan the key activities for 2012–2017. Necsa was chosen to present an African regional course on alpha-spectrometry and radio-chemical techniques from 8 to 19 October 2012 at its Pelindaba site.

Environmental Sustainability

Decommissioning and Decontamination

Good progress was made during the year in accordance with the project schedules for the respective decommissioning projects.

The Decontamination Facility consists of a Wet Decontamination Section where chemical or metallurgical decontamination techniques are used to recover nuclear materials and a Dry Decontamination Facility where nuclear materials are physically and mechanically removed from contaminated materials for recovery.

A total of 415 batches were processed and 90% of the material that was presented for decontamination was cleared through regulatory control. Scrap sales to the value of R1.4 million were generated from the cleaned material.

Nuclear Waste Projects

As part of the consolidation of all waste management facilities into one area on the Necsa site, conditional approval was received from the NNR to relocate the Cell 2-3 waste conditioning facility. The licensing document to operate the facility is being prepared and the start of construction of the relocated facility is anticipated in the new reporting period.

A Safety Assessment Report (SAR) is being prepared for the Department of Health (DoH) for the conditioning of sources in the new Source Conditioning Facility. Preliminary approval has been received from the DoH to continue with conditioning.

Construction and installation of a Volume Reduction Facility at Pelstore, which will give effect to Necsa's waste minimisation commitment, progressed well and cold commissioning will commence later in 2012. The facility is expected to become fully operational during 2013.

Liquid Effluent Management

Effluent treatment was sustained without any unplanned operational interruptions or delays to effluent generators.

A planned shutdown of the Medium Active Effluent Evaporation System was completed successfully. This facilitated maintenance work and the profiling of critical equipment, in particular the circulation pump. Despite the shutdown, available capacity was maintained and no loss of production to any generator was incurred.

The Molybdenum Waste Transfer Station for liquid waste was decommissioned for re-location to pre-disposal operations. The Interim Safety Assessment Report for this project was completed and submitted to the NNR ahead of schedule.

Liquid Effluent Treatment

Discharges of industrial and low active effluent to the Crocodile River were well contained and well within statutory limits as follows:

	Q1 (2011) Apr – Jun	Q2 (2011) Jul – Sep	Q3 (2011) Oct – Dec	Q4 (2012) Jan – Mar	YTD Apr 11 – Mar 12
Industrial effluent (m^3)	29,577	32,641	32,256	41,258	135,732
Low active effluent (m^3)	1,685	2,200	1,936	1,202	7,023
Total effluent discharged to Crocodile River (m^3)	31,262	34,841	34,192	42,460	142,755
Dose impact (µS)*	**1.839**	**2.359**	**1.263**	**1.290**	**6.751**

* Authorised dose impact = 150 µSv per annum; ≈37.5 µSv per quarter (12.5 µSv per month)

Medium Active (MA) Effluent Processing and Treatment

	Q1 (2011) Apr – Jun	Q2 (2011) Jul – Sep	Q3 (2011) Oct – Dec	Q4 (2012) Jan – Mar	YTD Apr 11 – Mar 12
MA received (m^3)	124	164	217	73	578
MA evaporated					
(Low Salt) (m^3)	102	163	221	88	574
Concentrate solidified (m^3)	3.804	0	0	1.55	5.354
No. of 100 ℓ drums solidified (each)	95	0	0	40	135#

Limited solidification of MA concentrate took place in this reporting period

At the end of the reporting period, approximately 94 m^3 of accumulated concentrate required solidification; this accumulated amount will be solidified and transported to Vaalputs waste disposal site within scheduled time.

Nuclear Waste Storage and Transportation

Nuclear waste, collected from various points of origin and safely stored at Necsa during the review period, was as follows:

Type	Origin	Storage area	No. received 2011/12	Total at 31 March 2012
Drums	Facilities on Necsa site and external clients	Pelstore and Area 21	1,822 received 3,079 transported to and disposed of at Vaalputs	53,721
Spent sealed radioactive sources	Clients throughout South Africa, specifically the healthcare sector	Area 24 Source Store	1,752	6,216
Smoke detectors	Clients throughout South Africa	Area 24 Source Store	2,296	18,781

After obtaining NNR approval in March 2011 for the transport to and disposal of Necsa low level waste at Vaalputs, a total of 3,079 metal drums were disposed of at Vaalputs in May 2011.

Nuclear Waste Disposal

Necsa has continued to manage Vaalputs in the interim until such time as the National Radioactive Waste Disposal Institute (NRWDI) is operational. Vaalputs was issued with a new nuclear installation licence (NIL28) and is currently in the process of implementing the licence requirements.

3,262 waste packages from Koeberg and Necsa containing low level waste were received for final disposal. The cumulative total of waste packages disposed of at 31 March 2012 was 22,092.

Vaalputs maintained its ISO 9001:2008 and ISO 14001:2004 certification status during the 2011/12 financial year. The NNR conducted its nuclear licence compliance inspections on a quarterly basis. The annual Safety, Health, Environment and Quality (SHEQ) audit was conducted in September 2011 and the Disabling Injury Incident Rate (DIIR) for Vaalputs remained zero, with Vaalputs having operated for 50,244 man-hours without disabling injury.

Environmental Monitoring Programme

A comprehensive Environmental Monitoring Programme is in place to meet the requirements of the Air Quality Act, the Nuclear Energy Act, the National Environmental Management Act and the National Water Act. Resource usage, waste generation, and impacts on media and ecology are monitored and illustrated in the following sections.

Water

Compliance with Water Permit Requirements

Compliance is measured against the current water permit (Permit No. 1874B). The following table reflects the effluent generated from October 2011 to September 2012.

Effluent released to:	Volume (m^3)	Permit limit (m^3)	% of permitted amount
Crocodile River	127,279.8	250,000	50.91
PE Pans 1-5	12,700	19,000	66.84
Pan 6	204.5	8,500	2.4
Pan 9	3 579	15,000	23.86
PE Pans 7	135	4,500	7.4
PE Pans 8	200		
Total	144,098.3	365,500	39.4

Water Consumption

The following table reflects the water consumption for the period April 2011 – March 2012.

Resource	Amount (m^3)	Permitted amount (m^3)	% of permitted amount	% change year on year
Rand Water	893,302	400,000	223.3	0.8
River Water	111,230	840,000	13.2	8
Borehole	0	9,490	0	0
Total	1,004,532	1,249,490	80.4	1.6

Air

Compliance with Air Permit Requirements

The total fluoride emission was 64.7% less than the previous year and the monthly site limit was not exceeded during the year.

Environment

Compliance with Environmental Requirements of the Nuclear Licence

No nuclear occurrences related to environmental monitoring were reported to the NNR during the period 1 April 2011 to 31 March 2012.

The 2011 calendar year modelled dose to the public, based on actual releases, was 0.007 millisieverts (mSv) for the liquid

pathways of authorised releases to the Crocodile River and 0.002 mSv for gaseous releases, giving a total of 0.009 mSv. Comparative figures for the previous year were respectively 0.005 mSv and 0.004 mSv resulting in a total of 0.009 mSv.

The data shows there is no significant dose impact on the environment due to Necsa's activities.

The Environmental Monitoring Programme at Vaalputs was in full compliance with sample reporting levels and no nuclear occurrences were registered.

Electricity

Energy Management

Progressive energy savings opportunities implemented resulted in significant cost savings for Necsa. The site electricity consumption for the reporting year was 100.2 GWh (102.9 GWh for the previous year) representing a reduction of 2.7 GWh (2.6%).

In a quest to further reduce consumption, a lighting energy audit was conducted in collaboration with an experienced external energy company. The study projects a potential saving of R2 million per annum, but requires Necsa to invest approximately R3.5 million in order to achieve this. The remainder of the capex would be funded through the Eskom subsidy. This proposal will be implemented subject to the availability of funds.

In the interim, other energy saving measures will be investigated.

Network Improvements

Main feeder switchgear at Pelindaba West was replaced resulting in improved reliability of supply to end users. Improved maintenance techniques on MV switchgear also contributed to improved reliability of electricity supply.

Monkeys entering open yard substations remain a problem on the Necsa site. Preventive measures have been put in place to minimise the risk and discussions are in progress with Eskom to erect electric fencing at the substation which is most affected.

Electricity Supply Agreement

An Electricity Supply Agreement with Eskom is in the final stages of preparation for signing.

Social Sustainability

Stakeholder Management

Necsa's stakeholder matrix, depicted on page 5 of this report, has been developed through a strategic process and is regularly updated. Management of stakeholders is an organisation-wide responsibility, with certain functions managed centrally.

Stakeholder Relations

Overview

An integral part of Necsa's mandate is to increase public knowledge and change perceptions of the nuclear industry. The Necsa Visitor Centre, which was officially opened to the public on 27 May 2011, was established as a tool to accomplish this.

Events

During the year, 40 stakeholder-directed events were managed and successfully executed.

Pelindaba Public Safety Information Forum

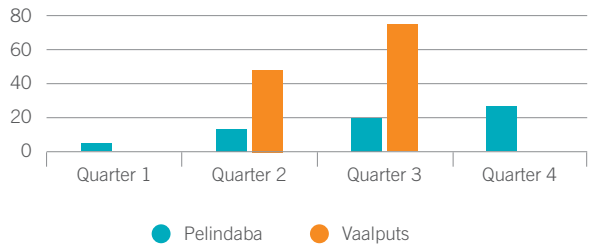
The Pelindaba Public Safety Information Forum (PSIF) was established by Necsa, in accordance with the Department of Minerals and Energy Regulation No. 26112 as promulgated in the Government Gazette of 12 March 2004, as part of the National Nuclear Regulatory Act, No. 47 of 1999. As the holder of a nuclear licence, it is required that forum meetings be held on a quarterly basis with the members of the community that live within a 5 km radius of the nuclear facility. The Chairperson and Deputy-Chairperson are independently appointed by the NNR, with Necsa as the licence holder providing the secretariat for the meeting.

The main objective of the forum is to facilitate interaction with community members and keep stakeholders informed of developments and safety matters.

Vaalputs Public Safety Information Forum

In terms of the above regulation, Necsa is not obliged to arrange PSIF meetings in the Vaalputs area, because the closest community to the site is located 45 km away. From a stakeholder relations perspective, however, Necsa strives to meet with community members to keep them informed about safety at the Nuclear Waste Disposal Site. During 2011/12 two meetings were held in different neighbourhoods in the sixteen surrounding communities.

PSIF Attendance for the Year 2011/12



Public Participation

Necsa hosted visitors from across the globe during the year. These included learners and teachers, employees from different organisations, government officials, and overseas visitors. Programmes were tailored to suit specific groups according to their needs, although most visits included the SAFARI-1 research reactor, NTP and the Pelchem plants.

Exhibitions

Exhibition at the World Nuclear Association Annual Symposium

The annual symposium, held in the Central Hall, Westminster, London, between 14 and 16 September 2011, was attended by over 700 leaders and specialists from more than 30 countries. This symposium is the nuclear industry's premier event and brought together the nuclear industry and its major stakeholders to discuss the practicalities of new nuclear power generation.

The exhibition served not only as a marketing tool, but also as a hub where Necsa delegates could meet with future business partners. Several media representatives interviewed Necsa's CEO on the stand, resulting in positive media coverage, both on-line and in print.

Exhibition at IAEA Annual General Conference

This exhibition took place in Vienna between 18 and 23 September 2011. The NNR was responsible for exhibiting on behalf of all entities reporting to the DoE.

Exhibition at PIME2012 in Warsaw, Poland

Between 12 and 15 February 2012, the Public Information Materials Exchange (PIME) offered a unique opportunity for delegates from nuclear facilities across the globe to network and share experiences with fellow professionals by presenting their communication activities. Necsa showcased its state-of-the-art Visitor Centre.

Local Exhibitions

- Exhibition in Parliament – Minister of Energy Budget Vote Speech;
- 2nd Regional Conference on Energy and Nuclear Power; and
- Nuclear Industry Association of South Africa (NIASA): Localisation Conference.

Corporate Social Investment

Necsa

During the past financial year, Necsa continued with its involvement in Community Development. A bursary of R70,000 was granted to a student from the Northern Cape to study towards a National Diploma in Electrical Engineering. A successful Do It Yourself (DIY) course was presented by the Nuclear Skills Development Centre to community members of Nourivier and Soebatsfontein in the Northern Cape. A total of 70 people attended the course, which covered the basics of Mechanical and Electrical work.

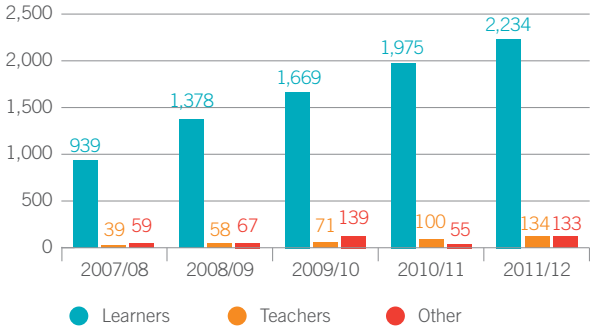
During January 2012, three interns were enrolled at the NSD Centre to complete their studies in Electrical and Mechanical Engineering.

As part of the agreement with the Vaalputs community, Necsa continued to outsource the catering for PSIF meetings to local schools in order for them to raise funds for their organisations.

Schools Outreach Programme

Each year, Necsa participates in the National Science Week and the growth in attendance by both learners and teachers continues to rise year-on-year, as reflected in the following Figure.

National Science Week



The Necsa Visitor Centre has enhanced Necsa's ability to reach out to schools.

The "Cell C Take a Girl Child to Work" initiative is a county-wide project, which seeks to expose girl children to available careers in the work environment. Necsa hosted 60 learners from a Dinaledi school in the North West, as well as children whose parents are employees within the organisation.

During Casual Day, R10,000 was collected for Meerhof and Zodwa Special Schools for mentally and physically disabled children.

NTP

NTP's focus was on projects aimed at making a difference in surrounding communities. Education and sustainable development are intertwined, which is why the focus was on disadvantaged schools such as Ennis Thabong and Re-e-Lwele Primary Schools in the Hartbeespoort area. NTP continues to undertake regular maintenance activities at the schools and is in the process of revamping Ennis Thabong's much-needed library and computer room. Safety inspections by NTP's Safety Manager were also carried out at both schools. Findings are in the process of being rectified.

Since the vast majority of NTP's products and services have applications in the healthcare environment, involvement includes the uplifting of basic healthcare in the community in collaboration with CANSA, using mobile clinics where women receive pathology tests. Together with SpecSavers mobile clinic, NTP arranged eye tests for the educators and students at Re-e-Lwele Primary School. Out of the 125 tests conducted, 21.6% required corrective eyewear.

NTP made a substantial donation of a R15.6 million PET-CT scanner to the people of the Western Cape. The scanner is situated at the Western Cape Academic PET-CT Centre and is the 10th functioning PET-CT scanner in the country. Most of these scanners are in the Gauteng province with only one located in the Western Cape, which is shared between one private clinic and three state hospitals. The donated scanner is the first state-owned scanner in the Western Cape. The need for an additional PET-CT scanner in the province was imminent as the use of F-18 FDG has grown substantially. The first patient to utilise the newly installed scanner, was scanned on 30 March 2012.

NTP undertook to sponsor the 2012 school fees for two former Ennis Thabong learners who are now doing their second year at Hartbeespoort High School. New school uniforms, books and stationery were purchased.

Other projects undertaken in the period include the Ride for Hope Annual Cycling Challenge, support of CANSA's Shavathon, Volunteer Day and general awareness campaigns at the schools.

Pelchem

Pelchem's Corporate Social Investment efforts focused on Meerhof School for disabled children, a school situated within close proximity to its facilities. The Pelchem management team was involved at the school on Casual Day, distributing Pelchem-sponsored snacks and gift packs. Pelchem also supported the school through the purchase of 200 calendars displaying art work done by the disabled children. A special Valentines music show was organised for the school with Pelchem staff and musicians entertaining the children.

Media Liaison

Media Relations

The year under review saw the continued establishment of new relationships with various print and broadcast media to advance the nuclear industry. A number of local journalists were invited to the Necsa Visitor Centre in a bid to renew existing communication channels and to establish additional information exchange networks for all matters relating to nuclear technology. The Necsa Visitor Centre served as an excellent platform to educate and inform local journalists, and the venue has proved to be extremely suitable for media engagements due to its exclusion from the main nuclear facilities and easy access.

Media Campaign

An unprecedented Nuclear Awareness Advertising Campaign was launched in February 2011. The campaign introduced the Necsa Visitor Centre and carried various messages focused on demystifying nuclear technologies, informing the public and inspiring learners to take up careers in nuclear science and technology.

The twelve-month campaign was promoted through radio, print, theatre, websites, social media and other appropriate marketing channels. Four million people were reached.

Media Reach

Medium	Reach	Frequency*
Radio	2.1 million	14
Print	1.8 million	13
Activations – schools	62,978	1
Activation – churches	9,638	1
Activations – campuses	70,000 15,000	1 2
Total	**4.0 million**	

* Frequency refers to the number of times the same person is likely to see the same media message.

Acquired Value

	Value	Cost to Necsa	Added value*
Kaya	R230,803	R201,200	R29,603
Motsweding	R334,464	R121,500	R212,964
YFM	R1,248,343	R516,147	R732,196
Campus	R147,975	R115,311	R32,664
Daily Sun	R956,931	R797,443	R159,487
Total	R2,918,516	R1,751,601	R1,166,914

* Due to popular public interest and spontaneous mentions of the Necsa advertising campaign by the media, the campaign gained 67% more Rand value.

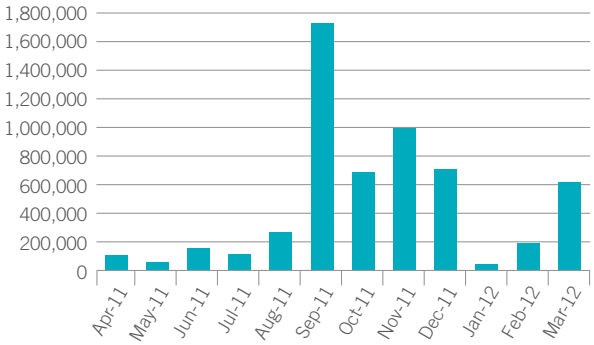
Fukushima

Following the Fukushima Daiichi incident, Necsa maintained open discussions with the public and the media through information sessions and media enquiries throughout the year. As a result, the Necsa brand and reputation was assertively profiled as a credible source of opinion and information.

Advertising Value Equivalents

The following national Advertising Value Equivalent figures for the period were provided by an independent media monitoring agent:

Advertising Value Equivalents – April 2011 to March 2012



Knowledge Management

Increased focus was placed on an integrated approach to the generation, digitisation and preservation of critical knowledge. This was made easier through the absorption of all archival material which was collected from decentralised departments, and an increase in the scale of digitisation activities on the new Necsa Knowledge Management System.

Interaction continued with the International Nuclear Information System (INIS) of the IAEA through the scanning of local publications for potential South African contributions to the database, and the supply of various information services related to the INIS System.

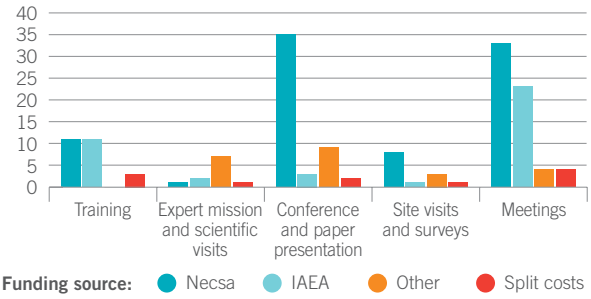
In the spirit of national and international co-operation, good relations were maintained with other organisations in the library and information field, including Sabinet Online, the Southern African Inter-lending Scheme and the North West Public Library System.

International Relations

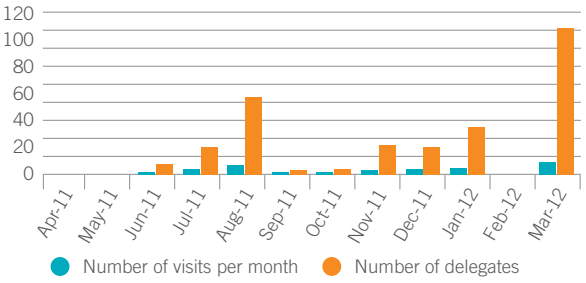
Incoming and Outgoing International Visits

In the course of the 2011/12 financial year, International Relations monitored 171 outgoing international visits by 244 officials in which 36 countries were visited.

Types of Visit and Funding Source



Incoming International Delegations



IAEA and AFRA

The participation of Necsa staff members in IAEA and AFRA activities continued to grow and the following initiatives are worthy of mention:

- Six projects, which will be funded under the Technical Co-operation Programme cycle, 2012–2013 were approved in the following fields:
  - Health and nutrition; and
  - Industry;
- Necsa experts regularly participated in IAEA consultative meetings; and
- Necsa staff members benefited from the Technical Co-operation Programme by participating in training courses, scientific visits and workshops.

Safety, Health, Environment and Quality

Security

Necsa's security measures are designed on the basis of threat analysis in accordance with international best practice. Security is achieved through implementation of a number of security layers which are designed to counter the assessed threat and are reviewed periodically in the event that the threat changes. The categorisation of all facilities is in line with IAEA standards and provides the basis for the graded security approach.

National Key Point Audit

As a National Key Point (NKP) in terms of the National Key Points Act, No. 102 of 1980, Necsa undergoes a NKP audit on an annual basis. The NKP office, under the South African Police Service (SAPS), regulates the security measures at every NKP in the country. The audit, conducted on 2 September 2011, focused on the management of security operations, administration of security officers and the adequacy of physical protection measures. An overall score of 97.72% was achieved, reflecting an improvement over previous audits (2010: 95.5% and 2009: 90.7%).

Access Control of Employees and Visitors

A marked improvement in access control and the efficiency of Security staff members was recorded in the period, with Necsa's Security staff emerging as a professional force, geared to meet the requirements for NKP security.

Successful joint exercises were undertaken with the SAPS which was on the alert and response-ready.

The Joint Planning Committee

The Joint Planning Committee (JPC) is a body established in terms of the NKP to regulate the affairs of the NKP and bring together various stakeholders such as the SAPS, State Security Agency, Necsa Security, Necsa Emergency Services, the Madibeng Community and the NNR.

Four JPC meetings were held in the review period to co-ordinate and consolidate activities in accordance with the NKP Act.

Security Exercises

Security exercises are important in establishing the readiness of security forces and the community to respond to an emergency. A joint security exercise was held on 19 August 2011 with local police, using a helicopter, and the Necsa Security response team. Overall the exercise was very successful, highlighting important elements that arise when two forces (internal Necsa Security and external SAPS) need to co-operate and liaise during a response action.

Safety

Employee Safety (Occupational Hygiene)

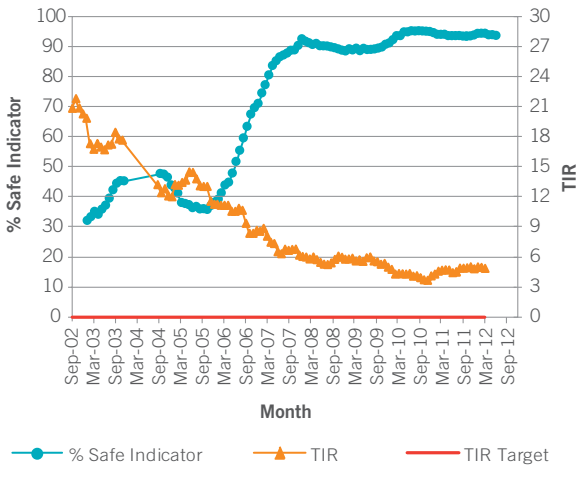
Medical Services continued to conduct Hazard Identification and Risk Assessments, including surveys as per the Occupational Health and Safety (OHS) Act, No. 85 of 1993. A total of 74 assessments and surveys were conducted during the financial year.

Behaviour-based Safety (BBS)

Necsa continued the implementation of the Behavioural Accident Prevention Process (BAPP®) under licence from Behavioural Science Technologies (BST®) (USA) and with the assistance of Behaviour-Based Initiatives (BBI), a local BBS consultant. This process uses trained observers to identify at-risk behaviours (i.e. behaviours that could result in a person being injured) and barriers to safe behaviour and to remove these barriers to prevent injuries.

The BBS Process has, over the years, made a significant contribution to improving safety at Necsa, with the Total Injury Rate (TIR) reducing from 20.9 in September 2002 to 4.8 in March 2012 as shown in the graph below. The TIR includes all injuries to personnel, even minor injuries. Over approximately the same period, the percentage Safe Indicator (which is an indication of the safe behaviours observed combined with an indicator of the BBS activity) improved from 32% to 94.6%.

Necsa: All Processes



The following table provides some related BBS statistics, as well as a comparison with those of previous years:

	Jan to Dec 2005	Jan to Dec 2006	Jan to Mar 2007	Apr 2007 to Mar 2008	Apr 2008 to Mar 2009	Apr 2009 to Mar 2010	Apr 2010 to Mar 2011	Apr 2011 to Mar 2012
Trained observers	647	909	1,033	1,298	1,576	1,708	1,799	1,804
Number of observations	4,529	8,289	2,997	13,459	14,037	17,103	18,285	17,904
Number of contacts	5,928	11,683	4,526	13,184	20,282	18,277	24,508	25,679
Number of barriers removed	1,344	3,113	797	2,983	3,779	3,646	3,896	3,519

Nuclear Event Management Process

No major events related to environmental, public or workers' exposure occurred during the reporting period. The SHEQ Department embarked on a programme to improve the quality of event investigations in order to ensure that events are properly investigated and the corrective actions are effectively implemented.

Events were analysed for trends, with slips, trips, falls and motor vehicle accidents being the focus during 2011/12. Analysis included identifying risk areas on site where personnel are knowingly or unknowingly exposed to unsafe conditions.

Necsa's Management is committed to providing the required resources to ensure that events are investigated and closed out in a timely manner, thus ensuring that actions are implemented effectively. The resulting improvement was seen through an Audit Process undertaken during the period.

Health

Medical Surveillance Programme

At the end of the reporting period 889 chemical, four laser, 759 noise and 1,032 radiation workers were registered as occupationally exposed workers at Necsa. They are subjected to regular, formal medical surveillance and health care programmes to ensure their good health despite their occupations.

Employee Assistance Programme

Medical Services engaged in a voluntary counselling and testing exercise. The aim was to establish the HIV/AIDS baseline risk, and offer the opportunity to those individuals who wanted to be tested to obtain assistance through the on-site Medical Services.

Participation results were as follows:

- Pelchem, 82 employees tested – 56% of the staff complement;
- NTP, 153 employees tested – 57% of the staff complement; and
- Necsa, 640 employees tested – 38% of the staff complement.

In total, 875 employees (42%) were tested.

Emergencies

Emergency Planning

Five successful Necsa site emergency exercises were held during the period, where minor deficiencies were identified and an Action Plan to correct the deficiencies was compiled. An NNR emergency exercise was held during November 2011. A number of shortcomings were identified but overall, improvements were recognised. The NNR indicated that visible improvements were observed in terms of the Madibeng Disaster Management Group, and an NNR Act, Section 38 Agreement between Necsa and local governments was signed by all parties involved.

Two successful workshops were held with disaster management officials from Madibeng, Bojanala, Tshwane, North West and the National Disaster Management Centre.

Emergency Services

Necsa's Emergency Services provides services not only to Necsa, but also to the community in the vicinity of Necsa's site. The following emergency calls were responded to in the period:

Type of call	Necsa		Public	
	Number of calls	Number of patients transported	Number of calls	Number of patients transported
Fire	24	0	96	0
Vehicle accident	5	1	114	75
Ambulance calls	40	34	173	106
Total	**69**	**35**	**383**	**181**

From the table it is clear that Necsa delivers a substantial service to the community.

SHEQ Performance

The following table summarises Necsa's SHEQ performance relative to previous years in terms of the International Nuclear Event Scale (INES) and other safety performance criteria:

No.	Description	Period									% improvement (+)/ deterioration (-)
		2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	
1	Nuclear Events • INES rating = 0 • INES rating > 0	105 0	71 1	42 3	48 0	58 2	34 6	19 4	38 3	43 5	13 (-) 67 (-)
2	Average cumulative individual dose (mSv per person) for 12 months*	0.72	0.69	0.74	0.7	0.74	0.64	0.79	0.75	0.75	0
	Number of persons who received a dose above 4 mSv	44	37	47	51	53	49	67	61	68	11 (-)
3	Disabling Injury Incident Rate (DIIR)	1.52	1.15	2.02	1.26	1.26	0.89	0.89	0.52	1.02	96 (-)
4	Total Injury Rate (TIR)	14.6	13.2	11.3	8.9	6	5.8	4.8	4.3	4.9	14 (-)
5	Disabling Injuries (DIs)	24	18	28	20	23	14	16	10	20	100 (-)
6	Workdays lost due to DIs	466	718	319	189	679	429	188	171	202	18 (-)
7	Maximum man-hours worked without a DI	456,681	536,235	423,088	599,199	598,276	702,623	643,198	959,377	721,963	25 (-)

* Necsa aims to ensure that the average annual effective dose is less than 4 mSv, which is the As Low As Reasonably Achievable (ALARA) objective.

SHEQ Audits

Forty-seven SHEQ compliance audits were conducted during the year. SHEQ-INS implementation and maintenance in the operational facilities are at an acceptable level of above 80% compliance.

Human Resources

Introduction

Necsa's Human Resource division derives its mandate from:

- The Necsa Business Plan:
  To build technical human resource capacity through innovative human resources development initiatives;
- Human Resources Strategic Direction:
  - Talent management;
  - Organisational change management; and
- HR Strategic Objectives:
  Human capacity building to ensure that Necsa is able to fulfil its strategic imperatives.

Necsa Group Staff Composition in Accordance with Internal Band Structure: 1 April 2011 to 31 March 2012

Overall Staff Composition

The Necsa Group's staff complement decreased by 4.59%, from 2,179 in 2010/11 to 2,097 at the end of the reporting period.

The number of contract staff decreased from 311 in 2010/11 to 199 in 2011/12, in line with Necsa's strategy to co-ordinate and consolidate its workforce to deliver on its strategic mandate.

Job category	Total	Black	White	Female
Directors	21	13	8	6
Management	149	50	99	37
Engineers	64	22	42	13
Scientists	113	52	61	32
Other professionals	153	54	99	37
Supervisors	100	37	63	11
Operators	229	176	53	17
Artisans	109	41	68	6
Technicians	137	97	40	53
Skilled	450	215	235	235
Semi-skilled	305	243	62	101
Unskilled	68	62	6	30
Contract staff	199	101	98	60
Grand total 31 March 2012*	**2,097**	**1,163**	**934**	**638**
Grand total 31 March 2011	2,179	1,182	997	653

* These figures include AEC-Amersham, Gammatec NDT, NTP Logistics and Directors

Necsa Group Employment Equity Performance against Numerical Goals as at 31 March 2012

Occupation categories	Total employee strength		2012		Target 2006–2011		Performance achieved 2011–2015		Target 2011–2015	
	2011	2012	Black (male & female)	Female (black & white)	Black (male & female)	Female (black & white)	Black (male & female)	Female (black & white)	Black (male & female)	Female (black & white)
Management	139	149	50	37	50%	45%	33.6%	24.8%	40.0%	25.0%
Engineers	69	64	22	13	51%	23%	34.4%	20.3%	51.0%	25.0%
Scientists	115	113	52	32	40%	30%	46.0%	28.3%	50.0%	35.0%
Other professionals	147	153	54	37	35%	30%	35.3%	24.2%	35.0%	30.0%
Supervisors	99	100	37	11	25%	15%	37.0%	11.0%	30.0%	15.0%
Operators	242	229	176	17	65%	10%	76.9%	7.4%	Target achieved	10.0%
Artisans	108	109	41	6	40%	3%	37.6%	5.5%	40.0%	3.0%
Technicians	130	137	97	53	60%	40%	70.8%	38.7%	Target achieved	45.0%
Skilled	430	450	215	235	25%	50%	47.8%	52.2%	50.0%	50.0%
Semi-skilled	328	305	243	101	65%	40%	79.7%	33.1%	Target achieved	40.0%
Unskilled	38	68	62	30	80%	25%	91.2%	44.1%	Target achieved	40.0%

Notes:
- The figures in red indicate fields where EE Targets were not met.
- Figures are for the Necsa Group.
- Figures do not include non-permanent employees, students and Directors.

Staff Movements

Appointments and exits during the period are reflected in the following table:

Job category	Designated group		Total employees	
	Appointments	Exits	Appointments	Exits
Management	4	2	5	7
Engineers	4	0	7	7
Scientists	8	6	10	9
Other professionals	9	3	10	9
Supervisors	0	0	2	4
Operators	8	3	9	3
Artisans	4	1	5	3
Technicians	12	9	15	10
Skilled	16	13	20	190
Semi-skilled	24	16	32	17
Unskilled	3	0	3	0
Contract staff	76	132	130	242
Grand total	168	185	248	330

Workplace Climate Indicators

Staff Turnover in Critical Skills Categories (%)

The review period reflected a stabilisation in staff turnover in the management category and a decrease in the technical category.

However, there has been a significant increase in the turnover of engineers and scientists since 2010.

Job category	2012	2011	2010	2009
Management	4.9	6.3	6.6	6.9
Engineers and scientists	8.7	9.2	5.8	10.8
Technicians	7.5	6.8	9.4	9.2

Disciplinary Hearings, Grievances and Sick Leave

Description	2012	2011	2010	2009
Disciplinary actions (number)	16	20	55	33
Grievances registered (number)	5	3	13	36
Sick leave (days per person per month)	0.49	0.50	0.59	0.63

Labour Union Membership

The Union statistics at 31 March 2012 were as follows:

Unionised	Number	Percentage
Pelindaba Workers Union	577	32.3 %
Solidarity Union	189	10.6%
National Education, Health and Allied Workers Union (NEHAWU)	448	25.1%
Sub-total	**1,214**	**68.0%**
Non-unionised	**572**	**32.0%**
Total	**1,786***	**100.0%**

* Excluding Directors (21), Contract Staff (199) and staff of subsidiaries [AEC-Amersham and Gammatec (91)]

Training and Development

Human Capital Development

Study Assistance Scheme

From April 2011 to March 2012, a total of R2,044,302 was spent on the Study Assistance Scheme (SAS) to assist Necsa staff to obtain educational qualifications at various institutions of higher learning throughout South Africa. The number of employees assisted through the scheme was as follows:

Study Assistance Provided								
Category	Black		Coloured		Indian		White	
	M	F	M	F	F	M	F	M
PhD	2	0	0	0	0	0	1	1
MSc	4	2	0	1	1	0	3	3
Masters in Engineering	2	2	0	0	0	0	1	1
Honours	0	0	0	0	0	0	1	0
BCom	1	0	0	1	0	0	1	1
National Diplomas	12	2	2	2	0	0	5	2
BTech Degrees	3	3	0	0	0	0	0	0
Security Management	10	2	0	0	0	0	0	0
Technical	7	2	1	0	0	0	3	0
Other Qualifications	62	40	5	4	1	0	11	17
Total SAS applications	103	53	8	8	2	0	26	25

Mentoring and Coaching

In order for Necsa to continue delivering on its strategic objectives, an organisational need system was identified to accelerate skills transfer to young graduates who are beginning to enter the organisation as a result of Necsa's training programmes. An external service provider was appointed to facilitate Mentoring and Coaching specifically for core skills.

The third phase was rolled-out in April 2011 with a total of 18 mentors and 23 mentees participating. In order to graduate, all mentees, with the support of mentors, will select a topic relevant to Necsa business operations and conduct research and thereafter present their findings to a panel of judges. Throughout the Mentoring and Coaching Programme, the panel of judges consists of senior level Necsa staff members.

Necsa Graduate Support Programme

This programme, comprising the Graduates-in-training Scheme, Undergraduate Bursary Scheme and Post-graduate Bursary Scheme, will ensure the creation of a sustainable pool of critical skills in alignment with Necsa's strategic imperatives and the sustainable future of the country. The number of Graduates-in-training (engineers, physicists and scientists) was 19 and the number of bursary students was 26. Necsa had 16 undergraduate bursars in 2011/12 – mainly in the field of engineering and chemistry. Necsa also has a total of 10 post-graduate bursars, mainly in physics and sciences.

Necsa Internships

In continued support of the National Skills Development Strategy Necsa undertook the training of interns and learners funded and supported by the Chemical Industries Education and Training Authority (CHIETA), the DST and the DoE.

Security Learnerships

Necsa was awarded provider accreditation by the Safety and Security Sector Education and Training Authority (SASSETA) for the training of learnerships in:

- NQF Level 3, General Security Practitioner;
- NQF Level 4,Specialised Security Practitioner;
- National Key Point Training; and
- Fire Arms Competency Training.

A total of 10 learners started in July 2011 and will complete their qualifications in 2012.

Discipline	African	
	M	F
Security learnerships	6	4
Total	**6**	**4**

Adult Basic Education and Training (ABET)

A total of 92 employees enrolled for the programme in the period 1 February 2011 to 30 November 2011 and 68 were declared competent in the ABET levels they had enrolled for. During this period, 26 learners were declared competent at NQF Level 1 in both Communications in English and Mathematical Literacy after writing the Independent Examination Board exams. Employees enrol voluntarily on the programme after permission has been granted by their line managers. Although the lessons are self-paced, learners are encouraged to try to complete at least one level and advance to the next level in the same learning period as defined in the Service Level Agreement.

Levels	Communi-cations in English	Mathematical literacy	
Level 1	5	7	12
Level 2	9	10	19
Level 3	6	5	11
Level 4/NQF 1	15	11	26
Total	**35**	**33**	**68**

Nuclear Skills Development Centre (NSD)

The NSD continues to grow and fulfil its mandate in responding to the call made by government through the National Skills Development Strategy. The quality of training at NSD is of such a high standard that it has been able to partner with clients such as:

- Department of Public Works (100 students);
- Development Bank of Southern Africa (150 students);
- Alstom (55 students);
- DB Thermal (35 students); and
- Others (88) on job creation projects.

The Centre is fully utilised and continues to attract new clients.

In its Decentralised Trade Test Centre, 120 pre-tests to determine the readiness of candidates for the final trade tests were conducted; 280 candidates received trade test preparation required by the SETAs; and 245 candidates wrote the artisan trade tests of whom 207 passed (84.5%).

Discipline	Apprenticeships		Total
	M	F	
Boiler-making	21	8	29
Fitter	34	12	46
Mechanical Engineering (Technician)	10	0	10
Instrumentation	14	4	18
Millwright	34	2	36
Electrician	112	34	146
Pipe Fitter	23	1	24
Fitter and Turner	18	4	22
Turner	14	7	21
Welder	30	6	36
Other	9	1	10
Grand total	**319**	**79**	**398**

Organisational Development

Shape and Size

In July 2011 Necsa embarked on the "Shape and Size" Project to ensure the optimal design and alignment of organisational structures and capacity (size) to facilitate delivery on Necsa's strategic mandate and business ventures in a cost-effective and operationally efficient manner.

The recommendations in the over-arching organisational report, summarising the findings and recommendations regarding the Shape and Size of Necsa and its various divisions, were presented to and approved by the Necsa Board, with minor exceptions. The new high level organisational structure was presented to Necsa staff by the Acting CEO. Next steps involve supporting the organisation with the implementation of the new structure as per approved divisional business cases and through the facilitation of proper change management.

Job Profiling

In order to ensure better alignment to work requirements and role clarity among employees, a project was initiated to review and develop integrated job profiles for the organisation. A total of 353 job profiles have been developed.

Employee Health

Necsa Group Medical Aid Scheme

Necsa's employees are obliged, in terms of their conditions of service, to become members of either Discovery Health or Sizwe Medical Scheme, or to become dependents on their spouses' medical schemes. Detailed membership information is available on request.

Necsa Retirement Fund

Necsa's Group Retirement Fund is a defined contribution provident fund which complies fully with the Pension Funds Act, No. 24 of 1956, as amended. The Fund is managed by a Board of Trustees comprising 50% employer and 50% employee representatives. Old Mutual Corporate is the administrator of the Fund and manages the Fund in conjunction with the Trustees, while Towers Watson provides investment and actuarial advice.

The Fund follows a life stage model approach as well as a member level investment choice, consisting of three investment portfolios, namely the market risk, stable and money market portfolios, to deal with the different needs of members with respect to their inflation and exit risks. The Fund's investment managers are Allan Gray Limited, Coronation Asset Management, Prescient Investment Management and Sanlam Investment Management.

Given the different investment portfolios, the market risk portfolio aims to deliver 5% per annum (net of fees) out-performance of "headline inflation" over any rolling seven-year period and the stable portfolio aims to deliver 3% per annum (net of fees) out-performance of "headline inflation" over any rolling three-year period.

The cumulative returns of the mentioned three investment portfolios for the financial year were as follows:

- Market risk portfolio 11.75%;
- Stable portfolio 6.84%; and
- Money market portfolio 5.96%.

This implies positive returns for members within these portfolios, despite ongoing difficult financial market circumstances.

Good control over the Fund's expenses, together with a slight increase in underwriting conditions by the insurer, have resulted in contributions to retirement funding decreasing slightly to 17.46% of pensionable salary (17.55% in the previous year). Fund administration expenses decreased to 0.45% (0.50% previous year) and the medical disability premium increased to 1.09% of pensionable salary (0.95% previous year). However, death benefit contributions have remained at 2% of pensionable salary.

The most recent annual financial report of the external auditor, Ernst & Young, declared the Fund financially sound and confirmed that its operations are in accordance with best accounting practices for South African retirement funds, as prescribed by the Pension Funds Act.

The un-audited net assets of the Fund at 31 March 2012 amounted to R738.3 million and membership stood at 1,796 in-service members, and 32 members who have been declared medically disabled.

The Trustees' priorities for the reporting period included the following matters:

- Regular meetings of the Board of Trustees (4), Investment Sub-committee (7) and Management Sub-committee (8);
- Trustee training, in particular, advanced training in death benefit allocation was received;
- Maintenance of PF130 Governance policies;
- Communication with members which was achieved through the annual benefit statements; various financial and audit reports; monthly Fund performance and individual member credit updates; information sessions and posting of all relevant information on Nucleus (the Necsa intranet). A member survey was conducted with a response of 27% of the Fund membership. Improvement actions in communication and other aspects have been identified and are being addressed;
- Continuous assessment of the overall Fund risks and development of action plans; and
- The revised rules of the Fund have been approved by the Financial Services Board and were posted on the Necsa intranet site.

Wellness

NTP holds monthly health presentations and works closely with Necsa on other Wellness Campaigns including Wellness Day. Voluntary counselling and testing for HIV/AIDS was conducted during the year with 154 personnel being tested of whom 2.6% tested positive. All test results are highly confidential and those who tested positive receive ongoing counselling and support. Fifty-six men participated in Prostate-specific Antigen (PSA) testing during the fourth quarter.

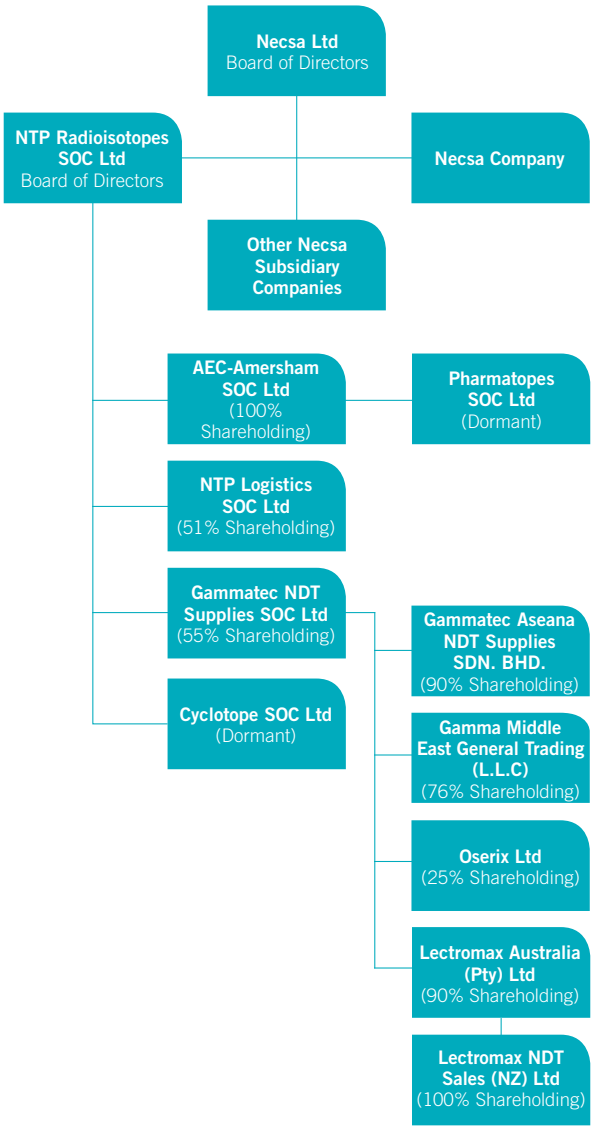
Pelchem fully sponsors an in-house Employee Assistance Programme providing support for its people and their immediate family members. It continued with the implementation of its Employee Wellness Programme, developed in line with the international wellness calendar. Significant progress was made in creating awareness among staff and their family members in the areas of work life balance; nutrition; diversity; health and safety; substance abuse; men's health; cancer; heart disease; mental health and stress; community service; and HIV/AIDS. The Pelchem values were again emphasised in communication to the staff and their family members.

Commercial Report

09

NTP Radioisotopes SOC Ltd

NTP Holding Company Group Structure



NTP Radioisotopes SOC Ltd (NTP) is a major player in the highly competitive global radioisotopes industry. A wholly-owned subsidiary of Necsa, the organisation routinely serves customers in 60 countries on six continents with its range of radiation-based products and services.

NTP has, over the past years, created various business subsidiaries or increased holdings that have strengthened its portfolio and group revenue stream. The following operating businesses make up the NTP Group:

- AEC-Amersham SOC Ltd – 100% owned by NTP;
- NTP Logistics SOC Ltd – 51% shareholding; and
- Gammatec NDT Supplies SOC Ltd – 55% shareholding (Gammatec has wholly and partially owned subsidiaries).

Product Portfolio

- Radiopharmaceuticals: Used in nuclear medicine for diagnostic and therapeutic purposes. Products include NovaTec-P generator, fluorodeoxyglucose (FDG) for Positron Emission Tomography (PET), cold kits and Iodine-131 (I-131) capsules and solutions;
- Irradiation Services: Neutron transmutation doping of silicon ingots and other neutron target irradiation services that are performed to customer specification in the SAFARI-1 research reactor;
- Radiochemicals: Produced in bulk and used by NTP and its customers for the manufacture of various radiopharmaceutical products and in life science research in the form of labelled compounds; and
- Radioactive sealed sources for industry: Iridium-192 (Ir-192), Cobalt-60 (Co-60), Cesium-137 (Cs-137) are used in non-destructive testing, industrial gauging and process control applications.

Customer satisfaction is imperative and every effort is made to ensure customer requirements are met at all times. NTP maintains an excellent safety record equal to the world's foremost organisations. A successful ISO 9001:2008 audit of NTP's processes and facilities was conducted by DEKRA during the review period. Following the successful completion of the audit, the contract with the South African Bureau of Standards (SABS) certification body was terminated.

Various licences and sub-licences were obtained from the NNR as well as the DoH throughout the year. No shortcomings were detected during the various audits conducted by these regulatory bodies and all licences remain current. The type (B)U transport containers, BEATRICE and JANE, for which licences lapse in January 2013, have undergone design review.

Safety Assessment Reports were compiled and the documents submitted to the NNR for assessment. Re-certification is expected by the end of the first quarter 2012/13.

Molybdenum-99 Global Market

The ^{99}Mo market was in turmoil during the review period with an oversupply of the product and a resultant downward pressure on prices and volumes. This was the result of an aggressive effort by competitors to regain market share following their extended absence due to the 18-month long unscheduled shut down of the NRU reactor. The situation was aggravated by the decline in the global demand for ^{99}Mo by an estimated 20% compared to "pre-crisis" levels. The impact of this was clear, with sales under pressure and below budget right from the start of the financial year. For the first time in many years NTP did not meet budgeted sales.

NTP established a collaborative association with ANSTO which will position the companies at the forefront of LEU-based ^{99}Mo processes, i.e. reactor fuel and irradiation targets. For over 15 years, NTP and IRE of Belgium have maintained a Consortium arrangement to provide ^{99}Mo supply back-up for each other during reactor outage periods and also jointly supply several major customers who require, for risk mitigation purposes, a dual source of ^{99}Mo.

The conversion of customers to LEU ^{99}Mo continued and 26% are now fully qualified, with one being supplied routinely. The conversion process is expected to be completed by the end of 2014/15.

At the Nuclear Security Summit held in the Republic of (South) Korea in March 2012, it was announced that three European countries (Belgium, France and the Netherlands), with American support, are committed to phasing out the use of HEU for ^{99}Mo production by 2015. These countries are following the lead set by South Africa.

NTP works closely with Necsa on research and development and has made major advancements. Several studies continue to be performed in collaboration with Professor Mike Sathekge at Steve Biko Academic Hospital. One such achievement was realised after the first F-Choline scans were performed on patients at the Steve Biko Nuclear Medicine facility. Satisfactory results were achieved. The F-Choline was developed by Necsa using equipment provided by NTP.

An agreement was reached with iThemba LABS on the expansion of the FDG manufacturing capacity and a new dedicated 11 MeV cyclotron for F-18 production will be installed. This cyclotron will service the expected increase in market demand in the Western Cape, where a PET-CT scanner was commissioned. The 11 MeV cyclotron is expected to be operational by the second quarter of 2012/13.

Final agreement has been reached with Gamwave on the revival and upgrading of the P2000 Co-60 plant. A company, of which NTP will own 40%, will operate the gamma sterilisation facility at the Pelindaba site. The refurbished facility is expected to be operational during the latter half of the 2012/13 financial year.

Dedicated Isotope Production Reactor (DIPR)/SAFARI-2

The NTP and Necsa Boards evaluated the feasibility of the proposed DIPR and decided that due to the uncertain and fluctuating isotope market situation, the feasibility of the procurement of a SAFARI-2 Multi-Purpose Reactor (MPR) would also be explored. Necsa informed all interested and affected parties that the Environmental Impact Assessment for the project has been expanded to include that of a MPR.

Quality, Safety and Regulatory

Safety in the nuclear industry is strictly regulated and closely monitored worldwide. NTP proudly achieved its Behaviour Based Safety (BBS) milestone of two million disabling injury free hours. The goal is to continue in this stride over the coming years as there is no margin for error. Reaching this milestone gives the organisation a competitive edge in the nuclear industry.

Six injuries on duty were registered during the financial year, resulting in a Total Injury Rate (TIR) of 2.29 at the end of March 2012.

From an environmental perspective all gaseous and liquid releases were well within regulatory limits, while removal of old and redundant facility equipment was completed. Solid waste movement from the facilities and waste yards received attention and various initiatives for enhanced waste movement to the on-site waste management area and Vaalputs commenced.

Excellent progress was made by the Current Good Manufacturing Practices (cGMP) Steering Committee responsible for addressing cGMP shortcomings within NTP. Most top tier issues, such as the rewriting of the programme documents, reorganisation of the Quality Department and compiling of workflows, have been addressed. The second phase of the project will see smaller work groups being formed. Such work groups will provide greater focus on specific areas that need attention and will involve supervisory and operational staff in the process.

Stakeholder Relations

One of NTP's strategic objectives is to build and maintain the support and confidence of its customers and stakeholders by being customer-focused, transparent, engaging effectively with all stakeholders, ensuring that personnel understand the challenges facing the business and encouraging them to support the socio-economic aims of the organisation.

Human Resources

NTP respects cultural diversity and the viewpoints of its personnel and believes in engagement with them. During the year NTP created a total of 35 new jobs. Personnel numbers increased to 266, with 78.6% representing the designated group.

The total annual training expenditure for the year was R816,682, with eight technical and office internships at a cost of R288,000 and 12 ABET students costing R54,000.

NTP Subsidiaries

AEC-Amersham SOC Ltd

AEC-Amersham is a wholly-owned subsidiary of NTP and is the exclusive distributor in sub-Saharan Africa and the Indian Ocean Islands of NTP's radiopharmaceutical products, as well as a range of healthcare, life sciences and quality and safety assurance products. The core strengths of the company are its extensive range of specialised products and services, supported by a dedicated and knowledgeable sales force, whose skills are continuously developed. AEC-Amersham is a Level 4 BBBEE contributor.

Gammatec NDT Supplies SOC Ltd

Gammatec NDT Supplies' focus over the past year was on improving existing products in the marketplace with a focus on Close Proximity Radiation Systems and Original Equipment Manufacturer (OEM) research, while working with Carestream on low cost, portable digital systems for computed radiography, and magnetic particle equipment with Industronics. Lectromax is currently developing a multipurpose printed circuit (PC) board which will replace the single item unit manufactured for each individual bench unit and significantly reduce costs and improve production.

NTP Logistics SOC Ltd

NTP Logistics manages the movement of hazardous goods, specialising in radioactive materials and chemicals. As part of its Growth Strategy, the company is aggressively marketing itself outside of the hazardous goods environment. A Black female Managing Director, arguably the first in the industry, was appointed in October 2011 to drive the Growth Strategy.

The company has fully established itself as a market leader with the following differentiators:

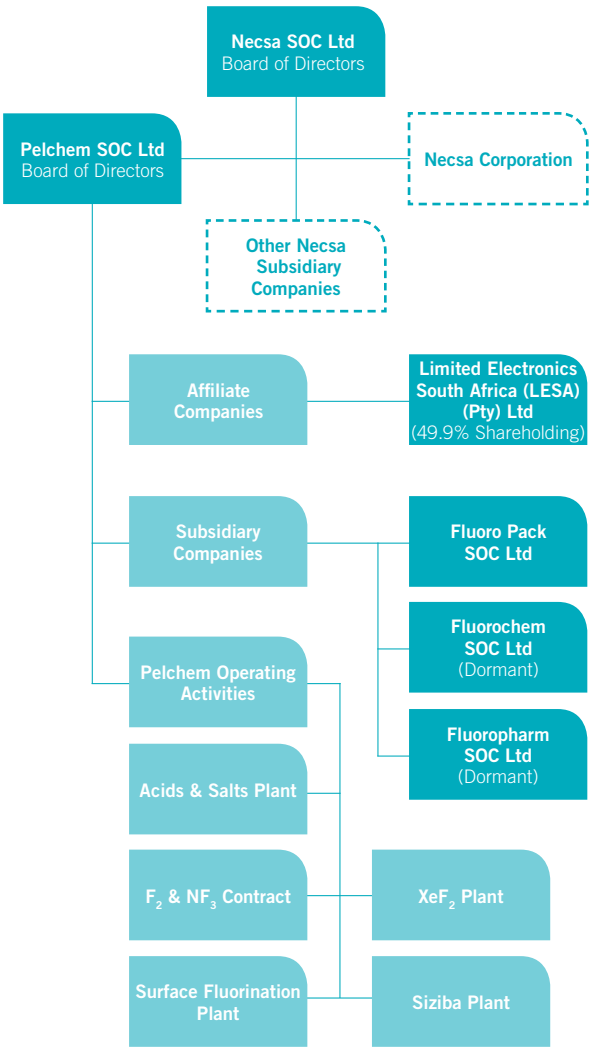
- Vast experience in national and international regulatory requirements;
- NTP Logistics has an array of permits and licences to operate in this field, which are issued by the NNR; DoE; DoH and the Department of Transport;
- The strategic partnership between NTP Radioisotopes (51%), with vast experience in nuclear and radioactive products, and Transglobal Cargo (49%), with over 75 years of combined experience in the movement of cargo;
- The company is ISO-accredited (ISO 9001:2008);
- The company is an active member of the World Nuclear Transport Institute;
- Its membership with WCA gives NTP Logistics an international footprint; and
- The company has a Level 1 BBEEE rating.

Pelchem SOC Ltd

Introduction

Pelchem SOC Ltd (Pelchem) is a 100% subsidiary company of Necsa SOC Ltd and was incorporated on 1 April 2007. Pelchem has a proud record of more than 25 years experience in locally produced fluorspar beneficiation and operates and maintains a portfolio of fluorochemical products, supplied to local and international markets. Pelchem, in partnership with the DST and **the dti**, plays a leading role in the South African Fluorochemical Expansion Initiative (FEI). The Pelchem team has the proven ability and knowledge base to diversify, expand and develop fluorine products across multiple market sectors.

Pelchem SOC Ltd Group Structure



Products and Applications

South Africa has the largest single reserve of fluorspar globally, but currently supplies less than 10% of the global fluorspar demands while earning less than 0.5% of the $16 billion annual turnover. Downstream value-adding manufacturing is therefore a strategic focus for South Africa. Pelchem is the only local company and the only company in the southern hemisphere which produces fluorochemicals from fluorspar. South Africa cannot reach its job creation and economic growth targets without growing its downstream, value-adding manufacturing industry and Pelchem has set up strategic partnerships to optimise the opportunity for South Africa.

Pelchem's manufacturing capabilities include eight commercially-operated production facilities which deliver twenty five products and services to the local and international commodity and specialty gas markets. The production facilities are operated under patented trade secret or trademark protection and give Pelchem recognised and unique know-how across its product value chain.

Pelchem manufactures and markets hydrogen fluoride (HF), hydrofluoric acid, fluoride salts, fluorine gas and specialty fluoride containing gases and fluoro-organic monomers to the local South African industry and selected international customers on six continents. Pelchem products are used in the petroleum, pharmaceutical, glass, electricity, metallurgical, mining, polymer, agrochemical, electronics, construction, aluminium and detergent industries.

Around the world, societies benefit on a daily basis from products which are manufactured, processed or enhanced using fluoride chemicals. These include high octane fuel; anaesthetics; metered dose inhalers; polished crystal glasses; frosted glass; electrical insulators; foam insulation and packaging materials; special alloys in aircraft and turbines; telephones; cell phones; diamonds; domestic and industrial refrigeration; non-stick cookware; plastic components in automotive applications; electrical cable insulation; beverage cans; pesticides and herbicides in agriculture; microchips for domestic appliances and computers; memory chips in computers, iPods, flash memory sticks; liquid crystal displays (LCD) on electronic components and LCD televisions; cement; alloy wheels; gaming devices; automotive safety devices (airbags); aluminium foils; designer stainless steel kitchenware; stainless steel automotive components; soaps and washing powders; fluoride toothpaste, fluoride tables and fluoride dental treatment.

Responsible Care

Pelchem continued to deliver on its public pledge of responsible care. The outcome of this is evident from the environmental, occupational and social responsibilities reported below.

Air Pollution Compliance

Due to the presence of HF and fluorine gas, all chemical processes at Pelchem are scheduled processes which are licensed and adherence to statutory Safety, Health and Environment requirements is mandatory. Compliance with Air Pollution permits during the 2011/12 financial year was 98.4%.

Personnel and Transformation Responsibility

The Pelchem Group has a total staff complement of 163 of whom 15.9% are women and 61% are previously disadvantaged individuals. Pelchem has grown its staff complement by 9.4% in the reporting period and has provided career development opportunities for 22 interns (six of whom are from the Nuclear Skills Development Centre) as part of its commitment to capacity building and job creation.

Integrated Internal SHEQ Audit

Pelchem completed its third integrated internal SHEQ audit in July 2011, achieving an overall compliance of 78.8% (July 2011: 80%). The lower audit rating is as a result of findings associated with housekeeping. Pelchem is working with Necsa property management to address challenges associated with building maintenance in addition to production-related housekeeping excellence.

Behaviour-based Safety

Health and Safety at Pelchem is managed through the Necsa Safety, Health and Environment (SHE) policies and with the aid of a BBS Programme known as PEARL (Pelchem Eliminating Accidents and Risks of Life). The Group achieved an average BST Process Index Score of 90.3% for the reporting period (2011: 92%). Special attention is being given to the barrier removal and quality of observations. The Disabling Injury Incidence Rate (DIIR) increased to 2.7 (2011: 0.8) due to incidences related to HF exposure in workers. This has led to the launch of an intensive management and leadership driven safety campaign to re-affirm commitment to safety. The Total Injury Rate (TIR) in the same period was 5.7 against a target of 6.87.

Training

In addition to the statutory training provided according to regulatory requirements, Pelchem is placing increased emphasis on the continuous improvement of its biggest asset, its people, skills and knowledge. The organisation has initiated a Growth Plan which requires high level skilled people in addition to basic skills for delivery. This is providing the opportunity for people development and growth. Skills training focused on formal courses as well as informal workplace training in work procedures. Pelchem supported Necsa learnerships by providing exposure and working experience to artisans and technicians in its operating plants and compulsory vacation work to university engineering undergraduates. Pelchem's total training investment in 2011/12 was R821,710 compared to R200,000 in the previous year. This investment is higher than the contribution to the skills levy, emphasising Pelchem's commitment to training and development. The training budget is scheduled to increase, providing a further indication of the priority allocated to people development.

Economic Responsibility

Quality

Pelchem had a successful surveillance audit by the SABS in October 2011, and retained its ISO 9001:2008 certification status.

Information Technology

Pelchem makes use of the Necsa IT infrastructure and has started to upgrade and modernise its ICT infrastructure and capability to remain aligned with its global customers.

Customer Satisfaction

In the last quarter of 2011, Pelchem performed a Customer Satisfaction Survey with its top 21 customers (six international and fifteen domestic) which account for >80% of its sales. An average score of 89% was recorded (2011: 81%). Pelchem introduced a Key Account Management system to ensure that excellence in customer care is achieved. This is one of the contributing factors to its highest ever customer satisfaction rating.

Operating Activities

Where 2009/10 was marked by the recovery from the recession and 2010/11 by the strong South African Rand versus the currencies of its major trading partners, 2011/12 was marked by the Euro-zone foreign debt crisis, the continued strong growth in China's economy, particularly in fluorochemicals and a roller-coaster Rand. This increased the challenges and opportunities for Pelchem.

Pelchem had a record year and for the first time in its history exceeded its sales budget and delivered real growth in turnover of 14.9%. The team was also able to operate the Company to deliver a positive net margin, a milestone in Pelchem's drive for profitability.

During the reporting period Pelchem continued to grow its business in South America in partnership with the Brazilian company, Usiquimica. The volume of 70%HF sold into Brazil doubled in 2011/12. In 2010 Pelchem was successful in being awarded the tender to supply the Shell refineries in Australia and has subsequently maintained its position as the sole supplier of anhydrous hydrofluoric acid (AHF) to Australian petrochemical refineries.

Pelchem has also remained the sole supplier of AHF and 70%HF to the South African market, and has actively embarked on supporting new projects aimed at HF utilisation, specifically in the tantalite and titanium sectors.

The HF production continued to be exceptional at 4,659 ton which is 3% above the nameplate capacity of the plant. This HF life extension and production optimisation programmes of Pelchem have proven to be of exceptional quality.

Pelchem's sales record was driven by the fact that it exceeded targets for HF, nitrogen trifluoride (NF_3) and Surface Fluorination, which recorded its highest turnover ever and handled more than six million units in the current year.

Market share for xenon difluoride (XeF_2) was lost to Air Products, resulting in delivery being 50% below budget for XeF_2. However, Pelchem has taken up the challenge and is reclaiming some market share through a focus on excellence in customer care, packaging and quality. XeF_2 is used primarily in the Micro-electronic Mechanical Systems (MEMS) industry which is one of the fastest growing sectors, both in volumes and applications, in the electronic market. The largest portion of the XeF_2 sales went to Qualcomm Panel Manufactures (Taiwan), and its demand is expected to increase as the industrialisation of the application progresses.

Linde Electronics South Africa (Pty) Ltd changed its name to Limited Electronics South Africa (Pty) Ltd (LESA), the company will hereafter be referred to by the latter name throughout the report. The sales volume of LESA exceeded budget by more than R14 million due to successful price negotiations with Linde and market demand, driven by the need for NF_3 in the photovoltaic (PV) solar sector as well as in the semi-conductor sector.

However, price pressure, due to an oversupply situation, a more competitive technology and economies of scale, is eroding the margins of NF_3. This is putting severe financial strain on LESA.

Significant progress was made on FEI activities, with focus on R&D work supported by the grant received from the DST. The 2011/12 year was the last year of the first grant, but the DST has awarded Pelchem a second three-year grant to the value of R41.6 million following a positive impact and relevance review by the DST of the FEI outputs. Work on the design and construction of the multipurpose fluorination pilot plant – also funded by a grant from the DST – is close to completion. This facility will ultimately assist in the industrialisation and market penetration of opportunities developed via funded R&D work.

Pelchem's surface fluorination technology was originally explored by Fluoro Pack SOC Ltd to create barrier layers on polymer surfaces through fluorination of the surface by reaction with fluorine gas. Chemical modification gives the polymer unique characteristics, such as improved permeation resistance and chemical inertness. On 1 October 2010 the business of Fluoro Pack was consolidated into Pelchem, and it now operates as Surface Fluorination, a department in Pelchem. The Department is a toll fluorinator and fluorinates a wide variety of products, such as containers, fuel tanks and fuel pipes for domestic and international markets. The first of its two production facilities is situated at Pelindaba and services a variety of products, while the second is situated on the Inergy Automotive Systems premises in Brits, and is used exclusively for blow moulded fuel tanks. During the year Surface Fluorination handled a record of six million units for fluorination. Part of this great record can be attributed to the recovery of the South African automotive industry.

Overall, Pelchem achieved external sales of R186.1 million (2011: R161.9 million) which represents a 14.9% increase over the previous year and a real growth for the first time in Pelchem's history. The target of delivering a positive net profit was realised with a R4.4 million positive variance on the 2011/12 budget.

Strategic Initiatives

Pelchem has developed a Strategy for Growth and Financial Sustainability which was approved at Board level in November 2011. This strategy focuses on organic and radical growth through the development of a sustainable product pipeline, as well as strategic partnerships to capture market opportunities.

The key strategic developments which will have significant impact on Pelchem in the short-, medium- and long-term are:

- Project Ketlaphela, a partnership established between the state-owned companies Pelchem and the Industrial Development Corporation (IDC), together with Lonza, a Swiss-based health science company, was approved by the Pelchem and Necsa Boards. Project Ketlaphela will establish local manufacturing of Antiretroviral Medicines (ARVs), as well as medicines for other diseases such as tuberculosis,

malaria, diabetes and hypertension for South Africa and the SADC region. A business proposal developed by the partners was supported by government in November 2011. This joint venture will establish the first pharmaceutical plant to manufacture Active Pharmaceutical Ingredients (APIs) for ARVs in South Africa. "Ketlaphela" is a Sesotho word meaning "I will live or survive". The new company will be funded by a capital investment of >R1.6 billion by various state institutions, including the IDC, Lonza and Pelchem/Necsa.

Lonza is one of the world's leading suppliers of various products to pharmaceutical, healthcare and life sciences industries and is a global leader in the production and support of APIs, in cell-based research, end toxin detection and cell therapy manufacturing. Lonza's high Swiss standards together with its superb track record of establishing and maintaining successful commercial operations in developing countries, makes it a valuable and highly desirable partner.

The project is in line with plans of the South African government to address HIV/AIDS through the local and cost effective production of antiretroviral drugs. Ketlaphela will:

- Leapfrog South Africa into local manufacturing of ARV pharmaceuticals;
- Provide new opportunities for South African scientists and pharmaceutical companies;
- Reduce the country's dependence on imported drugs;
- Provide security of supply of priority drugs and stable pricing with less sensitivity to exchange;
- Create an estimated 3,800 jobs during the construction phase; and
- Create an estimated 2,200 permanent, direct and indirect jobs in both the formal and informal sectors of the economy.

While most of the medicines used in the current ARV treatment regimen are manufactured by local pharmaceutical companies – currently, four South African companies are capable of formulating generic ARVs – all APIs are imported. APIs account for 50% to 75% of the production of generic ARVs in the finished-dosage form.

The consortium has entered into negotiations with the South African government with the aim of delivering the first fully South African manufactured ARVs from 2016 onwards.

- A strategic partnership is being established to realise a South African vision of capturing 10% of the global fluorochemical value-add business by 2020 as a key initiative to benefit from South Africa's rich fluorspar reserves. This will be done through the establishment of a globally competitive fluorspar beneficiation industrial cluster (Fluorochemical Hub) in South Africa, in partnership with the IDC and other role-players in the industry. Together the partners bring a track record of more than 40 years of successful mining and beneficiation of fluorspar. The team has a global footprint in the production, sales and distribution of fluorochemicals. The South African government, at both national and provincial levels, has created incentives and an enabling environment to meet its economic growth and job creation targets through manufacturing in addition to mining and services. This initiative is being undertaken in close co-operation with **the dti**, the DST and the FEI Initiative.

- The successful re-negotiation and re-packaging of the production, sales and distribution of the NF_3 business with Linde AG has made an immediate positive impact on Pelchem. Pelchem and Linde AG have agreed to strengthen their business relationship through an exclusive Long-term Supply and Distribution Agreement for NF_3. In this agreement Pelchem takes full ownership of the intellectual property and the NF_3 production plant, as well as sole shareholding of LESA, the NF_3 trading company. The two companies are currently exploring other business opportunities.

The 2011/12 financial year was in many respects a milestone year for Pelchem. The company exceeded all its performance targets, with the unfortunate exception of the disabling injury rate. The latter triggered a renewed and refreshed look at safety and human behaviour and the launch of a top management-lead safety campaign. Pelchem is on track to deliver on the Growth Strategy approved by its Board and has met all the milestones for Ketlaphela, while creating a new partnership with Minersa to take fluorspar beneficiation to a new level and strengthen its existing customer relationships and product sales. The Pelchem team has taken the challenge of making the Company sustainable and successful with commitment and has demonstrated again why they are its biggest asset.

ARECSA

ARECSA Human Capital SOC Ltd (ARECSA) is a company co-owned by AREVA from France and Necsa, with Necsa owning 51% and also representing the interests of two other South African nuclear industry stakeholders, namely Eskom and the NNR. ARECSA Human Capital is aligned with and supports government's Accelerated Shared Growth Initiative (ASGISA) as well as the Joint Initiative for Priority Skills Acquisition (JIPSA) and is committed to skills development, especially of disadvantaged South Africans.

Through its association and partnership with AREVA and other stakeholders such as INSTN Saclay French Atomic Energy Commission, Institut de Soudure (Villepinte), Essec Paris Business School, the SA Institute of Welding and the Nuclear Skills Development Centre, among others, ARECSA is able to provide training and the transfer of skills from the wealth of expertise of its stakeholders to benefit South Africans. The organisation utilises obligor funds for training and is a vehicle through which the obligors can discharge their counter-trade obligations from the National Industrial Participation Programme (NIPP) of **the dti** and other obligations from the Competitive Supplier Development Programme (CSDP) of the Department of Public Enterprises.

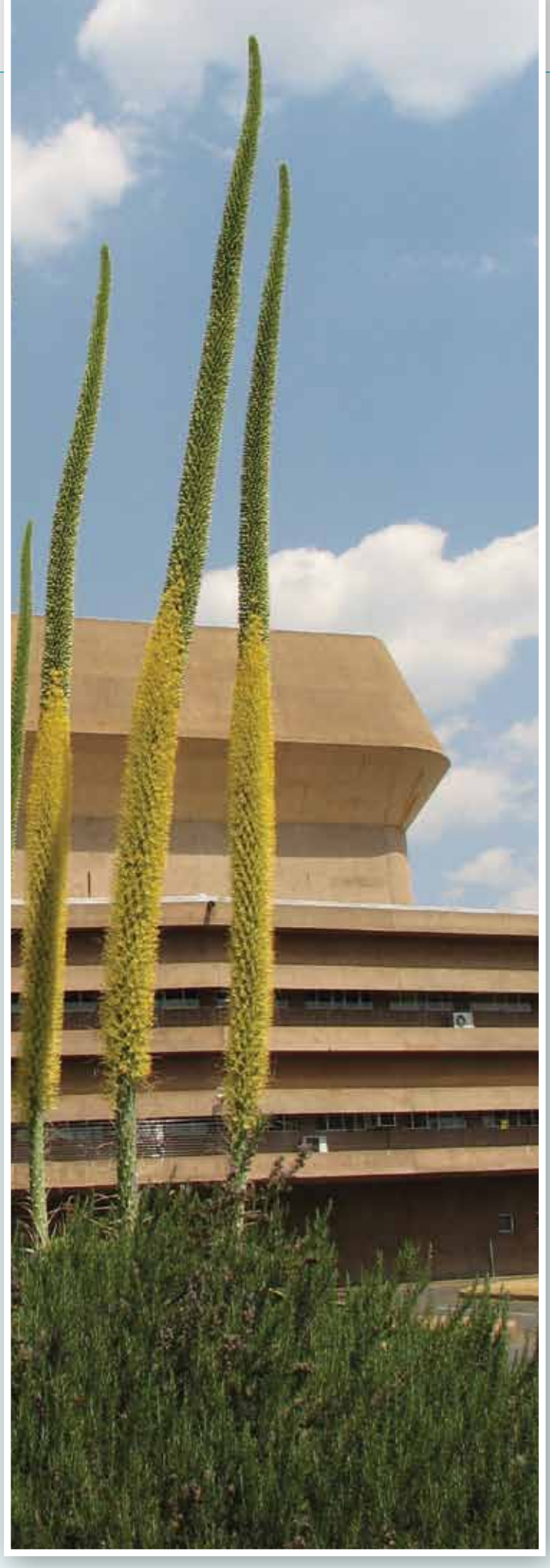
Achievements

Patria, a Finnish organisation involved in the armaments industry, funded ARECSA in 2010 with an amount of €206,000 to provide training in fulfilment of its counter-trade obligations with **the dti**. The training programme, which commenced in January 2010, was concluded during the 2011/12 financial year. The number of people trained on the Patria-funded programme was 73, of whom 59 were Previously Disadvantaged Individuals (PDIs).

The nuclear industry participated in JIPSA training in France, organised by the National Empowerment Fund (NEF) and the French Chamber of Commerce. Fourteen people received training in France under this programme. The total number of people trained for the year, including the JIPSA Programme in France, was 87 against a target of 86.

The total number of PDIs trained in the 2011/12 financial year, including the JIPSA Programme in France, was 70 which represents 78.7% against a target of 70%. The satisfaction levels reflected, concerning the training that was given, varied from 74% to 86%, with the average satisfaction level being 78.6% for the 2011/12 financial year against a target of 70%.

No additional funding could be obtained from the NIPP of **the dti** or any other source during the financial year. Due to the lack of funding, the Necsa Board approved a proposal from the ARECSA Board to make ARECSA dormant until such time as further funds become available for training.

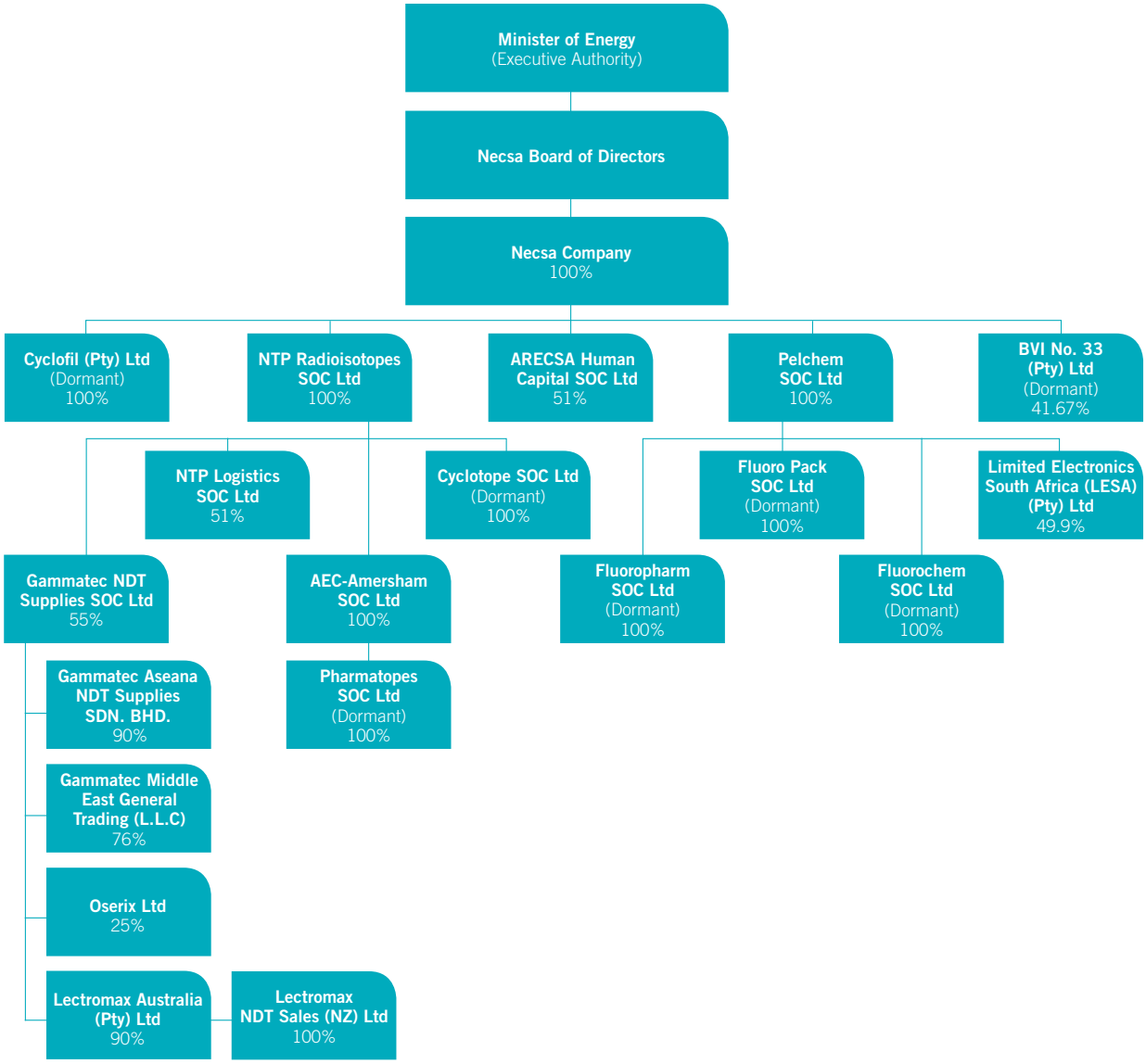


Corporate Governance Report

10

Necsa Structure

Necsa Group Structure



Necsa as an Organisation

The South African Nuclear Energy Corporation SOC Limited, known by its trade name Necsa, is a wholly-owned state entity established in terms of the Nuclear Energy Act, No. 46 of 1999, and the Companies Act, No. 61 of 1973.

In line with the new Companies Act, No. 71 of 2008, which came into effect on 1 May 2011, Necsa and its wholly owned subsidiaries now include the signifier "SOC" in their names to reflect their status as State Owned Companies.

The Nuclear Energy Act outlines Necsa's main and ancillary objects, including the Corporation's financial accountability.

In addition to its main and ancillary functions, Necsa is responsible for the implementation of certain mandated activities which include the implementation and application of the Safeguards Agreement and any additional protocols entered into by the Republic of South Africa and the International Atomic Energy Agency in support of the Nuclear Non-Proliferation Treaty acceded to by the Republic.

The Nuclear Energy Act further regulates the acquisition and possession of nuclear fuel, certain nuclear and related material and equipment, as well as the importation and exportation thereof, and other acts and activities relating to fuel material and equipment, in order to comply with the international obligations of the Republic. The Nuclear Energy Act also prescribes measures regarding the management of radioactive waste and the storage of irradiated nuclear fuel.

Code of Practices and Conduct

Corporate Governance is formally concerned with the organisational arrangements that have been put in place to provide an appropriate set of checks and balances within which the stewards of the organisation operate. The objective is to ensure that those to whom the stakeholders have entrusted the direction and success of the organisation act in the best interests of these stakeholders. It encourages leadership with integrity, responsibility and transparency.

The Necsa Group endorses the principles of the South African Code of Corporate Practices and Conduct as recommended in the King III Report. As such, the Group is committed to principles and practices that provide stakeholders with the assurance that the organisation is managed soundly and ethically.

Worker Participation and Employment Equity

The Group has established participative structures on issues that affect employees directly and materially and is committed to promoting equal opportunities and fair employment practices, regardless of employees' ethnic origin or gender. Several programmes are in place to ensure realisation of worker participation and equity, namely:

- The Necsa Retirement Fund Committee which is an independent body that acts as a governance structure for the Fund;
- The Employment Equity Committee which is responsible for alerting management on equity issues;
- The Women in Nuclear (WIN-Necsa) forum, an affiliate of Women in Nuclear in South Africa (WIN-SA), through which Necsa women's interests in nuclear are promoted; and
- The South African Young Nuclear Professionals (SAYNPS), a body representing the interests of young nuclear professionals in the country.

Code of Ethics

The Company's Code of Ethics spells out fundamental ethical principles and standards in accordance with which Necsa will conduct itself with its various stakeholders, namely customers, suppliers, financiers and government departments. The Code emphasises the highest standards of compliance with various laws and regulations.

The principles contained in the Code have been communicated throughout the Group. A 24-hour fraud and corruption hotline is in place and has been operated by an independent service provider since 2004. Through this, staff members are able to safely, and without fear of victimisation, bring to the attention of Management and the Board serious irregularities, that can be addressed by Management.

Governance Structure and Compliance Framework

Necsa is governed by a Board of Directors appointed by the Minister of Energy (the Shareholder) in terms of Section 16 of the Nuclear Energy Act. The Board is the accounting authority as defined in terms of the Public Finance Management Act, No. 1 of 1999. The Board is appointed for a renewable period of three years and undergoes a Necsa-specific induction process within six months of appointment.

In line with the recommendations of King III, the Board has a unitary structure and comprises ten independent, Non-Executive Directors and one executive Director. The Chairperson of the Board is an independent, Non-Executive Director, as are the other Directors. The acting CEO is the only executive Director and there is a clear division of roles between the Chairperson and the CEO.

The Chairperson oversees the functioning of the Board, and the CEO, together with the Executive Management Committee (EMC), is accountable for the day-to-day affairs of Necsa, including implementation and monitoring of the approved strategy.

The Board is assisted in performing its duties by a series of Board Committees, Necsa's Legal Department and the Company Secretary, who is responsible for ensuring that Board procedures and rules are followed and that the organisation complies with legislation and the principles of corporate governance as set out in King III.

The Board regularly reviews the Group's governance structures and processes. Compliance is proactively monitored through scheduled reports by the Committees and Company Secretary to the Board. Issues of governance will continue to receive the consideration and attention of the Board and its Committees during the year ahead and, where appropriate, will be reviewed and adapted to accommodate internal corporate developments and to reflect best practice.

Board of Directors

Dr Manne Dipico
Deputy Chairperson,
De Beers Consolidated Mines
(Non-Executive Director)

Dr Rob Adam
Chief Executive Officer,
Necsa
(Executive Director)

Mr Don Robertson
Acting Chief Executive Officer,
Necsa
(Executive Director)

Dr Ntuthuko Bhengu
Chief Operations Officer,
Clinix Health Group
(Non-Executive Director)

Adv. Nazreen Shaik-Peremanov
Senior Lecturer:
Department of Public International Law, Unisa
(Non-Executive Director)

Prof. Thokozani Majozi
Professor: Department of Chemical Engineering,
University of Pretoria
(Non-Executive Director)

Dr Velaphi Msimang
Chief Director: Hydrogen and Energy Sub-programme,
Department of Science and Technology
(Non-Executive Director)

Ms Noluphumzo Noxaka
Director, Alatha Consulting
(Non-Executive Director)

Mr Lampona Aphane
Chief Director: Electricity,
Department of Energy
(Non-Executive Director)

Mr Phumzile Tshelane
Acting General Manager:
Nuclear Build, Eskom;
Vice-president, Nuclear Industry Association of South Africa (NIASA)
(Non-Executive Director)

Mr Abdul Minty
Ambassador, Department of International Relations and Communications
(Non-Executive Director)

Mr Leslie Gumbi
Chief Director: United Nations Political, Department of International Relations and Cooperation
(Alternate Director:
Mr Abdul Minty)

Mr Jeetesh Keshaw
Director: Nuclear Policy and Technology,
Department of Energy
(Alternate Director:
Mr Lampona Aphane)

Details of Board Members

Executive members						
Name	**Race**	**Gender**	**Date of appointment**	**Term**	**Expiry date**	**Qualifications**
Dr Rob Adam CEO, Necsa	White	Male	1 March 2006	2	Resigned 31 January 2012	MSc (Theoretical Physics) – Unisa; and PhD (Nuclear Physics) – Unisa.
Mr Don Robertson Acting CEO, Necsa	White	Male	1 February 2012	1	Until appointment of new CEO	BSc (Honours Natural Sciences) – Rhodes; and MSc (Natural Sciences) – Rhodes.

Non-executive members						
Name	**Race**	**Gender**	**Date of appointment**	**Term**	**Expiry date**	**Qualifications**
Dr Manne Dipico Deputy Chairperson, De Beers Consolidated Mines	Black	Male	1 December 2006	2	31 October 2012	Emerging Economics Leadership – Pennsylvania University, USA; and PhD Hons (Law) – Monash University, USA.
Dr Ntuthuko Bhengu Executive Head: Provider Networks, Metropolitan Health	Black	Male	1 November 2009	1	31 October 2012	MB, ChB – Natal University Medical School; DA – College of Medicine in South Africa; MBA – Wales University, Cardiff; and MPH (HCM) – Harvard University, USA.
Adv. Nazreen Shaik-Peremanov Senior Lecturer: Department of Public International Law, Unisa	Indian	Female	1 November 2009	1	31 October 2012	BSocSc; LLB; LLM – University of Natal; LLM – Notre Dame USA; and LLD – Unisa.
Prof. Thokozani Majozi Professor: Department of Chemical Engineering, University of Pretoria	Black	Male	1 November 2009	1	31 October 2012	PhD Institute of Science & Technology – Manchester University, UK; MSc (Engineering) – University of Natal; BSc (Engineering) – University of Natal.
Dr Velaphi Msimang Chief Director: Hydrogen and Energy Sub-programme, Department of Science and Technology	Black	Male	1 April 2010	1	31 October 2012	PhD (Chemical Engineering) – University of Cape Town; MEng (Civil/Environmental Engineering) – A&M University, Texas; Advanced Leadership & Management Development Programme – University of Stellenbosch; and B Tech Chemical Engineering, Peninsula Technikon.
Ms Noluphumzo Noxaka Director, Alatha Consulting	Black	Female	1 November 2009	1	31 October 2012	CA (SA); MBA – UCT Graduate School of Business; BCom Hons (Accounting) – University of Natal; BCompt NDP – Unisa; BAdmin – University of Zululand; H Dip (Computer Audit) – University of the Witwatersrand; N Dip (Financial Markets & Instruments) – Academy of Financial Markets & Instruments
Mr Lampona Aphane Chief Director: Electricity, Department of Energy	Black	Male	1 November 2009	1	31 October 2012	Pr Engineering, BSc (Electrical Engineering) – University of Natal.
Mr Phumzile Tshelane Acting General Manager: Nuclear Build, Eskom; Vice-president, Nuclear Industry Association of South Africa (NIASA)	Black	Male	29 March 2006	2	31 October 2012	BSc Hons (Nuclear Physics) – University of the Witwatersrand; and BSc (Maths and Physics) – University of the Witwatersrand.
Mr Abdul Minty Ambassador: Department of International Relations and Cooperation	Indian	Male	24 January 2000	4	31 October 2012	MSc (Economics) – University of London; and BSc (Economics) – University of London.
Mr Leslie Gumbi Chief Director: United Nations Political, Department of International Relations and Cooperation	Black	Male	11 October 2009	3	31 October 2012	MA (Political Science) – Warsaw University, Poland.
Mr Jeetesh Keshaw Director: Nuclear Policy and Technology, Department of Energy	Indian	Male	11 October 2009	3	31 October 2012	MSc (Nuclear Engineering) – North-West University; and MSc in (Nuclear Physics) – University of the Witwatersrand.

Board Charter

The Nuclear Energy Act serves as the Necsa Board charter. The Act does this by *inter alia* outlining the functions and mandate of the Corporation, dealing with the appointment of the Board, setting out the powers of the Board, and the Minister's responsibilities concerning South Africa's international obligations with regard to nuclear non-proliferation as well source material, special nuclear material, and radioactive waste.

The Board is responsible for ensuring the establishment of various policies to enhance and provide assurance in terms of transparency, inclusiveness, reliability, accuracy, relevance, completeness, clarity and timeliness to ensure sustainability.

Remuneration of Board Members

Director's emoluments for the period under review are recorded on page 151 of this report.

Meetings of the Board

The Nuclear Energy Act requires that the Board meets at least four times per annum to discuss and review the Strategy and Business Plan. Special Board Meetings are convened when necessary to deliberate on issues that require Board resolutions between scheduled meetings. Members of management are periodically invited to make presentations on issues of particular interest to the Board.

The Board met four times during the review period, with attendance at meetings as follows:

Name of Board member	Meeting dates			
	8 June 2011	29 July 2011	30 November 2011	28 February 2012
Dr Rob Adam (CEO and Executive Director)[1]	Present	Present	Present	-
Mr Don Robertson[2]	-	-	-	Present
Mr Manne Dipico (Chairperson)	Present	Present	Via teleconference	Present
Adv. Nazreen Shaik-Peremanov (Deputy Chairperson)	Present	Present	Present	Present
Mr Phumzile Tshelane	Apology	Present	Present	Present
Mr Abdul Minty	Apology	Present	Apology	Apology
Prof. Thokozani Majozi	Present	Present	Apology	Present
Dr Ntuthuko Bhengu	Present	Apology	Apology	Present
Mr Lampona Aphane	Apology	Present	Apology	Apology
Ms Noluphumzo Noxaka	Present	Present	Present	Present
Dr Velaphi Msimang	Apology	Present	Apology	Apology
Mr Jeetesh Keshaw (Alternate Director: Mr Lampona Aphane)	Present	Present	Present	Present

[1] Dr Rob Adam resigned 31 January 2012
[2] Mr Don Robertson assumed the position of Acting CEO from 1 February 2012

Assessment of the Board

An independent Board Performance Assessment was conducted with the help of the Institute of Directors during 2011. The report, including recommendations, was submitted to the shareholder, the Department of Energy, in 2012. Assessments will be conducted twice per annum, as requested by the shareholder, with the next assessment scheduled for September 2012.

Board Opinion

The Board of Directors believes that the organisation has appropriately applied and complied with the principles incorporated in the Code of Corporate Practices and Conduct, as set out in the King III Report.

Legal Services

Necsa has a dedicated legal office proving support to the Group. This helps to minimise the organisation's legal and compliance risks and assists various Necsa business divisions and Necsa subsidiary companies in pursuit of their respective strategic objectives. Specific legal services include commercial legal services (negotiating, drafting, vetting of the Group's commercial contracts and providing quality legal advice), and management of civil/litigation matters, which include advising the corporation on appropriate Litigation Strategy. The office of the legal services also has oversight over the Corporation's statutory and/or regulatory compliance.

Company Secretary and Professional Advice

The Company Secretary is Mr Aukney Clifford Mabunda, BA, LLB, LLM (Wits), P. Grad. Dip Business Management & Administration (De Montfort University, UK). Mr Mabunda is an Attorney of High Court of South Africa. His business and postal addresses are as follows:

Pelindaba	PO Box 582
Elias Motswaledi/	Pretoria
Church Street West Extension	0001
Pretoria	

All Directors have access to the advice and services of the Company Secretary, whose appointment is in accordance with the Companies Act, and who is responsible to the Board for ensuring the proper administration of Board proceedings. The Company Secretary also provides guidance to the Directors on their responsibilities within the prevailing regulatory and statutory environment and the manner in which such responsibilities should be discharged. The Directors are entitled to seek independent professional advice at the Group's expense concerning the affairs of the Company and have access to any information they may require in discharging their duties as Directors.

Committees of the Board

In terms of Section 19 of the Nuclear Energy Act, the Board is advised and assisted by advisory committees, whose mandate is to assist the Board in discharging its responsibilities. These committees play an important role in enhancing high standards of governance and improving effectiveness within the Necsa Group. External advisors are invited to attend Board and/or Committee meetings on an ad hoc basis, as or when the need arises.

Audit and Risk Committee

The Audit and Risk Committee comprises three Non-Executive Directors. A Non-Executive Director who is not the Chairperson of the Board chairs the Committee.

The Audit and Risk Committee assists the Board in overseeing:

- The quality and integrity of the Group's financial statements and the disclosure thereof;
- The scope and effectiveness of the external audit function; and
- The effectiveness of the Company's internal controls and internal audit function.

The Committee held four meetings during the year, with membership and meeting attendance being as follows:

Name of Board member	Meeting dates			
	27 May 2011	22 July 2011	25 November 2011	23 February 2012
Ms Noluphumzo Noxaka (Chairperson)	Present	Present	Present	Present
Dr Ntuthuko Bhengu	Present	Present	Apology	Apology
Adv. Nazreen Shaik-Peremanov	Present	Present	Present	Present

The Committee has adopted formal Terms of Reference and is satisfied that it has complied with its responsibilities as set out therein.

Human Resource and Remuneration Committee

This Committee has adopted formal Terms of Reference and is responsible for determining Human Resource strategies and policies, and recommending these for approval to the Board. These include policies on staff and Board Member remuneration, human resource development, as well as conditions of service.

The Committee held five meetings during the year with membership and meeting attendance being as follows:

Name of Committee member	Meeting dates				
	27 May 2011	8 June 2011	22 July 2011	18 November 2011	23 February 2012
Mr Lampona Aphane (Chairperson)	Apology	Apology	Present	Present	Present
Prof. Thokozani Majozi	Apology	Present	Present	Present	Present
Ms Noluphumzo Noxaka	Apology	Present	Present	Present	Present
Mr Jeetesh Keshaw (Alternate Director: Mr Lampona Aphane)	Present	Present	Present	Present	Present

SHEQ and Technical Committee

The objective of this Committee is to provide assurance to Necsa's Board, and in turn its shareholder and stakeholders, that Necsa maintains the highest levels of compliance with applied international and national legislation and standards and best management practice in terms of SHEQ, as well as related nuclear issues and regulatory framework matters in terms of the Company and its projects.

The Committee convened four times during the review period with membership and meeting attendance being as follows:

Name of Committee member	Meeting dates			
	6 June 2011	20 July 2011	23 November 2011	21 February 2012
Mr Phumzile Tshelane (Chairperson)	Present	Present	Present	Present
Prof. Thokozani Majozi	Present	Apology	Present	Present
Adv. Nazreen Shaik-Peremanov	Present	Present	Present	Present
Prof. Gideon Greyvenstein	Apology	Apology	Present	Apology

The Committee has adopted formal Terms of Reference and has the authority to investigate, at its discretion, any issues relating to its mandate. During the review period, the Committee monitored the following:

- The implementation and management of SHEQ, the Security and Regulatory Framework and related nuclear issues;
- Compliance with international management standards and applicable national legislation;
- The implementation of the Safety Culture Enhancement Programme;
- The promotion of continuous improvement; and
- Management's view on identified and potential risks relating to SHEQ, the security and regulatory framework and related nuclear issues as applicable to the Company.

The Committee is satisfied that it has complied with its responsibilities as set out in the Terms of Reference. It is also satisfied that Necsa is a responsible organisation which executes its SHEQ responsibilities at a high level and has adequate, effective management systems and processes in place to protect its workers, the public and the environment.

Investment and Finance Committee

The objective of this Committee is to provide guidance and assistance with the administrative procedures required for the completion of investment projects.

The Committee has adopted formal Terms of Reference and convened four times during the review period, with membership and meeting attendance being as follows:

Name of Committee member	Meeting dates			
	30 May 2011	20 July 2011	23 November 2011	21 February 2012
Dr Ntuthuko Bhengu	Present	Apology	Present	Apology
Mr Phumzile Tshelane	Apology	Present	Present	Apology
Ms Noluphumzo Noxaka	Present	Present	Present	Present
Mr Lampona Aphane	Apology	Apology	Apology	Apology
Mr Jeetesh Keshaw (Alternate Director: Mr Lampona Aphane)	-	Present	Present	Present

Social and Ethics Committee

In line with Regulation 43 of the new Companies Act, No. 71 of 2008, which requires that all SOCs establish a Social and Ethics Committee, the Necsa Board resolved to establish this Committee in February 2012. The Committee will be responsible for carrying out statutory functions as set out in Regulation 43 (5), which include *inter alia* corporate, environmental, health, safety and labour issues.

The Committee had not held its first meeting by the end of the reporting period.

Executive Management Committee

In terms of Sections 22 and 23 of the Nuclear Energy Act, the CEO has the power and authority, among other things, to implement approved business plans, annual budgets and all other issues and matters relating to the achievement of Necsa's goals and prepare, review and recommend to the Board the annual budgets and any amendments thereto.

The CEO, in carrying out the powers set out above, is assisted by an Executive Management Committee (EMC). The CEO is the Chairperson of the EMC, which consists of nine members. The Committee's main functions include alignment of Necsa's business with the Group mission, vision, strategies, targets and policies and consideration of material business, strategic, financial and functional issues.

The members of the EMC for the financial year were:

Name	Capacity	Appointed to the Committee	Resigned from the Committee
Dr Rob Adam	CEO	March 2006 to 31 January 2012	31 January 2012
Mr Don Robertson	Acting CEO	1 February 2012 to date	
Dr Van Zyl de Villiers	Group Executive: Strategy and Performance	November 2002 to date	
Mr Arie van der Bijl	Group Executive: Nuclear Technology Industrialisation	January 2008 to date	
Ms Nishina Dayaram	Group Executive: Finance and Information Management	April 2008 to date	
Mr Joseph Shayi	Group Executive: Nuclear Compliance & Services	October 2008 to date	
Mr Daniel Moagi	Group Executive: Human Resources	October 2009 to date	
Ms Chantal Janneker	Group Executive: Marketing and Communication	April 2010 to date	
Dr Zeblon Vilakazi	Group Executive: Research and Development	April 2011 to date	
Dr Ramatsemela Masango	Group Executive: NURAD	June 2010 to date	
Ex-officio member of the Executive Committee			
Mr Aukney Mabunda	Legal Services and Company Secretariat		

Executive Management Committee

Dr Rob Adam
Chief Executive Officer

Mr Don Robertson
Acting Chief Executive Officer

Dr Van Zyl de Villiers
Group Executive:
Strategy and Performance

Mr Arie van der Bijl
Group Executive:
Nuclear Technology
Industrialisation

Ms Nishina Dayaram
Group Executive:
Finance and Information
Management

Mr Joseph Shayi
Group Executive:
Technical Services

Ms Chantal Janneker
Group Executive:
Marketing and
Communication

Mr Daniel Moagi
Group Executive:
Human Resources

Dr Zeblon Vilakazi
Group Executive: Research
and Development

Dr Ramatsemela Masango
Group Executive:
Nuclear Compliance

Mr Aukney Mabunda
Legal Services and Company
Secretariat
(Ex-officio member)

Internal Control and Risk Management

The Directors are ultimately responsible for the Group's system of internal control, designated to provide reasonable assurance against material misstatement and loss. The Group maintains a system of internal financial control designed to provide the Directors with assurance on the maintenance of proper accounting records and the reliability of financial information used within the business and for publication.

The internal control system includes:

- A documented organisational structure and reasonable division of responsibility;
- Established policies and procedure (including a Code of Ethics to foster a strong ethical climate); and
- Established mechanisms to ensure compliance.

Internal Audit

The Internal Audit function is responsible for:

- Assisting the Board and Management in monitoring the effectiveness of the Organisation's Risk Management process;
- Assisting the Board and Management in maintaining effective controls by evaluating those controls continuously to determine their efficiency and effectiveness and recommending improvements; and
- Assisting the Board and Management in achieving objectives by evaluating the performance of units, departments and subsidiaries to determine their effectiveness and efficiency and recommending improvements.

The controls subject to evaluation encompass:

- The information management environment;
- The reliability and integrity of financial operating information;
- The safeguarding of assets; and
- The effective and efficient use of the Company's resources.

Audit plans are based on an assessment of risk areas, as well as on issues highlighted by the Audit and Risk Committee and Management. Audit plans are updated as is appropriate to ensure they are responsive to changes in the business. Significant findings are reported to the Audit and Risk Committee at each of their scheduled meetings. Follow-up audits are conducted in areas where significant internal control weaknesses are found.

Corporate Governance best practice requires that the Internal Audit function reports directly to the Audit and Risk Committee.

Such direct reporting is ensured by the Audit and Risk Committee's mandate and practice to:

- Evaluate the effectiveness of Internal Audit;
- Review and approve the Internal Audit Charter, Internal Audit plans and Internal Audit conclusions about internal control;
- Review significant Internal Audit findings and the adequacy of corrective actions taken;
- Assess the performance of the Internal Audit function and the adequacy of available Internal Audit resources;
- Review significant differences of opinion between management and the Internal Audit function; and
- Consider the appointment, dismissal or reassignment of the head of Internal Audit.

The Charter of the Internal Audit Department provides that the head of Internal Audit has direct access to the CEO and the Chairperson of the Audit and Risk Committee.

Risk Management

The Board is responsible for governing risk management processes in accordance with corporate governance requirements. The enterprise-wide Risk Management Process has the following principal objectives:

- Providing the Board with assurance that significant business risks are systematically identified, assessed and reduced to acceptable levels in order to achieve an optimal risk reward balance; and
- Making risk identification and risk management an integral part of the daily activities of everyone in the organisation.

Necsa's enterprise-wide Risk Management Process is guided by the following key principles:

- A clear assignment of responsibilities and accountabilities;
- A common enterprise-wide Risk Management Framework and Process;
- The identification of uncertain future events that may influence the achievement of business plans and strategic objectives; and
- The integration of Risk Management activities within the organisation and across its value chains.

The Group has established an Internal Risk Management Committee which seeks to:

- Assist the EMC and the Board, with the development and implementation of the Risk Management Strategy and Policies;

- Develop a Risk Management Process to identify Company risks and ensure all risks are identified and addressed through internal control mechanisms;
- Assist the EMC and the Board to review and monitor the Risk Management Process, as well as the various possible risks Necsa is exposed to; and
- Provide necessary information to the EMC and the Board Audit and Risk Committee or any other committees of the Board as may be required from time to time.

The Committee meets on a quarterly basis to assess Risk Management progress and initiatives. Group Risk Management is guided by an approved Risk Management Strategy which was adopted by the EMC and Board; and which has defined risk tolerance and acceptable risk appetite parameters. In addition to this, Internal Audit conducts a risk-based audit.

Necsa's Integrated Risk Management Implementation approach, among others, entails the development of strategic, functional and process risk profiles. Strategic risks are typically defined as those risks that may influence the achievement of strategic business objectives. Similarly, functional and process risks are defined as risks that may influence the achievement of functional and process objectives respectively.

Strategic Group Risks

The Necsa Group Risk Management Process considers sustainability as well as current risks, imminent and envisaged risk that may threaten the long-term sustainability of the Group.

The most significant sustainability risks currently faced by the Group are:

Financial Resource Constraints

As a public entity of the DoE, Necsa is mandated to undertake specific policy implementation and legislated functions, as well as fulfil Ministerial obligations. To this extent Necsa is dependent on government grant funding which has been concurrently reduced over the past three Medium-Term Expenditure Framework (MTEF) periods in real terms, placing the organisation under significant financial strain. Initiatives are under way to bolster funding from other sources and this will be continued.

Ageing Necsa Group Production Plants and Equipment Failure

The Necsa site was developed many years ago and activities were progressively scaled down, especially during the 1990s as a result of South Africa's signing of the Non-Proliferation Treaty and the non-viability of activities from the strategic era. However, nuclear R&D activities and commercial activities associated with the Pelchem Group and NTP Group have continued. In the meantime, decommissioning and decontamination of strategic disused facilities has also progressed.

Recent times have seen renewed growth in activities to support South Africa's Nuclear Programme expansion, and these activities require associated site infrastructure to house them. During the same period, however, Necsa experienced reduced government grant funding allocations, which have placed a strain on the extent of site maintenance, refurbishment and equipment replacement activities. Necsa has, however, implemented a Preventive Maintenance Programme in certain critical areas through which it has had to prioritise and reprioritise expenditure in light of growing constraints.

Lack of Suitable, Skilled Staff for Core Projects, Including the Loss of Expertise in the Medium- to Long-term

During the year under review Necsa initiated the implementation of a new business model in order to begin to effectively deal with financial constraints facing the organisation, as well as to gear up to respond to new opportunities that were arising as a result of government's Integrated Resource Plan (IRP) development process. This change necessitated a dual approach with primary focus on fulfilling legislative requirements, but also responding to new commercial opportunities, either as a result of new innovation developments, or in response to new government policies such as the IRP. Necsa has identified key HR requirements to give effect to its new business model and will progressively realise this as policy implementation and commercial opportunity exploitation allow.

Lack of Public Awareness of Nuclear Energy

This risk relates to Necsa as a state-owned entity not being able to leverage future opportunities that will arise out of South Africa's nuclear power expansion programme, namely in the areas of developing a fuel cycle to provide for the fuel requirements of the programme, as well as exploiting manufacturing opportunities that will arise from the localisation requirements for the programme. Essentially, both globally and locally, the public perception around nuclear energy remains a key strategic challenge and needs to be dealt with effectively. As a result of the serious financial constraints facing Necsa, the communication campaign that was implemented previously has had to be curtailed. Necsa, however, continued to build on the successes achieved through the communication campaign through more effective utilisation of the Necsa Visitor Centre, as well as successful outreach programmes. These programmes are designed to ensure that public perceptions regarding nuclear technologies are positively affected.

Market and Production Risks Associated with the Business Operations of the Pelchem Group and NTP Group

Given that both subsidiary companies are production-based and subject to market conditions, their risks vary with time. Key risks typically relate to production infrastructure and market fluctuations. Risks relating to subsidiaries are continuously dealt with through their respective Risk Management Processes under the oversight of their respective governance structures.

Risk Methodology

The responsibility for monitoring the management of each of these risks is assigned to an Executive Management Committee member. The Group Risk Management follows the Committee of Sponsoring Organisations (COSO) of the Treadway Commission enterprise risk management framework to ensure alignment with best practice. To give effect to this framework, Necsa approved a Risk Management Policy during 2009. In addition to the policy, a Risk Management Strategy was also approved in the same year. This strategy outlines roles and responsibilities for risk identification, assessment and management, as well as the overall Risk Management Process. As a nuclear organisation operating a nuclear research reactor, sustainability risks relating to safety, security, regulatory compliance and commercial success of subsidiaries define Necsa's risk tolerance at a risk rating level of ≥16 (i.e. those risks with high impact and high likelihood of occurrence). Necsa's risk appetite has been defined as "No risk may remain in the very high (unacceptable) category (15 < Rating ≤ 25) for longer than two consecutive quarters (six months) before being managed into a more acceptable (lower) risk category (Rating ≤ 15)". The Group Risk Management Process is as follows:

- Risk management is applied within all the divisions and subsidiaries as a continuous proactive process by management and personnel;
- All Necsa divisions and subsidiaries review the risks that may impact on the achievement of business objectives annually;
- Residual risks are rated on a five-point scale in terms of impact and likelihood of it occurring. The product of these ratings gives the total risk rating, with a maximum possible score of 25;
- The divisional and subsidiaries' risks are then captured in risk registers on the Internal Risk Management Committee (IRMC) corporate database. Residual risks are rated and progress on specific mitigation actions is monitored;
- Risk information and assessments are considered by the IRMC on a quarterly basis. Risk ratings are also moderated, where necessary, to ensure a consistent overview of corporate risks;
- The IRMC compiles a Necsa Risk Management Plan which is submitted to the EMC for confirmation;
- The annually updated plan is also submitted to the Audit and Risk Committee of the Board for approval;
- The status of implementation of actions to address the risks captured in this plan is provided to the EMC and Audit and Risk Committee as part of the quarterly reporting process; and
- Management of Necsa's subsidiaries are responsible for the implementation of Risk Management plans covering their business activities which are submitted to the relevant subsidiary boards and the Audit and Risk Committee for consideration.

Fraud Prevention

In addition to the Risk Management Plan, Necsa annually prepares a Fraud Prevention Plan for approval by the Audit and Risk Committee; and in this regard has also commissioned a fraud prevention hotline. The Internal Audit Coverage Plan is risk-based, as the official Risk Management plans of the Group are utilised as the basis for drafting of Audit plans in the different focus areas. The highest identified risks in Risk Management plans, i.e. those at and above the threshold of Necsa's risk appetite are considered for inclusion in the Internal Audit Coverage Plan. However, in some instances the discretion of the Auditor may be exercised to include risks with a lower likelihood and impact, as well as own identified risks. Risk Management plans are incorporated in the Necsa Corporate Plan which is submitted to both the accounting and executive authorities on a regular basis.

Assurance for the Risk Management Process is provided through a series of interrelated processes which include the IRMC, Internal Audit, the Audit and Risk Committee and ultimately the Board.

Disaster Recovery plans are continually reviewed for critical information management systems that could have a material impact on the Group's continuing operations.

Sustainability Reporting

The Company reports to the Board and its stakeholders on all aspects of its social, transformation, ethical and safety, health and environmental policies and practices. (See pages 24–42 of this report for comprehensive reporting on Necsa's sustainability).

Public Finance Management Act

The Necsa Group complies in all material respects with the requirements of the Public Finance Management Act (PFMA), No. 1 of 1999.

Significance and Materiality Framework

The materiality framework for reporting losses through criminal conduct and irregular, fruitless and wasteful expenditure, as well as for significant transactions envisaged as per Section 54(2) of the PFMA, has been confirmed by the Board and the shareholder compact. Losses through criminal conduct or irregular, fruitless and wasteful expenditure which are identified are disclosed as prescribed in the Act.

Governing Policies and Regulatory Framework

Nuclear Licence

The Necsa site and facilities are currently operated in accordance with the overarching nuclear licence NL-27 which was issued in 1999 in terms of the old Nuclear Energy Act, No. 31 of 1993.

International Agreements and Implementation

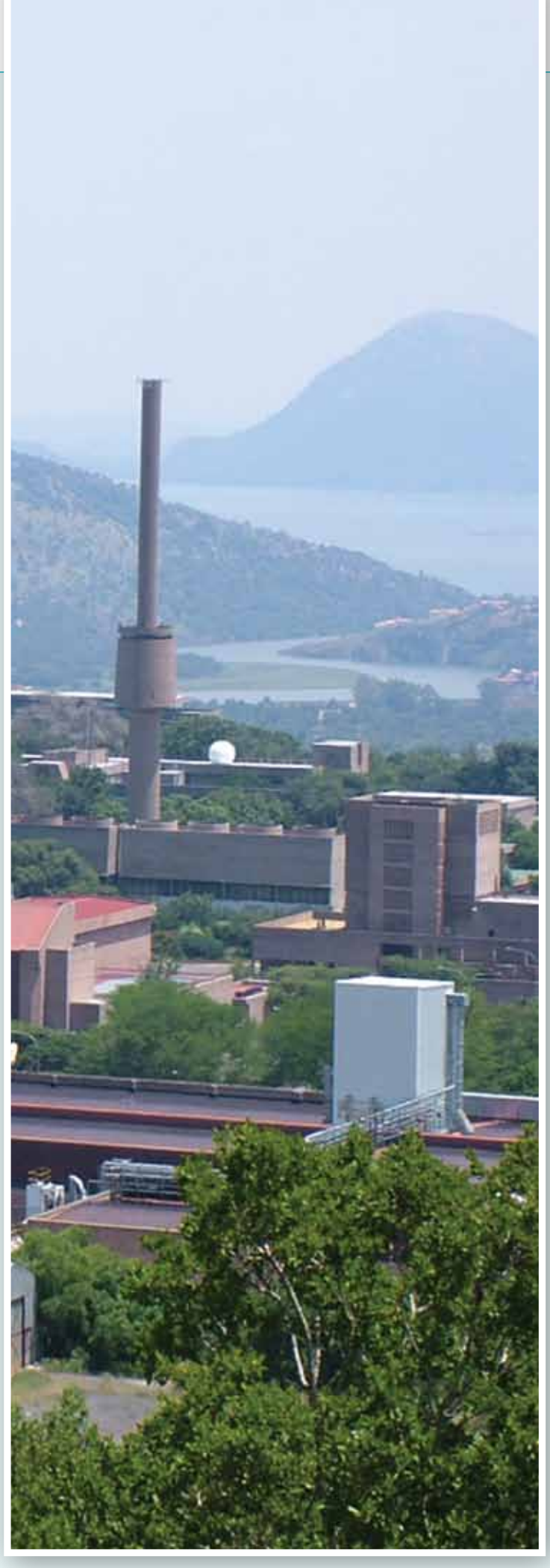
The execution of the Safeguards and Nuclear Non-Proliferation Agreements is reported on pages 28–29 of this report.

King III Compliance Checklist

	Apply	Partially apply	Under review/ do not apply
Ethical Leadership and Corporate Citizenship			
Effective leadership based on an ethical foundation	✓		
Responsible corporate citizen	✓		
Effective management of Company's ethics	✓		
Assurance statement on ethics in annual report	✓		
Boards and Directors			
The Board is the focal point for, and custodian of, corporate governance	✓		
Strategy, risk, performance and sustainability are inseparable	✓		
Directors act in the best interest of the Company	✓		
The Chairman of the Board is an independent Non-Executive Director	✓		
Framework for the delegation of authority has been established	✓		
The Board comprises a balance of power, with a majority of Non-Executive Directors who are independent	✓		
Directors are appointed through a formal process	✓		
Formal induction and ongoing training of Directors is conducted	✓		
The Board is assisted by a competent, suitably qualified and experienced Company Secretary	✓		
Regular performance evaluations of the Board, its committees and the individual Directors		✓ (Note 1)	
Appointment of well-structured committees and oversight of key functions	✓		
An agreed governance framework between the Group and its subsidiary Boards is in place	✓		
Directors and executives are fairly and responsibly remunerated	✓		
Remuneration of Directors and senior executives is disclosed	✓		
The Company's remuneration policy is approved by its shareholder	✓		
Internal Audit			
Effective risk-based internal audit	✓		
Written assessment of the effectiveness of the Company's system of internal controls and risk management		✓ (Note 2)	
Internal audit is strategically positioned to achieve its objectives	✓		
Audit Committee			
Effective and independent	✓		
Suitably skilled and experienced independent Non-Executive Directors	✓		

	Apply	Partially apply	Under review/ do not apply
Chaired by an independent Non-Executive Director	✓		
Oversees integrated reporting	✓		
A combined assurance model is applied to improve efficiency in assurance activities	✓		
Satisfies itself of the expertise, resources and experience of the Company's finance function	✓		
Integral to the risk management process	✓		
Oversees the external audit process	✓		
Reports to the Board and shareholders on how it has discharge its duties	✓		
Compliance with Laws, Codes, Rules and Standards			
The Board ensures that the Company complies with relevant laws	✓		
The Board and Directors have a working understanding of the relevance and implications of non-compliance	✓		
Compliance risk forms an integral part of the Company's risk management process	✓		
The Board has delegated to management the implementation of an effective compliance framework and processes	✓		
Governing Stakeholders Relationships			
Appreciation that stakeholders' perceptions affect a Company's reputation	✓		
Management proactively deals with stakeholder relationships	✓		
There is an appropriate balance between various stakeholder groupings	✓		
Equitable treatment of stakeholders	✓		
Transparent and effective communication to stakeholders	✓		
Disputes are resolved effectively and timeously	✓		
IT Governance			
The Board is responsible for IT governance	✓		
IT is aligned with the performance and sustainability objectives of the Company		✓ (Note 3)	
Management is responsible for the implementation of an IT governance framework	✓		
The Board monitors and evaluates significant IT investments and expenditure		✓ (Note 3)	
IT is an integral part of the Company's risk management	✓		
IT assets are managed effectively		✓ (Note 3)	
The risk management committee and audit committee assist the Board in carrying out its IT responsibility		✓ (Note 3)	
The Governance of Risk			
The Board is responsible for the governance of risk and setting levels of risk tolerance	✓		
The Risk Management Committee assists the Board in carrying out its risk responsibilities	✓		
The Board delegates the process of risk management to management	✓		
The Board ensures that risk assessments and monitoring are performed on a continual basis	✓		
Frameworks and methodologies are implemented to increase the probability of anticipating unpredictable risks	✓		
Management implements appropriate risk responses	✓		
The Board receives assurance on the effectiveness of the risk management process	✓		
Sufficient risk disclosure to stakeholders	✓		
Integrated Reporting and Disclosure	✓		
Ensures the integrity of the Company's annual report	✓		
Sustainability reporting and disclosure are integrated with the Company's financial reporting	✓		
Sustainability reporting and disclosure are independently assured			✓ (Note 4)

Notes:
1 See page 58 for confirmation of Board evaluation
2 A system is in place. Its effectiveness has not yet been demonstrated
3 The new IT Strategy and Governance Framework makes provision for full compliance with the King III Code. The IT Strategy has been approved for implementation. The IT Governance Framework has not yet been approved by the Board. The implementation of the Strategy and Governance Framework will ensure compliance with King III
4 Financial constraints have precluded the appointment of an independent assurer



Remuneration Report

11

Remuneration Approach

The principle of "performance based remuneration" is one of the cornerstones of the reward philosophy, which is underpinned by sound remuneration management and governance and promoted throughout the organisation to ensure consistent application. This approach is designed to:

- Attract, motivate and retain the right employees who will deliver business success;
- Offer a holistic employee value proposition;
- Ensure that the sum total of the rewards offering is competitive, well defined, branded and communicated in such a way that employees value it;
- Optimise the return on investment of remuneration and benefits by balancing the reward offering in terms of financial and non-financial rewards; and
- Ensure that the Company complies with corporate governance guidelines in the way that remuneration is managed.

Remuneration Principles

To ensure the integrity and legitimacy of the total reward approach, the development and application of reward-related policies, programmes and practices as well as reward decisions are directed by core guiding reward principles contained in the reward philosophy. The reward philosophy is underpinned by sound remuneration management and governance principles which are promoted throughout Necsa to ensure consistent application. Principles include:

- All reward policies and practices should be free of inequitable distinctions;
- Investment in human capital on the basis of affordability and return on investment using all elements of the total reward which include:
  - Fixed remuneration
  - Variable pay (incentives)
  - Benefits
  - Work-life balance
  - Performance management
  - Development and career opportunities;
- The reward and recognition of high performance;
- An effective, workable performance management system which allows for the differentiation of pay for individuals and teams that are performing and delivering value for the business;
- A tightly managed salary bill in order for the business to fund the various aspects of the total reward environment; and
- Clear principles around pay practices, levels, performance management and cost management.

Necsa undertakes to remunerate executive employees in line with market benchmarks, taking into account:

- The size of the company;
- Budget;
- Economic indicators; and
- The type of company.

A number of variables will, from time to time, influence the remuneration of executives, such as:

- The maturity of Necsa;
- Trends in remuneration practices; and
- The financial status of the organisation.

Base Salary

Executive employees are paid a guaranteed package, based on the 'total cost to company' principle.

Variable Pay

Variable pay is paid on performance. This implies not only the individual's performance but also the performance of Necsa. Unlike guaranteed annual bonuses, these are not regular guaranteed payments and, if granted, may be paid in variable instalments in any one year based on Necsa's variable pay model.

Other Benefits

Other benefits include medical aid and membership of a defined contribution provident fund scheme, full details of which are covered elsewhere in this report.

Remuneration of Executive Directors and Employees

Remuneration of Executive Directors

Necsa's dedicated Human Resource and Remuneration Committee, details of which are reported in the Corporate Governance Report, oversees the principles for remuneration of executive employees. Implementation is managed through the Human Resources and Finance Departments.

Adjustments to the remuneration of Executive Directors are recommended by the Board's Human Resource Committee, which comprises only Non-Executive Directors and are approved by the Board of Directors. Remuneration of Necsa's Executive Directors is disclosed under Note 43 in the financial statements. Remuneration of NTP and Pelchem's Executive Directors was as follows:

2012	Total package R
NTP	
Robertson DG	2,118,600
Louw PA	1,647,800
Van der Walt PL	1,530,100
Pelchem	
Terblanche APS	1,786,044
Naidoo V	1,081,867
Valkenburgh EG	1,079,824

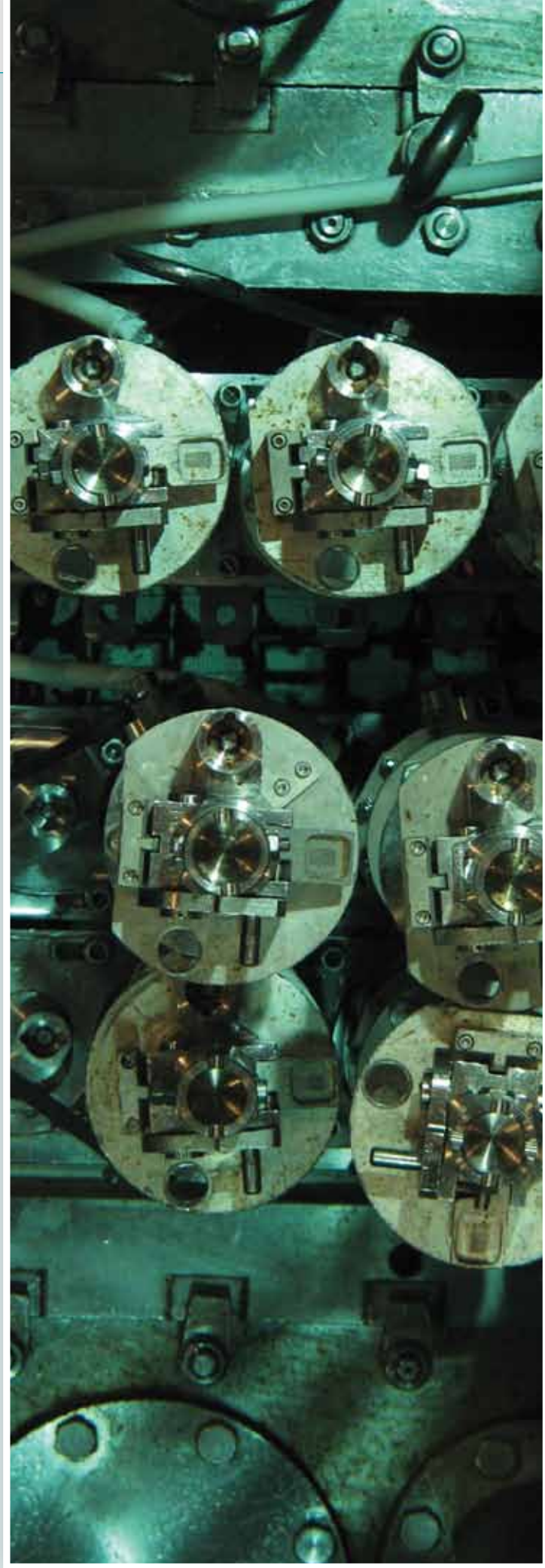
Remuneration of Top Three Employees

Remuneration of the top three employees (non-directors) in the Necsa Group for the review period was as follows:

2012	Total package R
Mabunda AC	1,232,569
Linington AJ	1,128,110
Prior JH	1,123,818

Remuneration of Non-Executive Directors

The remuneration of Necsa's Non-Executive Directors is determined by the Minister of Energy in terms of the Nuclear Energy Act, No. 46 of 1999. In making her determination in this respect, the Minister also takes into account the relevant National Treasury Regulations and/or framework on remuneration of Non-Executive Directors of state-owned entities.



Financial Report

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General Information

Country of incorporation and domicile	South Africa
Nature of business and principal activities	The South African Nuclear Energy Corporation SOC Limited is responsible for managing certain institutional obligations defined in the Nuclear Energy Act, No. 46 of 1999
Directors	Dr EM Dipico Mr AS Minty Mr GP Tshelane Adv. N Shaik-Peremanov Dr NM Bhengu Prof. T Majozi Ms LN Noxaka Mr LF Aphane Mr VZ Msimang Mr LM Gumbi (Alternate Director to AS Minty) Mr JB Keshaw (Alternate Director to LF Aphane)
Registered office	Elias Motswaledi/Church Street West Extension Madibeng District Pelindaba North West Province 2025
Business address	Elias Motswaledi/Church Street West Extension Madibeng District Pelindaba North West Province 2025
Postal address	PO Box 582 Pretoria 0001
Holding company	Department of Energy
Auditors	Auditor-General of South Africa
Secretary	Mr AC Mabunda
Company registration number	2000/003735/06

Directors' Responsibilities and Approval

The Directors are required in terms of the Companies Act, No. 71 of 2008 (Companies Act) to maintain adequate accounting records and are responsible for the content and integrity of the annual financial statements and related financial information included in this report. It is their responsibility to ensure that the annual financial statements fairly present the state of affairs of the Group as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with SA GAAP (SA GAAP and the PFMA). The external auditors are engaged to express an independent opinion on the annual financial statements.

The annual financial statements are prepared in accordance with SA GAAP and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgments and estimates.

The Directors acknowledge that they are ultimately responsible for the system of internal financial control established by the Group and place considerable importance on maintaining a strong control environment. To enable the Directors to meet these responsibilities, the Board of Directors sets standards for internal control aimed at reducing the risk of error or loss in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the Group and all employees are required to maintain the highest ethical standards in ensuring the Group's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the Group is on identifying, assessing, managing and monitoring all known forms of risk across the Group. While operating risk cannot be fully eliminated, the Group endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Directors are of the opinion, based on the information and explanations given by management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The Directors have reviewed the Group's cash flow forecast for the foreseeable future and in the light of this review and the current financial position, they are satisfied that the Group has or has access to adequate resources to continue in operational existence for the foreseeable future, with certain key processes to be followed and actions to be taken. (Also refer to Directors' report)

The Group and Company's annual financial statements have been audited by the Group's external auditors and their report is presented in the annual financial statements.

The annual financial statements which have been prepared on the going concern basis, are approved by the Board of Directors on 31 July 2012 and are signed on its behalf by:

Dr Manne Dipico
Chairperson
Pelindaba
31 July 2012

Mr DG Robertson
Acting Chief Executive Officer

Report of the Auditor-General

Report of the Auditor-General to Parliament on the South African Nuclear Energy Corporation SOC Limited its and Subsidiaries

Report on the Consolidated Financial Statements

Introduction

1. I have audited the consolidated and separate financial statements of the South African Nuclear Energy Corporation and its subsidiaries set out on pages 88 to 159 which comprise the consolidated and separate statement of financial position as at 31 March 2012, the consolidated and separate statement of financial performance, statement of changes in equity and the statement of cash flows for the year then ended, and the notes, comprising a summary of significant accounting policies and other explanatory information.

Accounting Authority's responsibility for the consolidated financial statements

2. The board of directors which constitutes the accounting authority is responsible for the preparation and fair presentation of these consolidated and separate financial statements in accordance with the South African Statements of Generally Accepted Accounting Practice (SA statements of GAAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No. 1 of 1999) (PFMA) and the Companies Act of South Africa, 2008 (Act No. 71 of 2008), and for such internal control as the accounting authority determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

Auditor-General's responsibility

3. My responsibility is to express an opinion on these consolidated and separate financial statements based on my audit. I conducted my audit in accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA), the *General Notice* issued in terms thereof and International Standards on Auditing. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated and separate financial statements are free from material misstatement.

4. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated and separate financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated and separate financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated and separate financial statements.

5. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

6. In my opinion, the consolidated and separate financial statements present fairly, in all material respects, the financial position of the South African Nuclear Energy Corporation SOC Limited and its subsidiaries as at 31 March 2012, and their financial performance and cash flows for the year then ended in accordance with SA Statements of GAAP and the requirements of the PFMA and Companies Act of South Africa.

Emphasis of matters

7. I draw attention to the matter below. My opinion is not modified in respect of this matter.

Restatement of Corresponding figures

8. As disclosed in note 44 to the financial statements, the corresponding figures for 31 March 2011 have been restated as a result of an error in classification between operating leases and finance leases discovered during the 2012 financial year, amounting to R4 923 million in the financial statements of the South African Nuclear Energy Corporation SOC Limited at, and for the year ended, 31 March 2011.

Financial sustainability

9. The directors' report, note 3 in the consolidated annual financial statements indicates that whilst Necsa has been assessed as a going concern for the financial year ended 31 March 2012, there has been a significant reduction in government funding. This along with other matters set forth in the directors report indicate the existence of a material uncertainty that may cast significant doubt on the entity's ability to fulfil certain of it's obligations as they become due.

Additional matter

10. I draw attention to the matter below. My opinion is not modified in respect of this matter.

Other reports required by the Companies Act

11. As part of my audit of the financial statements for the year ended 31 March 2012, I have read the Directors' Report, the Audit Committee's Report and the Company Secretary's Certificate for the purpose of identifying whether there are material inconsistencies between these reports and the audited financial statements. These reports are the responsibility of the respective preparers. Based on reading these reports I have not identified material inconsistencies between the reports and the audited financial statements. I have not audited these reports and accordingly do not express an opinion on them.

Report on Other Legal and Regulatory Requirements

PAA Requirements

12. In accordance with the PAA and the *General Notice* issued in terms thereof, I report the following findings relevant to performance against predetermined objectives, compliance with laws and regulations and internal control, but not for the purpose of expressing an opinion.

Predetermined objectives

13. I performed procedures to obtain evidence about the usefulness and reliability of the information in the South African Nuclear Energy Corporation SOC Limited group annual performance report as set out on pages 83 to 87 of the annual report.

14. The reported performance against predetermined objectives was evaluated against the overall criteria of usefulness and reliability. The usefulness of information in the annual performance report relates to whether it is presented in accordance with the National Treasury annual reporting principles and whether the reported performance is consistent with the planned objectives. The usefulness of information further relates to whether indicators and targets are measurable (i.e. well defined, verifiable, specific, measurable and time bound) and relevant as required by the *National Treasury Framework for managing programme performance information.*

The reliability of the information in respect of the selected objectives is assessed to determine whether it adequately reflects the facts (i.e. whether it is valid, accurate and complete).

15. There were no material findings on the South African Nuclear Energy Corporation SOC Limited group annual performance report concerning the usefulness and reliability of the information.

Compliance with laws and regulations

16. I performed procedures to obtain evidence that the entity has complied with applicable laws and regulations regarding financial matters, financial management and other related matters. My findings on material non-compliance with specific matters in key applicable laws and regulations as set out in the *General Notice* issued in terms of the PAA are as follows:

Expenditure Management

17. The accounting authority did not take effective and appropriate steps to prevent fruitless and wasteful expenditure as per the requirements of section 51(1)(b)(ii) of the PFMA.

Internal control

18. I considered internal control relevant to my audit of the financial statements, annual performance report and compliance with laws and regulations. The matter reported below under the fundamentals of internal control is limited to the significant deficiency that resulted in the finding on compliance with laws and regulations included in this report.

Financial and Performance management

19. The fruitless and wasteful expenditure could have been prevented had compliance with laws and regulations been properly reviewed and monitored by management.

Pretoria
31 July 2012

AUDITOR-GENERAL
SOUTH AFRICA

Auditing to build public confidence

Report of the Audit and Risk Committee

We are pleased to present our report for the financial year ended 31 March 2012

Audit and Risk Committee Terms of Reference

The Audit and Risk Committee reports that it has adopted formal terms of reference, that have been approved by the Board of Directors. The Committee has conducted its affairs in compliance with its terms if reference and has discharged its responsibilities contained therein. The terms of reference are available on request.

Audit Committee Members, Meeting Attendance and Qualifications

The Committee is independent and consists of three independent, Non-Executive Directors. It meets at least four times per year as per its terms of reference. Attendance of meetings, dates of appointments as well as qualifications of the members are included in the governance report.

Roles and Responsibilities

Statutory Duties

The Committee's role and responsibilities include statutory duties as per the Companies Act, PFMA and further responsibilities assigned to it by the Board of Directors.

External Auditor Appointments and Independence

The Committee has satisfied itself that the external auditor was independent of the Group, as set out in the Companies Act, which includes consideration or conflicts of the interest as prescribed by the PAA. Requisite assurance was sought and provided by the external auditor that internal governance processes within the audit firm support and demonstrate its claims to independence.

The Committee, in consultation with executive management, agreed to the engagement letter, terms, audit plan and budgeted audit fees for the 2012 year.

Financial Statements and the Accounting Practices

The Committee has evaluated the annual financial statements of the company and the group for the year ended 31 March 2012 and based on the information provided to the Committee, considers that they comply, in all material respects with the requirements of the Companies Act and the PFMA, and South African Statements of the Generally Accepted Accounting Practice. The Committee concurs that the adoption of the going concern premise in the preparation of the annual financial statements is appropriate. The Committee has recommended the adoption of the annual financial statements and the integrated report by the Board of Directors.

The Audit and Risk Committee has:

- Reviewed and discussed with the Auditor-General and Accounting Authority, the audited annual financial statements;
- Reviewed the Auditor-General's management letter and management response;
- Reviewed changes in accounting policies and practices;
- Reviewed significant adjustments resulting from the audit; and
- Reviewed and discussed with the Accounting Authority, performance information submitted to the Auditor-General.

Internal Financial Controls

The Committee is satisfied that internal controls and systems have been put in place and that these controls have functioned effectively during the period under review. The Committee has overseen a process by which internal audit has performed audits according to a risk-based audit plan where the effectiveness of the risk management and internal controls were evaluated. The findings of these evaluations formed the basis for the Committee's recommendations in this regard to the Board of Directors, in order for the Board of Directors to report thereon.

The Audit and Risk Committee is satisfied, based on the information and explanations given by management and internal audit as well as through discussion with the Auditor-General on the result of their audits that an adequate system of internal control is being maintained to:

- Reduce the entity's risk to an acceptable level;
- Meet the business objectives of the organisation;
- Reviewed changes in accounting policies and practices;
- Ensure the organisation's assets are adequately safeguarded; and
- Ensure that the transactions undertaken are recorded in the organisation's records.

Going Concern

The Committee has reviewed management's assessment of the going concern status of the Group and has made recommendation to the Board of Directors. The future financial sustainability of the Company is a concern and is receiving the appropriate attention by the Board of Directors and Shareholder.

Internal Audit

The Committee is responsible for ensuring that the Group's internal audit function is independent and has the necessary resources, standing and authority within the Group to enable it to discharge its duties. Furthermore, the Committee oversees co-operation between the internal and external auditors and serves as a link between the Board of Directors and these functions.

The Committee considered and approved the internal audit charter. The internal audit function's annual audit plan and three year strategic plan were approved by the Committee.

The internal audit function reports administratively to the Chief Executive Officer and functionally to this Committee and is responsible for reviewing and providing assurance on the adequacy of the internal control environment across all of the Group's operations. The internal audit manager has direct access to the Committee, primarily through its Chairperson.

From the various reports of the internal auditors, it was noted that no matters were reported that indicate any material deficiencies in the systems of internal control. Risks that have been identified through various processes are being addressed.

Expertise and Experience of the Chief Financial Officer and Finance Function

The Committee has satisfied itself that the Chief Financial Officer has appropriate expertise and experience. The Committee has considered, and has satisfied itself of the appropriateness of the expertise and the adequacy of resources of the finance function and experience of the senior members of management responsible for the financial function.

Governance of Risk

The Committee exercises oversight over the risk management process and ensures that management implements appropriate risk mitigation controls. The organisation is continuously improving its risk management practices to ensure that an enterprise wide risk management system is entrenched as an integral part of the organisation in the fulfillment of its mandate. A risk register has been developed for the continuous assessment of present risks and identification of emerging risks. The organisation is also reviewing its ICT Strategy and IT Governance Framework to ensure alignment with strategic and organisational objectives.

Auditor-General

During the year, the Committee met with the external auditors, without management being present. The Committee accepts the audit opinion of the Auditor-General on the annual financial statements and recommends that the audited annual financial statements be accepted and read together with the report of the Auditor-General.

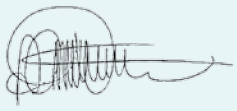
Conclusion

The Audit and Risk Committee recommends the adoption of the Annual report and Annual Financial Statements by the Board of Directors.

Ms Noluphumzo Noxaka
Chairperson: Necsa Audit and Risk Committee
31 July 2012

Group Secretary's Certification

In terms of Section 88(2)(e) of the Companies Act, as amended, I certify that the Group has lodged with the commissioner all such returns as are required of a state owned company in terms of the Companies Act and that all such returns are true, correct and up to date.



Mr Aukney Mabunda
Company Secretary
Pelindaba
31 July 2012

Directors' Report

The Directors submit their report for the year ended 31 March 2012.

Incorporation

The Company was incorporated on 24 February 2000 and obtained its certificate to commence business on the same day.

Review of Activities

Main Business and Operations

Necsa is responsible for managing certain institutional obligations defined in the Nuclear Energy Act, No. 46 of 1999 (Nuclear Energy Act). The main functions of the Company are:

- To undertake and promote research and development in the field of nuclear energy and radiation sciences and technology and subjected to the Safeguards agreement, to make these generally available;
- To process source material, special nuclear material and restricted material and to process and enrich source material and nuclear material; and
- To co-operate with any person or institution in matters falling within these functions subject to the approval of the minister.

Ancillary powers and functions may be granted to the Group:

- In connection with its main functions;
- In order to create and utilise viable business opportunities in commerce and industry; and
- In order to undertake the development and/or exploitation of nuclear technology or nuclear related technology.

The subsidiaries in turn, have a mandate from Necsa to operate the companies in a self sustainable manner and to remain competitive in the industries within which they operate.

The operating results and state of affairs of the Company are fully set out in the attached annual financial statements and do not in our opinion require any further comment.

Going Concern

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

The ability of the Group to continue as a going concern is dependent on a number of factors. The most significant of these is that the Department of Energy continue to provide funding for the ongoing operations of the Company.

As a result of the constraints facing Necsa primarily due to successive reductions in government grant over the past three years as well as more challenging market conditions for its subsidiaries, the organisation has had to embark on a Section 189 (Labour Relations Act) consultation process with staff to ensure a sustainable future

The Directors have reviewed the Group's forecast financial performance for the foreseeable future as well as the longer term budget and in light of this review and the current financial position, they are satisfied that the Group has access to adequate resources to continue in operational existence for the foreseeable future on the basis that certain key processes and actions be undertaken in the short- to medium-term (Please refer to section 4 for further detail).

Events After the Reporting Period

Necsa, is pursuing a review and realignment of the current structure in order to fulfil its mandate within the budget as allocated by Government. In this regard, various aspects of the business are under review to ensure cost reduction, rationalisation of the organisation and operational efficiency. Various steps have been initiated in order to ensure that we place Necsa in a sound financial position.

The cost reduction initiatives which included non-renewal of fixed term contracts, targeted operational expenditure savings, elimination of overtime where applicable, not filling vacant posts as a result of natural attrition, exit of contract employees and a moratorium on future appointments have already been implemented. Exceptions were made with respect to vacant positions of critical nature. Recently, Necsa has also introduced two voluntary severance processes which have been concluded. Unfortunately, the desired saving and cost reduction has not been achieved. As a consequence, Necsa contemplates the possible termination of employment of certain employees on the basis of its operational requirements.

Should the identified austerity measures and other initiatives not be met, this would add even more pressure on Necsa's future financial sustainability.

Pelchem SOC Limited (Pelchem) as a 100% subsidiary of Necsa and a minority shareholder of Limited Electronics South Africa (Pty) Ltd (LESA) are in the process of acquiring the remaining shares of LESA to make Pelchem the 100% shareholder of LESA. Agreements in this regard are being finalised and at the date of this report expected to be concluded by end of May 2012.

NTP Radioisotopes SOC Limited (NTP) signed a joint venture agreement with Gamwave SA (Pty) Ltd in June 2012. The business activities of this joint venture will be transferred to Cyclotope SOC Ltd. Final agreement has been reached with Gamwave on the revival and upgrading of the P2000 Co-60 plant. A newly formed joint venture company, of which NTP will own 40%, will operate the gamma sterilisation facility at the Pelindaba site. The refurbished facility is expected to be operational during the 2012/13 financial year.

NTP Radioisotopes SOC Ltd and Pelchem SOC Ltd have provided for profit-share bonuses to be paid out in the 2013 financial year, subject to approval. The total amount for this provision is R9.1 million.

Directors' Interest in Contracts

All Directors have given general declarations of interest in terms of section 75 (4) of the Companies Act. Refer to Note 42 for details on transactions entered into during the year.

Authorised and Issued Share Capital

There were no changes in the authorised or issued share capital of the Group during the year under review or the previous year.

Dividends

No dividends were declared or paid to shareholders during the year.

Directors

The Directors of the Company during the year and to the date of this report are as follows:

Name	Nationality	Changes
Dr EM Dipico	South African	
Mr AS Minty	South African	
Mr GP Tshelane	South African	
Dr RM Adam	South African	Resigned 31 January 2012
Mr D Robertson	South African	Appointed as acting CEO 1 February 2012
Adv. N Shaik-Peremanov	South African	
Dr NM Bhengu	South African	
Prof. T Majozi	South African	
Ms LN Noxaka	South African	
Mr LF Aphane	South African	
Mr VZ Msimang	South African	
Mr LM Gumbi (Alternate Director to AS Minty)	South African	
Mr JB Keshaw (Alternate Director to LF Aphane)	South African	

Secretary

The secretary of the Company is Mr AC Mabunda. His address is as follows:

Business Address

Elias Motswaledi/Church Street West Extension
Madibeng District
Pelindaba
North West Province
2025

Postal Address

PO Box 582
Pretoria
0001

Holding Company

The Company's holding company is the Department of Energy.

Interest in subsidiaries

Name of company	Nature of business	Issued share capital		Effective percentage		Number of shares		Indebtedness		Profit/(loss) after taxation	
		2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
		R	R	%	%			R'000	R'000	R'000	R'000
AEC-Amersham SOC Ltd[1]	Marketing of radiopharma-ceutical products	4,000	4,000	100	100	4,000	4,000	-	-	2,777	3,903
ARECSA Human Capital SOC Ltd[6]	Training in nuclear and related industries	1,000	1,000	51	51	510	510	-	-	247	192
Cyclofil SOC Ltd[6]	Dormant	1	1	100	100	1	1	-	-	-	-
Cyclotope SOC Ltd[1]	Dormant	100	100	100	100	100	100	-	-	-	58
Fluoro Pack SOC Ltd[2]	Dormant	100	100	100	100	100	100	-	-	-	277
Fluorochem SOC Ltd[2]	Dormant	100	100	100	100	100	100	-	-	-	-
Fluoropharm SOC Ltd[2]	Dormant	4,000	4,000	100	100	4,000	4,000	-	-	-	-
Gamma Film Industries SOC Ltd[4]	Dormant	100	100	55	55	100	100	-	-	13	3,084
Gammatec Aseana NDT Supplies SDN. BHD[4]	Non-destructive testing equipment, accessories and consumables	1,119,075	1,115,775	49.5	49.5	450,000	450,000	-	-	(1,187)	(698)
Gammatec Middle East General Trading Liability Co[4]	Non-destructive testing equipment, accessories and consumables	553,110	594,960	41.81	41.8	75,000	75,000	-	-	(5,913)	(1,010)
Gammatec NDT Supplies SOC Ltd[1]	Non-destructive testing equipment, accessories	300	300	55	55	165	165	-	-	10,717	12,712
Lectromax Australia Pty Ltd[4]	Non-destructive testing equipment	140	134	49.5	49.5	18	18	-	-	2,680	(2,831)
Lectromax New Zealand Pty Ltd[5]	Dormant	5,157	5,157	49.5	49.5	1,000	1,000	-	-	140	(199)
NTP Logistics SOC Ltd[1]	Logistics	100	100	51	51	51	51	-	-	6,305	5,331
NTP Radioisotopes SOC Ltd[6]	Marketing and distribution of radiopharma-ceuticals	220	220	100	100	220	220	-	-	104,681	160,517
Pelchem SOC Ltd[6]	Flourochemical products	770,310	770,310	100	100	770,310	770,310	12,278		3,102	(3,399)
Pharmatopes SOC Ltd[3]	Dormant	1,000	1,000	100	100	1,000	1,000	-	-	326	1,712

1 Subsidiary of NTP Radioisotopes SOC Ltd
2 Subsidiary of Pelchem SOC Ltd
3 Subsidiary of AEC-Amersham SOC Ltd
4 Subsidiary of Gammatec NDT Supplies SOC Ltd.
5 Subsidiary of Lectromax Australia (Pty) Ltd
6 Subsidiary of Necsa SOC Ltd

Details of the Company's investment in subsidiaries are set out in Note 7.

Interest in Associates

Name of company	Nature of business	Issued share capital		Effective percentage		Number of shares	
		2012	2011	2012	2011	2012	2011
		R	R	%	%		
Business Venture Exploration Investments No. 33 (Pty) Ltd[3]	Mineral exploration (Dormant)	3,840	3,840	41.61	41.61	1,598	1,598
Limited Electronics of South Africa (Pty) Ltd[1]	Manufacturing and distribution of nitrogen tri-fluoride	1,000	1,000	49.9	49.9	499	499
Oserix[2]	Supply isotopes and accessories for the radiographic non-destructive testing market	582	582	25	25	2,500	2,500

1 Associate of Pelchem SOC Ltd
2 Associate of Gammatec NDT Supplies SOC Ltd
3 Associate of Necsa SOC Ltd

Details of the Group's investment in associates are set out in Note 8.

Auditors

The Auditor-General of South Africa will continue in office in accordance with section 90 of the Companies Act.

Compliance with legislation

The Directors believe the Group has complied, in all material respects, with the provisions of the Companies Act, PFMA, the Nuclear Energy Act and other applicable legislation during the year under review.

Performance Measured Against Pre-determined Objectives

Overall Necsa Key Performance Areas and Indicators 2011/12

Output KPA	Indicator KPI	2011/12 Target	2011/12 Actual	Notes
1. Necsa Group annual income	Annual percentage growth in Group income	11.6%	1.9%	Income has declined due to lower Group sales mainly as a result of difficult market conditions in the manufacturing and medical isotope sectors.
2. Necsa Corporate core grant	Annual percentage growth in core grant	5%	2.1%	The baseline grant allocation from the DoE was reduced resulting in a lower growth in core grant.
3. Necsa Group other grant income	Annual percentage growth in other grant income	109%	-10.7%	This is significantly lower due to the Klydon project being terminated and therefore other grant income not realised.
4. Refereed research publications	Number of refereed research publications	22	39	Target for publication of research outputs exceeded mainly as a result of a significant growth in the development of young research professionals and post-graduate studies.
5. Innovation value chain	• Number of innovation disclosures • Number of priority patent applications • Number of PCT or equivalent applications • Number of granted international patents	10 3 3 12	11 3 1 20	Target exceeded. Target achieved. Some of the planned applications were withheld due to commercial considerations. The backlog on applications experienced in the international patent examiners office during the previous year, were processed during 2012.
6. Nuclear fuel cycle (PWR) programme implementation	Achievement of strategic project objectives	• Necsa approved as supplier of PWR fuel components • Techno-economic study for U from USi: completed	• Target not achieved • Target achieved	• Discussions were held with all major nuclear vendors and indications are that the vendors await the SA nuclear power programme bid process prior to making commitments. • Two international vendors submitted their fuel design details. • Non-disclosure agreements have been concluded with Rosatom and KEPCO. • Front-end engineering package completed. • Cost estimate for facility obtained. • Further R&D required to determine process route to be followed.
7. Black technical professionals	Black technical professionals as percentage of all technical professional staff	30.0%	31.8%	Target exceeded as a result of an increase in recruitment of black technical professionals.
8. Investment in training	Investment in training as percentage of staff budget	7.6%	7.8%	Training objectives met.
9. Public dose impact of annual releases and events	Reduction in releases (3-year moving average)	6.3 µSv	12 µSv	Attributed to normal operations (only 4.8% of the NNR authorised limit of 250 µSv)
10. Unqualified audit: Compliance to SA statements of GAAP accounting, auditing and PFMA requirements	Number of annual report qualifications	0	0	Target achieved.
11. National key point reportable security incidents	Number of NKP events	0	0	Target achieved.
12. Marketing and Communication Programmes to stimulate public awareness on nuclear energy Nuclear Energy Policy: Principle 14, Section 7	• Improve public perceptions of nuclear technologies as measured by the social development component of the BEE rating agency • Promote and grow the Necsa brand as measured by the MSA rating • Advertising value equivalent (AVE)	15 points 60% R15.8 million	15 points 65% R7 million	Target achieved. The MSA rating increased due to the prominence of nuclear publications following the Fukushima incident in March 2011 and Necsa's direct involvement in addressing the nuclear safety questions that followed. The lower than expected performance relating to AVE was mainly due to a large volume of negative media coverage surrounding the Fukushima incident.

Output KPA	Indicator KPI	2011/12 Target	2011/12 Actual	Notes
Institutional Mandate **1. Nuclear research and development: NEA Section 13(a)**				
1.1 Innovation value chain	1.1.1 Number of innovation disclosures	10	11	Target exceeded.
	1.1.2 Number of priority patent applications	3	3	Target achieved.
	1.1.3 Number of PCT or equivalent applications	3	1	Some of the planned applications were withheld due to commercial considerations.
	1.1.4 Number of granted international patents	12	20	The backlog on applications experienced in the international patent examiners office during the previous year, were processed during 2012.
1.2 Research publications and technical reports	1.2.1 Number of refereed research	22	39	Target for publication of research outputs exceeded mainly as a result of a significant growth in development of young research professionals and post-graduate studies.
	1.2.2 Number of reports reviewed and rated as comparable to publications standards	10	1	Most outputs in this category qualified as refereed publications reflected under 1.2.1.
Institutional Mandate **2. Nuclear Fuel: Process source material, nuclear fuel and enrichment including projects and services related to or in support of this mandate: NEA Section 13(b)**				
2.1 Nuclear fuel cycle (PWR) programme implementation: mining, conversion, enrichment, fuel fabrication, waste and recycling	2.1.1 Achievement of strategic programme project objectives	• Necsa approved as supplier of PWR fuel components • Techno-economic study for U from USi: completed	• Target not achieved • Target achieved	• Discussions were held with all major nuclear vendors and indications are that the vendors await the SA nuclear power programme bid process prior to making commitments. • Two international vendors submitted their fuel design details. • Non-disclosure agreements have been concluded with Rosatom and KEPCO. • Front-end engineering package completed. • Cost estimate for facility obtained. • Further R&D required to determine process route to be followed.
2.2 MTR-LEU fuel and target plate manufacturing	2.2.1 Achievement of strategic programme project objectives	Basic design completed and submitted to NNR	Basic design 77% completed	The delay in the completion of the basic design package is mainly due to the changes which had to be implemented following the HAZOP studies. The SAR will be submitted to the NNR by 30 June 2012.
2.3 Nuclear Manufacturing: Manufacturing nuclear components, general engineering	2.3.1. External sales revenue 2.3.2. Profit before tax	R75 million R7 million	R55.7 million (R53.3 million)	The poor financial performance here is attributed to: • The global and national declining trend for manufacturing demand. • High labour cost associated with ASME III QC/QA functions. • Continuous ASME III training required for all advanced manufacturing staff resulting in overtime having to be worked to honour committed targets on orders. • Declining to quote on RFQs due to limited capacity and utilisation shortages caused by focus on ASME III certification.

Output KPA		Indicator KPI		2011/12 Target	2011/12 Actual	Notes
Institutional Mandate **3. Commercial exploitation of nuclear and related products and services: NEA Section 14 and the application of radiation technology for medical or scientific purposes: NEA Section 1(xii)(c)**						
3.1	NTP Group: External sales revenue of products and services	3.1.1	Sales revenue arising from operational activities	R887 million	R842 million	Sales were lower than target, mostly due to difficult market conditions and price pressure from competitors.
		3.1.2	Net profit after tax	R133 million	R123 million	Lower profits due to lower sales contribution.
3.2	Pelchem Group: External sales revenue of products and services	3.2.1	Sales arising from operational activities	R177 million	R186 million	Higher sales attributable to better NF_3 pricing and exchange rate gains, therefore the increase in profit together with a R3.9 million dividend received from Fluoro Pack SOC Limited.
		3.2.2	Net profit after tax	(R3 million)	R0.44 million	
3.3	Necsa Corporate: External sales	3.3.1	External sales	R392 million	R345 million	Lower than targeted sales are as a result of difficult trading conditions in the manufacturing environment.
3.4	Necsa Group: External sales revenue of products and services	3.4.1	Total sales arising from operational activities	R1,234 million	R1,113 million	Lower than targeted sales are as a result of difficult trading conditions in the manufacturing (Necsa) and medical isotope (NTP) markets.
Institutional Mandate **4. Decommissioning and Decontamination of nuclear facilities: NEA Section 1(xii)(a)**						
4.1	D&D programme execution: Effective discharge of nuclear liabilities associated with past strategic disused nuclear facilities: NEA Section 1(xii)(a)	4.1.1	Execution of "annual plan of action" as submitted and approved by DoE	100%	143%	Target exceeded due to some of the annual action plan targets having been underestimated.
Institutional Mandate **5. Operation of SAFARI-1 NEA Section 1(xii)(d)**						
5.1	SAFARI-1 research reactor availability	5.1.1	SAFARI-1 research reactor operational availability (reactor days available of days scheduled)	303/303 days available	308.3/303 days available	The exceeded target is as a result of well managed reactor shutdown maintenance activities.
Institutional Mandate **6. Operation of Necsa site and services: NEA Section 1(xii)(e)**						
6.1	Site and infrastructure maintenance	6.1.1	Amount spent on maintenance	R48 million	R47.6 million	Target achieved.
Institutional Mandate **7. Implementation and execution of the safeguards: NEA Section 1(xii)(f)**						
7.1	Nuclear safeguards implementation and execution of safeguards management services	7.1.1	Performance in terms of annual Safeguards Activity Plan objectives (measured as percentage achievement)	100%	100%	Target achieved.

Output KPA	Indicator KPI	2011/12 Target	2011/12 Actual	Notes
Institutional Mandate **8. SHEQ: Developing and maintaining a corporate SHEQ System and Meeting safety health and environmental requirements (nuclear licenses, Occupational Safety Act and various environmental acts and licenses)**				
8.1 SHEQ management services	8.1.1 SHEQ Management Compliance – Audited compliance in terms of 224 elements of the Necsa SHEQ System including related legal requirements.	82%	82%	Target achieved.
	8.1.2 Public dose impact of annual releases and events – 3 year moving average	6.3 µSv	12 µSv	Attributed to normal operations (only 4.8% of the NNR authorised limit of 250 µSv).
	8.1.3 Work-related injuries per employee, per annum measured in terms of TIR – 3 year moving average	4.2	4.9	Target not achieved.
Institutional Mandate **9. Security: Meeting security requirements in terms of NEA Section 29, NNRA Section 26, site license NL 27 and the NKPA**				
9.1 Nuclear security services	9.1.1 National Key point reportable events	0	0	Target achieved.
Institutional Mandate **10. Human Resources: Appointment of staff necessary for Necsa's activities NEA Section 25**				
10.1 Employment of technical staff	10.1.1 Percentage of technical staff in total staff	47.2%	47.8%	Target exceeded as there were more technical than support staff recruited.
	10.1.2 Black technical staff as percentage of all technical staff	42.4%	44.2%	Target exceeded due to recruitment of higher percentage of black technical staff among technicians and artisans.
	10.1.3 Black technical professionals as percentage of all technical professional staff	29.97%	31.8%	Target exceeded as a result of an increase in recruitment of black technical professionals.
	10.1.4 Number of interns as percentage of workforce (technicians and artisans included)	6.0%	7.6%	Target exceeded due to improved collaboration with external funders for placement of interns.
10.2 Training and development	10.2.1 Investment in training as percentage of staff expenditure	7.6%	7.8%	Training objectives met.
	10.2.3 Numbers of persons trained per year through the NSD centre	218	447	Target exceeded as a result of new contracts for training of artisans.

Output KPA	Indicator KPI	2011/12 Target	2011/12 Actual	Notes
11. Financial management				
11.1 Compliance to SA statements of GAAP, auditing and PFMA institutional requirements	11.1.1 Number of annual report qualifications	0	0	Target achieved.
11.3 Information management and services	11.3.1 Achievement of IT annual work programme (measured as percentage achievement of annual plan objectives)	100%	100%	Target achieved.
12. Strategy and Performance				
12.1 Corporate plan and quarterly report compilation and submission	12.1.1 Compliance to PFMA requirements	100%	100%	Target achieved.
12.2 Necsa Group risk management	12.1.1 Compliance to PFMA, King III requirements	100%	100%	Target achieved.
13. Marketing and Communication Programmes to give effect to the Nuclear Energy Policy (NEP) by promoting nuclear technology and the Necsa brand as directed by the NEP: Principle 14, Section 7.				
13.1 Marketing and Communication to stimulate public awareness on nuclear energy Nuclear Energy Policy: Principle 14, Section 7	12.1.1 Improve public perceptions of nuclear technologies measured by the social development component of the BEE rating agency	15 points	15 points	Target achieved.
	12.1.2 Promote and grow the Necsa brand as measured by the MSA rating	60%	65%	The MSA rating increased due to the prominence of nuclear publications following the Fukushima incident in March 2011 and Necsa's direct involvement in addressing the nuclear safety questions that followed.
	12.1.3 Advertising value equivalent	R15.8 million	R7 million	The lower than expected performance relating to AVE was mainly due to a large volume of negative media coverage surrounding the Fukushima incident.

Consolidated Statement of Financial Position

on 31 March 2012

	Note	Group			Company		
		2012	2011 Restated	2010 Restated	2012	2011 Restated	2010 Restated
		R'000	R'000	R'000	R'000	R'000	R'000
Assets							
Non-current assets							
Investment property	3	16,404	52,105	44,881	69,733	107,849	94,121
Property, plant and equipment	4	874,644	745,077	705,817	683,967	590,627	563,166
Goodwill	5	14,587	14,587	15,781	-	-	-
Intangible assets	6	1,866	1,105	-	-	-	-
Investments in subsidiaries	7	-	-	-	319,519	319,519	319,519
Investments in associates	8	260	2	2	2	2	2
Loans to group companies	9	1,026	998	-	-	2	-
Other financial assets	10	105,292	69,057	62,136	105,276	69,044	62,124
Deferred tax	11	18,085	13,054	12,941	-	-	-
Finance lease receivables	12	693	1,341	-	-	-	-
		1,032,857	**897,326**	**841,558**	**1,178,497**	**1,087,043**	**1,038,932**
Current assets							
Inventories	13	215,535	161,286	93,698	36,383	46,064	22,252
Loans to group companies	9	-	-	-	13,011	24,284	23,210
Current tax receivable		1,621	3,872	5,447	-	-	-
Finance lease receivables	12	5	629	-	-	-	-
Trade and other receivables	14	315,598	263,791	236,484	102,515	123,645	59,979
Cash and cash equivalents	15	462,541	482,732	326,372	76,422	109,896	103,406
		995,300	**912,310**	**662,001**	**228,331**	**303,889**	**208,847**
Non-current assets held-for-sale and assets of disposal groups	16	-	2,130	-	-	-	-
Total assets		**2,028,157**	**1,811,766**	**1,503,559**	**1,406,828**	**1,390,932**	**1,247,779**

	Note	Group			Company		
		2012	2011 Restated	2010 Restated	2012	2011 Restated	2010 Restated
		R'000	R'000	R'000	R'000	R'000	R'000
Equity and liabilities							
Equity							
Equity attributable to equity holders of parent							
Share capital	17	2,205	2,205	2,205	2,205	2,205	2,205
Reserves		323,310	335,830	324,065	295,034	304,726	303,577
Retained income		399,325	355,550	218,060	97,118	162,515	160,955
		724,840	693,585	544,330	394,357	469,446	466,737
Non-controlling interest		23,208	15,797	14,294	-	-	-
		748,048	**709,382**	**558,624**	**394,357**	**469,446**	**466,737**
Liabilities							
Non-current liabilities							
Loans from group companies	9	2,728	2,530	2,352	-	-	-
Other financial liabilities	18	10,928	1,548	2,162	-	-	-
Finance lease obligation	19	3,193	5,862	5,040	2,867	4,542	4,045
Retirement benefit obligation	20	395,104	357,780	351,072	377,063	343,972	330,606
Deferred income	21	266,381	255,206	187,932	266,381	255,206	187,932
Deferred tax	11	214	1,095	7,742	-	-	-
Provisions	22	159,491	136,074	61,357	113,475	89,700	54,399
		838,039	**760,095**	**617,657**	**759,786**	**693,420**	**576,982**
Current liabilities							
Loans from shareholders	23	861	882	1,700	-	-	-
Other financial liabilities	18	2,248	618	3,541	-	-	-
Current tax payable		1,311	442	1,556	-	-	-
Finance lease obligation	19	4,025	4,775	4,535	3,397	3,569	3,059
Trade and other payables	24	305,580	169,075	218,082	157,269	94,959	124,631
Deferred income	21	27,739	83,530	34,090	27,728	83,530	34,090
Provisions	22	88,136	70,857	62,988	64,291	46,008	42,280
Retirement benefit obligation		-	-	118	-	-	-
Bank overdraft	15	12,170	12,110	668	-	-	-
		442,070	**342,289**	**327,278**	**252,685**	**228,066**	**204,060**
Total liabilities		**1,280,109**	**1,102,384**	**944,935**	**1,012,471**	**921,486**	**781,042**
Total equity and liabilities		**2,028,157**	**1,811,766**	**1,503,559**	**1,406,828**	**1,390,932**	**1,247,779**

Consolidated Statement of Comprehensive Income

for the year ended 31 March 2012

	Note	Group			Company		
		2012	2011 Restated	2010 Restated	2012	2011 Restated	2010 Restated
		R'000	R'000	R'000	R'000	R'000	R'000
Revenue	29	1,643,370	1,612,035	1,520,941	854,753	806,732	710,123
Cost of sales	30	(647,517)	(705,740)	(642,086)	(191,482)	(196,646)	(202,439)
Gross profit		**995,853**	**906,295**	**878,855**	**663,271**	**610,086**	**507,684**
Other income		50,121	77,519	23,566	32,931	26,821	34,748
Operating expenses		(851,562)	(740,163)	(678,556)	(718,690)	(651,491)	(592,667)
Administration expenses		(95,721)	(87,410)	(56,069)	(72,382)	(57,941)	(51,300)
Operating profit/(loss)	31	**98,691**	**156,241**	**167,796**	**(94,870)**	**(72,525)**	**(101,535)**
Investment revenue	32	44,785	52,480	54,823	53,998	54,576	64,870
Fair value adjustments	33	(3,464)	5,486	13,301	(5,976)	14,051	13,771
Income from equity accounted investments		257	(145)	(1,049)	-	-	-
Finance costs	34	(12,328)	(15,702)	(21,671)	418	(5,873)	(3,435)
Profit/(loss) before taxation		**127,941**	**198,360**	**213,200**	**(46,430)**	**(9,771)**	**(26,329)**
Taxation	35	(55,127)	(68,920)	(46,394)	-	1,296	23,983
Profit/(loss) for the year		**72,814**	**129,440**	**166,806**	**(46,430)**	**(8,475)**	**(2,346)**
Other comprehensive income:							
Exchange differences on translating foreign operations		(1,201)	73	475	-	-	-
Available-for-sale financial assets adjustments		1,522	1,057	2,967	1,520	1,055	2,963
Actuarial gains and losses on defined benefit plans		(32,840)	-	-	(30,179)	-	-
Gains and losses on property revaluation		(1,629)	20,237	321,595	-	10,129	303,466
Other comprehensive (loss)/income for the year net of taxation	37	**(34,148)**	**21,367**	**325,037**	**(28,659)**	**11,184**	**306,429**
Total comprehensive income/(loss)		**38,666**	**150,807**	**491,843**	**(75,089)**	**2,709**	**304,083**
Total comprehensive income/(loss) attributable to:							
Owners of the parent		31,255	148,822	490,451	(75,089)	2,709	304,083
Non-controlling interest		7,411	1,985	1,392	-	-	-
		38,666	**150,807**	**491,843**	**(75,089)**	**2,709**	**304,083**

Consolidated Statement of Changes in Equity

for the year ended 31 March 2012

	Share capital R'000	Foreign currency translation reserve R'000	Revaluation reserve R'000	Fair value adjustment assets-available-for-sale-reserve R'000	Total reserves R'000	Retained income R'000	Total attributable to equity holders of the Group/ Company R'000	Non-controlling interest R'000	Total equity R'000
Group									
Opening balance as previously reported	2,205	475	323,477	113	324,065	217,743	544,013	14,294	558,307
Adjustments									
Prior year adjustments (refer to Note 44)	-	-	-	-	-	317	317	-	317
Balance at 1 April 2010 as restated	**2,205**	**475**	**323,477**	**113**	**324,065**	**218,060**	**544,330**	**14,294**	**558,624**
Changes in equity									
Total comprehensive income for the year	-	73	20,237	1,057	21,367	127,455	148,822	1,985	150,807
Pelchem in Fluoro Pack	-	-	-	-	-	-	-	(482)	(482)
Transfer between reserves	-	-	(10,035)	-	(10,035)	10,035	-	-	-
Deferred tax on revaluation of assets	-	-	433	-	433	-	433	-	433
Total changes	-	73	10,635	1,057	11,765	137,490	149,255	1,503	150,758
Opening balance as previously reported	2,205	548	334,112	1,170	335,830	355,061	693,096	15,797	708,893
Adjustments									
Prior year adjustments (refer to Note 44)	-	-	-	-	-	489	489	-	489
Balance at 1 April 2011 as restated	**2,205**	**548**	**334,112**	**1,170**	**335,830**	**355,550**	**693,585**	**15,797**	**709,382**
Changes in equity									
Total comprehensive income for the year	-	(1,201)	(1,629)	1,522	(1,308)	32,563	31,255	7,411	38,666
Transfer between reserves	-	-	(11,212)	-	(11,212)	11,212	-	-	-
Total changes	-	(1,201)	(12,841)	1,522	(12,520)	43,775	31,255	7,411	38,666
Balance at 31 March 2012	**2,205**	**(653)**	**321,271**	**2,692**	**323,310**	**399,325**	**724,840**	**23,208**	**748,048**
Note(s)	17	37	27&37	28&37		37			

	Share capital R'000	Foreign currency translation reserve R'000	Revaluation reserve R'000	Fair value adjustment assets-available-for-sale-reserve R'000	Total reserves R'000	Retained income R'000	Total attributable to equity holders of the Group/ Company R'000	Non-controlling interest R'000	Total equity R'000
Company									
Opening balance as previously reported	2,205	-	303,466	111	303,577	160,638	466,420	-	466,420
Adjustments									
Prior year adjustments (refer to Note 44)	-	-	-	-	-	317	317	-	317
Balance at 1 April 2010 as restated	**2,205**	**-**	**303,466**	**111**	**303,577**	**160,955**	**466,737**	**-**	**466,737**
Changes in equity									
Total comprehensive income for the year	-	-	10,129	1,055	11,184	(8,475)	2,709	-	2,709
Amortisation on revaluation reserve	-	-	(10,035)	-	(10,035)	10,035	-	-	-
Total changes	-	-	94	1,055	1,149	1,560	2,709	-	2,709
Opening balance as previously reported	2,205	-	303,560	1,166	304,726	162,026	468,957	-	468,957
Adjustments									
Prior year adjustments (refer to Note 44)	-	-	-	-	-	489	489	-	489
Balance at 1 April 2011 as restated	**2,205**	**-**	**303,560**	**1,166**	**304,726**	**162,515**	**469,446**	**-**	**469,446**
Changes in equity									
Total comprehensive income for the year	-	-	-	1,520	1,520	(76,609)	(75,089)	-	(75,089)
Transfer between reserves	-	-	(11,212)	-	(11,212)	11,212	-	-	-
Total changes	-	-	(11,212)	1,520	(9,692)	(65,397)	(75,089)	-	(75,089)
Balance at 31 March 2012	**2,205**	**-**	**292,348**	**2,686**	**295,034**	**97,118**	**394,357**	**-**	**394,357**
Note(s)	17	37	27&37	28&37		37			

Consolidated Statement of Cash Flows

for the year ended 31 March 2012

	Note	Group			Company		
		2012	2011 Restated	2010 Restated	2012	2011 Restated	2010 Restated
		R'000	R'000	R'000	R'000	R'000	R'000
Cash flows from operating activities							
Cash receipts from customers		1,600,620	1,594,990	1,434,083	874,013	743,374	727,283
Cash paid to suppliers and employees		(1,380,730)	(1,282,468)	(1,155,221)	(825,964)	(696,713)	(687,322)
Cash generated from operations	38	219,890	312,522	278,862	48,049	46,661	39,961
Interest income		35,461	39,339	34,526	16,516	20,752	23,574
Dividends received		78	-	-	-		-
Finance costs		(3,508)	(1,175)	(3,566)	1,404	(635)	(860)
Tax paid	39	(58,176)	(75,218)	(79,262)	-	1,296	-
Net cash from operating activities		**193,745**	**275,468**	**230,560**	**65,969**	**68,074**	**62,675**
Cash flows from investing activities							
Purchase of property, plant and equipment	4	(170,359)	(101,023)	(94,096)	(110,654)	(63,631)	(76,878)
Sale of property, plant and equipment	4	6,380	1,632	165	-	461	-
Purchase of other intangible assets	6	(738)	(1,105)	-	-	-	-
Business combinations		-	-	(13,575)	-	-	-
Loans to minority shareholders		(21)	(1,816)	(3,670)	-	(1,076)	(12)
Proceeds from loans from group companies		170	-	-	11,275	-	7,099
Purchase of financial assets		(34,713)	-	-	-	-	-
Sale of financial assets		-	-	(12,953)	(34,712)	-	(12,953)
Purchase of available-for-sale financial assets		-	(2,932)	-	-	(2,931)	-
Acquisition of associate		-	(145)	-	-	-	-
Dividends received		-	64	48	37,482	28,586	37,997
Net cash from investing activities		**(199,281)**	**(105,325)**	**(124,081)**	**(96,609)**	**(38,591)**	**(44,747)**
Cash flows from financing activities							
Repayment of other financial liabilities		11,010	-	(2,428)	-	-	-
Increase in post-retirement medical aid		(25,725)	(22,995)	-	-	(22,993)	-
Increase/(decrease) in provision for other liabilities and charges		-	(3,537)	-	-	-	-
Finance lease payments		-	1,307	(1,046)	(2,834)	-	-
Net cash from financing activities		**(14,715)**	**(25,225)**	**(3,474)**	**(2,834)**	**(22,993)**	**-**
Total cash movement for the year		**(20,251)**	**144,918**	**103,005**	**(33,474)**	**6,490**	**17,929**
Cash at the beginning of the year		470,622	325,704	222,699	109,896	103,406	85,477
Total cash at end of the year	15	**450,371**	**470,622**	**325,704**	**76,422**	**109,896**	**103,406**

Accounting Policies

for the year ended 31 March 2012

1. Basis of Preparation

The annual financial statements have been prepared in accordance with SA GAAP and the Companies Act. The financial statements have been prepared on the historical cost basis except for certain properties and financial instruments that are measured at revalued amounts or fair values, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for assets. These accounting policies are consistent with the previous period.

The principal accounting policies are set out below.

1.1 Consolidation

Basis of Consolidation

The consolidated annual financial statements incorporate the annual financial statements of the Company and all entities which are controlled by the Company.

Control is achieved where the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. Assets and liabilities of subsidiaries acquired or disposed of during the year are included in the consolidated statement of financial position from the effective date of acquisition and up to the effective date of disposal, as appropriate.

Income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate.

Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Where necessary, adjustments are made to the annual financial statements of subsidiaries to bring their accounting policies in line with those of the Group. All intra-group balances, income and expenses are eliminated in full on consolidation.

Non-controlling interests in the net assets of consolidated subsidiaries are identified and recognised separately from the Group's interest therein, and are recognised within equity.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognised in other comprehensive income and accumulated in equity, the amounts previously recognised in other comprehensive income and accumulated in equity are accounted for as if the Company had directly disposed of the relevant assets (i.e. reclassified to profit or loss or transferred directly to retained earnings as specified by applicable IFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IAS 39 Financial Instruments: Recognition and Measurement or, when applicable, the cost on initial recognition of an investment in an associate or a jointly controlled entity. Where a subsidiary is disposed of and a non-controlling shareholding is retained, the remaining investment is measured to fair value with the adjustment to fair value recognised in profit or loss as part of the gain or loss on disposal of the controlling interest.

Business Combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquire and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognised in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed, including acquired contingent liabilities are recognised at their fair value at the acquisition date, except that:

- Deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with IAS 12 Income Taxes and IAS 19 Employee Benefits respectively;
- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based

payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 Share-based Payment at the acquisition date (see 3.16.2); and
- Assets (or disposal groups) that are classified as held-for-sale in accordance with IFRS 5 Non-current Assets Held-for-Sale and Discontinued Operations are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value.

When the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not re-measured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is re-measured at subsequent reporting dates in accordance with IAS 39, or IAS 37 Provisions, Contingent Liabilities and Contingent Assets, as appropriate, with the corresponding gain or loss being recognised in profit or loss.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date (i.e. the date when the Group obtains control) and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

Business combinations that took place prior to 1 January 2010 were accounted for in accordance with the previous version of IFRS 3.

Investment in Associates

An associate is an entity over which the Group has significant influence and which is neither a subsidiary nor a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held-for-sale, in which case it is accounted for in accordance with IFRS 5 Non-current Assets Held-for-Sale and Discontinued Operations. Under the equity method, an investment in an associate is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognising its share of further losses. Additional losses are classified as liabilities when

recognised, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate recognised at the date of acquisition is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognised immediately in profit or loss.

The requirements of IAS 39 are applied to determine whether it is necessary to recognise any impairment loss with respect to the Group's investment in an associate. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When a group entity transacts with its associate, profits and losses resulting from the transactions with the associate are recognised in the Group' consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

When the Group reduces its level of significant influence or loses significant influence, the Group proportionately reclassifies the related items which were previously accumulated in equity through other comprehensive income to profit or loss as a reclassification adjustment. In such cases, if an investment remains, that investment is measured to fair value, with the fair value adjustment being recognised in profit or loss as part of the gain or loss on disposal.

1.2 Significant Judgements and Sources of Estimation Uncertainty

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts presented in the annual financial statements and related disclosures. Use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Significant judgements include:

Trade Receivables, Held-to-Maturity Investments and Loans and Receivables

The Group assesses its trade receivables, held-to-maturity investments and loans and receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in profit or loss, the Group makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

The impairment for trade receivables, held-to-maturity investments and loans and receivables is calculated on a portfolio basis, based on historical loss ratios, adjusted for national and industry-specific economic conditions and other indicators present at the reporting date that correlate with defaults on the portfolio. These annual loss ratios are applied to loan balances in the portfolio and scaled to the estimated loss emergence period.

Available-for-Sale Financial Assets

The Group follows the guidance of IAS 39 to determine when an available-for-sale financial asset is impaired. This determination requires significant judgment. In making this judgment, the Group evaluates, among other factors, the duration and extent to which the fair value of an investment is less than its cost; and the financial health of and near-term business outlook for the investee, including factors such as industry and sector performance, changes in technology and operational and financing cash flow.

Allowance for Slow Moving, Damaged and Obsolete Stock

An allowance to write stock down to the lower of cost or net realisable value. Management have made estimates of the selling price and direct cost to sell on certain inventory items. The write down is included in the operating profit note.

Fair Value Estimation

The fair value of financial instruments traded in active markets (such as trading and available-for-sale securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Group is the current bid price.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses a variety of methods and makes assumptions that are based on market conditions existing at the end of each reporting period. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments. The fair value of forward foreign exchange contracts is determined using quoted forward exchange rates at the end of the reporting period.

The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments. The assumption is based on the management expectation that outstanding balances will be collected or paid within twelve months, therefore the time value of money will not have an impact as it is considered to be immaterial.

Impairment Testing

The recoverable amounts of cash-generating units and individual assets have been determined based on the higher of value-in-use calculations and fair values less costs to sell. These calculations require the use of estimates and assumptions. It is reasonably possible that an assumption may change which may then impact our estimations and may then require a material adjustment to the carrying value of goodwill and tangible assets.

The Group reviews and tests the carrying value of assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. In addition, goodwill is tested on an annual basis for impairment. Assets are grouped at the lowest level for which identifiable cash flows are largely independent of cash flows of other assets and liabilities. If there are indications that impairment may have occurred, estimates are prepared of expected future cash flows for each group of assets. Expected future cash flows used to determine the value in use of goodwill and tangible assets are inherently uncertain and could materially change over time.

Provisions

Provisions were raised and management determined an estimate based on the information available. Additional disclosure of these estimates of provisions are included in Note 22 – Provisions.

Taxation

Judgement is required in determining the provision for income taxes due to the complexity of legislation. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

The Group recognises the net future tax benefit related to deferred income tax assets to the extent that it is probable that the deductible temporary differences will reverse in the foreseeable future. Assessing the recoverability of deferred income tax assets requires the Group to make significant estimates related to expectations of future taxable income. Estimates of future taxable income are based on forecast cash flows from operations and the application of existing tax laws in each jurisdiction. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Group to realise the net deferred tax assets recorded at the end of the reporting period could be impacted.

Property, Plant and Equipment

The useful lives of assets are based on management's estimation. Management considers the following factors to determine the optimum useful life expectation for each of the individual items of property, plant and equipment.

- Expected usage of the asset. Usage is assessed by reference to the assets expected capacity or physical output;
- Expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance programme, and the care and maintenance of the asset while idle;
- Technical or commercial obsolescence arising from changes or improvement in production or from a change in the market demand for the product or service output of the asset; and
- Exit policy of the Company.

The estimation of residual value of assets is also based on management's judgement that the assets will be sold and what its condition will be like at the end of its useful life. For assets that incorporate both a tangible and intangible portion, management uses judgement to assess which element is more significant to determine whether it should be treated as property, plant and equipment or intangible assets.

Post-retirement Benefit Obligation

Judgement is required when recognising and measuring the retirement benefit obligation of the Group and the Company. The obligation is valued by an independent actuary at each reporting date. The actuarial valuation method is used to value the obligation and the projected unit credit method is used. Future benefit values are projected using specific actuarial assumptions and the liability to in-service members is accrued over the expected working lifetime.

1.3 Investment Property

Investment properties are properties held to earn rentals and/or for capital appreciation (including property under construction for such purposes).

Investment property is recognised as an asset when, and only when, it is probable that the future economic benefits that are associated with the investment property will flow to the enterprise, and the cost of the investment property can be measured reliably.

Investment property is initially recognised at cost. Transaction costs are included in the initial measurement.

Costs include costs incurred initially and costs incurred subsequently to add to, or to replace a part of, or service a property. If a replacement part is recognised in the carrying amount of the investment property, the carrying amount of the replaced part is derecognised.

Fair Value

Subsequent to initial measurement investment property is measured at fair value.

A gain or loss arising from a change in fair value is included in net profit or loss for the period in which it arises.

An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from the disposal. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognised.

1.4 Property, Plant and Equipment

The cost of an item of property, plant and equipment is recognised as an asset when:

- It is probable that future economic benefits associated with the item will flow to the Company; and
- The cost of the item can be measured reliably.

Property, plant and equipment is initially measured at cost.

Costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it. If a replacement cost is recognised in the carrying amount of an item of property, plant and equipment, the carrying amount of the replaced part is derecognised.

The initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located is also included in the cost of property, plant and equipment, where the entity is obligated to incur such expenditure, and where the obligation arises as a result of acquiring the asset or using it for purposes other than the production of inventories.

Plant and equipment are stated at cost less accumulated depreciation and any impairment losses.

Land and buildings is carried at its revalued amount, being the fair value at the date of revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

Revaluations are performed with sufficient regularity such that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.

Any increase in an asset's carrying amount, as a result of a revaluation, is recognised to other comprehensive income and accumulated in the revaluation surplus in equity. The increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.

Any decrease in an asset's carrying amount, as a result of a revaluation, is recognised in profit or loss in the current period. The decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset. The decrease recognised in other comprehensive income reduces the amount accumulated in the revaluation surplus in equity.

The revaluation surplus in equity related to a specific item of property, plant and equipment is transferred directly to retained earnings as the asset is used. The amount transferred is equal to the difference between depreciation based on the revalued carrying amount and depreciation based on the original cost of the asset.

Property, plant and equipment are depreciated on the straight line basis over their expected useful lives to their estimated residual value.

The useful lives of items of property, plant and equipment have been assessed as follows:

Item	Range of useful life
Land	indefinite
Buildings	10–50 years
Plant and machinery	5–50 years
Furniture and fixtures	2–22 years
Motor vehicles	2–26 years
Office equipment	2–22 years
IT equipment	2–22 years
Research facilities	2–22 years
Leasehold improvements	2–10 years
Machinery and equipment	2–22 years
Component spares	2–10 years

The residual value, useful life and depreciation method of each asset is reviewed at the end of each reporting period. If the expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

The depreciation charge for each period is recognised in profit or loss unless it is included in the carrying amount of another asset.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset.

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in profit or loss when the item is derecognised. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

1.5 Intangible Assets

An intangible asset is recognised when:

- It is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and
- The cost of the asset can be measured reliably.

Intangible assets are initially recognised at cost.

Internally Generated Intangible Assets – Research and Development Expenditure

Expenditure on research (or on the research phase of an internal project) is recognised as an expense when it is incurred.

An intangible asset arising from development (or from the development phase of an internal project) is recognised when all of the following have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- The intention to complete the intangible asset and use or sell it;
- The ability to use or sell the intangible asset;
- It will generate probable future economic benefits;
- How the intangible asset will generate probable future economic benefits;
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognised for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

An intangible asset is regarded as having an indefinite useful life when, based on all relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows. Amortisation is not provided for these intangible assets, but they are tested for impairment annually and whenever there is an indication that the asset may be impaired. For all other intangible assets amortisation is provided on a straight line basis over their useful life.

The amortisation period and the amortisation method for intangible assets are reviewed at the end of each reporting period.

Reassessing the useful life of an intangible asset with a finite useful life after it was classified as indefinite is an indicator that the asset may be impaired. As a result the asset is tested for impairment and the remaining carrying amount is amortised over its useful life.

Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance are not recognised as intangible assets.

1.6 Investments in Subsidiaries

Company Financial Statements

In the Company's separate annual financial statements, investments in subsidiaries are carried at cost less any accumulated impairment.

The cost of an investment in a subsidiary is the aggregate of:

- The fair value, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the Company; plus
- Any costs directly attributable to the purchase of the subsidiary.

1.7 Investments in Associates

Company Annual Financial Statements

An investment in an associate is carried at cost less any accumulated impairment.

1.8 Financial Instruments

Classification

The Group classifies financial assets and financial liabilities into the following categories:

- Financial assets at fair value through profit or loss – held-for-trading;
- Held-to-maturity investment;
- Loans and receivables;
- Available-for-sale financial assets;
- Financial liabilities at fair value through profit or loss – held-for-trading; and
- Financial liabilities measured at amortised cost.

Classification depends on the purpose for which the financial instruments were obtained/incurred and takes place at initial recognition. Classification is re-assessed on an annual basis, except for derivatives and financial assets designated as at fair value through profit or loss, which shall not be classified out of the fair value through profit or loss category.

Initial Recognition and Measurement

Financial instruments are recognised initially when the Group becomes a party to the contractual provisions of the instruments.

The Group classifies financial instruments, or their component parts, on initial recognition as a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual arrangement.

Financial instruments are measured initially at fair value, except for equity investments for which a fair value is not determinable, which are measured at cost and are classified as available-for-sale financial assets.

For financial instruments which are not at fair value through profit or loss, transaction costs are included in the initial measurement of the instrument.

Transaction costs on financial instruments at fair value through profit or loss are recognised in profit or loss.

Regular purchases and sales of investments are recognised on trade-date, i.e. the date on which the Group commits to purchase or sell the asset.

Subsequent Measurement

Financial instruments at fair value through profit or loss are subsequently measured at fair value, with gains and losses arising from changes in fair value being included in profit or loss for the period.

Net gains or losses on the financial instruments at fair value through profit or loss exclude dividends and interest.

Dividend income is recognised in profit or loss as part of other income when the Group's right to receive payment is established.

Loans and receivables are subsequently measured at amortised cost, using the effective interest method, less accumulated impairment losses.

Held-to-maturity investments are subsequently measured at amortised cost, using the effective interest method, less accumulated impairment losses.

Available-for-sale financial assets are subsequently measured at fair value. This excludes equity investments for which a fair value is not determinable, which are measured at cost less accumulated impairment losses.

Gains and losses arising from changes in fair value are recognised in other comprehensive income and accumulated in equity until the asset is disposed of or determined to be impaired. Interest on available-for-sale financial assets calculated using the effective interest method is recognised in profit or loss as part of other income. Dividends received on available-for-sale equity instruments are recognised in profit or loss as part of other income when the Group's right to receive payment is established.

Changes in fair value of available-for-sale financial assets denominated in a foreign currency are analysed between translation differences resulting from changes in amortised cost and other changes in the carrying amount. Translation differences on monetary items are recognised in profit or loss, while translation differences on non-monetary items are recognised in other comprehensive income and accumulated in equity.

Financial liabilities at amortised cost are subsequently measured at amortised cost, using the effective interest method.

Fair Value Determination

The fair values of quoted investments are based on current bid prices. If the market for a financial asset is not active (and for unlisted securities), the Group establishes fair value by using valuation techniques. These include the use of recent arm's length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, and option pricing models making maximum use of market inputs and relying as little as possible on entity-specific inputs.

Impairment of Financial Assets

At each reporting date the Group assesses all financial assets, other than those at fair value through profit or loss, to determine whether there is objective evidence that a financial asset or group of financial assets has been impaired.

Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For amounts due to the Group, significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default of payments are all considered indicators of impairment. In the case of equity securities classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered an indicator of impairment. For all other financial assets, objective evidence of impairment could include:

- Significant financial difficulty of the issuer or counter-party;
- Breach of contract, such as a default or delinquency in interest or principal payments;
- It becoming probable that the borrower will enter bankruptcy or financial re-organisation; or
- The disappearance of an active market for that financial asset because of financial difficulties.

For financial assets carried at amortised cost, the amount of the impairment loss recognised is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

For financial assets carried at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognised in profit or loss.

When an annual financial statement financial asset is considered to be impaired, cumulative gains or losses previously recognised in other comprehensive income are reclassified to profit or loss in the period.

For financial assets measured at amortised cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

In respect of annual financial statement equity securities, impairment losses previously recognised in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognised in other comprehensive income and accumulated under the heading of investments revaluation reserve. In respect of annual financial statement debt securities, impairment losses are subsequently reversed through profit or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss.

On derecognition of a financial asset other than in its entirety (e.g. when the Group retains an option to repurchase part of a transferred asset or retains a residual interest that does not result in the retention of substantially all the risks and rewards of ownership and the Group retains control), the Group allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in other comprehensive income is recognised in profit or loss. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts.

Financial Instruments Designated as at Fair Value Through Profit or Loss

These are financial assets held-for-trading. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term. Assets in this category are classified as current assets if they are either held-for-trading or are expected to be realised within 12 months of the statement of financial position date.

Gains or losses arising from changes in the fair value of the 'financial assets at fair value through profit or loss' category, are presented in the statement of comprehensive income in the period in which they arise. Dividend income from financial assets at fair value through profit or loss is recognised in the statement of comprehensive income as part of other income when the Group's right to receive payment is established.

Financial Instruments Designated as Available-for-Sale

Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless management intends to dispose of the investment within 12 months of the statement of financial position date.

Changes in the fair value of monetary securities classified as available-for-sale and non-monetary securities classified as available-for-sale are recognised in comprehensive income.

When securities classified as available-for-sale are sold or impaired, the accumulated fair value adjustments recognised in other comprehensive income are included in the statement of comprehensive income as 'gains and losses from investment securities'. Interest on available-for-sale securities calculated using the effective interest method is recognised in the statement of comprehensive income. Dividends on available-for-sale equity instruments are recognised in the statement of comprehensive income when the Group's right to receive payments is established.

Loans to/(from) Group Companies

These include loans to and from holding companies, fellow subsidiaries, subsidiaries, joint ventures and associates and are recognised initially at fair value plus direct transaction costs.

Loans to group companies are classified as available-for-sale financial assets.

Loans to group companies are measured at cost as the fair value cannot be determined.

Loans from group companies are classified as financial liabilities measured at amortised cost.

Loans to Shareholders, Directors, Managers and Employees

These financial assets are classified as loans and receivables.

Trade and Other Receivables

Trade receivables are measured at initial recognition at fair value, and are subsequently measured at amortised cost using the effective interest rate method. Appropriate allowances for estimated irrecoverable amounts are recognised in profit or loss when there is objective evidence that the asset is impaired. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments (more than 30 days overdue) are considered indicators that the trade receivable is impaired. The allowance recognised is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the effective interest rate computed at initial recognition.

The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss within operating expenses. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against operating expenses in profit or loss.

Trade and other receivables (excluding prepayments, deposits and VAT receivable) are classified as loans and receivables.

Trade and Other Payables

Trade payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are initially and subsequently recorded at fair value.

Bank Overdraft and Borrowings

Bank overdrafts and borrowings are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method. Any difference between the proceeds (net of transaction costs) and the settlement or redemption of borrowings is recognised over the term of the borrowings in accordance with the Group's accounting policy for borrowing costs.

Derivatives

Derivative financial instruments, which are not designated as hedging instruments, consisting of foreign exchange contracts and interest rate swaps, are initially measured at fair value on the contract date, and are re-measured to fair value at subsequent reporting dates.

Derivatives embedded in other financial instruments or other non-financial host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contract and the host contract is not carried at fair value with unrealised gains or losses reported in profit or loss.

Changes in the fair value of derivative financial instruments are recognised in profit or loss as they arise.

Derivatives are classified as financial assets at fair value through profit or loss – held-for-trading.

1.9 Tax

Current Tax Assets and Liabilities

Current tax for current and prior periods is, to the extent unpaid, recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset.

Current tax liabilities/(assets) for the current and prior periods are measured at the amount expected to be paid to/(recovered from) the tax authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated statement of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred Tax Assets and Liabilities

A deferred tax liability is recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from:

- The initial recognition of goodwill; or
- The initial recognition of an asset or liability in a transaction which:

- is not a business combination; and
- at the time of the transaction, affects neither accounting profit nor taxable profit/(tax loss).

A deferred tax liability is recognised for all taxable temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint ventures, except to the extent that both of the following conditions are satisfied:

- The parent, investor or venturer is able to control the timing of the reversal of the temporary difference; and
- It is probable that the temporary difference will not reverse in the foreseeable future.

A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised, unless the deferred tax asset arises from the initial recognition of an asset or liability in a transaction that:

- Is not a business combination; and
- At the time of the transaction, affects neither accounting profit nor taxable profit/(tax loss).

A deferred tax asset is recognised for all deductible temporary differences arising from investments in subsidiaries, branches and associates, and interests in joint ventures, to the extent that it is probable that:

- The temporary difference will reverse in the foreseeable future; and
- Taxable profit will be available against which the temporary difference can be utilised.

A deferred tax asset is recognised for the carry forward of unused tax losses and unused STC credits to the extent that it is probable that future taxable profit will be available against which the unused tax losses and unused STC credits can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

1.10 Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Finance Leases – Lessor

The Group recognises finance lease receivables in the consolidated statement of financial position.

Finance income is recognised based on a pattern reflecting a constant periodic rate of return on the Group's net investment in the finance lease.

Finance Leases – Lessee

Finance leases are recognised as assets and liabilities in the consolidated statement of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated statement of financial position as a finance lease obligation.

The discount rate used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease. The lease payments are apportioned between the finance charge and reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of on the remaining balance of the liability.

Operating Leases – Lessor

Operating lease income is recognised as an income on a straight-line basis over the lease term.

Initial direct costs incurred in negotiating and arranging operating leases are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease income.

Income for leases is disclosed under revenue in profit or loss.

Operating Leases – Lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term except when another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

The difference between the amounts recognised as an expense and the contractual payments are recognised as an operating lease asset. This liability is not discounted.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

Any contingent rents are expensed in the period they are incurred.

1.11 Inventories

Inventories are measured at the lower of cost and net realisable value on the first-in-first-out basis.

Net realisable value represents the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

The cost of inventories comprises of all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects is assigned using specific identification of the individual costs.

The cost of inventories is assigned using the weighted average cost formula. The same cost formula is used for all inventories having a similar nature and use to the entity.

When inventories are sold, the carrying amount of those inventories are recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, are recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

1.12 Non-current Assets Held-for-Sale

Non-current assets and disposal groups are classified as held-for-sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

In the statement of comprehensive income, income and expenses from discontinued operations are reported separately from income and expenses from continuing operations, down to the level of profit after taxes, even when the Group retains a non-controlling interest in the subsidiary after the sale. The resulting profit or loss (after taxes) is reported separately in the statement of comprehensive income as part of comprehensive income.

Non-current assets held-for-sale (or disposal group) are measured at the lower of its previous carrying amount and fair value less costs to sell.

A non-current asset is not depreciated (or amortised) while it is classified as held-for-sale, or while it is part of a disposal group classified as held-for-sale.

Interest and other expenses attributable to the liabilities of a disposal group classified as held-for-sale are recognised in profit or loss.

Any gain or loss on the remeasurement on a non-current asset classified as held-for-sale that does not meet the definition of a discontinued operation shall be included in profit or loss from continuing operations.

An impairment loss shall be recognised for any initial or subsequent write down of the asset to fair value less cost to sell.

An gain shall be recognised for any subsequent increase in fair value less costs to sell of the asset, but not in excess of the cumulative impairment loss that has been recognised previously.

1.13 Impairment of Tangible and Intangible Assets other than Goodwill

The Group assesses at each end of the reporting period whether there is any indication that an asset may be impaired. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extend of the impairment loss (if any).

Irrespective of whether there is any indication of impairment, the Group also:

- Tests intangible assets with an indefinite useful life or intangible assets not yet available for use annually for

impairment by comparing its carrying amount with its recoverable amount. This impairment test is performed during the annual period and at the same time every period; and
- Tests goodwill acquired in a business combination annually for impairment.

If it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is determined.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount.

An impairment loss of assets carried at cost less any accumulated depreciation or amortisation is recognised immediately in profit or loss. Any impairment loss of a revalued asset is treated as a revaluation decrease.

Goodwill acquired in a business combination is, from the acquisition date, allocated to each of the cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination.

An impairment loss is recognised for cash-generating units if the recoverable amount of the unit is less than the carrying amount of the units. The impairment loss is allocated to reduce the carrying amount of the assets of the unit in the following order:

- First, to reduce the carrying amount of any goodwill allocated to the cash-generating unit; and
- Then, to the other assets of the unit, pro rata on the basis of the carrying amount of each asset in the unit.

The carrying amount of an asset included in a cash-generating unit may not be reduced below the highest of (i) Its fair value less cost to sell; (ii) Its value in use or (iii) zero.

An entity assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for assets other than goodwill may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated.

The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortisation other than goodwill is recognised immediately in profit or loss. Any reversal of an impairment loss of a revalued asset is treated as a revaluation increase.

1.14 Share Capital and Equity

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

Ordinary shares are classified as equity and measured at cost.

1.15 Employee Benefits

Short-term Employee Benefits

The cost of short-term employee benefits, those payable within 12 months after the service is rendered, such as paid vacation leave and sick leave, bonuses, and non-monetary benefits such as medical care, are recognised in the period in which the service is rendered and are not discounted.

The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non-accumulating absences, when the absence occurs.

The expected cost of profit sharing and bonus payments is recognised as an expense when there is a legal or constructive obligation to make such payments as a result of past performance.

Defined Contribution Plans

Group companies operate a provident fund on behalf of its employees. The schemes are generally funded through payments to insurance companies or trustee-administered funds, determined by periodic actuarial calculations. A defined contribution plan is a plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefit relating to employee service in the current and prior periods.

Payments to defined contribution retirement benefit plans are charged as an expense as they fall due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

Defined Benefit Plans

Some group companies provide post-retirement healthcare benefits to their retirees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. For defined benefit plans the cost of providing the benefits is determined using the projected unit credit method.
Actuarial valuations are conducted on an annual basis by independent actuaries.

Consideration is given to any event that could impact the funds up to the end of the reporting period where the interim valuation is performed at an earlier date.

Past service costs are recognised immediately to the extent that the benefits are already vested, and are otherwise amortised on a straight line basis over the average period until the amended benefits become vested.

Actuarial gains and losses are recognised in the year in which they arise, in other comprehensive income.

Gains or losses on the curtailment or settlement of a defined benefit plan is recognised when the Group is demonstrably committed to curtailment or settlement.

When it is virtually certain that another party will reimburse some or all of the expenditure required to settle a defined benefit obligation, the right to reimbursement is recognised as a separate asset. The asset is measured at fair value. In all other respects, the asset is treated in the same way as plan assets. In profit or loss, the expense relating to a defined benefit plan is presented as the net of the amount recognised for a reimbursement.

The amount recognised in the consolidated statement of financial position represents the present value of the defined benefit obligation as adjusted for unrecognised actuarial gains and losses and unrecognised past service costs, and reduces by the fair value of plan assets.

Any asset is limited to unrecognised actuarial losses and past service costs, plus the present value of available refunds and reduction in future contributions to the plan.

1.16 Provisions and Contingencies

Provisions are recognised when:

- The Group has a present obligation as a result of a past event;
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- A reliable estimate can be made of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement shall be recognised when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement shall be treated as a separate asset. The amount recognised for the reimbursement shall not exceed the amount of the provision.

Provisions are not recognised for future operating losses.

Onerous Contracts

If an entity has a contract that is onerous, the present obligation under the contract shall be recognised and measured as a provision.

An onerous contract is considered to exist where the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Restructurings

A constructive obligation to restructure arises only when an entity:

- Has a detailed formal plan for the restructuring, identifying at least:
  - the business or part of a business concerned;
  - the principal locations affected;
  - the location, function, and approximate number of employees who will be compensated for terminating

their services;
- the expenditures that will be undertaken; and
- when the plan will be implemented; and

- Has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring, which are those amounts that are both necessarily entailed by the restructuring and not associated with the ongoing activities of the entity. The effect of the time value of money is only considered if material.

Contingent Assets and Liabilities

After their initial recognition contingent liabilities recognised in business combinations that are recognised separately are subsequently measured at the higher of:

- The amount that would be recognised as a provision; and
- The amount initially recognised less cumulative amortisation.

Contingent assets and contingent liabilities are not recognised. Contingencies are disclosed in Note 41.

1.17 Government Grants

Government grants are recognised when there is reasonable assurance that:

- The Group will comply with the conditions attaching to them; and
- The grants will be received.

Government grants are recognised as income over the periods necessary to match them with the related costs that they are intended to compensate.

Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

A government grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs is recognised as income of the period in which it becomes receivable.

Government grants related to assets, including non-monetary grants at fair value, are presented in the consolidated statement of financial position by setting up the grant as deferred income.

Grants related to income are presented as a credit in the profit or loss (separately).

Repayment of a grant related to income is applied first against any un-amortised deferred credit set up in respect of the grant. To the extent that the repayment exceeds any such deferred credit, or where no deferred credit exists, the repayment is recognised immediately as an expense.

Repayment of a grant related to an asset is recorded by reducing the deferred income balance by the amount repayable. The cumulative additional depreciation that would have been recognised to date as an expense in the absence of the grant is recognised immediately as an expense.

1.18 Turnover

Turnover comprises of sales to customers and service rendered to customers. Turnover is stated at the invoice amount and is exclusive of value added taxation.

1.19 Cost of Sales

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

The related cost of providing services recognised as revenue in the current period is included in cost of sales.

Contract costs comprise:

- Costs that relate directly to the specific contract;
- Costs that are attributable to contract activity in general and can be allocated to the contract; and
- Such other costs as are specifically chargeable to the customer under the terms of the contract.

1.20 Borrowing Costs

Borrowing costs that are directly attributable to the acquisition,

construction or production of a qualifying asset which are assets that necessarily take a substantial period of time to get ready for their intended use or sale are capitalised as part of the cost of that asset until such time as the asset is ready for its intended use. The amount of borrowing costs eligible for capitalisation is determined as follows:

- Actual borrowing costs on funds specifically borrowed for the purpose of obtaining a qualifying asset less any temporary investment of those borrowings; and
- Weighted average of the borrowing costs applicable to the entity on funds generally borrowed for the purpose of obtaining a qualifying asset. The borrowing costs capitalised do not exceed the total borrowing costs incurred.

The capitalisation of borrowing costs commences when:

- Expenditure for the asset have occurred;
- Borrowing costs have been incurred; and
- Activities that are necessary to prepare the asset for its intended use or sale are in progress.

Capitalisation is suspended during extended periods in which active development is interrupted.

Capitalisation ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

All other borrowing costs are recognised as an expense in the period in which they are incurred.

1.21 Translation of Foreign Currencies

Functional and Presentation Currency

Items included in the annual financial statements of each of the Group entities are measured using the currency of the primary economic environment in which the entity operates (functional currency).

The consolidated annual financial statements are presented in Rand which is the Group functional and presentation currency.

Foreign Currency Transactions

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences on monetary items are recognised in profit or loss in the period in which they arise except for:

- Exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- Exchange differences on transactions entered into in order to hedge certain foreign currency risks (see 3.28 below for hedging accounting policies); and
- Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to profit or loss on repayment of the monetary items.

Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous annual financial statements are recognised in profit or loss in the period in which they arise.

When a gain or loss on a non-monetary item is recognised to other comprehensive income and accumulated in equity, any exchange component of that gain or loss is recognised to other comprehensive income and accumulated in equity. When a gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss is recognised in profit or loss.

Investments In Subsidiaries, Joint Ventures and Associates

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into Currency Units using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognised in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e. a disposal of the

Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognised in profit or loss. For all other partial disposals (i.e. reductions in the Group's ownership interest in associates or jointly controlled entities that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised in equity.

1.22 Related Parties

The Group operates in an economic environment currently dominated by entities directly or indirectly owned by the South African Government. As a result of the constitutional independence of all three spheres of government in South Africa, only parties within the national sphere of government will be considered to be related parties.

Key management is defined as being individuals with the authority and responsibility for planning, directing and controlling the activities of the entity. All individuals from the level of Chief Executive Officer up to the Board of Directors are regarded as key management.

Close family members of key management personnel are considered to be those family members who may be expected to influence or be influenced by key management individuals or other parties related to the entity.

1.23 Fruitless and Wasteful Expenditure

Fruitless and wasteful expenditure in terms of the PFMA means expenditure which was made in vain and would have been avoided had reasonable care been exercised.

2. New Standards and Interpretations

2.1 Standards and Interpretations Effective and Adopted in the Current Year

In the current year, the Group has adopted the following standards and interpretations that are effective for the current financial year and that are relevant to its operations:

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact
IAS 24 (AC 126) Related Party Disclosures (Revised)	1 January 2011	The revised IAS 24 provides a partial exemption for government related entities. The partial exemption applies to related party transactions and outstanding balances with a government which controls, jointly controls or significantly influences the reporting entity as well as to transactions or outstanding balances with another entity which is controlled, jointly controlled or significantly influenced by the same government. In such circumstances, the entity is exempt from the disclosure requirements of paragraph 18 of IAS 24 and is required only to disclose: The name of the government and nature of the relationship; information about the nature and amount of each individually significant transaction, and a quantitative or qualitative indication of the extent of collectively significant transactions. Such information is required in sufficient detail to allow users to understand the effect. Refer to Note 42 for related party disclosure.
2010 Annual Improvements Project: Amendments to IFRS 3 (AC 140) Business Combinations	1 July 2010	The measurement options available for non-controlling interests were amended. The adoption of the amendment had no impact on the financial performance or position of the Group.
2010 Annual Improvements Project: Amendments to IFRS 7 (AC 144) Financial Instruments: Disclosures	1 January 2011	The amendment was intended to simplify the disclosures provided and improving disclosures by requiring qualitative information to put quantitative information in context.
2010 Annual Improvements Project: Amendments to IAS 1 (AC 101) Presentation of Financial Statements	1 January 2011	The amendment clarifies that an entity may present an analysis of each component of other comprehensive income either in the statement of changes in equity or in the notes to the financial statements. The Group provides the analysis in the statement of changes in equity.
2010 Annual Improvements Project: Amendments to IAS 21 (AC 112) The Effects of Changes in Foreign Exchange rates	1 July 2010	The amendment provides transitional provisions as a result of changes to IAS 27 (AC 132) Consolidated and Separate Financial Statements. The adoption did not have a significant impact on the Group's financial statements.
2010 Annual Improvements Project: Amendments to IAS 28 (AC 110) Investments in Associates	1 July 2010	The amendment provides transitional provisions as a result of changes to IAS 27 (AC 132) Consolidated and Separate Financial Statements. The adoption did not have a significant impact on the Group's financial statements.
Improvements to IFRIC 14 (AC 447) – IFRS 19 (AC116) The Limit on a Defined Benefit Asset, Minimum Funding Requirements and Their Interaction	1 January 2011	The amendments apply in limited circumstances: when an entity is subject to minimum funding requirements and makes an early payment of contributions to cover those requirements. The amendments permit such an entity to treat the benefit of such an early payment as an asset. The adoption did not have a significant impact on the Group's financial statements.

2.2 Standards and Interpretations not yet Effective

The Group has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the Group's accounting periods beginning on or after 1 April 2012 or later periods:

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact
IFRS 9 (AC 146) Financial Instruments	1 January 2013	IFRS 9 addresses the initial measurement and classification of financial assets and financial liabilities. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortised cost and fair value. The Group is still determining the impact of the standard on the financial statements.

Standard/Interpretation	Effective date: Years beginning on or after	Expected impact
IFRS 7 (AC 144) Amendments to IFRS 7 (AC 144) Disclosures Transfers of financial assets	1 July 2011	The amendment requires additional quantitative and qualitative disclosures relating to transfers of financial assets. The amendment will not have any impact on the financial position or performance of the Group as the Group does not transfer financial assets.
IFRS 10 (AC147) Consolidated Financial Statements	1 January 2013	IFRS 10 amended the definition of control which may result in changes to the Group. Management is in the process of considering the relevant amendments to the standards and determining the financial implications and impact on the Group.
IAS 27 (AC 132) Separate Financial Statements	1 January 2013	Consequential amendment as a result of IFRS 10. The amended standard now only deals with separate financial statement. Management is in the process of considering the relevant amendments to the standards and determining the financial implications and impact on the Group.
IFRS 11 (AC148) Joint Arrangements	1 January 2013	IFRS 11 introduces new requirements for the accounting of joint ventures as it requires equity accounting and eliminates the proportional consolidation option of accounting. The Group currently does not have joint ventures. The amendment is not expected to have an impact on the Group's financial statements.
IFRS 12 (AC 149) Disclosure of Interests in Other Entities	1 January 2013	IFRS 12 includes the disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, special purpose vehicles and other off balance sheet vehicles IFRS 12 will only result in additional disclosures where required.
IFRS 13 (AC 150) Fair Value Measurement	1 January 2013	IFRS 13 aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across IFRS. The requirements do not extend the use of fair value accounting but provide guidance on how it should be applied where its use is already required or permitted by other standards within IFRS. IFRS 13 will be applied prospectively and is not expected to have a significant impact on the financial results of the Group.
IAS 1 (AC101) Presentation of Financial Statements	1 July 2012	The amendments to IAS 1 change the grouping of items presented in other comprehensive income. Items that would be reclassified (or recycled) to profit or loss at a future point in time (for example, upon derecognition or settlement) would be presented separately from items that will never be reclassified. The amendment is not expected to have a significant impact on the Group's financial statements.
IAS 12 (AC 102) Income Taxes: Amendment: Deferred Tax: Recovery of Underlying Assets	1 January 2012	The amendment introduced a rebuttable presumption that an investment property measured at fair value will be recovered in its entirety through sale. The amendment is not expected to have an impact on the Group's financial statements.
IAS 19 (AC 116) Employee Benefits Revised	1 January 2013	The revised standard includes a number of amendments that range from fundamental changes to simple clarifications and re wording. The more significant changes include the following: • For defined benefit plans, the ability to defer recognition of actuarial gains and losses (i.e., the corridor approach) has been removed. As revised, actuarial gains and losses are recognised in other comprehensive income when they occur. Amounts recorded in profit or loss are limited to current and past service costs, gains or losses on settlements, and net interest income/(expense). All other changes in the net defined benefit asset/(liability) are recognised in other comprehensive income with no subsequent recycling to profit or loss. • Objectives for disclosures of defined benefit plans are explicitly stated in the revised standard, along with new or revised disclosure requirements. These new disclosures include quantitative information of the sensitivity of the defined benefit obligation to a reasonably possible change in each significant actuarial assumption. • Termination benefits will be recognised at the earlier of when the offer of termination cannot be withdrawn, or when the related restructuring costs are recognised under IAS 37 Liabilities. • The distinction between short term and other long term employee benefits will be based on expected timing of settlement rather than the employee's entitlement to the benefits. The Group is still in the process of determining the impact of the standard on the financial statements.

3. Investment Property

	2012			2011			2010		
	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000
Group									
Investment property	16,404	-	16,404	52,105	-	52,105	44,881	-	44,881
Company									
Investment property	69,733	-	69,733	107,849	-	107,849	94,121	-	94,121

	Opening balance R'000	Transfers to/ from land and buildings R'000	Fair value adjustments R'000	Total R'000
Reconciliation of Investment Property – Group – 2012				
Investment property	52,105	(32,237)	(3,464)	16,404
Reconciliation of Investment Property – Group – 2011				
Investment property	44,881	1,738	5,486	52,105
Reconciliation of Investment Property – Group – 2010				
Investment property	32,531	(950)	13,300	44,881

	Opening balance R'000	Additions R'000	Transfers to/ from land and buildings R'000	Fair value adjustments R'000	Total R'000
Reconciliation of Investment Property – Company – 2012					
Investment property	107,849	97	(32,237)	(5,976)	69,733
Reconciliation of Investment Property – Company – 2011					
Investment property	94,121	-	(324)	14,052	107,849
Reconciliation of Investment Property – Company – 2010					
Investment property	80,874	-	(524)	13,771	94,121

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Fair value of investment properties	16,404	52,105	44,881	69,733	107,849	94,121

A register containing the information required by Regulation 25(3) of the Companies Regulations, 2011, is available for inspection at the registered office of the Company.

3. Investment Property (continued)

Details of Valuation

The effective date of the revaluations was 1 March 2012. Revaluations were performed by an independent valuer, Mr B van Vuuren from JHI Properties (Pty) Ltd T/A JHI. Mr B van Vuuren is a registered Professional Valuer in terms of section 19 of the Property Valuers Act, 2000. JHI is not a related party to the Group and is independent.

The valuation was based on open market value for existing use.

The transfer of R32,237 in Group and Company 2012 is due to the termination of a rental contract of a key tenant. The land and buildings were transferred to property, plant and equipment.

Amounts Recognised in Profit and Loss for the Year

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Rental income from investment property	1,668	2,835	6,359	4,899	8,606	13,197

4. Property, Plant and Equipment

	2012			2011			2010		
	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000
Group									
Land and buildings	525,613	(13,626)	511,987	446,645	-	446,645	434,293	-	434,293
Startup costs	24	(13)	11	27	(4)	23	3	-	3
Plant	263,360	(120,787)	142,573	195,264	(104,129)	91,135	182,921	(100,039)	82,882
Furniture and fixtures	15,196	(4,969)	10,227	13,732	(3,484)	10,248	9,664	(2,454)	7,210
Motor vehicles and transport containers	49,046	(17,209)	31,837	43,962	(12,990)	30,972	35,436	(8,835)	26,601
Office equipment	9,577	(5,735)	3,842	8,448	(4,720)	3,728	6,924	(3,971)	2,953
IT equipment	54,600	(36,489)	18,111	48,438	(29,918)	18,520	41,341	(25,453)	15,888
Research facilities	8,924	(2,739)	6,185	8,924	(1,777)	7,147	8,924	(911)	8,013
Leasehold improvements	195	(39)	156	195	(20)	175	507	(227)	280
Machinery and equipment	256,432	(118,705)	137,727	214,992	(93,525)	121,467	185,521	(71,965)	113,556
Component spares	11,415	(5,139)	6,276	11,498	(4,073)	7,425	10,851	(3,329)	7,522
Finance lease assets	17,371	(11,659)	5,712	15,321	(7,729)	7,592	10,851	(4,235)	6,616
Total	**1,211,753**	**(337,109)**	**874,644**	**1,007,446**	**(262,369)**	**745,077**	**927,236**	**(221,419)**	**705,817**

	2012			2011			2010		
	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000	Cost/ Valuation R'000	Accumulated depreciation R'000	Carrying value R'000
Company									
Land and buildings	457,074	(13,626)	443,448	390,891	-	390,891	382,913	-	382,913
Plant	109,242	(22,010)	87,232	77,981	(20,035)	57,946	66,688	(18,065)	48,623
Furniture and fixtures	10,829	(3,250)	7,579	9,313	(2,133)	7,180	6,934	(1,212)	5,722
Motor vehicles and transport containers	17,720	(7,746)	9,974	16,338	(5,609)	10,729	10,823	(3,804)	7,019
Office equipment	7,718	(4,657)	3,061	6,599	(3,917)	2,682	5,381	(3,295)	2,086
IT equipment	43,196	(30,605)	12,591	39,017	(25,809)	13,208	33,839	(21,200)	12,639
Research facilities	8,924	(2,739)	6,185	8,924	(1,777)	7,147	8,924	(911)	8,013
Machinery and equipment	204,079	(95,894)	108,185	169,511	(76,259)	93,252	147,273	(57,738)	89,535
Finance lease assets	17,371	(11,659)	5,712	15,321	(7,729)	7,592	10,851	(4,235)	6,616
Total	**876,153**	**(192,186)**	**683,967**	**733,895**	**(143,268)**	**590,627**	**673,626**	**(110,460)**	**563,166**

Reconciliation of Property, Plant and Equipment

	Opening balance R'000	Additions R'000	Disposals R'000	Transfers R'000	Revaluations R'000	Foreign exchange movements R'000	Other changes, movements R'000	Depreciation R'000	Total R'000
Group – 2012									
Buildings	446,645	49,142	-	32,237	(488)	-	-	(15,549)	511,987
Startup costs	23	-	(2)	-	-	-	-	(9)	12
Plant	91,135	61,680	(846)	88	-	85	8,099	(17,668)	142,573
Furniture and fixtures	10,248	1,930	(42)	(367)	-	27	1	(1,570)	10,227
Motor vehicles and transport containers	30,972	5,987	(140)	-	-	(1)	2	(4,983)	31,837
Office equipment	3,728	1,256	(9)	(88)	-	-	-	(1,045)	3,842
IT equipment	18,520	6,553	(40)	320	-	19	1	(7,262)	18,111
Research facilities	7,147	-	-	-	-	-	-	(962)	6,185
Leasehold improvements	175	-	-	-	-	-	-	(19)	156
Machinery and equipment	121,467	41,761	(32)	-	-	-	-	(25,469)	137,727
Component spares	7,425	-	-	-	-	-	(82)	(1,067)	6,276
Finance lease assets	7,592	2,050	-	-	-	-	-	(3,930)	5,712
	745,077	**170,359**	**(1,111)**	**32,190**	**(488)**	**130**	**8,021**	**(79,533)**	**874,645**

4. Property, Plant and Equipment (continued)

	Opening balance R'000	Additions R'000	Disposals R'000	Classified as held-for-sale R'000	Transfers R'000	Revaluations R'000	Foreign exchange movements R'000	Other changes, movements R'000	Depreciation R'000	Total R'000
Group – 2011										
Land and buildings	434,293	12,021	(246)	(2,130)	(1,738)	20,237	-	-	(15,792)	446,645
Startup costs	3	24	-	-	-	-	-	-	(4)	23
Plant	82,882	30,872	(327)	-	(206)	-	27	(440)	(21,673)	91,135
Furniture and fixtures	7,210	5,774	(54)	-	150	-	(2)	-	(2,830)	10,248
Motor vehicles and transport containers	26,601	10,290	(1,043)	-	3	-	-	-	(4,879)	30,972
Office equipment	2,953	1,461	(5)	-	93	-	1	-	(775)	3,728
IT equipment	15,888	8,421	(104)	-	-	-	(1)	-	(5,684)	18,520
Research facilities	8,013	-	-	-	-	-	-	-	(866)	7,147
Leasehold improvements	280	-	(54)	-	(27)	-	-	-	(24)	175
Machinery and equipment	113,556	26,874	(138)	-	-	-	1	-	(18,826)	121,467
Component spares	7,522	956	-	-	-	-	-	-	(1,053)	7,425
Finance lease assets	6,616	4,330	-	-	-	-	-	-	(3,354)	7,592
	705,817	**101,023**	**(1,971)**	**(2,130)**	**(1,725)**	**20,237**	**26**	**(440)**	**(75,760)**	**745,077**

	Opening balance R'000	Additions R'000	Additions through business combinations R'000	Disposals R'000	Transfers R'000	Revaluations R'000	Reassess of decommissioning and decontamination asset R'000	Depreciation R'000	Impairment loss R'000	Total R'000
Group – 2010										
Land and buildings	93,448	19,579	3,000	-	950	321,595	-	(4,279)	-	434,293
Startup costs	3	-	-	-	-	-	-	-	-	3
Plant	69,964	18,624	2,688	(103)	(80)	-	(800)	(7,411)	-	82,882
Furniture and fixtures	5,124	2,834	157	(1)	37	-	-	(941)	-	7,210
Motor vehicles and transport containers	23,220	5,925	685	(26)	80	-	-	(3,283)	-	26,601
Office equipment	2,994	787	100	(11)	(37)	-	-	(880)	-	2,953
IT equipment	16,679	6,562	96	(102)	(279)	-	-	(7,068)	-	15,888
Research facilities	7,641	1,203	-	-	-	-	-	(831)	-	8,013
Leasehold improvements	254	2	26	-	-	-	-	(2)	-	280
Machinery and equipment	101,139	33,997	-	(89)	279	-	-	(21,770)	-	113,556
Component spares	8,136	253	-	-	-	-	-	(970)	103	7,522
Finance lease asset	4,606	4,330	-	-	-	-	-	(2,320)	-	6,616
	333,208	**94,096**	**6,752**	**(332)**	**950**	**321,595**	**(800)**	**(49,755)**	**103**	**705,817**

	Opening balance R'000	Additions R'000	Disposals R'000	Transfers R'000	Revaluations R'000	Depreciation R'000	Total R'000
Company – 2012							
Land and buildings	390,891	33,946	-	32,237	-	(13,626)	443,448
Plant	57,946	31,261	-	-	-	(1,975)	87,232
Furniture and fixtures	7,180	1,525	(5)	-	-	(1,121)	7,579
Motor vehicles and transport containers	10,729	1,382	-	-	-	(2,137)	9,974
Office equipment	2,682	1,137	(5)	-	-	(753)	3,061
IT equipment	13,208	4,490	(20)	-	-	(5,087)	12,591
Research facilities	7,147	-	-	-	-	(962)	6,185
Machinery and equipment	93,252	34,863	(23)	-	-	(19,907)	108,185
Finance lease assets	7,592	2,050	-	-	-	(3,930)	5,712
	590,627	**110,654**	**(53)**	**32,237**		**(49,498)**	**683,967**
Company – 2011							
Buildings	382,913	10,007	(246)	324	10,129	(12,236)	390,891
Plant	48,623	11,418	(9)	-	-	(2,086)	57,946
Furniture and fixtures	5,722	2,380	(1)	-	-	(921)	7,180
Motor vehicles and transport containers	7,019	5,515	-	-	-	(1,805)	10,729
Office equipment	2,086	1,269	(3)	-	-	(670)	2,682
IT equipment	12,639	6,059	(82)	-	-	(5,408)	13,208
Research facilities	8,013	-	-	-	-	(866)	7,147
Machinery and equipment	89,535	22,513	(138)	-	-	(18,658)	93,252
Finance lease assets	6,616	4,470	-	-	-	(3,494)	7,592
	563,166	**63,631**	**(479)**	**324**	**10,129**	**(46,144)**	**590,627**
Company – 2010							
Buildings	61,822	21,381	-	524	303,466	(4,280)	382,913
Plant	35,990	14,736	(82)	-	-	(2,021)	48,623
Furniture and fixtures	3,956	2,450	(1)	-	-	(683)	5,722
Motor vehicles and transport containers	6,538	1,673	(10)	-	-	(1,182)	7,019
Office equipment	2,349	446	(11)	-	-	(698)	2,086
IT equipment	13,989	4,545	(86)	-	-	(5,809)	12,639
Research facilities	7,641	1,203	-	-	-	(831)	8,013
Machinery and equipment	81,493	26,114	(81)	-	-	(17,991)	89,535
Finance lease assets	4,606	4,330	-	-	-	(2,320)	6,616
	218,384	**76,878**	**(271)**	**524**	**303,466**	**(35,815)**	**563,166**

4. Property, Plant and Equipment (continued)

Pledged as Security

Vehicles and electronic office equipment held under finance leases have been pledge as security.

Assets Subject to Finance Lease (Net Carrying Amount)

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Leasehold property	(2)	-	3	-	-	-
Furniture and fixtures	-	-	(37)	-	-	-
Motor vehicles	-	-	533	-	-	-
Office equipment	-	-	42	-	-	-
Leasehold improvements	-	-	254	-	-	-
Motor vehicles and electronic office equipment	5,712	7,592	6,616	5,712	7,592	6,616
	5,710	**7,592**	**7,411**	**5,712**	**7,592**	**6,616**

Revaluations

The valuation was based on open market value and is wherever possible, derived from comparable transactions.

Land and buildings consist of the following properties:

Necsa: Farm 567, Weldaba; Erf 1150, 1153, 1155 and 1156 Albertinia; Erf 4473 and 4474 Riverdale; Erf 1115, 1224, 1916, 1917, 1919, 1921, 1922, 1924, 1926, 1928 and 1929 Springbok; Farm 369 and 380, Vaalputs.

Gammatec NDT: Portion 91 of Farm 601, Klipplaatdrif, Vereeniging.

The estimation of the useful lives of property, plant and equipment is based on historic performance as well as expectations about future use and therefore requires a significant degree of judgement to be applied by management. These depreciation rates represent management's current best estimate of the useful lives of the assets.

There are no idle assets held. There are assets fully depreciated but still in use to the value of R64 on the Company's asset register.

Transfer of property, plant and equipment not only relates to investment property, but also includes transfers to other asset classes.

The revaluation reserve can only be distributed to shareholders in limited circumstances.

A register containing the information required by Regulation 25(3) of the Companies Regulations, 2011, is available for inspection at the registered office of the Company.

5. Goodwill

	2012			2011			2010		
	Cost R'000	Accumulated impairment R'000	Carrying value R'000	Cost R'000	Accumulated impairment R'000	Carrying value R'000	Cost R'000	Accumulated impairment R'000	Carrying value R'000
Group									
Goodwill	14,587	-	14,587	15,781	(1,194)	14,587	15,781	-	15,781

Reconciliation of Goodwill

	Opening balance R'000	Additions through business combinations R'000	Impairment loss R'000	Total R'000
Group – 2012				
Goodwill	14,587	-	-	14,587
Group – 2011				
Goodwill	15,781	-	(1,194)	14,587
Group – 2010				
Goodwill	3,230	12,551	-	15,781

Goodwill arose on the acquisition of the following subsidiaries:

A 55% shareholding in Gammatec NDT Supplies SOC Ltd was acquired on 1 October 2009 by NTP Radioisotopes SOC Ltd. The Gammatec group of companies consists of six companies located in South Africa, Malaysia, the Middle East, Australia and New Zealand.

A 100% shareholding in Pharmatopes SOC Ltd was acquired on 1 January 2009 by AEC-Amersham SOC Ltd.

Goodwill is initially measured at cost, being the excess of the business combination over the Company's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities.

6. Intangible Assets

	2012			2011			2010		
	Cost R'000	Accumulated amortisation R'000	Carrying value R'000	Cost R'000	Accumulated amortisation R'000	Carrying value R'000	Cost R'000	Accumulated amortisation R'000	Carrying value R'000
Group									
Patents, trademarks and other rights	1,244	-	1,244	1,105	-	1,105	-	-	-
Computer software	985	(363)	622	-	-	-	-	-	-
Total	**2,229**	**(363)**	**1,866**	**1,105**	**-**	**1,105**	**-**	**-**	**-**

Reconciliation of Intangible Assets

	Opening balance R'000	Additions R'000	Transfers R'000	Amortisation R'000	Total R'000
Group – 2012					
Patents, trademarks and other rights	1,105	139	-	-	1,244
Computer software	-	599	47	(24)	622
	1,105	738	47	(24)	1,866
Group – 2011					
Patents, trademarks and other rights	-	1,105	-	-	1,105

6. Intangible Assets (continued)

Other Information

There are no significant intangible assets controlled by the entity but not recognised as assets because they did not meet the recognition criteria in this Standard or because they were acquired or generated before the version of IAS 38 Intangible Assets issued in 1998 was effective.

The intangible asset relates to computer software as well as intellectual property generated internally by a subsidiary of the Company and used in the purification of Fluorine, it's lifetime is considered by management to be 8 years.

The lifespan for patents, trademarks and other rights ranges from 2 to 8 years. None is indefinite.

7. Investments in Subsidiaries

Name of Company	Held by	% Holding power 2012	% Holding power 2011	% Holding power 2010	Carrying amount 2012 R'000	Carrying amount 2011 R'000	Carrying amount 2010 R'000
Pelchem SOC Ltd	Necsa	100.00%	100.00%	100.00%	98,818	98,818	98,818
NTP Radioisotopes SOC Ltd	Necsa	100.00%	100.00%	100.00%	220,700	220,700	220,700
Cyclofil SOC Ltd	Necsa	100.00%	100.00%	100.00%	-	-	-
ARECSA SOC Ltd	Necsa	51.00%	51.00%	51.00%	1	1	1
					319,519	**319,519**	**319,519**

The carrying amounts of subsidiaries are shown net of impairment losses.

The Directors' value the investment in subsidiaries as equal to carrying value.

Impairment of Investment

The Company assessed impairment indicators for its investments during the current reporting period and the results indicated no need for impairment tests.

The Company assessed impairment indicators for its investments during the previous reporting period and the results indicated that the investment in Pelchem SOC Ltd needed to be tested for impairment. An impairment test was performed on the investment at 31 March 2011. The outcome of the impairment test indicated that no impairment was necessary in the 2011 financial year and that the 2010 previous impairment had to be reversed.

8. Investments in Associates

Name of company	Held by:	% Holding 2012	% Holding 2011	% Holding 2010	Carrying amount 2012 R'000	Carrying amount 2011 R'000	Carrying amount 2010 R'000	Fair value 2012 R'000	Fair value 2011 R'000	Fair value 2010 R'000
Business Venture International No. 33 (Pty) Ltd	Necsa	41.67%	41.67%	41.67%	2	2	2	2	2	2
Limited Electronics South Africa (Pty) Ltd (LESA)	Pelchem	49.90%	49.90%	49.90%	-	-	-	-	-	-
Oserix	Gammatec NDT	25.00%	25.00%	-%	258	-	-	258	-	-
					260	**2**	**2**	**260**	**2**	**2**

The carrying amounts of associates are shown net of impairment losses.

The Directors' value the investment in subsidiaries as equal to carrying value.

Summary of Groups Interest in Associates

	2012 R'000	2011 R'000	2010 R'000
Total assets	24,300	13,476	14,814
Total liabilities	42,270	20,911	13,060
Revenue	36,592	50,838	56,409
Profit or loss	(1,907)	(5,231)	(5,717)

Associates with Different Reporting Dates

The financial year end of Limited Electronics South Africa (Pty) Ltd (LESA) is 31 December. This date was the financial year end established when the Company was incorporated. For the purpose of applying the equity method of accounting, the financial statements of Limited Electronics South Africa (Pty) Ltd (LESA) for the year ended 31 December 2011 (2011: 31 December 2010) have been used, and appropriate adjustments have been made for the effects of significant transactions between that date and 31 March 2012 (2011: 31 March 2011).

The financial year end of Business Venture International No. 33 (Pty) Ltd is 28 February. This date was the financial year end established when the Company was incorporated. For the purpose of applying the equity method of accounting, the financial statements of Business Venture International No. 33 (Pty) Ltd for the year ended 29 February 2012 (2011: 28 February 2011) has been used, and appropriate adjustments have been made for the effects of significant transactions between that date and 31 March 2012 (2011: 31 March 2011). The Company had no assets or liabilities at 31 March 2012 and did not trade during the current year.

9. Loans to/(from) Group Companies

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Subsidiaries						
Pelchem SOC Limited This loan bears interest at prime less 2% and has no fixed repayment terms, but are repayable on demand.	-	-	-	12,278	12,682	11,909
NTP Radioisotopes SOC Limited The loan is unsecured, bears no interest and has no fixed terms of repayment.	-	-	-	733	11,602	11,289
Fluoropack SOC Limited The loan is unsecured, bears no interest and has no fixed terms of repayment.	-	-	-	-	2	12
	-	**-**	**-**	**13,011**	**24,286**	**23,210**

9. Loans to/(from) Group Companies (continued)

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Associates						
Limited Electronics of South Africa (Pty) Ltd The loan is repayable in June 2013 and carries interest at prime less 2.25%.	(2,728)	(2,530)	(2,352)	-	-	-
Business Venture International No. 33 (Pty) Ltd The loan is unsecured, bears no interest and has no fixed repayment term.	972	972	972	-	-	-
Oserix S.A. The loan is unsecured, bears no interest and has no fixed repayment term.	1,026	998	-	-	-	-
	(730)	**(560)**	**(1,380)**	**-**	**-**	**-**
Impairment of loans to associates	(972)	(972)	(972)	-	-	-
	(1,702)	**(1,532)**	**(2,352)**	**-**	**-**	**-**
Non-current assets	1,026	998	-	-	2	-
Current assets	-	-	-	13,011	24,284	23,210
Non-current liabilities	(2,728)	(2,530)	(2,352)	-	-	-
	(1,702)	**(1,532)**	**(2,352)**	**13,011**	**24,286**	**23,210**
Fair Value of Loans to and from Group Companies						
Loans to group companies	(1,702)	(1,532)	(2,352)	13,011	24,286	23,210

The maximum exposure to credit risk at the reporting date is the fair value of each class of loan mentioned above. The Group does not hold any collateral as security.

10. Other Financial Assets

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Available-for-sale						
Listed shares	2,494	2,148	1,429	2,478	2,135	1,417
Unit trusts	102,798	66,909	43,970	102,798	66,909	43,970
Deposits with insurance companies	-	-	16,737	-	-	16,737
	105,292	**69,057**	**62,136**	**105,276**	**69,044**	**62,124**
Non-current assets						
Available-for-sale	105,292	69,057	62,136	105,276	69,044	62,124

Fair Value Information

Financial assets at fair value through profit or loss are recognised at fair value, which is therefore equal to their carrying amounts.

The following classes of financial assets at fair value through profit or loss are measured to fair value using quoted market prices:

- Listed shares; and
- Unit trusts.

Fair values are determined annually at statement of financial position date.

Fair Value Hierarchy of Available-for-Sale Financial Assets

For financial assets recognised at fair value, disclosure is required of a fair value hierarchy which reflects the significance of the inputs used to make the measurements.

Level 1 represents those assets which are measured using unadjusted quoted prices for identical assets.

Level 2 applies inputs other than quoted prices that are observable for the assets either directly (as prices) or indirectly (derived from prices).

Level 3 applies inputs which are not based on observable market data.

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Level 1						
Sanlam – Ordinary shares	1,314	1,093	985	1,298	1,079	973
Old Mutual – Ordinary shares	637	1,056	444	637	1,056	444
Unit Trusts – Collective Investment Schemes	102,798	66,908	43,970	102,798	66,909	43,970
Deposits with insurance companies	-	-	16,737	-	-	16,737
	104,749	**69,057**	**62,136**	**104,733**	**69,044**	**62,124**

11. Deferred Tax

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Deferred tax asset						
Property, plant and equipment	(11,854)	8,898	8,898	-	-	-
Provisions, allowances and post-retirement medical aid (PRMA) liability	16,194	3,549	3,471	-	-	-
Fair value and IFRS adjustments	6	96	228	-	-	-
Tax losses	-	636	636	-	-	-
Reserves	-	(125)	(292)	-	-	-
Goodwill	13,739	-	-	-	-	-
	18,085	**13,054**	**12,941**	**-**	**-**	**-**
Reconciliation of deferred tax asset						
At beginning of the year	13,054	12,941	9,918	-	-	-
Classification adjustment	(1,139)	-	-	-	-	-
Charged to the income statement	4,686	-	-	-	-	-
Increase/(decrease) in tax losses available for set off against future taxable income	(2,082)	(269)	1,665	-	-	-
Originating temporary difference on fixed assets	1,353	94	798	-	-	-
Deemed interest	444	-	-	-	-	-
Originating temporary difference on provisions and tax allowances	75	88	549	-	-	-
Originating/(reversing) temporary difference on fair value and IFRS adjustments	2	(86)	20	-	-	-
Originating temporary difference on PRMA liability	1,185	106	283	-	-	-
Originating temporary difference on reserves	-	180	(292)	-	-	-
Originating temporary difference on profit sharing provision	507	-	-	-	-	-
	18,085	**13,054**	**12,941**	**-**	**-**	**-**

11. Deferred Tax (continued)

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Deferred tax liability						
Property, plant and equipment	32	(12,459)	(12,102)	-	-	-
Provisions, allowances and PRMA liability	-	-	936	-	-	-
Fair value and IFRS adjustments	(337)	11,376	3,424	-	-	-
Tax losses	-	(4)	-	-	-	-
Prepayment	91	(8)	-	-		
	(214)	**(1,095)**	**(7,742)**	**-**	**-**	**-**
Reconciliation of deferred tax (liability)						
At beginning of the year	(1,095)	(7,742)	(10,102)	-	-	-
Classification adjustment	1,143	-	-	-	-	-
Revaluation reserve	153	-	-	-	-	-
Originating temporary difference on fair value adjustments	-	-	106	-	-	-
Originating/(reversing) temporary difference on PRMA liability, provisions and allowances	-	-	925	-	-	-
Originating/(reversing) temporary difference on fixed assets	-	6,647	1,329	-	-	-
Charged to the income statement	(415)	-	-	-	-	-
	(214)	**(1,095)**	**(7,742)**	**-**	**-**	**-**

12. Finance Lease Receivables

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Non-current assets	693	1,341	-	-	-	-
Current assets	5	629	-	-	-	-
	698	**1,970**	**-**	**-**	**-**	**-**

The Group entered into finance leasing arrangements for certain of its equipment.

Credit quality of finance lease receivables

The credit quality of finance lease receivables that are neither past due nor impaired can be assessed by reference to historical information about counterparty default rates:

Class 1 (Local finance lease receivables)

Counterparties with historical credit rating						
High quality	698	1,970	-	-	-	-

Group 1 – new customer (less 6 months)
Group 2 – existing customer (more than 6 months) with no defaults in the past
Group 3 – existing customer (more than 6 months) with some defaults in the past. All defaults were fully recovered.

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Fair value of finance lease receivables						
Class 1	698	1,970	-	-	-	-

Credit Risk Exposure

The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above.

The Company does not hold any collateral as security over finance lease receivables.

13. Inventories

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Raw materials	4,848	4,407	4,870	-	-	-
Work in progress	38,809	43,890	13,698	18,759	31,314	12,209
Finished goods	18,108	15,528	10,353	4,451	4,428	191
Life science products and equipment	5,306	3,955	4,514	-	-	-
Plant components	22,869	21,714	20,926	-	-	-
Goods in transit	109	-	-	-	-	-
Consumables	131,323	77,426	45,363	14,210	11,546	11,480
	221,372	166,920	99,724	37,420	47,288	23,880
Impairment on inventories	(5,837)	(5,634)	(6,026)	(1,037)	(1,224)	(1,628)
	215,535	**161,286**	**93,698**	**36,383**	**46,064**	**22,252**
Carrying value of inventories carried at fair value less costs to sell	215,535	161,286	93,698	36,383	46,064	22,252

During the financial year end 31 March 2012 R191,482 (2011: R196,646; 2010: R202,439) was recognised as an expense for the Company and R647,517 (2011: R705,740; 2010: R642,086) for the Group.

14. Trade and Other Receivables

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Trade receivables	222,278	195,873	205,032	70,788	90,085	51,341
Prepayments	54,544	31,734	21,947	9,864	27,709	2,474
Deposits	233	209	20	-	-	-
VAT	12,266	28,872	10,315	-	-	2,029
Other receivables	26,277	7,103	(830)	21,863	5,851	4,135
	315,598	**263,791**	**236,484**	**102,515**	**123,645**	**59,979**

Trade and Other Receivables Pledged as Security

No trade and other receivables have been pledged as security.

14. Trade and Other Receivables (continued)

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Credit Quality of Trade and Other Receivables						
The credit quality of trade and other receivables that are neither past nor due nor impaired can be assessed by reference to external credit ratings (if available) or to historical information about counter-party default rates:						
Fair value of trade and other receivables						
Trade and other receivables	315,598	263,791	236,484	102,515	123,645	59,979

Debtors have been reviewed on an individual basis and where extended payment terms were granted the effect of the time value of money have been taken into account. This was done to determine the finance portion granted. The carrying value of trade and other receivables is reduced by an interest charge of (R98) (2011: (R1,428); (2010: (R1,247)) to discount the carrying value to amortised cost for the Company and an interest charge of R1,706 (2011: (R6,469); 2010: R1,623) for the Group.

Trade and other Receivables Past Due but not Impaired

Trade and other receivables which are past due are assessed for impairment on an ongoing basis. At 31 March 2012, R29,343 (2011: R728; 2010: R9,590) were past due but not impaired for the Company and R78,667 (2011: R56,130; 2010: R72,134) were past due but not impaired for the Group. The ageing of these amounts are less than 1 year outstanding.

Trade and Other Receivables Impaired

As of 31 March 2012, trade and other receivables of (R6,607) (2011: (R4,741); 2010: (R5,465)) were past due and provided for possible impairment by the Company and R7,598 (2011: R7,648; 2010: (R8,592)) were past due and provided for possible impairment by the Group. These amounts were fully provided for due to the uncertainty of its recoverability.

Reconciliation of Provision for Impairment of Trade and Other Receivables

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Opening balance	7,648	8,592	3,379	4,741	5,465	2,790
Provision for impairment	6,759	4,524	8,463	6,607	4,741	5,587
Amounts written off as uncollectable	(239)	(3,655)	(3,189)	-	(1,754)	(2,912)
Unused amounts reversed	(6,570)	(1,813)	(61)	(4,741)	(3,711)	-
	7,598	**7,648**	**8,592**	**6,607**	**4,741**	**5,465**

The creation and release of provision for impaired receivables have been included in operating expenses in profit or loss.

The maximum exposure to credit risk at the reporting date is the fair value of each class of loan mentioned above. The Group does not hold any collateral as security.

The credit period on sales of goods is 30 days from date of statement. Interest on overdue accounts is charged based on management discretion. It is the policy of the Group to provide fully for receivables that is identified on an individual basis as unrecoverable. The other classes within trade and other receivables do not contain impaired assets.

15. Cash and Cash Equivalents

Cash and cash equivalents consist of:

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Cash on hand	59	87	94	32	72	74
Bank balances	116,571	112,104	86,140	31,109	34,716	22,434
Short-term deposits	345,911	370,541	240,138	45,281	75,108	80,898
Bank overdraft	(12,170)	(12,110)	(668)	-	-	-
	450,371	**470,622**	**325,704**	**76,422**	**109,896**	**103,406**
Current assets	462,541	482,732	326,372	76,422	109,896	103,406
Current liabilities	(12,170)	(12,110)	(668)	-	-	-
	450,371	**470,622**	**325,704**	**76,422**	**109,896**	**103,406**

The government of South Africa is irrevocably bound as surety and co-principal debtor to Absa Bank Limited with regard to the repayment of capital and payment of interest and any other charges in terms of the general short term banking facility of Necsa to the amount of R20 million.

The R20 million undrawn facility is available for future operating activities and to settle capital commitments, with no restriction to this.

Details of Facilities

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Asset based financing	6,250	13,000	39,020	-	-	8,000
Forex settlement limit	1,750	1,750	299,350	-	-	-
ACB Magtape credits	28,000	28,000	19,000	28,000	28,000	19,000
ACB Magtape debits	100	100	100	100	100	100
FEC's	100,700	68,700	32,300	29,000	29,000	29,000
Commitments regarding guarantees (foreign)	34	140	1	-	-	-
Commitments regarding guarantees (local)	2,200	2,200	2,455	-	-	-
General short term banking facility	21,000	14,000	14,950	7,000	7,000	7,000
Medium Term Loan	1,708	2,250	2,292	-	-	-
Letter of credit	450	450	450	-	-	-
Overdraft	10,390	17,390	-	-	-	-
CFC	1,500	1,500	-	-	-	-
Bills of Exchange	100	100	-	-	-	-
Corporate Credit Card	300	150	-	-	-	-
Vehicle and asset finance	4,434	4,100	-	-	-	-
Guarantees by bank	11,475	255	-	-	-	-
Fleet management service	68	-	-	-	-	-

16. Discontinued Operations or Disposal Groups or Non-current Assets Held-for-Sale

Gammatec NDT Supplies SOC Ltd approved a decision to sell Erf 943 and Erf 1003 (both properties are in Vereeniging) on 1 October 2010. The properties were sold in the current financial year.

Assets and liabilities

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Non-current assets held-for-sale						
Property, plant and equipment	-	2,130	-	-	-	-

17. Share Capital

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Authorised						
500,000,000 Ordinary shares of R1 each	500,000	500,000	500,000	500,000	500,000	500,000
There were no changes in authorised share capital.						
Reconciliation of number of shares issued:						
Reported as at 1 April 2011	2,205,000	2,205,000	2,205,000	2,205,000	2,205,000	2,205,000
Issued						
Ordinary	2,205	2,205	2,205	2,205	2,205	2,205

18. Other Financial Liabilities

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Held at amortised cost						
Nedbank The unsecured loan is interest bearing at prime less 2%. The loan is repayable in monthly instalments of R264. The last date for repayment was 1 March 2011.	-	-	2,924	-	-	-
Standard Bank – Mortgage The loan is secured by a first mortgage bond registered over land and buildings Erf 943 and 1003, Duncanville Ext. 3. Interest is charged at prime rate. The bond has to be repaid in equal monthly instalments of R6.	-	373	414	-	-	-
Standard Bank – Australia Investment The loan is unsecured, bears a fixed interest rate of 11.50% and is repayable in equal monthly instalments of R42. The amount is restricted to R2,500.	1,292	1,793	2,291	-	-	-
First National Bank – Mortgage The loan is secured by a first mortgage bond registered over land and buildings Portion 91 of Farm 601, Klipplaatdrif, Vereeniging. Interest is charged at prime rate minus 1%. The bond has to be repaid in equal monthly instalments of R146.	11,884	-	74	-	-	-
Less: Short term portion	(2,248)	(618)	-	-	-	-
	10,928	1,548	5,703	-	-	-

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Non-current liabilities						
At amortised cost	10,928	1,548	2,162	-	-	-
Current liabilities						
At amortised cost	2,248	618	3,541	-	-	-
	13,176	**2,166**	**5,703**	**-**	**-**	**-**

19. Finance Lease Obligation

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Minimum lease payments due						
- within one year	4,689	5,986	5,396	3,996	4,356	3,734
- in second to fifth year inclusive	3,513	6,406	5,528	3,174	5,060	4,453
	8,202	12,392	10,924	7,170	9,416	8,187
less: future finance charges	(984)	(1,756)	(1,349)	(906)	(1,305)	(1,082)
Present value of minimum lease payments	**7,218**	**10,636**	**9,575**	**6,264**	**8,111**	**7,105**
Present value of minimum lease payments due						
- within one year	4,024	4,923	4,535	3,397	3,570	3,059
- in second to fifth year inclusive	3,194	5,713	5,040	2,867	4,541	4,046
	7,218	**10,636**	**9,575**	**6,264**	**8,111**	**7,105**
Non-current liabilities	3,193	5,862	5,040	2,867	4,542	4,045
Current liabilities	4,025	4,775	4,535	3,397	3,569	3,059
	7,218	**10,636**	**9,575**	**6,264**	**8,111**	**7,104**

The average lease term was 3–6 years and the average effective borrowing rate was 13% (2011: 13%; 2010: 13%).

Interest rates are linked to prime at the contract date. All leases have fixed repayments and no arrangements have been entered into for contingent rent.

The Group's obligations under finance leases are secured by the lessor's charge over the leased assets.

20. Retirement Benefits

Provident Fund Benefits

The Company and its two major subsidiaries, NTP Radioisotopes and Pelchem, operate a provident fund scheme which is governed by the Pensions Fund Act, No. 24 of 1956. The scheme is generally funded through payments to insurance companies or trustee-administered funds, determined by periodic actuarial calculations. The Company has defined contribution plans established in 1994. These contribution plans are compulsory for every permanent employee employed in accordance with the conditions of employment, primarily by means of monthly contributions to the Necsa Retirement Fund. A defined contribution plan is a provident fund under which the Company pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee services in the current and prior periods. The contributions are recognised as an expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

20. Retirement Benefits (continued)

The Necsa Retirement Fund is revalued by an independent actuary on an annual basis. The last actuarial valuation was performed in April 2012 for the period ending 31 March 2012. The conclusion made in the latest actuarial valuation was that the Fund is currently in a good financial position and should remain so, based on the contribution rates payable in terms of the rules of the Fund, until the next actuarial valuation. The next actuarial valuation will be performed in April 2013 for the period ended 31 March 2013.

Post-Retirement Medical Aid

The Company provides post-retirement healthcare benefits to employees who were employed on or before 30 September 2004. The entitlement to post-retirement healthcare benefits is further based on the employee remaining in service up to retirement age and completing a minimum service period. The expected costs of these benefits are accrued over the period of employment, using an accounting methodology similar to that for defined benefit pension plans. Independent qualified actuaries carry out valuations of these obligations. All actuarial gains and losses are recognised immediately in the statement of comprehensive income. The actuarial valuation method used to value the obligations is the projected unit credit method. Future benefit values are projected using specific actuarial assumptions and the liability to in-service members is accrued over the expected working lifetime. These obligations are funded over a 25 year period. The valuation is done every year. Management has embarked on a strategy to effectively manage its future commitments by initiating a plan that consists of settling the present value of the future commitments of a small targeted employee base and purchasing an inflation linked annuity for the remainder.

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Carrying value						
Present value of the defined benefit obligation	364,566	322,883	296,023	331,807	296,984	275,439
Fair value of plan assets	(17,021)	(16,466)	-	(2,303)	(4,375)	-
Past service cost not recognised	47,559	51,363	55,167	47,559	51,363	55,167
	395,104	**357,780**	**351,190**	**377,063**	**343,972**	**330,606**
Non-current liabilities	395,104	357,780	351,072	377,063	343,972	330,606
Current liabilities	-	-	118	-	-	-
	395,104	**357,780**	**351,190**	**377,063**	**343,972**	**330,606**
Reconciliation of net liability recognised in the statement of financial position						
Opening balance	357,780	351,190	331,162	343,972	330,606	313,258
Current service cost	3,563	5,091	4,781	3,526	3,951	3,743
Return on plan assets	(2,170)	-	-	(2,755)	-	-
Interest cost	26,691	26,459	23,655	26,532	24,565	22,052
Benefits paid	(223)	(46,376)	(17,664)	-	(32,507)	(17,481)
Actuarial (gains)/losses recognised in profit and loss	37,753	25,220	13,060	35,092	21,161	12,838
Employer benefit payments	(18,416)	-	-	(19,190)	-	-
Benefit payments from plan assets	19,430	-	-	19,190	-	-
Past service cost recognised	(3,804)	(3,804)	(3,804)	(3,804)	(3,804)	(3,804)
Employer pre-funding contributions	(25,500)	-	-	(25,500)	-	-
	395,104	**357,780**	**351,190**	**377,063**	**343,972**	**330,606**

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Reconciliation of present value of obligations in excess of plan assets						
Opening balance	306,417	296,023	272,191	292,609	275,439	254,287
Current service cost	3,563	5,091	4,781	3,526	3,951	3,743
Interest cost	26,691	26,459	23,655	26,532	24,565	22,052
Return on plan assets	(2,170)	-	-	(2,755)	-	-
Benefits paid	(223)	(46,376)	(17,664)	-	(32,507)	(17,481)
Actuarial (gains)/losses	37,753	25,220	13,060	35,092	21,161	12,838
Employer benefit payments	(18,416)	-	-	(19,190)	-	-
Benefit payments from plan assets	19,430	-	-	19,190	-	-
Employer pre-funding contributions	(25,500)	-	-	(25,500)	-	-
	347,545	**306,417**	**296,023**	**329,504**	**292,609**	**275,439**
Expense recognised in the statement of comprehensive income						
Current service cost	4,055	5,091	4,781	3,526	3,951	3,743
Interest cost	27,798	26,459	23,655	26,532	24,565	22,052
Benefits paid	(223)	(21,801)	(17,664)	-	(9,514)	(17,481)
Past service cost	(3,804)	(3,804)	(3,804)	(3,804)	(3,804)	(3,804)
Actuarial (gains)/losses	37,753	25,220	13,060	35,092	21,161	12,838
Return on plan assets	-	(1,582)	-	-	-	-
	65,579	**29,583**	**20,028**	**61,346**	**36,359**	**17,348**
Reconciliation of plan assets						
Opening balance	4,375	-	-	4,375	-	-
Return on plan assets	2,755	-	-	2,755	-	-
Employer benefit payments	(19,190)	-	-	(19,190)	-	-
Employer prefunding contributions	25,500	-	-	25,500	-	-
Movement in plan assets	(11,137)	-	-	(11,137)	-	-
	2,303	**-**	**-**	**2,303**	**-**	**-**

20. Retirement Benefits (continued)

Key Assumptions Used

Assumptions used on the last valuation on 31 March 2012.

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
CPI Inflation	5.50%	6.00%	5.50%	5.50%	6.00%	5.50%
Discount rates per annum	8.25%	9.25%	9.25%	8.25%	9.25%	9.25%
Expected retirement age	65	65	65	65	65	65
Expected Return on Plan Assets	7.25%	9.25%	9.25%	7.25%	9.25%	-
Membership discontinued at retirement or death-in-service	-%	-%	-%	-%	-%	-%
Withdrawal assumption	0%–16% (Males) 0%–24% (Females)	0%–16% (Males) 0%–24% (Females)	0%–16% (Males) 0%–24% (Females)	0%–16% (Males) 0%–24% (Females)	0%–16% (Males) 0%–24% (Females)	0%–16% (Males) 0%–24% (Females)
Post-retirement assumption	PA (90) ultimate rated down 2 years	PA (90) ultimate rated down 2 year	PA (90) ultimate rated down 2 year	PA (90) ultimate rated down 2 years	PA (90) ultimate rated down 2 year	PA (90) ultimate rated down 2 year

Sensitivity results on actuarial valuation for 31 March 2012:

	Central Assumption	CPI Inflation			
	5.50%	-1%	% Change	+1%	% Change
Group					
Accrued liability 31 March 2012	364,831	324,557	(14.00)%	413,569	18.00%
Current service cost and interest cost 2011/12	34,395	30,171	(15.00)%	39,567	19.00%
Accrued liability 31 March 2011	296,996	267,529	(9.90)%	331,984	11.80%
Current service cost and interest cost 2010/11	30,073	28,116	6.50%	34,009	13.10%
Accrued liability 31 March 2010	296,023	265,631	(10.30)%	332,339	12.30%
Current service cost and interest cost 2009/10	28,516	25,331	(11.20)%	32,354	13.50%
Company					
Accrued liability 31 March 2012	331,807	296,945	(10.50)%	373,641	12.60%
Current service cost and interest cost 2011/12	30,416	26,880	(11.60)%	34,704	14.10%
Accrued liability 31 March 2011	296,984	267,507	(9.90)%	331,953	11.90%
Current service cost and interest cost 2010/11	30,058	26,762	(11.00)%	34,005	13.00%
Accrued liability 31 March 2010	275,439	248,366	(9.80)%	307,587	11.70%
Current service cost and interest cost 2009/10	28,516	25,331	(11.20)%	32,354	13.50%

	Central Assumption	Discount Rate			
	8.25%	-1%	% Change	+1%	% Change
Group					
Accrued liability 31 March 2012	364,831	413,477	18.00%	325,208	(14.00)%
Accrued liability 31 March 2011	296,996	334,627	12.60%	268,077	(9.70)%
Accrued liability 31 March 2010	296,023	339,512	14.70%	266,337	(10.00)%
Company					
Accrued liability 31 March 2012	33,807	373,601	12.60%	297,481	(10.30)%
Accrued liability 31 March 2011	296,984	334,595	12.70%	268,055	(9.70)%
Accrued liability 31 March 2010	275,439	313,832	13.90%	248,976	(9.60)%

	Central Assumption	Expected retirement age			
	60/65 years	1 year younger	% Change	1 year older	% Change
Group					
Accrued liability 31 March 2012	364,831	373,658	5.00%	356,436	(4.00)%
Accrued liability 31 March 2011	297,010	303,322	2.10%	291,022	(2.00)%
Accrued liability 31 March 2010	296,023	303,975	2.70%	288,781	(2.40)%
Company					
Accrued liability 31 March 2012	331,807	338,630	2.10%	325,215	(2.00)%
Accrued liability 31 March 2011	296,984	303,295	2.10%	290,998	(2.00)%
Accrued liability 31 March 2010	275,439	281,627	2.20%	269,741	(2.10)%

	Central assumption PA (90) ult	Mortality assumption PA (90) ult.rated down 2 years with 1.0% improvement p/a from 2006	% Change
Group			
Accrued liability 31 March 2012	364,831	334,092	0.70%
Accrued liability 31 March 2011	296,996	306,419	3.20%
Accrued liability 31 March 2010	296,023	313,154	5.80%
Company			
Accrued liability 31 March 2012	331,807	334,092	0.70%
Accrued liability 31 March 2011	296,984	306,392	3.00%
Accrued liability 31 March 2010	275,439	291,126	5.70%

20. Retirement Benefits (continued)

	31 March 2008	31 March 2009	31 March 2010	31 March 2011	31 March 2012
Group					
Present value of obligations	266,780	272,191	296,023	292,635	18,042
Fair Value of plan assets	-	-	-	4,375	2,303
Experience adjustment – Plan assets	-	-	-	-	(11,137)
Experience adjustment – Obligations	12,330	(7,410)	13,060	3,677	(452)
Company					
Present value of obligations	249,974	254,287	275,287	296,984	331,807
Fair Value of plan assets	-	-	-	4,375	2,303
Experience adjustment – Plan assets	-	-	-	-	(11,137)
Experience adjustment – Obligations	10,503	(5,990)	(4,339)	-	3,973

The expected rate of return on plan assets of 7.25% per annum is based on the expected return on cash (discount rate – 1%).

An estimated R28,000 will be contributed to the retirement fund in the next financial year.

Any actuarial gains and losses are recognised immediately in profit and loss.

The plan assets consist of an annuity insurance policy with the following components:

Market value of the growth account	R774
Value of the guaranteed account	R1,519
Cash account	R10

21. Deferred Income

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Non-current liabilities	266,381	255,206	187,932	266,381	255,206	187,932
Current liabilities	27,739	83,530	34,090	27,728	83,530	34,090
	294,120	**338,736**	**222,022**	**294,109**	**338,736**	**222,022**

22. Provisions

Reconciliation of Provisions

	Opening balance R'000	Additions R'000	Utilised during the year R'000	Reversed during the year R'000	Change in discount factor R'000	Total R'000
Group – 2012						
Restructuring	-	22,868	-	-	-	22,868
Decontamination and waste disposal	119,711	25,250	-	(1,226)	(2,111)	141,624
Employee benefit accruals	68,792	42,121	(45,645)	-	-	65,268
Provision for PRMA buy-out	5,039	-	(2,250)	-	-	2,789
Provision for gratuities	-	669	-	-	-	669
After-reactor management cycle	13,389	1,020	-	-	-	14,409
	206,931	**91,928**	**(47,895)**	**(1,226)**	**(2,111)**	**247,627**
Group – 2011						
Decontamination and waste disposal	47,613	86,693	(11,872)	(2,290)	(433)	119,711
Employee benefit accruals	62,988	45,556	(39,379)	(373)	-	68,792
Provision for PRMA buy-out	-	5,039	-	-	-	5,039
Provision for insurance fund	1,281	94	-	(1,375)	-	-
After-reactor management cycle	12,463	926	-	-	-	13,389
	124,345	**138,308**	**(51,251)**	**(4,038)**	**(433)**	**206,931**
Group – 2010						
Decontamination and waste disposal	39,389	9,024	-	-	(800)	47,613
Employee benefit accruals	54,918	31,187	(23,117)	-	-	62,988
Provision for insurance fund	1,236	45	-	-	-	1,281
After-reactor management cycle	10,619	1,844	-	-	-	12,463
	106,162	**42,100**	**(23,117)**	**-**	**(800)**	**124,345**
Company – 2012						
Restructuring	-	22,868	-	-	-	22,868
Decontamination and waste disposal	73,337	22,940	-	-	-	96,277
Employee benefit accruals	43,943	23,039	(25,559)	-	-	41,423
Provision for PRMA buy-out	5,039	-	(2,250)	-	-	2,789
After-reactor management cycle	13,389	1,020	-	-	-	14,409
	135,708	**69,867**	**(27,809)**	**-**	**-**	**177,766**
Company – 2011						
Decontamination and waste disposal	40,655	34,972	-	(2,290)	-	73,337
Employee benefit accruals	42,280	24,973	(23,310)	-	-	43,943
Provision for PRMA buy-out	-	5,039	-	-	-	5,039
Provision for insurance fund	1,281	94	-	(1,375)	-	-
After-reactor management cycle	12,463	926	-	-	-	13,389
	96,679	**66,004**	**(23,310)**	**(3,665)**	**-**	**135,708**
Company – 2010						
Decontamination and waste disposal	32,275	8,380	-	-	-	40,655
Employee benefit accruals	38,340	25,312	(21,372)	-	-	42,280
Provision for insurance fund	1,236	45	-	-	-	1,281
After-reactor management cycle	10,619	1,844	-	-	-	12,463
	82,470	**35,581**	**(21,372)**	**-**	**-**	**96,679**

22. Provisions (continued)

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Non-current liabilities	159,491	136,074	61,357	113,475	89,700	54,399
Current liabilities	88,136	70,857	62,988	64,291	46,008	42,280
	247,627	**206,931**	**124,345**	**177,766**	**135,708**	**96,679**

Provision for restructuring:

Necsa, is pursuing a review and realignment of the current structure in or to fulfil its mandate within the budget as allocated by Government. In this regard, various aspects of the business are under review to ensure cost reduction, rationalisation of the organisation and operational efficiency. As part of this, Necsa has also introduced the voluntary severance process which has been concluded. Provision is therefore made for the payment of voluntary severance packages in 2013 financial year.

Provision for decontamination and waste disposal:

Provision is made for the decontamination of commercial plants and disposal of the resulting waste. The annual transfer is based on the latest available cost information. The Company was awarded a license from the National Nuclear Regulator to transport the waste to Vaalputs on 15 March 2011 The assessment methodology provides an estimate of the total cost associated with the decommissioning of commercial plants currently existing at Necsa to the point where they can be reused or released from regulatory control, and the total cost to manage (treat, condition, store and/or dispose) all the existing and future waste created by these activities. In order to estimate the cost and scheduling of the various decommissioning and waste management activities the following assumptions were made:

i) In view of the fact that the Necsa site will remain a licensed site for the foreseeable future, the decommissioning of facilities to the point of release from regulatory control is not necessarily regarded as the required endpoint, as that may depend on the potential future re use of the nuclear facility.

ii) Only liabilities associated with existing facilities identified during the assessment cycle, and future facilities identified as essential for the discharge of these liabilities are included in the assessment.

iii) The following costs are included in the assessment:

The cost to decommission all facilities to the point where they can be released from regulatory control (the cost excludes future demolishing cost of buildings). Rehabilitation of the site was not included in the assessment, except in cases where this was considered to be the most viable option to achieve release from regulatory control.

A potential benefit (cost decrease) may be achieved as a result of technological progress in the fields of decommissioning and waste management. There are, however, many uncertainties that may impact the accuracy of cost estimates for discharging nuclear liabilities, mainly due to the long time periods over which the cost estimates must be done. Some of these uncertainties are listed below:

- Non-technical aspects, such as socio-political factors and changes in laws or regulations in nuclear safety and waste management, are difficult to quantify in terms of impact on cost estimates;
- Decommissioning cost for many projects occur some years in the future. The life time of some processes may also be extended resulting in the postponement of decommissioning activities and cost;
- Future developments in the nuclear industry (up scaling or down scaling) may result in the reuse of contaminated or previously decommissioned facilities; and
- Uncertainties in the future cost of waste management once the National Radioactive Waste Disposal Institute has been established.

Accrual for employee benefits:

The cost of leave days due to employees as well as thirteenth cheques payable has been accrued for. The accrual will be realised during the following year.

Provision for insurance fund:

Provision was made to cover potential self-insured losses not covered externally. The annual provision was based on the excess investment income over claims experienced. The provision has been fully utilised in the 2011 financial year.

Provision for after-reactor management cycle:

Provision is made over a thirty year period for the management of the Vaalputs disposal site after its final closure. The annual transfer is based on the latest available cost information. It is expected that the economic benefits will flow in ten years, at the end of the thirty year period.

Provision for PRMA buy-out:

Provision is made for a buy-out of the post-retirement medical aid liability of employees under the age of 46. The original liability of qualifying employees who excepted the offer amounted to R8,583. This amount will be paid in three equal annual instalments of which the first instalment was paid on 31 March 2011.

It is envisaged that, based on the current information available, any additional liability in excess of the amounts provided will not have a material adverse effect on the Group's financial position, liquidity or cash flow.

The effect of time value of money has been omitted when calculating provisions as it is immaterial.

23. Loans to/(from) Minority Shareholders

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Transglobal Logistics (Pty) Ltd	-	-	(490)	-	-	-
P Rainier-Pope	(356)	(291)	(278)	-	-	-
Fluoro Corp (Pty) Ltd	-	-	(36)	-	-	-
B Owen	(3)	(2)	(597)	-	-	-
R Davies	(469)	(556)	(299)	-	-	-
M Gonzalez	(33)	(33)	-	-	-	-
	(861)	**(882)**	**(1,700)**	**-**	**-**	**-**

These loans are unsecured, have no fixed repayment terms.

The maximum exposure to credit risk at the reporting date is the fair value of each class of loan mentioned above. The Group does not hold any collateral as security.

24. Trade and Other Payables

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Trade payables	96,661	77,410	81,008	49,610	19,375	18,011
Amounts received in advance	6,792	5,486	6,204	1,408	22,448	1,408
VAT	10,906	1,438	632	10,894	1,390	-
Deferred grants	58,976	2,892	75,613	54,794	-	72,440
Accrued expenses	61,242	10,784	20,067	-	959	-
Accrued audit fees	346	-	-	-	-	-
Other accrued expenses	960	-	-	-	-	-
Other payables	69,697	71,065	34,558	40,563	50,787	32,772
	305,580	**169,075**	**218,082**	**157,269**	**94,959**	**124,631**
Fair value of trade and other payables						
Trade payables	305,581	169,076	218,082	157,268	94,959	124,630

Trade creditors have been reviewed on an individual basis and where extended payment terms were applicable the effect of the time value of money have been taken into account. This was done to determine the finance portion included. The carrying value of Trade and other payables is increased by an interest income of (R0) (2011: R6,685; 2010: R3,379) to discount the carrying value to amortised cost for the Company and an interest charge of R1,962 (2011: R4,099; 2010: R612) for the Group.

The average credit period on purchases is 30 days from date of statement. The Company and Group settle payments to creditors on average 30 days from receipt of the statements. Interest is sometimes charged on trade payables based on the payment policy of the Group. The Company and Group have financial risk management policies in place to ensure that all payables are paid within the credit time frame.

25. Financial Assets by Category

The accounting policies for financial instruments have been applied to the line items below:

	Loans and receivables R'000	Fair value through profit or loss – held-for-trading R'000	Held-to-maturity investments R'000	Available-for-sale R'000	Total R'000
Group – 2012					
Loans to group companies	1,026	-	-	-	1,026
Other financial assets	-	-	-	105,292	105,292
Trade and other receivables	248,555	-	-	-	248,555
Cash and cash equivalents	-	462,554	-	-	462,554
	249,581	**462,554**	**-**	**105,292**	**817,427**
Group – 2011					
Loans to group companies	998	-	-	-	998
Other financial assets	-	-	-	69,057	69,057
Trade and other receivables	263,791	-	-	-	263,791
Cash and cash equivalents	-	482,732	-	-	482,732
	264,789	**482,732**	**-**	**69,057**	**816,578**
Group – 2010					
Loans to minority shareholders	1,700	-	-	-	1,700
Other financial assets	-	-	-	62,136	62,136
Trade and other receivables	236,484	-	-	-	236,484
Cash and cash equivalents	-	326,372	-	-	326,372
	238,184	**326,372**	**-**	**62,136**	**626,692**
Company – 2012					
Loans to group companies	13,011	-	-	-	13,011
Other financial assets	-	-	-	105,276	105,276
Trade and other receivables	92,651	-	-	-	92,651
Cash and cash equivalents	-	76,422	-	-	76,422
Investments in subsidiaries	-	-	319,519	-	319,519
Investments in associates	-	-	2	-	2
	105,662	**76,422**	**319,521**	**105,276**	**606,881**
Company – 2011					
Loans to group companies	24,286	-	-	-	24,286
Other financial assets	-	-	-	69,044	69,044
Trade and other receivables	123,645	-	-	-	123,645
Cash and cash equivalents	-	109,896	-	-	109,896
	147,931	**109,896**	**-**	**69,044**	**326,871**
Company – 2010					
Loans to group companies	23,210	-	-	-	23,210
Other financial assets	-	-	-	62,124	62,124
Trade and other receivables	59,979	-	-	-	59,979
Cash and cash equivalents	-	103,406	-	-	103,406
	83,189	**103,406**	**-**	**62,124**	**248,719**

26. Financial Liabilities by Category

The accounting policies for financial instruments have been applied to the line items below:

	Financial liabilities at amortised cost R'000	Total R'000
Group – 2012		
Loans from group companies	2,728	2,728
Loans from minority shareholders	861	861
Other financial liabilities	10,928	10,928
Trade and other payables	166,359	166,359
Bank overdraft	12,170	12,170
	193,046	**193,046**
Group – 2011		
Loans from group companies	2,530	2,530
Loans from minority shareholders	882	882
Other financial liabilities	2,166	2,166
Trade and other payables	169,087	169,087
Bank overdraft	12,110	12,110
Finance lease obligation	2,525	2,525
	189,300	**189,300**
Group – 2010		
Finance lease obligation	2,471	2,471
Loans from group companies	2,352	2,352
Loans from minority shareholders	1,700	1,700
Other financial liabilities	5,703	5,703
Trade and other payables	218,082	218,082
Bank overdraft	668	668
	230,976	**230,976**
Company – 2012		
Trade and other payables	90,172	90,172
Company – 2011		
Trade and other payables	94,974	94,974
Company – 2010		
Trade and other payables	124,630	124,630

27. Revaluation Reserve

The revaluation reserve consists of a fair value adjustment to the non-interest bearing loan from Limited Electronics South Africa (Pty) Ltd and fair value adjustments to the land and buildings of the Company and Group.

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Fair value adjustment on loan	-	1,888	1,882	-	-	-
Fair value adjustment to land and buildings	321,271	332,224	321,595	292,348	332,700	332,606
Prior period error	-	-	-	-	(29,140)	(29,140)
	321,271	**334,112**	**323,477**	**292,348**	**303,560**	**303,466**

28. Fair Value Adjustment Assets Available-for-Sale Reserve

The fair value adjustment assets available-for-sale-reserve comprises all fair value adjustments on available-for-sale financial instruments. When an asset or liability is derecognised, the fair value adjustment relating to that asset or liability is transferred to profit or loss.

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Available-for-sale financial instruments	2,692	1,170	113	2,686	1,166	111

29. Revenue

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Sale of goods	1,113,118	1,107,135	1,049,014	344,782	312,199	247,559
Government grants	505,138	476,780	446,485	505,138	476,780	446,485
Other grants	25,114	28,120	25,442	4,833	17,753	16,079
	1,643,370	**1,612,035**	**1,520,941**	**854,753**	**806,732**	**710,123**
The amount included in revenue arising from government grants is as follows:						
Operating activities	436,144	401,428	362,766	436,144	401,428	362,766
Decommissioning of strategic plants	60,550	67,069	67,049	60,550	67,069	67,049
LEU fuel and conversion	87	36	7,202	87	36	7,202
Security	8,357	8,247	9,468	8,357	8,247	9,468
	505,138	**476,780**	**446,485**	**505,138**	**476,780**	**446,485**
Other grant income	25,114	28,120	25,442	4,833	17,753	16,079

29. Revenue (continued)

Operating profit for the year is stated after accounting for the following:

The government grant relating to operating activities is primarily utilised to fund research and development expenses, non-commercial overheads, supplementary activities as required by the Nuclear Energy Act, No. 46 of 1999, costs for discarding radioactive waste and for storage of irradiated nuclear fuel.

The South African Government has an obligation to discharge nuclear liabilities resulting from previous strategic nuclear programmes which includes decommissioning and decontamination of disused historic facilities. The Minister of the Department of Energy is charged with this responsibility on behalf of government. A Nuclear Liabilities Management Plan (NLMP) was approved by parliament in February 2007. The plan indicates an amount of R1,827,000 to be applied over a period up to 2035.

Necsa, as a statutory body created in terms of the Nuclear Energy Act has been delegated with certain responsibilities in this regard. It annually receives funds to apply to the decommissioning and decontamination process in terms of the NLMP. Funds received by Necsa for this purpose and not utilised at year end are accounted for as deferred grants.

30. Cost of Sales

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Sale of goods						
Cost of services and goods sold	647,517	705,740	642,086	191,482	196,646	202,439

31. Operating Profit/(Loss)

Operating profit/(loss) for the year is stated after accounting for the following:

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Income from subsidiaries						
Dividends	-	-	-	37,482	28,586	37,950
Interest	-	-	-	1,444	1,614	2,356
	-	**-**	**-**	**38,926**	**30,200**	**40,306**
Operating lease charges						
Premises						
- Contractual amounts	2,164	2,666	1,684	26	702	53
Motor vehicles						
- Contractual amounts	-	6,311	-	-	6,311	-
Equipment						
- Contractual amounts	5	5,110	3,868	5,193	4,915	3,859
Lease rentals on operating lease						
- Contractual amounts	515	942	254	-	-	-
	2,684	**15,029**	**5,806**	**5,219**	**11,928**	**3,912**

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Profit/(loss) on sale of property, plant and equipment	3,139	(339)	(167)	(53)	(18)	(271)
Loss on sale of other financial assets	-	(658)	(969)	-	(742)	(969)
Reversal of impairment on property, plant and equipment	-	-	(103)	-	-	-
Impairment on subsidiary	-	-	-	-	-	17,141
Impairment on other financial assets	349	-	-	-	-	-
Impairment on trade and other receivables	(265)	-	5	-	-	-
Impairment on loans to Directors, managers and employees	-	336	-	-	-	-
(Loss)/profit on exchange differences	(8,727)	11,577	3,080	(3,466)	(365)	2,145
Amortisation on intangible assets	24	-	-	-	-	-
Depreciation on property, plant and equipment	79,533	75,760	-	49,498	46,144	-
Employee costs	646,207	587,035	525,170	562,091	504,112	463,910
(Loss)/profit on available-for-sale financial asset	-	(2,934)	-	-	-	-
Consulting and professional fees	20,397	14,730	15,428	19,863	14,040	15,070

32. Investment Revenue

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Dividend revenue						
Subsidiaries – local	-	-	-	37,482	28,524	37,950
Listed financial assets – local	1	64	48	-	62	47
Unit trusts – local	77	-	-	-	-	-
	78	**64**	**48**	**37,482**	**28,586**	**37,997**
Interest revenue						
Subsidiaries	-	-	-	1,444	1,614	2,356
Other financial asset	75	-	1,910	75	-	1,910
Bank	35,109	39,273	32,504	15,620	19,138	19,264
Interest charged on trade and other receivables	277	17	112	-	-	44
Fair value adjustments	9,246	13,059	20,249	(623)	5,238	3,299
Interest received from SARS	-	67	-	-	-	-
	44,707	**52,416**	**54,775**	**16,516**	**25,990**	**26,873**
	44,785	**52,480**	**54,823**	**53,998**	**54,576**	**64,870**

33. Fair Value Adjustments

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Investment property (Fair value model)	(3,464)	5,486	13,301	(5,976)	14,051	13,771

34. Finance Costs

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Shareholders	22	39	117	-	-	-
Non-current borrowings	56	300	421	-	-	-
Trade and other payables	25	16	1,561	24	16	1
Finance leases	1,192	985	877	986	885	859
Bank	1,504	831	400	-	-	-
Amortisation of held-to-maturity liabilities	709	704	839	-	-	-
Late payment of tax	-	-	47	-	-	-
Fair value adjustments	8,820	12,827	17,409	(1,428)	4,972	2,575
	12,328	**15,702**	**21,671**	**(418)**	**5,873**	**3,435**

35. Taxation

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Major Components of the Tax Expense						
Current						
Local income tax - current period	57,548	77,142	52,210	-	-	(23,983)
Local income tax - recognised in current tax for prior periods	-	(1,462)	-	-	(1,296)	-
STC	3,748	-	224	-	-	-
Deferred tax current	(6,169)	(6,760)	-	-	-	-
	55,127	**68,920**	**52,434**	**-**	**(1,296)**	**(23,983)**
Deferred						
Originating and reversing temporary differences	-	-	(6,040)	-	-	-
	55,127	**68,920**	**46,394**	**-**	**(1,296)**	**(23,983)**
Reconciliation of the Tax Expense						
Reconciliation between accounting profit and tax expense.						
Accounting profit/(loss)	127,941	198,379	213,200	(46,430)	(9,752)	(26,157)
Tax at the applicable tax rate of 28% (2011: 28%)	35,823	55,546	58,832	(13,000)	(2,731)	(7,324)
Tax effect of adjustments on taxable income						
Permanent and temporary differences due to non-taxable income and non-deductible expenses	2,722	12,105	(3,939)	-	-	-
Tax losses carried forward	(2,081)	-	-	-	-	-
Permanent difference due to tax status	13,000	2,731	(8,499)	13,000	2,731	(16,659)
CGT	303	-	-	-	-	-
STC	3,748	-	-	-	-	-
Prior year	1,612	(1,462)	-	-	(1,296)	-
	55,127	**68,920**	**46,394**	**-**	**(1,296)**	**(23,983)**

STC is payable at a rate of 10% on the distribution of profits. STC is calculated based on the "net amount" as defined in the income tax act. The "net amount" represents the amount of dividends declared during a dividend cycle less certain dividend income that accrued to the entity during the applicable dividend cycle. No amount has been provided for STC as no dividends have been paid.

The South African Revenue Services has approved an exemption in respect of The South African Nuclear Energy Corporation SOC Limited under section 10(1)(cA)(i) of the Income Tax Act subject to certain conditions. No provision is therefore made for tax for the Necsa Company.

36. Auditors' Remuneration

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Fees	5,767	4,531	3,802	2,954	2,400	2,110
Adjustment for previous period	378	1,332	-	-	357	-
Consulting	-	-	(15)	-	-	(15)
	6,145	**5,863**	**3,787**	**2,954**	**2,757**	**2,095**

37. Other Comprehensive Income

	Gross R'000	Tax R'000	Net R'000
Components of Other Comprehensive Income – Group – 2012			
Exchange differences on translating foreign operations			
Other movement	(1,201)	-	(1,201)
Available-for-sale financial assets adjustments			
Reclassification adjustments for available-for-sale financial assets	1,522	-	1,522
Movements on revaluation			
Gains/(losses) on property revaluation	(1,629)	-	(1,629)
Actuarial gains/(losses) on defined benefit plans	(32,840)	-	(32,840)
Total	**(34,148)**	**-**	**(34,148)**
Components of Other Comprehensive Income – Group – 2011			
Exchange differences on translating foreign operations			
Exchange differences arising during the year	73	-	73
Available-for-sale financial assets adjustments			
Gains and losses arising during the year	1,057	-	1,057
Movements on revaluation			
Gains/(losses) on property revaluation	20,237	-	20,237
Total	21,367	-	21,367

37. Other Comprehensive Income (continued)

	Gross R'000	Tax R'000	Net R'000
Components of Other Comprehensive Income – Group – 2010			
Exchange differences on translating foreign operations			
Exchange differences arising during the year	475	-	475
Available-for-sale financial assets adjustments			
Gains and losses arising during the year	2,967	-	2,967
Movements on revaluation			
Gains/(losses) on property revaluation	321,595	-	321,595
Total	**325,037**	**-**	**325,037**
Components of Other Comprehensive Income – Company – 2012			
Available-for-sale financial assets adjustments			
Gains and losses arising during the year	1,520	-	1,520
Actuarial gains/(losses) on defined benefit plans	(30,179)	-	(30,179)
Total	**(28,659)**	**-**	**(28,659)**
Components of Other Comprehensive Income – Company – 2011			
Available-for-sale financial assets adjustments			
Gains and losses arising during the year	1,055	-	1,055
Movements on revaluation			
Gains/(losses) on property revaluation	10,129	-	10,129
Total	**11,184**	**-**	**11,184**
Components of Other Comprehensive Income – Company – 2010			
Available-for-sale financial assets adjustments			
Reclassification adjustments for available-for-sale financial assets	2,963	-	2,963
Movements on revaluation			
Gains/(losses) on property revaluation	303,466	-	303,466
Total	**306,429**	**-**	**306,429**

38. Cash Generated from Operations

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Profit/(loss) before taxation	127,941	198,360	213,200	(46,430)	(9,771)	(26,329)
Adjustments for:						
Depreciation and amortisation	79,533	74,175	49,755	49,496	46,146	35,815
Profit/(loss) on sale of assets	(3,139)	339	1,136	53	18	1,240
Income from equity accounted investments	(258)	145	1,049	-	-	-
Dividends received	-	(64)	(48)	(37,482)	(28,586)	(37,997)
Interest received	(35,539)	(39,359)	(34,526)	(16,516)	(20,752)	(23,574)
Finance costs	3,508	2,645	3,566	(418)	635	860
Fair value adjustments	2,580	(5,486)	(13,300)	5,976	(14,051)	(13,771)
Impairment loss	-	1,194	697	-	-	17,141
Utilisation of component spares	78	-	-	-	-	-
Movements in retirement benefit assets and liabilities	-	29,583	20,027	2,912	36,359	17,348
Movements in provisions	88,590	133,837	18,183	42,058	62,339	14,209
Forward exchange contract (FEC) liabilities	-	-	-	-	1,717	-
Profit on available-for-sale financial asset	-	(2,934)	-	-	-	-
Change in discount factor	(7,316)	440	-	-	-	-
Impairment of inventory	-	(392)	-	-	(404)	(203)
Unrealised profit on valuation of open FEC liabilities	-	11,577	8,128	-	-	356
Movement in bad debt provision	(50)	(944)	5,213	-	(724)	2,675
Adjustment of fair value of available-for-sale financial assets	-	-	-	-	(2,934)	-
Bad debts written off	239	3,655	-	-	1,754	-
Straight lining of leases	-	87	1,180	-	87	1,180
Reversal of impairment recognised in property, plant and equipment	(783)	-	-	-	-	-
Amortisation	24	-	-	-	-	-
Deemed interest	-	-	195	-	-	-
Movement in foreign currency translation reserve	-	-	589	-	-	-
Impairment of inventory	203	-	1,519	-	-	-
Actuarial (gains)/losses	30,207	-	-	-	-	-
Fair value adjustments to trade payables	8,820	13,358	3,069	-	530	341
Fair value adjustments to trade receivables	(9,246)	(13,060)	(2,184)	(94)	(1,428)	(1,246)
Changes in working capital:						
Inventories	(54,452)	(67,196)	20,325	9,681	(23,408)	10,012
Trade and other receivables	(42,750)	(17,045)	(44,133)	21,130	(63,358)	17,160
Trade and other payables	126,356	(73,942)	(16,449)	62,310	(31,905)	(20,181)
Deferred income	(44,616	116,714	42,746	(44,627)	116,714	42,745
Provision	(47,894)	(51,249)	-	-	(23,310)	-
Finance leases	(3,418)	(1,916)	(1,075)	-	993	2,180
Finance lease receivable	1,272	-	-	-	-	-
	219,890	**312,522**	**278,862**	**48,049**	**46,661**	**39,961**

39. Tax Paid

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Balance at beginning of the year	3,430	3,891	(20,897)	-	-	(23,983)
Current tax for the year recognised in profit or loss	(61,296)	(68,919)	(52,434)	-	1,296	23,983
Adjustment in respect of businesses sold and acquired during the year including exchange rate movements	-	-	(2,040)	-	-	-
Movement in deferred tax	-	(6,760)	-	-	-	-
Balance at end of the year	(310)	(3,430)	(3,891)	-	-	-
	(58,176)	**(75,218)**	**(79,262)**	**-**	**1,296**	**-**

40. Commitments

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Authorised Capital Expenditure						
Already contracted for but not provided for						
- Property, plant and equipment	131,739	81,545	16,782	115,586	43,169	5,311
This committed expenditure relates to plant and equipment and will be financed through ordinary trading operations.						
Operating Leases – As Lessee (Expense)						
Minimum lease payments due						
- within one year	3,934	4,319	-	1,562	2,792	-
- in second to fifth year inclusive	4,897	7,050	-	1,240	2,706	-
	8,831	**11,369**	**-**	**2,802**	**5,498**	**-**

Operating lease payments represent rentals payable by the Group for certain of its motor vehicles and office equipment. Leases are negotiated for an average term of 3.5 years.

41. Contingencies

By their nature, contingencies will only be resolved when one or more future events occur or fail to occur. The assessment of such contingencies inherently involves the exercise of significant judgement and estimates of the outcome of future events.

Litigation and other judicial proceedings as a rule raise difficult and complex legal issues and are subject to uncertainties and complexities including, but not limited to, the facts and circumstances of each particular case, issues regarding the jurisdiction in which each suit is brought and differences in applicable law. Upon resolution of any pending legal matter, the Company may be forced to incur charges in excess of the presently established provisions and related insurance coverage. It is possible that the financial position, results of operations or cash flows of the Company could be materially affected by the unfavourable outcome of litigation.

Guarantees:

Guarantees of R390 (2011: R410) were issued to financial institutions as collateral security for housing loans granted by financial institutions to employees. Performance guarantees of R2,210 (2011: R1,850) were issued to Absa Bank for a customer.

Legal claims:

A possible legal obligation exists for the Group totalling R56 (2011: R254). These cases are currently being investigated by the Necsa Legal division.

Suretyship:

A limited deed of suretyship for an amount of up to R20,000 has been given to Pelchem SOC Limited for a Nedbank facility. R14,000 relates to an overnight facility and R6,000 to an asset-based finance facility.

Nuclear and related liabilities:

The nuclear and related liabilities arising from operational nuclear activities on the Necsa site at Pelindaba and the management of all nuclear waste as well as waste generated during the decommissioning of the operating nuclear facilities, are currently being re-assessed and will be finalised in the 2012/13 financial year. Accountability will also be established.

A letter of support to Limited Electronics South Africa (Pty) Ltd was approved by the Board of Directors of Pelchem SOC Limited, for the financial year of Limited Electronics South Africa (Pty) Ltd ended 31 December 2011.

42. Related Parties

Relationships

Holding entity	Department of Energy
Subsidiaries	Refer to Note 7
Associates	Refer to Note 8
National government	All national government departments are regarded to be related parties in accordance with circular 4 of 2005: Guidance on the term "State controlled entities" in the context of IAS 24 – Related Parties, issued by the South African Institute of Chartered Accountants. No transactions are implicated simply by the nature of existence of the relationship between entities.
Directors and members of key management	All Directors have given general declarations of interest in terms of section 234 (3a) of the Companies Act. These declarations indicate that former CEO Dr RM Adam held a directorship in Pebble Bed Modular Reactor (Pty) Ltd, which is classified as a related party to the Group. Details of Directors and key management remuneration paid are disclosed in Note 43

National Spheres of Government

Necsa is a Schedule 2 Major Public Entity in terms of the Public Finance Management Act, No. 1 of 1999 as amended by Act No. 29 of 1999, and therefore falls within the national spheres of government. As a consequence, Necsa has a significant number of related parties being entities that fall within the three different national spheres of government. Amounts due from/(to) these entities are subject to the same terms of conditions as normal trade receivables and trade payables.

In addition, Necsa has a related party relationship with its subsidiaries (Note 7) and associates (Note 8). Unless specifically disclosed, these transactions are concluded at arm's length and the Group is able to transact with any entity.

42. Related Parties (continued)

The following is a summary of transactions with related parties during the year and balances due at year end:

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
National public business enterprises						
Services rendered	-	-	672	-	-	672
Major public entities						
Services rendered	59,849	22,954	10,334	24,817	22,394	10,334
Services received	(24,817)	(46,878)	(43,301)	(57,711)	(46,617)	(43,301)
Trade amount due (to)/from	425	12,467	1,898	321	11,828	1,898
National public entities						
Services rendered	5,598	1,056	249	5,598	1,027	249
Services received	(26,094)	(52,613)	(22,176)	(26,094)	(20,570)	(22,176)
Trade amount due (to)/from	919	135	18	351	146	18
National government business enterprises						
Services rendered	6,967	160	104	435	160	104
Services received	(435)	(6,195)	(7,496)	(6,903)	(6,195)	(7,496)
Trade amount due (to)/from	(15)	9	(496)	(13)	9	(496)
National Government Departments						
Services rendered	583,708	518,378	578,008	533,272	518,378	599,708
Services received	(233,882)	(189,920)	(168,483)	(188,056)	(189,920)	(146,820)
Trade amount due (to)/from	1,162	1,285	2,623	1,162	1,285	2,623
Subsidiaries						
Services rendered	-	-	-	339,097	222,451	227,771
Services received	-	-	-	(5,297)	(524)	(1,288)
Loans to/from subsidiaries	-	-	-	13,011	24,284	23,210
Trade amount due (to)/from	-	-	-	57,998	57,934	31,951
Associates						
Services rendered	51,700	47,362	55,192	-	-	129
Services received	(14,144)	(1,484)	-	-	-	-
Loans to/from associates	(1,633)	(2,351)	(2,352)	-	-	-
Trade amount due (to)/from	(134)	20,294	-	-	-	-
Minority shareholders						
Services rendered	-	50	1,523	-	-	-
Services received	-	(1,013)	-	-	-	-
Loans to/(from) shareholders	(941)	(1,509)	(1,700)	-	-	-
Trade amount due (to)/from	-	(203)	-	-	-	-
Other						
Minority shareholders: Interest paid	-	(1)	-	-	-	-
Directors of Gammatec Group: Interest paid	-	(103)	-	-	-	-
Pebble Bed Modular Reactor (Pty) Ltd	-	(56)	-	-	(56)	-
Nuclear Industry Association of South Africa	-	202	-	-	202	-
Compensation to Directors and other key management						
Short-term employee benefits	25,835	34,382	27,513	-	-	-

43. Directors' Emoluments

The following tables set out the Directors' emoluments and emoluments paid to general managers of Necsa Company.

Non-Executive	Directors fees R'000	Total R'000
2012		
Dipico M	44	44
Greyvenstein G	8	8
Shaik-Peremanov N	83	83
Tshelane P	62	62
Benghu NM	37	37
Majozi T	51	51
Noxaka LN	85	85
	370	**370**
2011		
Dipico M	34	34
Greyvenstein G	3	3
Shaik-Peremanov N	56	56
Tshelane P	57	57
Benghu NM	51	51
Majozi T	34	34
Noxaka LN	81	81
	316	**316**

Executive	Taxable allowance R'000	Pension paid or receivable R'000	Retirement fund contribution R'000	Medical contributions R'000	Other company contributions R'000	Salary R'000	Other compensation R'000	Total R'000
2012								
Adam RM	247	-	276	-	24	1,427	-	1,974
2011								
Adam RM	-	-	313	-	23	1,902	-	2,238

43. Directors' Emoluments (continued)

Group Executives	Taxable allowance R'000	Retirement fund contribution R'000	Medical contributions R'000	Other company contributions R'000	Salary R'000	Acting allowance R'000	Bonus R'000	Total R'000
2012								
Dayaram N	275	236	-	19	1,220	-	-	1,750
De Villiers W van Z	-	260	-	17	1,292	-	-	1,569
Janneker CC	375	211	-	18	1,090	-	-	1,694
Jarvis N	-	-	-	-	-	120	-	120
Robertson DG	-	-	-	-	65	-	-	65
Shayi LJ	21	286	-	18	1,446	-	-	1,771
Moagi DM	387	218	-	19	1,128	-	-	1,752
Van der Bijl	236	248	-	19	1,285	-	-	1,788
Masango R	375	211	-	18	1,089	-	-	1,693
Vilakazi Z	-	-	-	-	1,085	-	-	1,085
	1,669	**1,670**	**-**	**128**	**9,700**	**120**	**-**	**13,287**
2011								
Dayaram N	317	218	-	17	1,077	-	-	1,629
De Villiers W van Z	32	246	-	16	1,188	-	-	1,482
Janneker CC	342	167	-	16	835	-	61	1,421
Terblanche APS	421	117	-	12	575	-	-	1,125
Shayi LJ	133	258	-	17	1,267	-	-	1,675
Moagi DM	425	206	-	18	1,009	-	-	1,658
Van der Bijl AC	267	238	-	18	1,164	-	-	1,687
Masango R	342	167	-	14	820	-	-	1,343
	2,279	**1,617**	**-**	**128**	**7,935**	**-**	**61**	**12,020**

The performance bonus to CC Janneker in 2011 was paid as a result of the prior financial year's performance. Group Executives did not participate in 2009/10 performance bonuses. CC Janneker was appointed as Group Executive: Marketing and Communication on 1 April 2011.

The following Necsa Directors have not received any emoluments during the 2011 and 2012 financial years; AS Minty, JB Keshaw, LF Aphane, LM Gumbi, VZ Msimang and XM Mabhongo.

Details of Service Contracts

No Director has a notice period in excess of one year and no Director's contract makes provision for predetermined compensation on termination exceeding one year's salary and benefits in kind. No Directors are proposed for election or re-election at the forthcoming annual general meeting. All the Directors have a service contract.

44. Prior Period Errors

Lease agreements relating to vehicles and electronic office equipment were incorrectly classified as Operating Leases instead of Finance Leases.

The correction of the prior period error resulted in a R4,606 adjustment to increase the opening balance of property, plant and equipment, a R4,923 adjustment to increase the opening balance of finance lease liabilities and a R317 adjustment to decrease the opening balance of the retained earnings.

An investment property was incorrectly classified as owner occupied at 31 March 2010. The error have been corrected retrospectively and resulted in adjustments indicated below. The above adjustment does not affect the Group due to the fact that the building is owner occupied on Group level.

The errors have been corrected retrospectively and resulted in adjustments as follows:

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Consolidated Statement of Financial Position						
Property, plant and equipment	-	977	6,616	-	977	6,616
Finance lease liability	-	(1,006)	(7,105)	-	(1,006)	(7,105)
Opening retained earnings	-	489	317	-	489	317
Statement of comprehensive income						
Finance cost	-	885	859	-	885	859
Operating rental	-	(4,349)	(3,007)	-	(4,349)	(3,007)
Depreciation	-	3,494	2,320	-	3,494	2,320

45. Risk Management

Capital Risk Management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

There are no externally imposed capital requirements.

There have been no changes to what the entity manages as capital, the strategy for capital maintenance or externally imposed capital requirements from the previous year.

Financial Risk Management

The Group's principal financial liabilities comprise loans and borrowings and trade and other payables. The main purpose of these financial liabilities is to finance the Group's operations. The Group has loan and other receivables, trade and other receivables, cash and short term deposits that arrive directly from its operations. The Group also holds available-for-sale investments.

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and price risk), credit risk and liquidity risk.

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices comprise four types of risk: interest rate risk, currency risk, commodity price risk and other price risk, such as equity price risk. Financial instruments affected by market risk include loans and borrowings, deposits, available-for-sale investments and derivative financial instruments.

The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. Risk management is carried out by a central department under policies approved by the Board of Directors. This department identifies and evaluates financial risks in close co-operation with the Group's operating units. The Board of Directors provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk and investment of excess liquidity.

45. Risk Management (continued)

Liquidity Risk

Liquidity risk is the risk that the Group will not have sufficient financial resources to meet its obligations when they fall due, or will have to do so at excessive cost. The risk can arise from mismatches in the timing of cash flows from revenue and capital and operational outflows.

Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities.

The Group's risk to liquidity is a result of the funds available to cover future commitments. The Group manages liquidity risk through an ongoing review of future commitments and available credit facilities.

The objective of the Group's liquidity and funding management is to ensure that all foreseeable operational, capital expansion and loan commitment expenditure can be met under both normal and stressed conditions. The Group has adopted an overall statement of financial position approach, which consolidates all sources and uses of liquidity, while aiming to maintain a balance between liquidity, profitability and interest rate considerations.

The Group's liquidity and funding management process includes:

- Strict control on recovering of outstanding debtors;
- Monthly cash flow forecasts; and
- Investment of excess funds in low risk, available on request investments.

Cash flow forecasts are prepared and adequate utilised borrowing facilities are monitored.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the consolidated statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

The outstanding balance has been allocated into different categories as per the prior year to provide more comprehensive information.

	Less than 1 month R'000	Between 1 and 3 months R'000	Between 3 months and 1 year R'000	Between 1 and 5 years R'000
Group				
At 31 March 2012				
Borrowings	240	3,207	2,156	8,110
Trade and other payables	94,560	138,092	43,977	23,977
At 31 March 2011				
Borrowings	146	291	1,311	5,046
Trade and other payables	31,047	134,566	26,728	812
Company				
At 31 March 2012				
Trade and other payables	30,368	61,543	37,859	23,977
At 31 March 2011				
Trade and other payables	8,304	60,298	25,563	812

The table below analyses the Group's derivative financial instruments which will be settled on a gross basis into relevant maturity groupings based on the remaining period at the consolidated statement of financial position to the contractual maturity date. The amount disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

	Less than 1 month R'000	Between 1 and 3 months R'000	Between 3 months and 1 year R'000
Group			
At 31 March 2012			
Forward foreign exchange contracts			
- Outflow	(12,263)	(22,349)	(36,592)
- Inflow	69,486	70,833	69,268
- Net	57,223	48,484	32,676
At 31 March 2011			
Forward foreign exchange contracts			
- Outflow	(9,706)	(14,746)	(18,549)
- Inflow	52,365	88,166	63,330
- Net	42,658	73,420	44,781
Company			
At 31 March 2012			
Forward foreign exchange contracts			
- Outflow	-	(20,332)	(31,562)
- Inflow	4,463	20,554	64,537
- Net	4,463	222	32,975
At 31 March 2011			
Forward foreign exchange contracts			
- Outflow	(2,372)	(8,793)	(14,439)
- Inflow	8,740	33,528	62,050
- Net	6,368	24,735	47,611

Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates.

As the Group has no significant interest-bearing assets, the Group's income and operating cash flows are substantially independent of changes in market interest rates.

The Group's interest rate risk arises from long-term borrowings and commitments. Borrowings issued at fixed rates expose the Group to fair value interest rate risk. During 2012 and 2011, the Group's borrowings at variable rate were denominated in Rand.

Interest Rate Sensitivity

At 31 March 2012, if interest rates on Rand-denominated borrowings and commitments had been 1% higher/lower with all other variables held constant, post-tax profit for the year would have been R3,357 (2011: R2,949) lower/higher, mainly as a result of higher/lower interest expense on floating rate borrowings and commitments.

The sensitivity analysis for interest rate risk assumes that all other variables, in particular foreign exchange rates, remain constant.

45. Risk Management (continued)

Credit Risk

Credit risk is the risk of financial loss to the Group if a customer or other counter-party to a financial instrument fails to meet its contractual obligations.

The Group is exposed to credit risk from its operating activities (primarily for trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

Credit risk consists mainly of cash deposits, cash equivalents and trade debtors. The Company only deposits cash with major banks with high quality credit standing and limits exposure to any one counter-party.

Trade receivables comprise a widespread customer base. Management evaluated credit risk relating to customers on an ongoing basis. Risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. The utilisation of credit limits is regularly monitored.

The requirements for an impairment are analysed at each reporting period on an individual basis. The calculation is based on actually incurred historical data. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial asset.

The Group does not hold collateral as security. The Group evaluates the concentration of risk with respect to trade receivables as low, as its customers are located in several jurisdictions and industries and operate in largely independent markets.

Financial assets exposed to credit risk at year end were as follows:

	Group			Company		
Financial instrument	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Absa AA+	57,512	103,862	104,904	52,620	101,691	103,154
Allan Gray AAA	1,297	35,798	43,564	1,297	35,798	43,564
Sanlam A+	13,091	1,079	10,108	13,091	1,079	10,108
Old Mutual AA	14,970	11,896	6,648	14,970	11,896	6,648
Coronation Fund	22,753	-	-	22,753	-	-
Investec A to A-	181,353	282,167	61,101	-	24,773	-
Rand Merchant Bank	26,216	25,223	-	-	3,683	-
Nedbank AA-	148,563	-	-	-	-	-

Foreign Exchange Risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in the foreign exchange currency. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities, Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency.

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar and the Euro. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

Management has set up a policy to require group companies to manage their foreign exchange risk against their functional currency. The Group manages its foreign currency risk by entering into forward exchange contracts for foreign currency denominated transactions. To manage their foreign exchange risk arising from future commercial transactions and recognised assets and liabilities, entities in the

Group use forward contracts, transacted with group treasury. Although the forward exchange contracts have not been designated in a hedge relationship, they act as a commercial hedge and will offset the underlying transactions when they occur.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign operations is managed primarily through borrowings denominated in the relevant foreign currencies.

Foreign Currency Sensitivity

The following paragraphs demonstrate the sensitivity to a reasonable change in the foreign currency rate, with all other variables held constant.

Trade debtors and creditors

At 31 March 2012, if the currency had weakened by 10% against the US dollar with all other variables held constant, post-tax profit for the year would have been R39,526 (2011: R44,748) higher, mainly as a result of foreign exchange gains or losses on translation of US dollar denominated trade receivables, financial assets at fair value through profit or loss, debt securities classified as available-for-sale and foreign exchange losses or gains on translation of US dollar denominated borrowings.

At 31 March 2012, if the currency had weakened by 10% against the Euro with all other variables held constant, post-tax profit for the year would have been R12,844 (2011: R6,289) lower, mainly as a result of foreign exchange gains or losses on translation of Euro denominated trade payables.

The Group's exposure to foreign currency changes for all other currencies is not material.

Foreign Currency Exposure at the End of the Reporting Period

	Group			Company		
	2012 R'000	2011 R'000	2010 R'000	2012 R'000	2011 R'000	2010 R'000
Current assets						
US Dollar	146,056	86,275	123,026	9,191	4,191	5,549
Euro	45,615	31,194	33,417	198	57	838
GBP	1,651	2,958	1,045	124	49	98
Other	2,381	2,453	7,003	-	-	854
Liabilities						
US Dollar	75,417	26,947	49,009	1	-	-
Euro	14,327	19,027	10,043	4,571	143	-
GBP	3,090	3,759	1,312	3	-	-
Other	253	228	236	-	-	3
Exchange rates used for conversion of foreign items were:						
USD	7.7	6.78	7.59	7.7	6.78	7.59
EURO	10.28	9.63	10.11	10.28	9.63	10.11
GBP	12.32	11.11	13.00	12.32	11.11	13.00

The Group reviews its foreign currency exposure, including commitments on an ongoing basis. Although the foreign exchange contracts have not been designated in a hedge relationship, they act as a commercial hedge and will offset the underlying transactions when they occur.

45. Risk Management (continued)

Price Risk

The Group is exposed to equity securities price risk because of investments held by the Group and classified on the consolidated statement of financial position as available-for-sale. To manage its price risk arising from investments in equity securities, the Group diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the Group.

The table below summarises the impact of increases/decreases in unit prices on the Group's. The analysis is based on the assumption that the equity price has increased/decreased by 5% with all other variables held constant.

	Impact on post-tax profit in Rand			Impact on other components of in Rand		
	2012	2011	2010	2012	2011	2010
Group	R'000	R'000	R'000	R'000	R'000	R'000
Financial instrument						
Coronation Unit Trusts	-	-	-	1,089	676	-

46. Going Concern

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

The ability of the Company and the Group to continue as a going concern is dependent on a number of factors. The most significant of these is that the shareholder, the Department of Energy and Directors, continue to procure funding for the ongoing operations for the Company.

As a result of these constraints facing Necsa primarily due to successive reductions in government grant over the past three years as well as more challenging market conditions for its subsidiaries, the organisation has had to embark on a Section 189 (Labour Relations Act) consultation process with staff to ensure a sustainable future.

47. Public Finance Management Act

	Group		Company	
	2012	2011	2012	2011
	R'000	R'000	R'000	R'000
Fruitless and wasteful expenditure				
Unrecoverable payments[1]	1,000	106	1,000	-
Overpayments not recoverable[2]	328	28	328	-
Incorrect Tax deduction and payment to SARS[1]	100	-	100	-
Interest to suppliers due to late payments[3]	-	13	-	12
Speeding fines and other traffic violations[4]	65	5	65	5
Total fruitless and wasteful expenditure	**1,493**	**152**	**1,493**	**17**

Comments (including actions taken with regard to matters):

1 The recoverability of this matter is in the process of being assessed.
2 Disciplinary steps have been taken against staff to address the shortcoming.
3 This matter was investigated in order to identify the cause of late payment. The employee was counselled to ensure that the late payment will not happen again.
4 A procedure has been implemented, in terms of which all future fines will be deducted from the responsible employee's salary

Criminal or disciplinary steps:

There were no material losses through criminal conduct, unauthorised expenditure or irregular expenditure. Therefore criminal or disciplinary steps are not applicable.

Gifts, donations or sponsorships received:

Employees are allowed to receive gifts and courtesies. Gifts and courtesies received above R300 are recorded in a register and approved by the relevant manager. Gifts and courtesies received above R3,000 needs written permission from the General Manager or CEO as appropriate.

Remissions or payments made as an act of grace:

There were no remissions or payments made as an act of grace.

48. Changes in Accounting Policy

Revaluation of Land and Buildings

During the prior year, the Group changed the accounting policy from the proportionate restatement method to the elimination method with respect to the treatment of the revaluation of land and buildings.

The change provides reliable and more relevant information.

The effect of the change is applied retrospectively.

The aggregate effect of the changes in accounting policy on the annual financial statements for the year ended 31 March 2012 is as follows:

	Group		Company	
	2010 R'000	2009 R'000	2010 R'000	2009 R'000
Land and buildings				
Previously stated	466,101	123,666	445,119	90,607
Adjustment	(31,808)	(30,218)	(31,479)	(27,199)
	434,293	93,448	413,640	63,408
Accumulated depreciation				
Previously stated	(31,808)	(30,218)	(31,479)	(27,199)
Adjustment	31,808	30,218	31,479	27,199
	-	-	-	-
Opening retained earnings				
Previously stated	-	177,224	-	267,904
Adjustment	-	56,125	-	72,839
	-	233,349	-	340,743

Acronyms and Abbreviations

ABET	Adult Basic Education and Training
AFRA	African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology
AHF	Anhydrous Hydrofluoric Acid
ALARA	As Low As Reasonably Achievable
ALMERA	Analytical Laboratories for the Measurement of Environmental Radioactivity
ANSTO	Australian Nuclear Science and Technology Organisation
API	Active Pharmaceutical Ingredients
ARC	Audit and Risk Committee
ARV	Anti-retroviral
ASGISA	Accelerated Shared Growth Initiative
ASME	American Society of Mechanical Engineers
BBBEE	Broad-based Black Economic Empowerment
BBS	Behaviour Based Safety
CEA	Commissariat a l'Energie Atomique et aux Energies Alternatives
CFR	Code of Federal Regulations
cGMP	Current Good Manufacturing Practices
CHIETA	Chemical Industries Education and Training Authority
Cobit	Control Objectives for Information Technology
COMPS	Centre of Material and Process Synthesis
COP17	Conference of the Parties
COSO	Committee of Sponsoring Organisations
CSDP	Competitive Supplier Development Programme
CT	Computed Tomography
DI	Disabling Injury
DIIR	Disabling Injury Incident Rate
DIPR	Dedicated Isotope Production Reactor
DoE	Department of Energy (RSA)
DoH	Department of Health (RSA)
DPE	Department of Public Enterprises
DST	Department of Science and Technology
EE	Employment Equity
EMC	Executive Management Committee
FDA	Food and Drug Administration
FDG	Fluorodeoxyglucose
FEI	Fluorochemical Expansion Initiative
GMP	Good Manufacturing Practice
HAZOP	Hazard and Operability
HEU	Highly Enriched Uranium
HF	Hydrogen Fluoride
I-131	Iodine-131
IAEA	International Atomic Energy Agency
IDC	Industrial Development Corporation
INES	International Nuclear Event Scale
INIS	International Nuclear Information System
IP	Intellectual Property
IPAP2	Industrial Policy Action Plan 2
IRMC	Internal Risk Management Committee
IRP 2010	Integrated Resource Plan 2010–2030
ISO	International Standards Organisation
IT	Information Technology
JIPSA	Joint Initiative for Priority Skills Acquisition
JPC	Joint Planning Committee
LCD	Liquid Crystal Display
LEU	Low Enriched Uranium
LTSS	Long Term Storage Shield
MA	Medium Active
MEMS	Micro Electronic Mechanical Systems
^{99}Mo	Molybdenum-99
MoU	Memorandum of Understanding
MPR	Multi-Purpose Reactor
MSSP	Member State Support Programme
mSv	Millisievert
MTEF	Medium-Term Expenditure Framework
MW	Megawatt
NAR	NNR Approval Request
NdF_3	Neodymium Trifluoride
Necsa	The South African Nuclear Energy Corporation
NEF	National Empowerment Fund
NEHAWU	National Education, Health and Allied Workers Union
NETC	Nuclear Energy Technical Committee
NF_3	Nitrogen Trifluoride
NIASA	Nuclear Industry Association of South Africa
NIL	Nuclear Installation Licence
NIPP	National Industrial Participation Programme
NKP	National Key Point
NMDN	New Metals Development Network
NNEECC	National Nuclear Energy Executive Co-ordination Committee
NNMC	National Nuclear Manufacturing Centre
NNR	National Nuclear Regulator
NNSA	National Nuclear Security Administration (US)
NPT	Non-Proliferation Treaty
NQF	National Qualifications Framework
NRF	National Research Foundation
NRWDI	National Radioactive Waste Disposal Institute
NSD	Nuclear Skills Development
NSI	National System of Innovation
NTeMBI	Nuclear Technologies in Medicine and the Biosciences Initiative
NTP	NTP Radioisotopes SOC Ltd
NWU	North West University
OEM	Original Equipment Manufacturer
OTT	Office of Technology Transfer
PC	Printed Circuit
PCT	Patent Co-operation Treaty
PDI	Previously Disadvantaged Individual
Pelchem	Pelchem SOC Ltd

PET	Positron Emission Tomography
PFMA	Public Finance Management Act
PIME	Public Information Materials Exchange
PIV	Physical Inventory Verification
PRMA	Post-retirement Medical Aid
PSA	Prostate-specific Antigen
PSIF	Public Safety Information Forum
PTB	Physikalisch-Technische Bundesanstalt
PV	Photovoltaic
R&D	Research and Development
RFQ	Radio Frequency Quadrupole
RoD	Record of Decision
RSA	Republic of South Africa
SABS	South African Bureau of Standards
SA GAAP	South African Statements of Generally Accepted Accounting Practice
SAGSI	Standing Advisory Group for Safeguards Implementation
SANAS	South African National Accreditation System
SAP	South African Police Services
SAR	Safety Assessment Report
SAS	Study Assistance Scheme
SASSETA	Safety and Security Sector Education and Training Authority
SAYNPS	South African Young Nuclear Professionals
SETA	Sector Education and Training Authority
SHARS	Spent High Activity Radioactive Sources
SHEQ	Safety, Health, Environment and Quality
SIR	Safeguards Implementation Reports
SOC	State Owned Corporation
SOE	State Owned Enterprise
SP	Support Programme
SSAC	State System of Accounting and Control
the dti	Department of Trade and Industry
TIA	Technology Innovation Agency
TIR	Total Injury Rate
UJ	University of Johannesburg
UP	University of Pretoria
USA DOE	United States of America Department of Energy
USIE	Unified System for Information Exchange
VSP	Voluntary Severance Package
WIN-Necsa	Women in Nuclear at Necsa
WIN-SA	Women in Nuclear in South Africa
XeF_2	Xenon Difluoride
Zr	Zirconium

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