



NRWDI

NATIONAL RADIOACTIVE WASTE
DISPOSAL INSTITUTE



ANNUAL PERFORMANCE PLAN 2022-2023



NATIONAL RADIOACTIVE WASTE DISPOSAL INSTITUTE (NRWDI)

ANNUAL PERFORMANCE PLAN FOR 2022/2023

CHAIRPERSON'S STATEMENT

The National Radioactive Waste Disposal Institute (NRWDI) is an independent entity established by the National Radioactive Waste Disposal Institute Act (Act 53 of 2008) and listed as a Schedule 3A national entity in terms of the Public Finance Management Act, (Act 1 of 1999). NRWDI plays an important role in the safe management and disposal of radioactive waste on a national basis and the role will become increasingly more important as the country opts for nuclear to be an important source of clean energy in the energy mix.

The founding legislation contains NRWDI's mandate which is extensive, complex and highly technical in nature. In lieu of the fact that nuclear energy is infused into the energy mix, NRWDI needs well-thought-out plans detailing research and development and technology solutions that are suitable for the country's needs: which is identification of suitable management and disposal sites, strategic engagements and communication with all stakeholders.

The inadequate funding of the Institute, since its inception, poses a challenge to NRWDI's reliability, independence and sustainability over both the medium and the long term. It is for this intent and purpose that NRWDI is anxiously awaiting the Radioactive Waste Management Fund (RWMF) Bill to be passed as legislation. The implementation of the proposed RWMF Act will create a secure and predictable income stream by ensuring that waste generators pay levies for the safe management and disposal of their radioactive waste.

The high priority areas for the NRWDI Board, working with Management, during the 2022/23 financial year will include the following:

- Ensuring the smooth transition of Vaalputs operations from Necsa to NRWDI coupled with the implementation of successful change management programmes;
- Facilitating discussions with the Minister and the shareholder Department to expedite the promulgation of the RWMF Bill;

- Ensuring that there are strategic engagements and communications with all NRWDI stakeholders to eliminate doubt and build trust;
- Ensuring that there is a presence and visibility of NRWDI in the nuclear space;
- Ensuring that effective collaborations and partnerships are established with national and international organisations.

Taking the abovementioned into consideration and securing *adequate* funding, we as the NRWDI Board are confident that NRWDI will discharge its mandate.

The NRWDI Board endorses the Annual Performance Plan for 2022/23 and pledges its support to the new CEO and the rest of the NRWDI Team in its successful implementation.



MST ZUNGU

Chairperson: NRWDI Board of Directors



CHIEF EXECUTIVE OFFICER'S STATEMENT

It gives me immense pleasure to present the 2022/2023 Annual Performance Plan (APP) for the National Radioactive Waste Disposal Institute. This Annual Performance Plan is aligned with the Department of Mineral Resources and Energy's (DMRE) strategic outcomes and it contributes towards the delivery of the objectives of the National Development Plan as well as the Medium-Term Strategic Framework. It prioritises the key focus areas that will enable NRWDI to discharge its mandate.

In terms of its mandate, NRWDI has to manage radioactive waste disposal on a national basis. This mandate is to be carried out in such a manner that waste disposal is technically sound, socially acceptable, environmentally responsible and economically feasible. The objective is to ensure that there is no undue burden placed on the future generations.

Another key imperative for NRWDI is to operate the national low-level radioactive waste repository at Vaalputs. I am so excited to announce that the Nuclear Installation Licence for Vaalputs is imminent, and NRWDI will officially take-over the responsibilities of the management and operations of the Vaalputs radioactive waste repository. The task ahead is a mammoth one and I am assured that we have the necessary skills and expertise within NRWDI which will assist in making a smooth transition from Necsa to NRWDI. Significant changes will take place and it will require change management strategies and programmes to ensure a smooth transition.

As South Africa includes nuclear in the energy mix, there will be greater reliance and dependence on NRWDI to research and develop radioactive waste management and disposal technologies suitable for the needs of the country. For this to unfold, it would be necessary to, not only to leverage on existing partnerships, but also establish new partnerships and collaborations with various organisations nationally, regionally and internationally.

Embarking on new technologies and coming up with solutions for the radioactive waste will require buy-in from all our stakeholders. Communication and public awareness is key in order to build trust and confidence in the Institute.

Therefore, mechanisms will be put in place to strengthen public understanding of safe and secure management and disposal of radioactive waste.

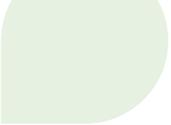
Another key focus for NRWDI is to provide information on all aspects of radioactive waste management to the public living in and around the radioactive waste disposal facility and the public in general. We live in such digitised times and I see more information sharing taking place on social media platforms to educate and empower our stakeholders and the public on the role of NRWDI in the safe and secure management and disposal of radioactive waste.

The global pandemic that took the world by storm has become the new normal. It has definitely changed the landscape of the working environment and requires new policies to ensure that our people who are our greatest asset are managed in a way that brings out their best taking into consideration that it has had some impact on their psychological and physical well-being.

It goes without saying that the nuclear industry is highly regulated and the safe management and disposal of radioactive waste must be executed in compliance with quality, health, safety, environmental and nuclear licencing regulatory requirements, relevant international standards and best practices. Compliance with the nuclear installation licences is key to the successful operation of disposal facilities.

The long-term sustainability of NRWDI remains a challenge. The enactment of the Radioactive Waste Management Fund Bill needs to be fast tracked as this will provide for NRWDI to become self-sufficient. It is also important to note that no single entity can operate in a vacuum and the possibility of partnerships, donor funding and alliances needs to be explored and managed in accordance with key deliverables and milestones documented in memoranda of understanding and agreement.

The 2022/2023 Annual Performance Plan is an ambitious plan and in order to execute the plan it is imperative that there is a collective understanding of our responsibilities and obligations as public servants to the people of South Africa.



The NRWDI Board fully endorses this Annual Performance Plan and commits to supporting its implementation. I would like to use this opportunity to acknowledge the important work that the NRWDI, the management team and staff are executing and would like to encourage a collective, innovative and supportive spirit to embrace and accept this Annual Performance Plan. I know that each one will strive to make a contribution towards realising the outcomes and outputs contained herein.



Dr Margaret Mkhosi

Chief Executive Officer: NRWDI

Date: 31 January 2022



OFFICIAL SIGN-OFF

It is hereby certified that this Annual Performance Plan:

- Was developed by the management of the National Radioactive Waste Disposal Institute (NRWDI) under the guidance of the Accounting Authority;
- Takes into account all the relevant policies, legislation and other mandates for which NRWDI is responsible, and
- Accurately reflects the Outcomes and Outputs which NRWDI will endeavour to achieve over the period 2022/23.

Signature: 
Mr Justin Daniel
Programme 1: Administration – Finance & SCM

Signature: 
Mr Cobus Beylevelde
Programme 4: Radioactive Waste Compliance Management

Signature: 
Mr Zweli Ndziba
Programme 1: Administration – Corporate Support Division

Signature: 
Mr Justin Daniel
Chief Financial Officer

Signature: 
Mr Alan Carolissen
Programme 2: Radioactive Waste Disposal Operations

Signature: 
Ms Deshnee Govender
Manager: Strategic Planning

Signature: 
Dr Vusi Twala
Programme 3: Science, Engineering and Technology

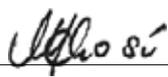
Signature: 
Dr Margaret Mkhosi
CEO of NRWDI

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LIST OF ABBREVIATIONS

Acronym/ Term	Description/Definition
AFRA	African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology
BOD	Board of Directors
CA	Competent Authority
CEO	Chief Executive Officer
CISF	Central Interim Storage Facility
CSI	Corporate Social Investment
DFFE	Department of Forestry, Fisheries and Environment
DGR	Deep Geological Repository
DHSWS	Department of Human Settlements, Water and Sanitation
DMRE	Department of Mineral Resources and Energy
DOH	Department of Health
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
GHG	Greenhouse Gas Emissions
GPS	Global Positioning System
HLW	High Level Waste
IAEA	International Atomic Energy Agency
ILW	Intermediate Level Waste
IRP	Integrated Resource Plan
ISO	International Standards Organisation
IUDF	Integrated Urban Development Framework
LLW	Low Level Waste
MTEF	Medium Term Expenditure Framework
MTSF	Medium Term Strategic Framework
NDP	National Development Plan

Acronym/ Term	Description/Definition
Necsa	South African Nuclear Energy Corporation
NIL	Nuclear Installation license
NNR	National Nuclear Regulator
NRWDIA	National Radioactive Waste Disposal Institute Act
NRWDI	National Radioactive Waste Disposal Institute
NT	National Treasury
PAIA	Promotion of Access to Information Act
PAJA	Promotion of Administrative Justice Act
PESTLE	Political, Economic, Social, Technological, Legal, Environmental
PFMA	Public Finance Management Act
POPIA	Protection of Personal Information Act
PSIF	Public Safety Information Forum
OHS	Occupational Health and Safety
R&D	Research and Development
RAWIS	Radioactive Waste Information System
RWMF	Radioactive Waste Management Fund
SADC	South African Development Community
SAPS	South African Police Services
SET	Science, Engineering and Technology
SHEQ	Safety, Health, Environment and Quality
SQEP	Suitably Qualified and Experienced Persons
SSA	State Security Agency
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNFCCC	United Nations Framework Convention on Climate Change
WAC	Waste Acceptance Criteria



PART A

OUR MANDATE

OUR MANDATE

1. UPDATES TO THE RELEVANT LEGISLATIVE AND POLICY MANDATES

The National Radioactive Waste Disposal Institute (NRWDI) carries out its work having due regard to the fundamental rights contained in the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) and other related legislation. The following sections are extracts from the Constitution which have a direct bearing on the NRWDI in terms of delivering on their constitutional mandate.

The NRWDI mandate is underpinned by Section 24(b) of the Constitution of the Republic of South Africa, Act 108 of 1996 which states that:

Everyone has the right –

- (a) To an environment that is not harmful to their health or well-being; and
- (b) To have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that:
 - (i) Prevent pollution and ecological degradation;
 - (ii) Promote conservation; and
 - (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

In turn, the above constitutional provisions inform further pieces of legislation that impact the functioning of NRWDI. The governance and regulation of radioactive waste management is also subject to the provisions of the following other acts. These are discussed below.

National Radioactive Waste Disposal Institute Act (NRWDIA), 2008 (Act 53 of 2008)

The National Radioactive Waste Disposal Institute Act (NRWDIA) (Act no. 53 of 2008) was proclaimed by the President of the Republic of South Africa in Government Gazette no. 32764 and NRWDIA became effective on the 1st December 2009. The NRWDIA endorsed the establishment of the National Radioactive Waste Disposal Institute (NRWDI). The functions of NRWDI as per Section 5 of the NRWDI Act (Act 53 of 2008) are summarised as follows:

- Manage radioactive waste disposal on a national basis;
- Operate the national low-level waste repository at Vaalputs;
- Design and implement disposal solutions for all categories of radioactive waste;
- Develop criteria for accepting and disposing radioactive waste in compliance with applicable regulatory safety requirements and any other technical and operational requirements;
- Assess and inspect the acceptability of radioactive waste for disposal and issue radioactive waste disposal certificates;
- Manage, operate and monitor operational radioactive waste disposal facilities including related predisposal management of radioactive waste on disposal sites;
- Investigate the need for any new radioactive waste disposal facilities and to site, design and construct new facilities as required;
- Define and conduct research and development aimed at finding solutions for long-term radioactive waste management;
- Maintain a national radioactive waste database and publish a report on the inventory and location of all radioactive waste in the Republic at a frequency determined by the BOD;
- Manage ownerless radioactive waste on behalf of the Government, including the development of radioactive waste management plans for such waste;
- Assist generators of small quantities of radioactive waste in all technical aspects related to the management of such waste;
- Implement institutional control over closed repositories, including radiological monitoring and maintenance as appropriate;
- Implement any assignments or directives from the Minister regarding radioactive waste management;



- Provide information on all aspects of radioactive waste management to the public living around radioactive waste disposal facilities and to the public in general;
- Advise nationally on radioactive waste management;
- Co-operate with any person or institution in matters falling within these functions; and
- Any other function necessary to achieve the objectives of the Institute.

The majority of the above functions are currently performed within the scope of Low- Level Waste (LLW) inventories. In future, the scope would need to be extended to address the national inventory of radioactive waste consisting of Intermediate Level Waste (ILW), High Level Waste (HLW), long-lived waste, spent nuclear fuel and disused sealed radioactive sources. This implies that alternative disposal concepts would have to be researched, designed and implemented. It is also possible that alternative disposal sites would need to be obtained, characterised, constructed and operated.

Nuclear Energy Act, 1999 (Act 46 of 1999)

NRWDI is an independent entity established by statute under the provision of section 55(2) of the Nuclear Energy Act (No. 46 of 1999) to fulfil the institutional obligation of the Minister of Mineral Resources and Energy. In accordance with the provisions of the Nuclear Energy Act, 1999 (Act No. 46 of 1999), the discarding of radioactive waste and storage of irradiated nuclear fuel require the written permission of the Minister of Mineral Resources and Energy and are subject to such conditions that the Minister, in concurrence with the Minister of Environment, Forestry and Fisheries and the Minister of Water and Sanitation, deems fit to impose. The conditions so imposed will be additional to any conditions contained in a nuclear authorisation as defined in the NNRA.

National Nuclear Regulatory Act, 1999 (Act 47 of 1999)

The Act provides for the establishment of a National Nuclear Regulator in order to regulate nuclear activities, for its objects and functions, for the manner in which it is to be managed and for its staff matters; to provide for safety standards and regulatory practices for protection of persons, property and the environment against nuclear damage; and to provide for matters connected therewith.

National Environmental Management Act (NEMA), 1998 (Act 107 of 1998) and Environment Conservation Amendment Act (ECAA), 2003 (Act 50 of 2003)

In accordance with the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), an environmental assessment has to be conducted prior to the construction of a spent fuel management or radioactive waste management facility. Furthermore, the Environment Conservation Amendment Act, 2003 (Act No. 50 of 2003) (ECAA) prescribes that no person may establish, provide or operate a disposal site without a permit issued by the Minister of Environment, Forestry and Fisheries.

Hazardous Substances Act, 1973 (Act 15 of 1973)

Sealed radioactive sources, including disused sealed sources, are controlled as Group IV Hazardous Substances, in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973) and are regulated by the Directorate Radiation Control in the Department of Health.

Currently all disused sealed radioactive sources are temporarily stored at Necsa because the end point (i.e., final disposal) has not yet been defined in radioactive waste management plans. The disposal of all radioactive material falls within the ambit of the National Nuclear Regulator and therefore the regulatory framework to manage the total life cycle of sealed radioactive sources needs to be harmonised.

The safety, security and control of disused radioactive sources is a high priority and in line with international commitment in order to prevent radiation accidents that may be caused by the potential abuse and misuse of such sources for, e.g., malicious purposes. NRWDI will liaise with all role players and stakeholders to mitigate these risks by implementing sustainable disposal options (end points) for various categories of disused sealed radioactive sources.

Mineral and Petroleum Resources Development Amendment Act, 2008 (Act 49 of 2008)

The objectives of this Act are to recognise the internationally accepted right of the State to exercise sovereignty over all the mineral and petroleum resources within the Republic, give effect to the principle of the State's custodianship of the nation's mineral and petroleum resources, give effect to section 24 of the Constitution by ensuring that the nation's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting

justifiable social and economic development; and promote equitable access to the nation's mineral and petroleum resources to all the people of South Africa.

National Water Act, 1998 (Act 36 of 1998)

The purpose of this Act is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors: promoting equitable access to water; redressing the results of past racial and gender discrimination; promoting the efficient, sustainable and beneficial use of water in the public interest; facilitating social and economic development; protecting aquatic and associated ecosystems and their biological diversity; meeting international obligations.

Public Finance Management Act, 1999 (Act 01 of 1999 as amended by Act 29 of 1999)

Enables public sector managers to manage and improve accountability in terms of eliminating waste and corruption in the use of public funds. NRWDI is listed as a Schedule 3A public entity.

Promotion of Administrative Justice Act, 2000 (Act 03 of 2000)

Gives effect to the constitutional right to just administrative action for any member of the public whose rights have been adversely affected and to ensure efficient, effective and legitimate administration within all spheres of government.

Preferential Procurement Policy Framework Act, 2000 (Act 05 of 2000)

Gives effect to Section 217 (3) and provides a framework for the implementation of the procurement policy contemplated in Section 217 (2) of the Constitution.

Promotion of Access to Information Act, 2000 (Act 02 of 2000)

Gives effect to the constitutional right of access to any information held by the State and any information held by a private person that is required for the exercise or protection of any other right.

Intergovernmental Relations Framework Act, 2005 (Act 13 of 2005)

Establishes a framework for national, provincial and local government to promote and facilitate intergovernmental relations and to provide a mechanism and procedure to facilitate the settlement of intergovernmental disputes.

Skills Development Act, 1998 (Act 97 of 1998)

Provides an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce.

Employment Equity Act, 1998 (Act 55 of 1998)

Serves as a mechanism to redress the effects of unfair discrimination and to assist in the transformation of workplaces, so as to reflect a diverse and broadly representative workforce.

Disaster Management Act, 2002 (Act 57 of 2002)

Provides for an integrated and co-ordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, and rapid and effective responses to disaster and post-disaster recovery.

Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)

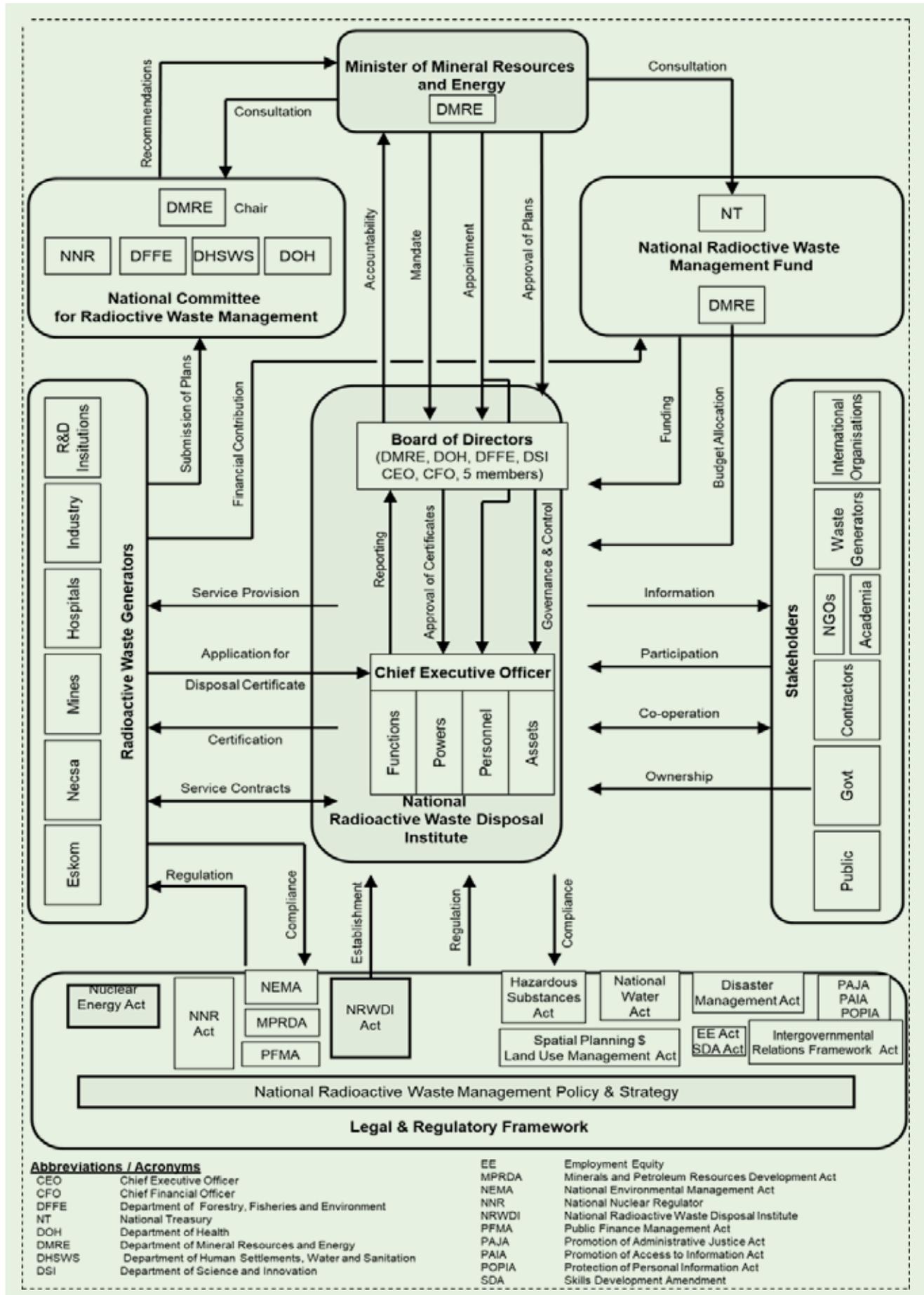
Makes provision for inclusive developmental, equitable and efficient spatial planning at different spheres of government.

Protection of Personal Information Act, 2013 (Act 4 of 2013)

The Protection of Personal Information Act aims to promote the protection of personal information processed by public and private bodies to regulate the flow of personal information across the borders of the Republic. It is South Africa's data protection law.



Figure 1 : The legislative and regulatory environment within which NRWDI operates.



2. UPDATES TO INSTITUTIONAL POLICIES AND STRATEGIES

There are a number of key policy mandates that comprehensively capture our vision and thus describe what we do and why we do them. In short, these are programs and plans that seek to address public interest. The policy mandates also provide for a relevant international framework that has a bearing on NRWDI and South Africa's policies.

National Development Plan, Vision 2030

The National Development Plan sets out the vision for South Africa by the year 2030:

- Chapter 3, 'Economy and employment', sets out the achievement for full employment, decent work and sustainable livelihoods.
- Chapter 13, 'Building a Capable State', sets out a vision of the transformative and developmental role of the state.
- Chapter 14, 'Promoting accountability and fighting corruption', sets out a vision which has zero tolerance for corruption.

Radioactive Waste Management Policy and Strategy for South Africa (2005)

The cornerstone of South Africa's approach to addressing radioactive waste management issues is the Radioactive Waste Management Policy and Strategy for the Republic of South Africa (Policy and Strategy) was published in November 2005. The Policy and Strategy serves as a national commitment to address radioactive waste management in a coordinated and cooperative manner and represents a comprehensive radioactive waste management governance framework by formulating, in addition to nuclear and other applicable legislation, a policy and implementation strategy developed in consultation with all stakeholders

Integrated Urban Development Framework (IUDF)

IUDF is a central urban policy that seeks to address urban spatial patterns through the creation of compact, coordinated cities. In the main, it is geared towards transforming urban spaces, focusing on infrastructure development and unleashing the potential of cities.

National Energy Efficiency Strategy

A guiding document developed by government to support implementation of energy efficient measures in South Africa

International Conventions

Apart from South African policies and strategies, the assurance of nuclear safety is reinforced by a number of international instruments. These include certain Conventions such as the Convention on Nuclear Safety and Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management ("Joint Convention") that are established by the International Atomic Energy Agency (IAEA) and that are legally binding on the participating IAEA Member States. South Africa, as a contracting party to these conventions is obliged to adhere to the articles of these conventions and to provide regular reports on compliance to these conventions.

The Joint Convention establishes an international peer review process among Contracting Parties and provides incentives for the IAEA Member States to improve nuclear safety in line with international best practises. One of the objects of the Institute is to fulfil national obligations in respect of international nuclear instruments relating to management of spent nuclear fuel and radioactive waste management, including disposal, to ensure that the Republic of South Africa is in compliance with the articles of the Joint Convention through existing national legal and regulatory infrastructure.

The South African Joint Convention report provides information on spent fuel and waste management facilities, radioactive waste inventories, ongoing decommissioning projects, spent fuel and radioactive waste management safety, as well as information on imports/exports of radioactive waste (trans-boundary movements) and disused sealed radioactive sources.

Sustainable Development Goals

A global agenda with a vision of ending poverty, protecting the planet and ensuring that humanity enjoys peace and prosperity. It appreciates that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development.

African Union 2063 Agenda

The Africa 2063 Agenda envisages an integrated, prosperous and peaceful Africa through inclusive growth and sustainable development.



Addis Ababa Agreement

The Addis Ababa Action, primarily provides and informs the implementation of the New Urban Agenda. Its main focus is on infrastructure, technology, micro small and medium enterprises.

Paris Agreement

The Paris agreement guides international efforts towards reducing and limiting greenhouse gas emissions and the associated approach towards low carbon development. Article 4.19 of the Agreement encourages its signatories to formulate and communicate long term – low GHG emission development to UNFCCC by 2020.

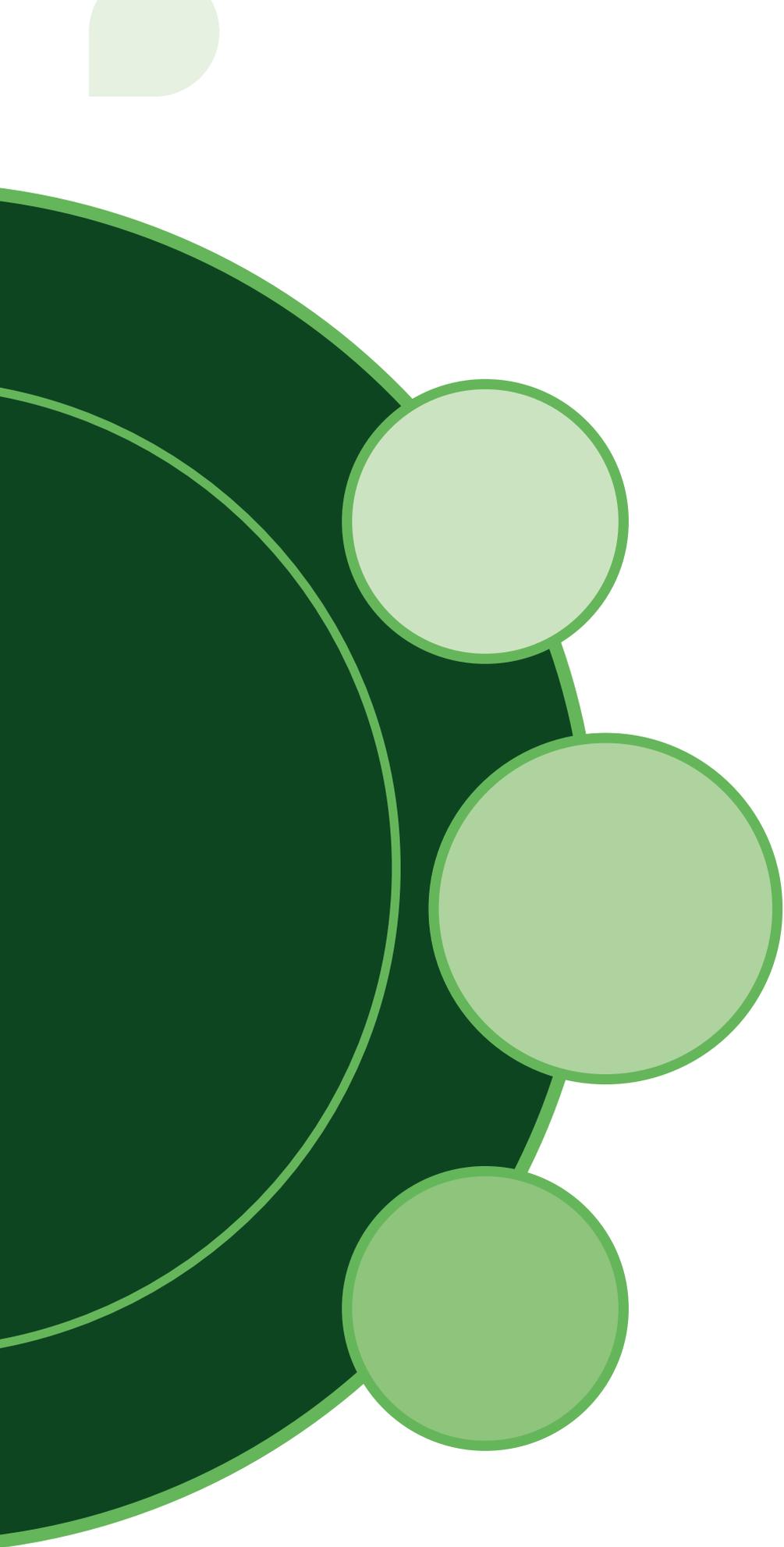
Sendai Framework for Disaster Risk Reduction

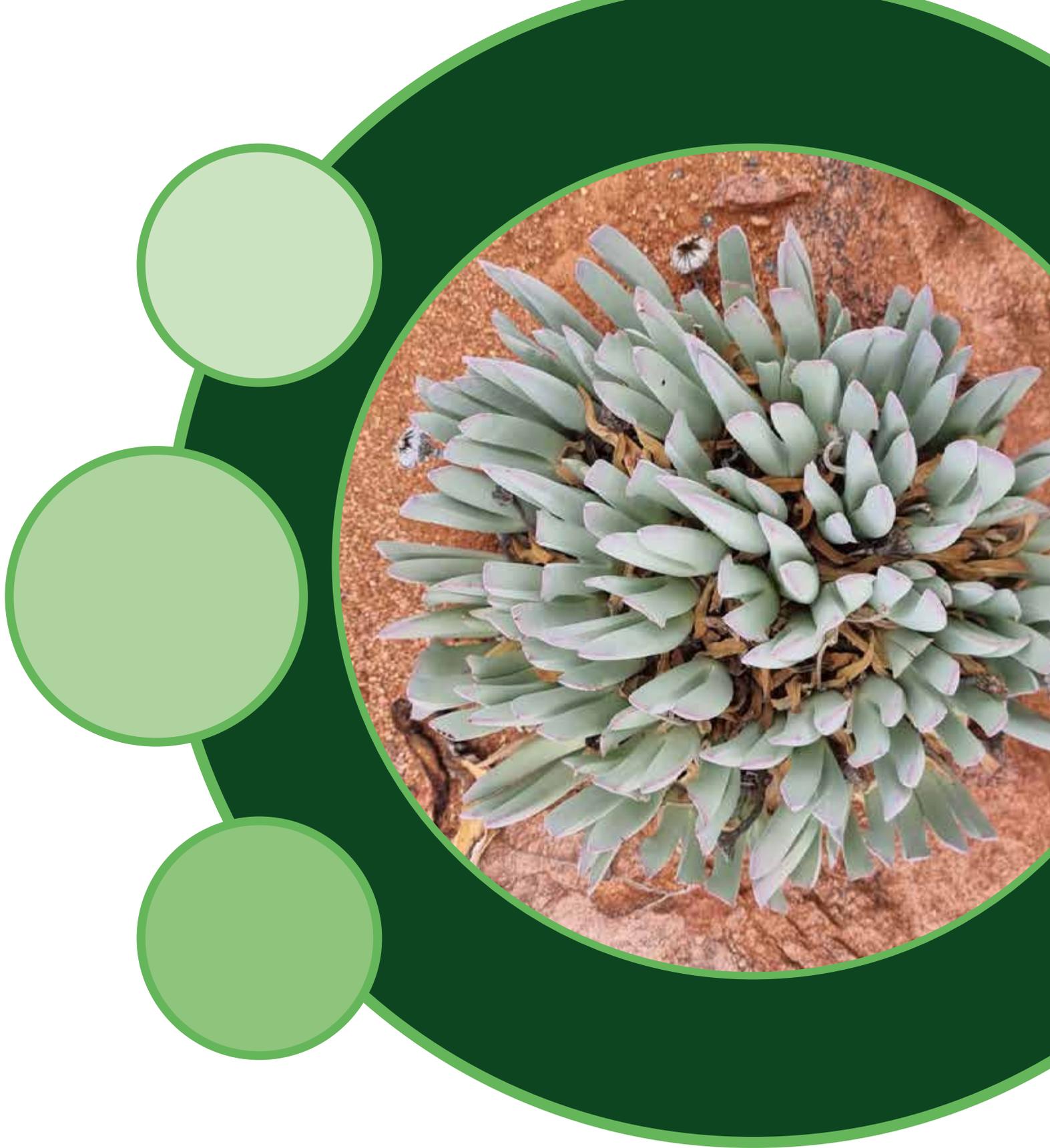
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The Sendai Framework is a non-binding voluntary framework; whose main focus is on the reduction of disaster risk.

3. UPDATES ON RELEVANT COURT RULINGS

There are no current court rulings that may have an influence on the on NRWDI's operations and/or service delivery obligations.





PART B

OUR STRATEGIC FOCUS

OUR STRATEGIC FOCUS

1. UPDATED SITUATIONAL ANALYSIS

The situational analysis is a narration of prevailing facts and their implications for NRWDI and the execution of its mandate. It is a logical step that follows any form of planning.

There are a number of countries that use nuclear technology to generate electricity and radioactive material for many other purposes, resulting in significant progress being made in the safe and effective management of radioactive waste and spent nuclear fuel, including the development of deep geological repositories.

Most nuclear power plants have a design operating lifetime of 25-40 years but engineering assessments have confirmed that they can operate for a longer period. There seems to be a growing acceptance from society regarding the nuclear power generation and the safe management and storage of nuclear waste internationally. For societal acceptance, trust and confidence, it is imperative for regular communication with stakeholders to take place.

In terms of the Spent Fuel Management Outcomes and regardless of the chosen Spent Nuclear Fuel Strategy, the following technical outcomes are inescapable namely the Centralised Interim Storage Facility (CISF) and the Deep Geological Repository (DGR).

Some of the global lessons learnt are the following:

- Spent fuel pools are for cooling purposes and not storage.
- Limit the spent fuel inventory "at reactor".
- Site selection for a Deep Geological Repository (DGR) is problematic.
- In the absence of a DGR, drive towards the storage of spent fuel, in particular off-site dry storage.
- Majority of countries have now opted for the direct disposal of spent fuel instead of reprocessing followed by disposal.

In South Africa, there are two nuclear reactors generating about 5% of its electricity. Government's commitment to the future of nuclear energy as part of the energy mix in South Africa is strong and there will always be a need for an entity like NRWDI. Currently, there are facilities for the safe

management and disposal of LLW which is carried at the Vaalputs site in the Northern Cape.

The South African public still needs to gain confidence and trust in the use of nuclear power as well as the safe management and disposal of nuclear waste. The mindsets of citizens can only be transformed through various communication initiatives which need to be put in place.

The NRWDI has performed a PESTLE analysis, a SWOT analysis, and Stakeholder Analysis.

1.1 External environment analysis

NRWDI's macro-environment was assessed, taking into consideration the **Political, Economic, Social, Technological, Legal / Ethics & Environmental (PESTLE) aspects**. These trends have informed the development of impact statement, outcomes, and outcome indicators to steer the organisation on its path to deliver on its mandate.

PESTLE ANALYSIS

POLITICAL

- In terms of the Integrated Resource Plan (IRP), nuclear energy has been incorporated as a part of the energy mix for the country. With the extension of the Koeberg Nuclear Power Plant operating lifetime and the replacement of the SAFARI-1 Research Reactor by a new multi-purpose reactor, the need for radioactive disposal solutions increases. Nuclear energy use is increasing around the world seeing that the greenhouse gas emissions emitted from nuclear power plants are far less than coal and other hydrocarbon fired power stations.
- There is committed political will to embrace nuclear science and technology for various power and non-power applications.

TECHNOLOGICAL

- Disposal facilities for very-low-level and low-level wastes are already in operation in several countries. The most important remaining challenge is the development of disposal facilities for intermediate-level waste, high-



level waste and spent nuclear fuel. Significant progress is being made in a few countries, such as Finland where the construction of a deep geological repository for the disposal of spent fuel is currently under way, making Finland the first country to have this technology operating. Partnerships with IAEA, France, Sweden, Finland, and Switzerland also need to be forged to learn more about different waste disposal technologies and ensure that skills are transferred.

- There is a need to keep abreast of advances in technology as well as new trends and methodologies in respect of disposal of radioactive waste.
- Mature technologies exist for the off-site long-term interim dry storage (up to 100 years) of spent nuclear fuel.
- Disposal technologies exist for disposal of disused sealed radioactive sources.
- Cyber and Information security challenges.

ECONOMIC

- South Africa has competing social, education, infrastructure, and health budget priorities. NRWDI currently has financial challenges with regards to the establishment of waste disposal and related infrastructure for the long-term management, including disposal of radioactive waste. NRWDI needs to diversify its income streams to meet the needs of its waste generators.
- There is a potential for economic opportunities and employment due to establishment of new waste disposal and storage related infrastructure.

LEGAL/ETHICS

- Current changes in the legislative environment might potentially influence operations.
- There will always be legal challenges from anti-nuclear lobby groups.
- There are various regulatory frameworks set out by the Regulatory bodies since the nuclear space is a highly regulated one.
- Government is in the process of establishing the Radioactive Waste Management Fund Bill to provide sustainable funding for the long-term management and disposal of all classes of radioactive waste

SOCIAL

- The perceived risk associated with nuclear energy and radioactive waste has led to nuclear having a negative perception as an energy source in the energy mix. Comprehensive programmes and other interventions must be put in place to communicate the safe and secure storage and disposal of radioactive waste to the public.
- Increased corporate social responsibility needs to take place. NRWDI can explore the possibilities of partnering with other organisations to improve the social, economic and environmental well-being of the Vaalputs community and other communities.
- There is an increased awareness of social media and digital connectedness. Social media like (Facebook, Twitter, Snapchat, blogs) can be used as an effective tool for communication with stakeholders to demystify and debunk the perceived risk associated with radioactive waste.
- With urban migration taking place at a rapid rate, land will become available for siting for new waste disposal infrastructure.
- There are high levels of unemployment in the country and the implementation of new waste management and disposal technologies will make a positive impact on socio-economic empowerment by alleviating poverty through job creation.

ENVIRONMENTAL

- Nuclear energy use is increasing around the world seeing that the greenhouse gas emissions emitted from nuclear plants are far less than the coal fired power stations. The need for the safe storage of radioactive material is likely to increase as a result of the abovementioned both in South Africa and around the world.
- Climate change and global warming has led to the environment becoming a global agenda item. The public is becoming more and more aware of the environment as they would like to preserve the environment for future generations. NRWDI plays a key role in protecting the environment for the current and future generations through its safe management and disposal of radioactive waste.
- Need to minimise the Carbon Footprint of NRWDI by reduced consumption in printing, water and electricity. Need to encourage environmentally friendly practices in NRWDI.

NRWDI will continue to monitor the ongoing changes in its external environment in order to respond timeously, appropriately and with relevance to any significant shifts or changes.

SWOT ANALYSIS

A SWOT analysis is a powerful tool for sizing up an organisation's resource capabilities and deficiencies. NRWDI's internal strengths and weaknesses, together with the external opportunities and threats were evaluated to provide a basis for re-aligning, re-prioritising and refining NRWDI's impact statement, outcomes and outcome indicators. The purpose is for NRWDI to optimise identified strengths, harness opportunities, offset identified weaknesses and mitigate threats.

Strengths are factors that give NRWDI a distinctive advantage or competitive edge within the environment within which it operates. The Institute can use such factors to accomplish its strategic objectives.

The weaknesses refer to a limitation, fault, or defect within the Institute that prevent it from achieving its objectives; it is what an Institute does poorly or where it has inferior capabilities or limited resources as compared to other organisations.

Opportunities include any favourable current or prospective situation which could be facilitated to allow the organisation to enhance its competitive edge. Threats may be a barrier, constraint, or anything which may inflict challenges, damages, harm or injury to the organisation.

STRENGTHS

- NRWDI mandate is legislated and unambiguous.
- Suitably qualified and experienced staff to run the operations.
- Technical expertise in radioactive waste management and disposal.
- World-class low-level waste disposal facility, Vaalputs, which is in operation for more than 30 years.
- Board and management are committed to the open, transparent, and accountable management of NRWDI.
- International and local partnerships and connectedness.
- Clean audits as part of good reputation.
- ISO 9001 compliant.
- Staff contingent, dedicated, innovative and open to embrace change.

WEAKNESSES

- Sustainability of funding – this negatively influences acting on the mandate.
- Lack of succession planning.
- Lack of brand identity and image.
- Internal processes and systems not completely in place.
- Change management processes for the Vaalputs functional shift needs to be strengthened.
- Lack of collaboration with waste generators.
- Insufficient staff compliment to execute the mandate.
- Lack of programme and project management capacity.

OPPORTUNITIES

- A hybrid working model provides flexibility for staff.
- Funding opportunities: offer professional services, project waste consultation services, AFRA training opportunities.
- Meaningful contribution to South Africa's socio-economic transformation, NDP and MTSF imperatives.
- There is an opportunity for a Centre of excellence in radioactive waste management and disposal to be established.
- Render advisory services to the AU and SADC countries with regard to radio- active waste.
- Build strong co-operative partnerships with IAEA, global and local waste management organisations to enhance and complement NRWDI's competencies.
- Efficiency gains – other waste currently stored at Necsa and Ithemba labs.
- Reallocation of resources: Vaalputs staff and asset transfer.
- Innovation for the disposal of other radioactive waste classes.
- To enter into MoU's with similar facilities worldwide.
- Endpoint for disused sealed sources.
- Virtual working and reduced travelling costs.
- Scoping exercise on funding gap.
- Gazette tariffs for waste disposal.

THREATS

- Possibility to lose highly qualified staff due to brain drain and poaching from other organisations in the very small nuclear industry.
- Communication with stakeholders not adequate.
- Negative public perception and sentiment regarding nuclear energy and radioactive waste.



- Delays in finalisation of the Radioactive Waste Management Fund Bill will compromise sustainability and mandate of NRWDI
- Global nuclear events and accidents increasingly influence government policy and regulation towards the nuclear industry.
- Delays in obtaining the Vaalputs Nuclear Installation licence and concluding the Vaalputs functional shift.
- Lack of critical mass of skilled and suitable qualified individuals in the nuclear energy sector.
- Change in regulatory requirements.
- Loss of mandate due to non-delivery.
- Risk and liabilities related to the Vaalputs functional shift e.g., inadequate funding for long-term aftercare
- Disruption by Covid-19 may result in loss of productivity and reduced collaboration.

Stakeholder Analysis

Achieving societal and political acceptance is one of the largest challenges with regard to the management and

disposal of radioactive waste. This relates in particular to dealing with the myriad of perceptions and fears associated with nuclear disasters in the world e.g., nuclear bomb explosions and weapons programmes, nuclear reactor accidents, health effects associated with cancer and genetic birth effects. Therefore, demonstrating technical competence and regulatory compliance alone are not enough to instil stakeholder confidence and trust. Thus, it is imperative to ensure public participation and stakeholder engagement in a meaningful way. NRWDI's stakeholder management strategy ensures that the advancement of enhanced stakeholder participation and corporate transparency go hand in glove. Stakeholder confidence building strategies and policies are regional specific and take into account cultural diversities.

Figure 2 below reflects the NRWDI's stakeholder map whilst Table 8: Stakeholder Analysis Matrix depicts the variety of stakeholders who assume substantial influence over the operation of the organisation. These stakeholders have respective expectations that must be fulfilled as tabulated below.

Figure 2: NRWDI Stakeholder Map

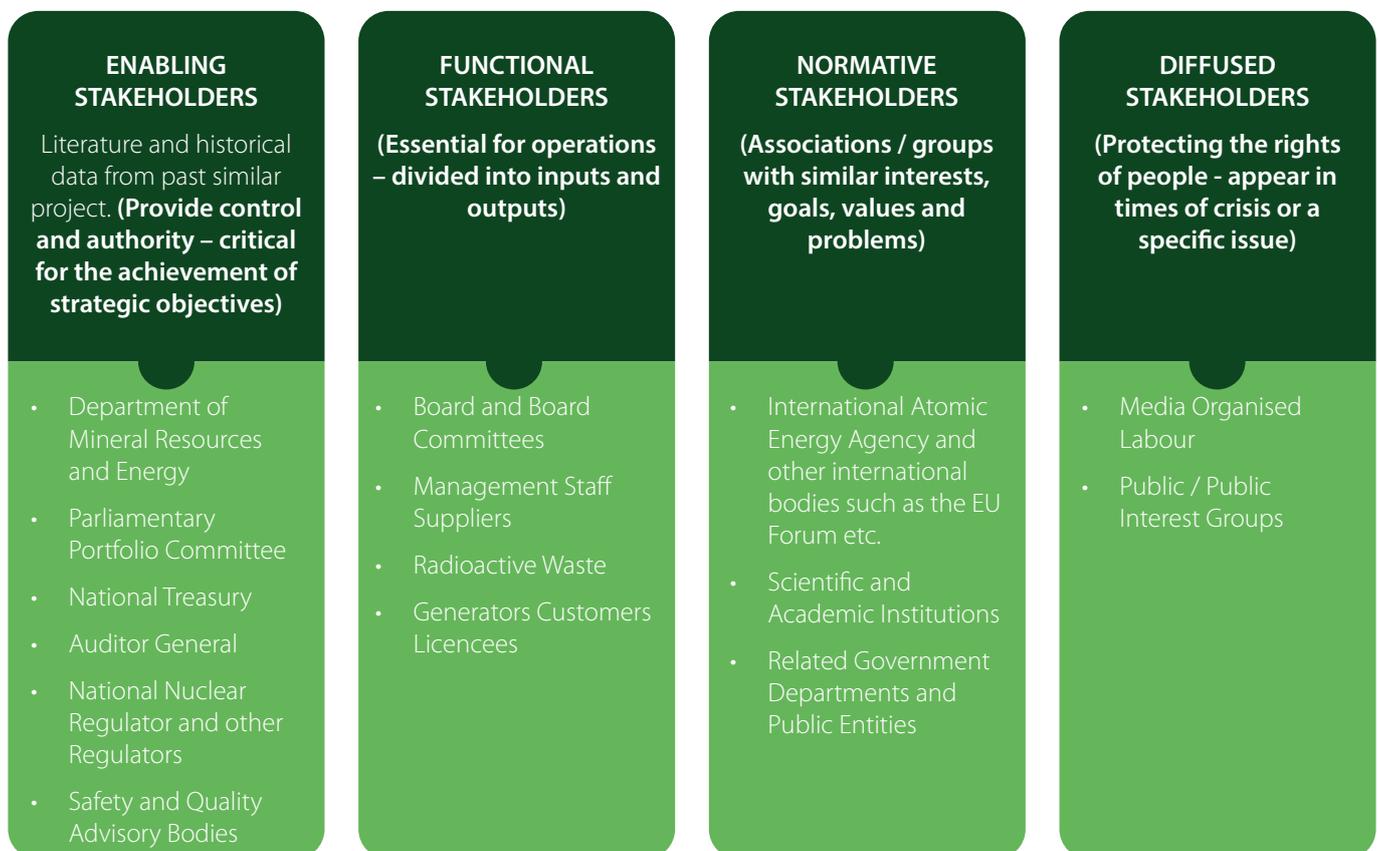


Table 1: Stakeholder Analysis Matrix

Stakeholder	Influence	Expectation
The Board and Governance Committees e.g. Technical Operations Committee, HR Social and Ethics Committee, Audit and Risk Committee	<ul style="list-style-type: none"> • Strategic direction 	<ul style="list-style-type: none"> • Transparency • Accountability • Governance, Integrity, Ethics • Stability • Visibility • Delivery
Department of Mineral Resources and Energy	<ul style="list-style-type: none"> • Policy Setting • Administrative and governance oversight 	<ul style="list-style-type: none"> • Conformance • Governance Continuity and Reporting • Synergy and effective collaboration • Fulfilment of legislative mandate
Parliamentary Portfolio Committees	<ul style="list-style-type: none"> • Sanction • Legislation • Oversight budget and reporting 	<ul style="list-style-type: none"> • Accountability and reporting • Governance, Integrity, Ethics • Contribution to National Priorities • Provision of direction
Radioactive Waste generators	<ul style="list-style-type: none"> • Public Perception • Risk Profile • Waste disposal infrastructure 	<ul style="list-style-type: none"> • Provision of information to establish waste disposal solutions • Clarity on waste management processes • Waste management plans • Fair in operation • Consistent feedback • Waste management inventory database • Good turnaround times • Honesty • Accountability • Integrity • Comply with their own licence agreements • Transparency • Responsiveness • Guidance • Interaction • Accessibility, Fairness, Consistency, Feedback
Staff	<ul style="list-style-type: none"> • Productivity • Morale • Public Perception • Performance Effectiveness 	<ul style="list-style-type: none"> • Fairness • Respect of Worker Rights • Equity • Involvement • Best Practice HRM policies/practices • Conducive work environment • Adequate resourcing • Transparency • Ethical Behaviour • Remuneration and incentives
Media	<ul style="list-style-type: none"> • Public Perception 	<ul style="list-style-type: none"> • Regular Communication • Transparency • Access to Information



Stakeholder	Influence	Expectation
Organised Labour	<ul style="list-style-type: none"> • Policies • Productivity 	<ul style="list-style-type: none"> • Framework for engagement • Willingness to work • Transparency • Communication • Fairness • Enabling environment for association
The Public/Public interest groups/Lobby groups/ Licensees	<ul style="list-style-type: none"> • Operations • Strategy • Culture 	<ul style="list-style-type: none"> • Transparency • Fairness • Consistent delivery • Integrity • Values orientation • Information sharing • CSI
Suppliers	<ul style="list-style-type: none"> • Risk • Effectiveness • Turnaround 	<ul style="list-style-type: none"> • Transparency • Fairness • Consistency • Ethical Behaviour
National Treasury (NT)	<ul style="list-style-type: none"> • Regulatory environment • Financial Prudency • Budgeting 	<ul style="list-style-type: none"> • Reporting • Governance • Compliance
Auditor General (AG)	<ul style="list-style-type: none"> • Regulatory environment • Compliance 	<ul style="list-style-type: none"> • Reporting • Governance • Audit outcomes • Performance
International Atomic Energy Agency and other international bodies such as EU Forum etc.	<ul style="list-style-type: none"> • Policy • Guidance • Safety standards • Direction 	<ul style="list-style-type: none"> • Compliance • Implement international best practice • Capacity building • Research and Development • Collaboration
NNR / regulators	<ul style="list-style-type: none"> • Source regulation of regulation 	<ul style="list-style-type: none"> • Regulatory compliance • Efficiency • Fairness • Regulate • Transparency • Due process • Cooperation
Scientific Institutions and Academic	<ul style="list-style-type: none"> • Research agenda • Strategy 	<ul style="list-style-type: none"> • Partnerships • Collaboration • Compliment the Research and Development mandate
Vaalputs community	<ul style="list-style-type: none"> • Safety 	<ul style="list-style-type: none"> • Community initiatives
Local and provincial authorities	<ul style="list-style-type: none"> • Emergency response 	<ul style="list-style-type: none"> • Social initiatives

1.2 Internal environment analysis

1.2.1 Vision

To be a world-class radioactive waste disposal organisation.

1.2.1 Mission

To provide environmentally safe and technologically innovative radioactive waste disposal solutions for the benefit of current and future generations.

1.2.3 Values

NRWDI's values are grounded in strong ethical considerations. As a result, NRWDI staff members are required to maintain the highest standards of proper conduct and integrity at all times and to ensure that there is no doubt as to what is required. To this end, NRWDI has developed a set of core values. NRWDI's value statements are reflected in the table below:

Table 2: NRWDI Values

Nurturing	We will make the well-being of people and the environment, a priority.
Respect	We will respect all and obey the laws and legislation that govern our country and regulates our industry
Work-life-balance	We are committed to the creation of a culture that supports the achievement of both life and work.
Dedication	We will demonstrate passion, commitment and care in all that we do being fully aware of the impact that our actions may have on current and future generations.
Integrity	We will conduct ourselves with openness, honesty and respect for all stakeholders

NRWDI will strive to be a learning organisation, continuously evolving and developing to improve and to find the safest efficient radioactive waste disposal solutions. All NRWDI employees are consistently encouraged to live the NRWDI's values in all that they do. NRWDI will continue to encourage staff to do so until such time as the values form an integral part of the work life of all staff at NRWDI. Regular communication sessions will continue to be held detailing NRWDI's purpose, mandate, role, functions and ways of working. This will ensure that the NRWDI's strategy and values remain relevant and become firmly institutionalised.

1.2.4 Organisational structure

NRWDI is a Schedule 3A public entity that reports to the Executive Authority i.e., the Minister of Mineral Resources and Energy. NRWDI's activities are funded by the provision of a budget from funds voted annually to the DMRE. The governance of NRWDI is entrusted to a Board appointed in accordance with the NRWDI Act, Section 7(1), by the Minister of Mineral Resources and Energy.

Good governance is crucial to business sustainability and growth of the organisation. The NRWDI has committees that advise the Accounting Authority on matters pertaining to governance. These are the Audit and Risk Committee, the Human Resources, Social and Ethics Committee which also has oversight of the Human Resources and Remuneration aspects, and the Technical Operations Committee. These committees' function by way of formal Charters.

The Chief Executive Officer, assisted by a senior management team which comprises of the Chief Financial Officer and Divisional Managers, is responsible for the day-to-day running of the NRWDI. The operational component of NRWDI has to be delivered through the Vaalputs National Radioactive Waste Disposal Facility, whose functional shift from Necsa to NRWDI is a key imperative for full operationalisation of NRWDI.

The current operational structure of NRWDI is approved by the Board. The structure has been adjusted over time to ensure that it remains relevant and appropriate to organisational requirements. It ensures that NRWDI continues to have the right people, with the right skills and competencies available at the right time, at the appropriate level to deliver on its mandate.

The organogram that follows represents the organisational structure for 2022/23 of NRWDI. It sets out the operational structures, based on NRWDI's Strategy 2020-2025 and Annual Performance Plan 2022/23, which will best enable it to deliver on its mandate.

The organisational structure of NRWDI has therefore been designed according to the design principles of consistency, continuity, accountability, flexibility and efficiency.

In order to ensure consistency and continuity, NRWDI will embark upon a full Workforce Planning exercise or scenario forecasting (quantitative and qualitative) exercise that will determine its specific resourcing requirements (as contained within a Workforce and Strategic Sourcing Plan) for coming years.



To ensure accountability, NRWDI, wherever possible, ensures that whole work processes with discrete work products are owned 'end to end' by functional teams. NRWDI will also use Project Management principles in managing their projects. In order to ensure efficiency, the NRWDI will be structured with a combination of permanent and contingent employees.

The key divisions within NRWDI are Administration, Radioactive Waste Disposal Operations, Science, Engineering and Technology and Radioactive Waste Compliance Management. The Administration division drives the Human Resource Strategy and Plan. HR's focus has shifted from a traditional "support unit" to one that is now a strategic delivery partner. Human resources functions incorporate amongst others, organisational design, strategic workforce planning and sourcing as well as human resource development, inclusive of a focus on ongoing learning.

The Administration division further comprises of the strategic planning, monitoring and evaluation and reporting subprogramme, the Finance and Supply Chain Management subprogramme, Internal Audit, Risk Management, Board Secretariat and Communications and Stakeholder Relations subprogrammes.

To ensure the consistent communication of business objectives and changes, as well as the engagement of all staff at all levels, Administration manages internal & external communications. The role of Administration in NRWDI also includes ensuring employment-related regulatory compliance as well as the appropriate design and utilisation of all aspects of its physical space in order to create an optimal, safe and cost-effective environment for NRWDI employees. This is accomplished by managing the core facilities management activities which include Occupational Health and Safety (OHS), maintenance, and cleaning.

NRWDI has a reasonably stable management core enjoying a degree of continuity. This core is tasked with managing employees whose numbers vary according to organisational requirements. The evolving profile of NRWDI workforce indicates a transition to a predominantly younger workforce over time. Managing this young, largely contingent workforce will require leadership within NRWDI to develop the necessary skills to manage millennial employees.

Figure 3: NRWDI organisational structure

National Radioactive Waste Disposal Institute Organisational Structure

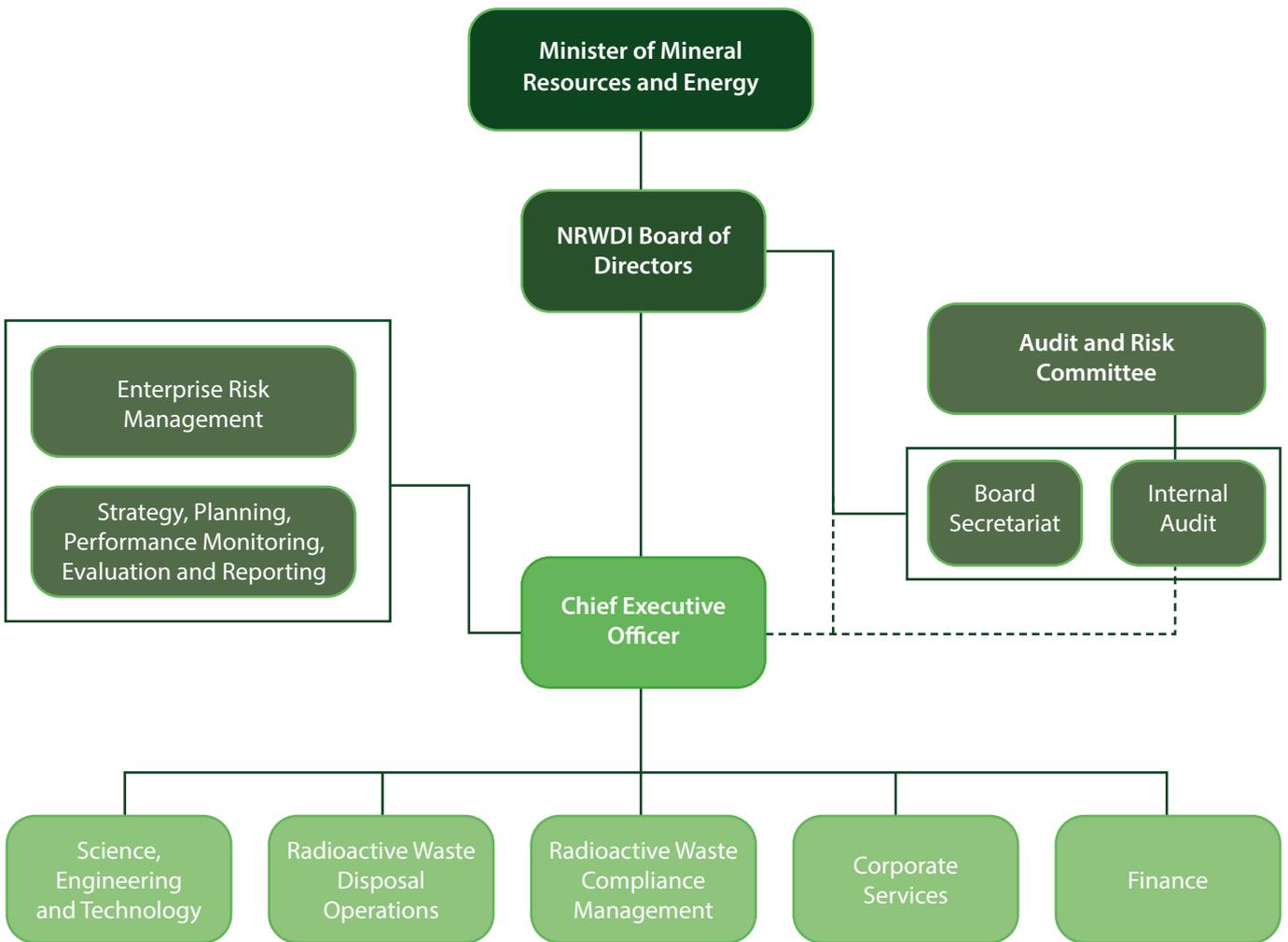




Table 3: Income and Expenditure

STATEMENT OF FINANCIAL PERFORMANCE - NRWDC CONSOLIDATED								
	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
REVENUE								
Non-tax revenue	1 908	2 521	1 184	1 725	1 725	1 625	1 600	1 500
Commission received	1	1	1	-	-	-	-	-
Interest, dividends and rent on land	1 907	2 520	1 183	1 725	1 725	1 625	1 600	1 500
Transfers received	45 532	47 499	49 397	49 166	49 166	50 304	50 486	52 753
Total revenue	47 440	50 020	50 581	50 891	50 891	51 929	52 086	54 253
EXPENSES								
Current payments	36 800	44 490	46 033	50 891	50 891	51 929	52 086	54 253
Compensation of employees	31 105	33 574	36 690	41 240	41 240	42 545	42 574	43 012
Salaries and wages	31 105	33 574	36 690	41 240	41 240	42 545	42 574	43 012
Goods and services: Of which	5 695	10 916	9 343	9 651	9 651	9 383	9 512	11 241
Administrative fees	22	42	22	61	61	63	63	66
Advertising	221	154	330	-	-	300	250	250
Minor assets	-	-	3	70	70	72	72	100
Audit costs: External	532	785	1 099	1 200	1 200	1 534	1 573	1 720
Catering: Internal activities	18	32	1	12	12	12	12	13
Communication (G&S)	228	278	275	476	476	529	518	535
Computer services	378	639	952	746	746	750	750	750
Consultants: Business and advisory services	203	144	512	547	547	550	550	550
Legal services (G&S)	32	73	-	250	250	250	250	250
Contractors: Maintenance and repairs of other fixed structures	1 119	-	-	-	-	-	-	-
Contractors: Maintenance and repairs of other machinery and equipment	-	-	18	-	-	-	-	-
Contractors: Other	-	1 818	2 692	638	638	844	745	1 870
Agency and support/outsourced services	53	27	742	34	34	36	36	38
Entertainment	11	-	-	14	14	10	10	10
Consumable supplies	19	51	48	53	53	65	65	66
Consumables: Stationery, printing and office supplies	-	29	224	92	92	76	76	77
Operating leases	783	817	850	1 045	1 045	1 600	1 750	1 900
Travel and subsistence	940	643	63	1 000	1 000	300	300	302
Training and development	67	253	342	1 588	1 588	750	800	1 000
Operating payments	470	4 304	104	931	931	292	292	294
Venues and facilities	96	124	62	191	191	150	150	150
Depreciation	492	703	1 004	703	703	1 200	1 250	1 300
Losses from sale of fixed assets	11	-	-	-	-	-	-	-
Total Expenditure	36 800	44 490	46 033	50 891	50 891	51 929	52 086	54 253
Surplus / Deficit)	10 640	5 530	4 548	-	-	-	-	-

Additional notes to budget amounts for MTEF

1. Advertising

Costs incurred for advertising vacant posts in newspapers

2. Agency and support (Outsourced services)

Internal Audit Function uses a combination of projects completed by own internal resources and those allocated to audit firms where NRWDI does not have the capacity to execute the project.

3. Assets less than R 5000

Capital projects less than R 5000.

4. Audit costs

Fees for the Auditor General of South Africa.

5. Board costs

Remuneration of non-executive Board Members.

6. Catering (Internal Activities)

In terms of NT Instruction on cost containment measures, no catering is allowed for internal meetings unless there are external stakeholders attending the meeting or deviations for internal meetings are approved per delegation of authority.

7. Communication

Payment to Necsa for telephones, network and email facilities.

8. Computer services

Computer hardware such as keyboards, hard drives and servers.

9. Contractors

Payments to service providers providing technical and specialist services where these services are unnecessary to maintain these skills in-house

10. Entertainment

Expenditure incurred by Senior Managers in performance of their duties. Such expenditure includes, but is not limited to, luncheon meetings held with, foreign delegations and/or other individuals in and outside the public sector.

11. Lease payments

Rental of NRWDI office space from Necsa.

12. Legal fees

Provision for unforeseen legal costs that maybe incurred.

13. Non – life insurance

Short term insurance for assets.

14. Printing and publication

Printing of corporate statutory documents like the strategic plan, annual performance plans and annual reports.

15. Repairs and Maintenance

Building/equipment.

16. Training and Development

Statutory training and staff development.

17. Travel and Subsistence

Travel to Vaalputs, Parliament, technical meetings, domestic and international travel as well as travel for Board members.

18. Venues and facilities

Hiring of venues and facilities for external stakeholder engagements.

19. Annual Licence Fees

Software licences.

20. Safety Support Case

Relicensing of Vaalputs

21. PSI Forums

Costs associated to hold quarterly Vaalputs Public Safety Information Forum meetings sessions at Vaalputs.

22. Stationery

Internal stationery.

23. Postal costs

Postage and delivery costs.

24. Consumables

Cleaning materials.

25. Branding material

Banners, pamphlets, brochures, signage.

26. Membership fees

Corporate membership fees and individual professional membership fees.



PART C

MEASURING OUR PERFORMANCE

MEASURING OUR PERFORMANCE

1. INSTITUTIONAL PROGRAMME PERFORMANCE INFORMATION

1.1 PROGRAMME 1: ADMINISTRATION

1.1.1 Purpose

To ensure that NRWDI is operationally efficient, cost-effective, properly managed and complies with good corporate governance principles.

Programme 1 makes a contribution to the MTSF's priority 6 which is "Capable, Ethical and Developmental State" by contributing to the following:

- A functional, efficient and integrated government;
- A professional, meritocratic and ethical administration;
- A social compact and engagement with key stakeholders; and
- Mainstreaming of gender, empowerment of youth and persons with disability

1.1.2 Sub-programmes

The core outcome is achieved through the provision of key corporate functions under the following sub-programmes:

- (i). Strategic planning, monitoring and evaluation and reporting** coordinates the translation of policy priorities agreed upon by the Board into actionable strategic plans with clear outcomes, outputs, indicators and resource commitments. It also carries out monitoring and evaluation of the strategy as articulated in the annual performance plan and institutional operational plan to ensure that NRWDI delivers on its impact statement and improves and sustains its performance and reporting thereof.
- (ii). Risk Management** is responsible for coordinating and supporting the overall institutional risk management process ensuring that risks are identified and managed so that it does not impact negatively on the institutional performance.
- (iii). Internal Audit** plays a pivotal role in the combined assurance framework by providing independent assurance over risk management and systems of internal control.

(iv). Board Secretariat plays an important role in supporting the effectiveness of the board by monitoring that board policy and procedures are followed. The Secretariat also coordinates the timely completion and dispatch of board agenda and all other documents that are tabled before the Board.

(v). Communications and Stakeholder Relations aims to remove existing constraints by achieving alignment through effective stakeholder engagement and value-adding partnerships that are mutually beneficial which will result in the organisation meeting and exceeding its goals.

(vi). Finance and Supply Chain Management ensures compliance with all relevant financial statutes and regulations, the most important of which is the Public Finance Management Act (PFMA). It ensures that goods and services are procured taking into consideration the procurement legislation and the principles of good corporate governance.

(vii). Corporate Services (Human Capital Management; Information and Communications Technology Management; Legal Services Management; and General Administration and Facilities Management)-The Corporate Services sub-programme primarily provides integrated strategic and operational business enabling services. Legal Services is responsible for providing a comprehensive legal advisory service to enable the entity to execute its mandate effectively within the rule of law. Human Resources (HR) Management provides transformational HR support enabling the entity to attract, develop and retain skilled people across the organisation. Information and Communication Technology (ICT) provides long term planning and day to day support in respect of ICT needs, services and systems. Facilities Management ensures physical and information security. It also oversees accommodation and the maintenance thereof.

1.1.3 Programme 1: Outcomes, outputs, output Indicators and targets

Table 4: Programme 1: Outcomes, outputs, output Indicators and targets

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Effective, Efficient and Responsive NRWDI	Financial sustainability plan	Financial sustainability plan	N/A	N/A	N/A	N/A	Financial sustainability assessment completed	Funding model developed	Financial sustainability plan developed
	Valid invoices paid within 30 days after relevant documents are received	Percentage of valid invoices paid within 30 days after relevant documents are received	100%	100%	100%	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received
	Staff capacity building / talent management	Number of training courses attended by staff	N/A	N/A	N/A	N/A	20 training courses attended	20 training courses attended	20 training courses attended
		Number of Interns employed	N/A	N/A	N/A	N/A	2 Interns employed	2 Interns employed	2 Interns employed
	Employment Equity (EE) plan implementation	Number of females at Executive/Senior Management Levels	N/A	N/A	N/A	N/A	No Target	No target	2 females at Executive/Senior Management Levels
		Percentage of people with disability employed	N/A	N/A	N/A	N/A	2% of people with disability employed	2% of people with disability employed	3% of people with disability employed

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	Secure NRWDI Active Directory Domain in place	Implemented Secure Active Directory Domain	N/A	N/A	N/A	N/A	Procurement of NRWDI Secure Active Directory Domain (AD). Infrastructure and Install Connectivity.	Stack, install and perform post-installation configuration tasks, testing for NRWDI Secure Active Directory Domain (AD).	Implementation & Deployment of NRWDI Secure Active Directory Domain (AD).
	Develop and Maintain a National Radioactive Waste Database (RAWIS)	Functional and populated Radioactive Waste Inventory System (RAWIS)	N/A	N/A	N/A	N/A	Incorporate additional User Requirements on RAWIS system and migrate all existing data from old Necs Radwaste Inventory System	Interface RAWIS system with waste generators inventory system	Migrate information from waste generators data base
	Strategic Partnerships and collaborations Framework	Partnership and collaboration framework developed and implemented	N/A	N/A	N/A	N/A	Board Approved partnership and collaboration framework	Partnership and collaboration tools (processes MoUs, MoAs) developed	Board Approved Partnership and collaboration on tools approved
	Public Safety Information Forum (PSIF) meetings held with communities surrounding Vaalputs	Number of PSIF meetings held with communities surrounding Vaalputs	4	4	2	4	4	4	4
	Communications and stakeholder engagement plan	Percentage implementation of communications and stakeholder engagement plan	N/A	N/A	N/A	N/A	80% implementation of communications and stakeholder engagement plan	80% implementation of communications and stakeholder engagement plan	80% implementation of communications and stakeholder engagement plan

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
	Improved efficiency and effectiveness of all governance structures	Board Approved Corporate Governance Framework	N/A	N/A	N/A	N/A	Approval of the Corporate Governance Framework	Implementation of the Corporate Governance Framework	Implementation of the Corporate Governance Framework
	Unqualified Audit Opinion	Unqualified Audit Report	N/A	N/A	Unqualified Audit Report	Unqualified Audit Report	Unqualified Audit Report	Unqualified Audit Report	Unqualified Audit Report
	Risk strategy implemented	Number of quarterly reports produced	N/A	N/A	N/A	N/A	4 Quarterly risk reports produced	4 Quarterly risk reports produced	4 Quarterly risk reports produced
	Organisational Performance Framework developed	Organisational Performance Framework	N/A	N/A	N/A	N/A	Organisational Performance Framework developed	Organisational Performance Framework implemented	Organisational Performance Framework implemented



1.1.4 Programme 1: Output indicators: annual and quarterly targets

Table 5: Programme 1: Output indicators: annual and quarterly targets

Output indicators	Annual target 2022/2023	Q1	Q2	Q3	Q4
Financial sustainability plan	Financial sustainability assessment completed	Define problem statement and methodology and conduct desktop research	Conduct benchmarking exercise	Compile draft financial assessment with findings	Compile final financial sustainability assessment with recommendations
Percentage of valid invoices paid within 30 days	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received	100% of valid invoices paid within 30 days after relevant documents are received
Number of training courses attended	20 training courses attended	5 training courses attended	5 training courses attended	5 training courses attended	5 training courses attended
Number of Interns employed	2 Interns employed	-	-	-	2 Interns employed
Percentage of people with disabilities employed	2% of people with disabilities employed	-	-	-	2% of people with disabilities employed
Implemented Secure Active Directory Domain	Procurement of NRWDI Secure Active Directory Domain (AD). Infrastructure. Install Connectivity.	Procurement of Licences. Software and Infrastructure for NRWDI Secure Active Directory Domain (AD)	Procurement of Data Line, Voice-Over-IP-(VOIP) and Network (LAN) Infrastructure.	Install and configure Voice-Over-IP-(VOIP) and Network (LAN) Network.	Install and configure Telephony, Multifunction Device (MFDs) and Wi-Fi.
Functional and populated Radioactive Waste Inventory System (RAWIS)	Incorporate additional User Requirements on RAWIS system and migrate all existing data from old Necs Radwaste Inventory System	Present RAWIS System Beta Version and acquired additional user requirements input from all stakeholders	Modify RAWIS system functionality as per additional user requirements Conduct user testing	Collect and gather historical and current Radwaste Data from Vaalputs Conduct data normalisation	Migrate Vaalputs historic and current data into RAWIS system, conduct user Quality Assurance sign off (hand over) on the system
Partnership and collaboration framework developed and implemented	Board Approved Partnership and collaboration framework	Conduct desktop study and research on local and international partnership and	Produce first draft partnership and collaboration framework	Conduct staff workshop and incorporate inputs into final draft partnership and	Board Approved partnership and collaboration framework
Number of Public Safety Information Forum (PSIF) meetings held with communities surrounding Vaalputs	4 PSIF meetings held with communities surrounding Vaalputs	1 PSIF meeting held with communities surrounding Vaalputs	1 PSIF meeting held with communities surrounding Vaalputs	1 PSIF meeting held with communities surrounding Vaalputs	1 PSIF meeting held with communities surrounding Vaalputs
Percentage implementation of the communications and stakeholder engagement plan	80% implementation of communications and stakeholder engagement plan	20% implementation of communications and stakeholder engagement plan	40% implementation of communications and stakeholder engagement plan	60% implementation of communications and stakeholder engagement plan	80% implementation of communications and stakeholder engagement plan



Output indicators	Annual target 2022/2023	Q1	Q2	Q3	Q4
Board Approved Corporate Governance Framework	Approval of the Corporate Governance Framework	-	-	Corporate Governance Framework approved by Exco	Corporate Governance Framework approved by Board
Unqualified Audit Opinion	Unqualified Audit Report	No Target	No Target	No Target	Unqualified Audit Opinion
Number of quarterly risk reports produced	4 Quarterly risk reports produced	1 Risk Report produced	1 Risk Report produced	1 Risk Report produced	1 Risk Report produced
Organisational Performance Framework	Organisational Performance Framework developed	Draft Organisational Performance Framework developed	Exco Approved Organisational Performance Framework	Board Approved Organisational Performance Framework	N/A

1.1.5 Programme 1: Explanation of planned performance over the medium - term period

In order to have an effective, efficient and responsive NRWDI there must be a focus on the human resources and financial resources in the organisation. There is also a need for the various policies, processes and strategies to be in place. In this case the outputs include implementation of the finance strategy, human capital strategy and an unqualified audit report all of which contribute towards achieving the outcome and impact statement.

Strategic support at NRWDI comprises of a multitude of activities which are conducted by specific units within the organisation. All of these activities need to be timeously coordinated and meticulously implemented in order to ensure that the organisation is able to execute its mandate. Financial viability and sustainability (compliance to the PFMA and Treasury Regulations) must be tracked and monitored to ensure sustainable operations, support effective asset management, and deliver appropriate levels of service to stakeholders.

NRWDI seeks to ensure that governance protocols are adhered to by employing robust internal control systems. Key

contributions to such will be made by the Risk and Internal Audit departments and the Board Secretariat. Performance Planning, Reporting, Monitoring and Evaluation will determine the effectiveness of NRWDI in terms of meeting its mandate and the requirements of the Shareholder. The monitoring and evaluation processes are a strategic imperative, executed via the Office of the CEO, Strategy and Planning department and reported on, at defined intervals. The Human Capital strategy seeks to understand and anticipate the organisations talent needs. The strategy will focus on attracting, maintaining and retaining appropriate human capital and providing opportunities for employee growth and advancement.

The outputs i.e., a developed and implemented finance strategy; human capital strategy and an unqualified audit report will contribute jointly towards the achievement of the outcome i.e. Effective, Efficient and Responsive NRWDI.

The Administrative division will utilise their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

1.1.6 Programme 1: Programme Resource Considerations

Table 6: Budget Allocation for programme 1 and sub programmes as per the ENE and/or the EPRE

Expenses	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
Rand thousand								
Objective/Activity								
Administration								
Goods and services	5 213	6 535	6 367	8 406	8 406	8 834	8 963	9 684
Administrative fees	22	33	22	61	61	63	63	66
Advertising	221	154	230	-		300	250	250
Minor assets	-	-	3	70	70	72	72	100

Expenses	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
Audit costs: External	532	785	1 099	1 200	1 200	1 534	1 573	1 720
Catering: Internal activities	18	32	1	12	12	12	12	13
Communication (G&S)	151	174	185	357	357	363	352	368
Computer services	378	639	900	746	746	750	750	750
Consultants: Business and advisory services	203	144	512	547	547	550	550	550
Legal services (G&S)	32	73		250	250	250	250	250
Contractors: Maintenance and repairs of other fixed structures	1 119	-	-	-	-	-	-	
Contractors: Maintenance and repairs of other machinery and equipment	-	-	18	-	-	-	-	
Contractors: Other	-	1 818		638	638	844	745	870
Agency and support/outsourced services	53	27	729	34	34	36	36	38
Entertainment	11	-		14	14	10	10	10
Consumable supplies	-	51	48	39	39	50	50	50
Consumables: Stationery, printing and office supplies	-	28	224	68	68	50	50	50
Operating leases	783	817	850	1 045	1 045	1 600	1 750	1 900
Travel and subsistence	664	413	55	380	380	100	100	100
Training and development	26	242	342	1 588	1 588	750	800	1 000
Operating payments	401	278	83	463	463	150	150	150
Venues and facilities	96	124	62	191	191	150	150	150
Depreciation	492	703	1 004	703	703	1 200	1 250	1 300
Losses from Sale of fixed assets	11	-	-	-	-	-	-	
Total Expenditure	5 213	6 535	6 367	8 406	8 406	8 834	8 963	9 684

1.2 PROGRAMME 2: RADIOACTIVE WASTE DISPOSAL OPERATIONS

1.2.1 Purpose

The purpose of the program is to provide radioactive waste disposal and related services on a national basis that is, safe, technically sound, socially acceptable, environmentally responsible and economically feasible ensuring that no undue burden is placed on future generations due to past, present and future involvement in nuclear programs.

The future of the environment is a global agenda item and management and disposal of radioactive waste material must be carried out in such a manner that human health and the environment are protected.

The following activities are inherently part of the Radioactive Waste Operations Division:

- (i) Operate the national low-level waste repository at Vaalputs;
- (ii) Manage, operate and monitor operational radioactive waste disposal facilities including related predisposal management of radioactive waste on disposal sites;

- (iii) Manage ownerless radioactive waste on behalf of the Government, including the development of radioactive waste management plans for such waste;
- (iv) Provide information on all aspects of radioactive waste management to the public living around radioactive waste disposal facilities and to the public in general.
- (v) Maintain the Vaalputs Waste Disposal Inventory Database and submit annually a report to the NNR relating to waste inventory disposed of at Vaalputs.

Programme 2 makes a contribution to two of the MTSF priorities namely priority 1 which is "Economic Transformation and Job Creation and Priority 6 "A capable, ethical and developmental state". NRWDI is currently establishing new waste disposal and related infrastructure that will create and sustain more decent jobs.

1.2.2 Programme 2: Outcomes, Outputs, Performance Indicators and Targets

Table 7: Programme 2: Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2018/19	2019/20	2020/2021	2021/2022	2022/23	2023/24	2024/25
Safe and secure disposal of all classes of radioactive waste	Radioactive Waste safely and securely disposed at Vaalputs	Waste Acceptance Criteria (WAC) met for LLW	N/A	N/A	N/A	N/A	100% disposed waste packages meet WAC	100% disposed waste packages meet WAC	100% disposed waste packages meet WAC
	Preparation for physical security upgrades for Vaalputs to store or dispose other radioactive waste classes	Physical security upgrade implementation plan completed	N/A	N/A	N/A	N/A	Establish requirements for security upgrades	Assessment of the facility against the stakeholder requirements	Security upgrade implementation plan
National Waste Inventory Report	Preparation for the publication of a national waste inventory report.	Draft National Waste Inventory Report completed	N/A	N/A	N/A	N/A	Develop a Framework for the National Waste Inventory Report	Implementation of Framework for the National Waste Inventory Report	Draft National Waste Inventory Report



1.2.3 Programme 2: Indicators, Annual and Quarterly Targets

Table 8: Programme 2: Indicators, Annual and Quarterly Targets

Output indicators	Annual target 2022/2023	Q1	Q2	Q3	Q4
Waste Acceptance Criteria (WAC) met	100% disposed waste packages meet WAC	100% of waste packages disposed are WAC compliant	100% of waste packages disposed are WAC compliant	100% of waste packages disposed are WAC compliant	100% of waste packages disposed are WAC compliant
Physical security upgrade implementation plan completed	Establish requirements for security upgrades	Engagement with stakeholders	Develop physical security upgrade stakeholder engagement report	Review draft physical security upgrade stakeholder engagement report	Finalise physical security upgrade stakeholder engagement report
Preparation for the publication of a national waste inventory report.	Develop a Framework for the National Waste Inventory Report	Conduct benchmarking exercise on National Waste Inventories Reports	Develop Draft Framework for the National Waste Inventory Report	Review Draft Framework for the National Waste Inventory Report	Finalise Framework for the National Waste Inventory Report

1.2.4 Programme 2: Explanation of Planned Performance over the Medium -Term Period

In order to ensure safe disposal of all radioactive waste classes, the Vaalputs National Waste Disposal must be operated within Vaalputs Nuclear Installation License conditions. Key activities will focus on the operation and management of Vaalputs by:

- verifying that waste packages presented for disposal meet

all the requirements of the Vaalputs Waste Acceptance Criteria;

- ensuring adherence to Vaalputs Integrated SHEQ Management System;
- sharing information with Vaalputs communities via the Vaalputs Public Safety information Forum.

1.2.5 Programme Resource Considerations

Table 9: Budget Allocation for programme 2 and sub programmes as per the ENE and/or the EPRE

Expenses	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
Rand thousand	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
Objective/Activity								
Radioactive Waste Disposal Operations								
Goods and services	34	36	23	495	495	157	157	160
Communication (G&S)	30	35	23	23	23	50	50	50
Consumable supplies	-	-		3	3	3	3	3
Consumables: Stationery, printing and office supplies	-	-		4	4	4	4	4
Travel and subsistence	4	1		190	190	50	50	52
Operating payments	-	-		275	275	50	50	50
Total Expenditure	34	36	23	495	495	157	157	160

The Radioactive Waste Disposal Operations division will utilize their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.



1.3 PROGRAMME 3: SCIENCE, ENGINEERING AND TECHNOLOGY

1.3.1 Purpose

The purpose of this programme is to develop and implement radioactive waste management solutions for safe storage and disposal of all classes of radioactive waste through scientific, engineering and technological means.

This purpose is aligned with the legal mandate of NRWDI (NRWDI Act No.53 of 2008), which sanctions NRWDI to manage the disposal of radioactive waste on a national basis. As such the following functions of the programme flow from this mandate:

- To conduct research and develop plans for the long-term management of radioactive waste storage and disposal;
- To design and implement disposal solutions for all classes of radioactive waste;
- To investigate the need for any new radioactive waste disposal facilities;
- To site, design and construct such new facilities as may be required;
- To assist generators of small quantities of radioactive waste in all technical aspects related to the disposal of such waste;
- To develop and manage an intellectual property (IP) system for the protection of technology designs, innovations and related IP rights; and
- To co-operate with any person or institution on matters relating to the above functions of the programme

The goal of the programme is to promote science to expand knowledge in the field of radioactive waste management and disposal, and use engineering to convert this scientific knowledge, through combining it with resources and techniques, to create (design, build and maintain) new technologies for application to radioactive waste management and disposal.

The programme makes a contribution to two of the MTSF priorities, namely, Priority 1 "Economic Transformation and Job Creation" and Priority 6 "A Capable, Ethical and Developmental State." This contribution arises from the planned project such as the Establishment of a Centralised Interim Storage Facility for Spent Nuclear Fuel and the Disposal of Disused Sealed Radioactive Sources in a Borehole Disposal Facility.

PROGRAMME 3: SCIENCE, ENGINEERING AND TECHNOLOGY

1.3.2 Programme 3: Outcomes, Outputs, Performance Indicators and Targets

Table 10: Programme 3: Outcomes, Outputs, Performance Indicators and Targets

Outcomes	Outputs	Output Indicators	Annual Targets				
			Actual Audited Performance	Estimated Performance	MTEF Period		
			2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Capability for new radioactive waste disposal facilities established	CISF project development	CISF project progress reports	N/A	N/A	Preliminary design developed	Detailed design developed	Safety case developed
					EIA phase 1 performed (i.e., Application to Competent Authority (CA) lodged)	EIA phase 2 performed (i.e., Final EIA report submitted to CA)	EIA phase 3 performed (i.e.: Environmental Authorisation secured)
Established R&D programme for long-term radioactive waste management solutions	R&D programme launched	R&D scientific and technical reports	N/A	N/A	R&D strategy developed	Initiate 2 research focus areas	Initiate 2 additional research focus areas



1.3.3 Programme 3: Indicators, Annual and Quarterly Targets

Table 11: Programme 3: Indicators, Annual and Quarterly Targets

Output indicators	Annual target 2022/2023	Q1	Q2	Q3	Q4
CISF project progress reports	Preliminary design developed	Preliminary design Practitioner appointed	First Preliminary Design Interim report completed	Second Preliminary Design Interim report completed	Final Preliminary Design Report completed
	EIA phase 1 performed (i.e.: Application to Competent Authority (CA) lodged)	Environmental Assessment Practitioner (EAP) appointed	Draft Scoping Report completed	Draft EIA report completed	Application to Competent Authority (CA) lodged
R&D scientific and technical reports	R&D strategy developed	R&D requirements compiled	Intellectual property and information dissemination plan developed	Two partnership agreements concluded	R&D strategy developed

1.3.4 Programme 3: Explanation of Planned Performance Over the Medium-Term Period

There is currently no national “away from reactor site” storage and disposal infrastructure available for spent nuclear fuel except for the “on-reactor site” infrastructure. This programme will focus on the establishment of a national centralised interim spent fuel storage facility by 2030 for the safe storage of Koeberg and SAFARI-1 spent fuel and other high-level wastes from the country’s nuclear reactors. A project plan will be required to provide a roadmap, milestones and schedules as well as indicate resources required for achieving this

outcome by 2030. Key activities and milestones will include, inter alia, feasibility studies, technology selection, design development, environmental impact assessment, licensing, construction, cold and hot commissioning as well as the nuclear license to operate this facility.

In parallel, a R&D strategy will be developed, which will address R&D needs/requirements, intellectual property and information dissemination and the establishment of partnerships.

1.3.5 Programme Resource Considerations

Table 12: Budget Allocation for programme 3 and sub programmes as per the ENE and/or the EPRE

Expenses	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
Objective/Activity								
Science, Engineering and Radwaste, Technology								
Goods and services	122	177	26	294	294	137	137	1 141
Administrative fees Communication (G&S)	-	1	-	-	-	-	-	-
Contractors: Other	22	20	18	23	23	24	24	25
Consumable supplies	-	-	-	-	-	-	-	1 000
Consumables: Stationery, printing and office supplies	-	-	-	6	6	6	6	6
Travel and subsistence	-	1	-	13	13	15	15	16
Operating payments	100	154	8	210	210	50	50	50
	-	-	-	42	42	42	42	44
Total Expenditure	122	177	26	294	294	137	137	1 141

The Science, Engineering and Technology division will utilise their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

1.4 PROGRAMME 4: RADIOACTIVE WASTE COMPLIANCE MANAGEMENT

1.4.1 Purpose

The aim of the programme is to ensure that NRWDI's core mandate (disposal of radioactive waste on a national basis) is executed in compliance with quality, health, safety, environmental and nuclear licensing and other statutory requirements, relevant international standards and best practices. The programme also seeks to provide management systems and resources to discharge the obligations associated with holding a nuclear authorisation. The Radioactive Waste Compliance Management division provides a support function to the Institute in terms of developing and ensuring compliance with the nuclear installation licence including the required safety, health, environment and quality management systems.

Programme 4 makes a contribution to one priority of the MTSF namely Priority 6 which is "Capable, Ethical and Developmental State."

The compliance with quality, health, safety, environmental and nuclear licensing regulatory requirements, relevant international standards and best practices helps to ensure that NRWDI is in a position to deliver waste disposal services on a national basis.

PROGRAMME 4: RADIOACTIVE WASTE COMPLIANCE MANAGEMENT

1.4.2 Programme 4: Outcomes, Outputs, Performance Indicators and Targets

Table 13: Programme 4: Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Ensure compliance with applicable statutory requirements	Compliance assurance plan implemented	SHEQ, Licensing and RP training/ awareness sessions conducted	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> 4 X SHEQ training / awareness sessions 4 X Licensing and RP training / awareness sessions 	<ul style="list-style-type: none"> 4 X SHEQ training / awareness sessions 4 X Licensing and RP training / awareness sessions 	<ul style="list-style-type: none"> 4 X SHEQ training / awareness sessions 4 X Licensing and RP training / awareness sessions
		SHEQ, Licensing and RP inspections/ audits conducted	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> 4 X SHEQ inspections/ audits 4 X Licensing and RP inspections / audits 	<ul style="list-style-type: none"> 4 X SHEQ inspections/ audits 4 X Licensing and RP inspections / audits 	<ul style="list-style-type: none"> 4 X SHEQ inspections/ audits 4 X Licensing and RP inspections / audits



1.4.3 Programme 4: Indicators, Annual and Quarterly Targets

Table 14: Programme 4: Indicators, Annual and Quarterly Targets

Output indicators	Annual target 2022/2023	Q1	Q2	Q3	Q4
SHEQ, Licensing and RP training/ awareness sessions conducted	<ul style="list-style-type: none"> 4 X SHEQ training / awareness sessions 4 x Licensing and RP training / awareness sessions 	<ul style="list-style-type: none"> 1 X SHEQ training / awareness session 1 x Licensing and RP training / awareness session 	<ul style="list-style-type: none"> 1 X SHEQ training / awareness session 1 x Licensing and RP training / awareness session 	<ul style="list-style-type: none"> 1 X SHEQ training / awareness session 1 x Licensing and RP training / awareness session 	<ul style="list-style-type: none"> 1 X SHEQ training / awareness session 1 x Licensing and RP training / awareness session
SHEQ, Licensing and RP inspections/ audits conducted	<ul style="list-style-type: none"> 4 X SHEQ inspections/ audits 4 X Licensing and RP inspections / audits 	<ul style="list-style-type: none"> 1 X SHEQ inspection/ audit 1 X Licensing and RP inspection / audit 	<ul style="list-style-type: none"> 1 X SHEQ inspection/ audit 1 X Licensing and RP inspection / audit 	<ul style="list-style-type: none"> 1 X SHEQ inspection/ audit 1 X Licensing and RP inspection / audit 	<ul style="list-style-type: none"> 1 X SHEQ inspection/ audit 1 X Licensing and RP inspection / audit

1.4.4 Programme 4: Explanation of Planned Performance over the Medium-term period

The output indicators contribute directly towards achieving the NRWDI mandate, namely to manage radioactive waste disposal on a national basis. It therefore also supports all the activities for Programs 2 and 3. Compliance with the requirements and conditions of a nuclear authorisation is a prerequisite for any nuclear related projects and operations. In this regard the Nuclear Installation Licence requires that a Management System be established and implemented in accordance with the safety standards and regulatory practices for nuclear related projects and operations. In order for NRWDI to manage the radioactive waste disposal

operations and any other nuclear related activities on a national basis, the assumption is that the National Nuclear Regulator has approved and issued the Nuclear Installation Licence to NRWDI.

The implementation of the Compliance Assurance Plan will assist in ensuring that NRWDI as a holder of a nuclear authorisation complies with the requirements of the Nuclear Installation Licence (NIL). The compliance assurance activities take into consideration the training sessions, awareness sessions, audits and inspections.

1.4.5 Programme Resource Considerations

Table 15: Budget Allocation for programme 4 and sub programmes as per the ENE and/or the EPRE

Expenses	Audited outcome 2018/19	Audited outcome 2019/20	Audited outcome 2020/21	Budget estimate 2021/22	Approved budget	Medium Term Estimates		
Rand thousand	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
Objective/Activity								
Radioactive Waste Compliance Management								
Goods and services	326	4 168	2 927	456	456	255	255	256
Administrative fees	-	7	-	-	-	-	-	-
Advertising	-	-	100	-	-	-	-	-
Communication (G&S)	25	49	49	73	73	92	92	92
Computer services	-	-	52	-	-	-	-	-
Contractors: Other	-	-	2 692	-	-	-	-	-
Agency and support/outsourced services	-	-	13	-	-	-	-	-
Consumable supplies	19	-	-	5	5	6	6	7



Expenses	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2018/19	2019/20	2020/21	2021/22		2022/23	2023/24	2024/25
Consumables: Stationery, printing and office supplies	-	-		7	7	7	7	7
Travel and subsistence	172	74		220	220	100	100	100
Training and development	42	11	-	-	-	-	-	-
Operating payments	69	4 027	21	151	151	50	50	50
Total Expenditure	326	4 168	2 927	456	456	255	255	256

The Radioactive Waste Compliance Management division will utilize their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

2. UPDATED KEY RISK AND MITIGATION FROM STRATEGIC PLAN

Table 16: Key risks and mitigation

OUTCOME	KEY RISKS	RISK MITIGATION
1. An effective, efficient and responsive NRWDI	a) Inadequate capacity and capability (people, systems and processes).	<ul style="list-style-type: none"> • Drive organisational culture change • Strengthen internal capacity to deliver on mandate by filling all funded vacancies • Build strategic partnerships • Identify and implement Leadership and management development programme (Coaching and mentorship programme)
	b) Lack of succession planning	<ul style="list-style-type: none"> • Implement effective talent management strategies: • Develop succession planning strategy • Organogram to be reviewed
	c) Inadequate budget appropriation to implement plans.	<ul style="list-style-type: none"> • Motivate and request a correction of MTEF baseline • Strategic engagement on radioactive waste with Shareholder for NRWDI funding and finalisation of the Fund Bill • Radioactive Waste
	d) Lack of financial viability of NRWDI	<ul style="list-style-type: none"> • Financial sustainability planning • Obtain Ministerial approval for donor funding • Seek alternative Revenue generation by providing disposal and related services
	e) Ineffective management of changes within the organisation	<ul style="list-style-type: none"> • Develop a Change management framework
	f) Failure to manage Vaalputs functional shift	<ul style="list-style-type: none"> • Develop and implement the Transitional plan for Vaalputs functional shift • Implement the change management plan
	g) Lack of public understanding and acceptance of NRWDI brand	<ul style="list-style-type: none"> • Review and implement Communications and Stakeholder engagement plan • Develop and implement the advocacy programme for policy and decision makers • Implement robust public awareness programmes • Ensure independence from waste generators
	h) Failure to comply with applicable statutory and legislative requirements.	<ul style="list-style-type: none"> • Legal compliance register checklist that is reviewed quarterly

OUTCOME	KEY RISKS	RISK MITIGATION
2. Safe and secure disposal of all classes of radioactive waste	a) Failure to ensure that physical security systems are in place	<ul style="list-style-type: none"> • Liaison with SSA/SAPS in preparation for security assessments • Development of the safety and security framework (national security) • Develop and implement an effective communication plan with security cluster
3. Capability for new radioactive waste disposal facilities establishment	a) Lack of project funding	<ul style="list-style-type: none"> • Explore and define the nature of collaborative ventures or partnerships that are available to NRWDI
	b) Failure to sustain the scientific and technical support	<ul style="list-style-type: none"> • Develop the sustainability strategy for scientific and technical programme • Leveraging of existing strategic partnerships and developing new
4. Enabling R&D programme for long-term radioactive waste management solutions	a) Failure to leverage collaborations and partnerships	<ul style="list-style-type: none"> • Enter into binding agreements that define clear expectations and rights (intellectual property) • Develop and implement R&D processes
	b) Lack of availability of research infrastructure	<ul style="list-style-type: none"> • Undertaking collaborative research
	c) Misalignment in financial year reporting between NRWDI and research institutions	<ul style="list-style-type: none"> • Develop and implement aligned processes and procedures between partners
5. Compliance with applicable statutory requirements	a) Inability of NRWDI to comply with conditions of the nuclear installation license	<ul style="list-style-type: none"> • Regular compliance and assurance audit /inspections. • Regular staff training /awareness sessions • Timeous closing out of non-conformances

3. PUBLIC ENTITIES

N/A

4. INFRASTRUCTURE PROJECTS

The CISF is an infrastructure project.

5. PUBLIC PRIVATE PARTNERSHIPS

NRWDI does not have any public-private partnerships.



PART D

TECHNICAL INDICATOR DESCRIPTION

TECHNICAL INDICATOR DESCRIPTION

PROGRAMME 1: ADMINISTRATION

Indicator title	Financial sustainability plan
Definition	Conduct a financial sustainability assessment that will lead to developing a funding model for the entity which will culminate in the development of a financial sustainability plan that will inform the entity of the various alternative funding sources and funding opportunities to enable the entity to be a going concern and to deliver on its mandate.
Source of data	Desktop research data and data from industry and benchmarked entities
Method of calculation / assessment	Assessment report Funding model
Means of verification	Assessment report
Assumptions	Adequate resources are available
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for woman: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Quarterly
Desired performance	Developed financial sustainability assessment report
Indicator responsibility	Chief Financial Officer

Indicator title	Percentage of creditors paid within 30 days
Definition	100% of creditors must be paid within 30 days after relevant documents are received
Source of data	Payments requests, invoices, proof of payments payment reports, creditors age analysis
Method of calculation / assessment	Number of payments within 30 days / total number of payments made date invoice paid less date documents received.
Means of verification	Audit reports, quarterly reports and annual reports detailed individual creditors payment report
Assumptions	Adequate resources in the finance division
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Quarterly
Desired performance	100% of creditors paid within 30 days after relevant documents are received
Indicator responsibility	Chief Financial Officer



Indicator title	Number of training courses attended
Definition	Training identified for development purposes for staff.
Source of data	Training database
Method of calculation / assessment	Simple count of the number of courses attended
Means of verification	Training Report
Assumptions	Training budget in place
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative
Reporting cycle	Quarterly
Desired performance	20 training courses attended
Indicator responsibility	Executive Manager: Corporate Services

Indicator title	Number of Interns employed
Definition	Interns refers to a trainee admitted and trained in NRWDI with a qualification in order to gain experience
Source of data	Intern recruitment file
Method of calculation / assessment	Simple count of the number of interns employed
Means of verification	HR / Payroll Report
Assumptions	Finances to appoint Interns in place
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: 2 • Target for disabled persons: 1
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Non-cumulative
Reporting cycle	Annually
Desired performance	Two Interns employed in NRWDI annually
Indicator responsibility	Executive Manager: Corporate Services

Indicator title	Implemented Secure Active Directory Domain
Definition	The NRWDI Secure Active Directory Domain will be implemented in the future Head Office building when the Institute is independent of its customer Necsa.. The Secure Domain will be implemented through a capital project on an annual basis over the three-year period, and its implementation will be achieved and tracked through a project plan.
Source of data	NRWDI Secure Active Directory Domain project plan
Method of calculation / assessment	Actual number of deliverables achieved in the NRWDI Secure Active Directory Domain project plan / the number of deliverables contained in the project plan x 100
Means of verification	Project reports, audit reports, quarterly reports and annual reports
Assumptions	The new NRWDI Head Office building will be acquired within the 2022/23 financial period
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Quarterly
Desired performance	25% of the project plan deliverables achieved
Indicator responsibility	Executive Manager: Corporate Services

Indicator title	Functional and populated Radioactive Waste Inventory System (RAWIS)
Definition	The NRWDI Radioactive Waste Inventory System (RAWIS) will be implemented at NRWDI Head Office with a mirror instance at Vaalputs for performance and backup purposes. The system will be used to capture and maintain a National Inventory of radioactive waste across South Africa whether disposed-off at NRWDI disposal sites or stored on waste producer sites. The RAWIS will be implemented through a capital project on an annual basis over the three-year period, and its implementation will be achieved and tracked through a project plan.
Source of data	NRWDI Radioactive Waste Inventory System (RAWIS) project plan
Method of calculation / assessment	Actual number of deliverables achieved in the RAWIS project plan / the number of deliverables contained in the project plan x 100
Means of verification	Project reports, audit reports, quarterly reports and annual reports
Assumptions	Availability of SET Division staff members for joint application functionality development workshops
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Quarterly
Desired performance	100% of the project plan deliverables achieved
Indicator responsibility	Executive Manager: Corporate Services



Indicator title	Partnership and Collaboration Framework developed and implemented
Definition	The indicator entails the development of a documented partnership and collaboration framework and tools.
Source of data	IAEA Partnership agreement, Universities and SOE websites
Method of calculation / assessment	Developed and approved Partnerships and collaboration framework Implemented Partnerships and collaboration framework
Means of verification	Minutes of meeting where the framework for partnership and collaboration is approved and implemented
Assumptions	Programmes require a framework for partnerships and collaboration in order to implement relevant projects
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A Target for disabled persons: N/A
Calculation type	Non - cumulative
Reporting cycle	Quarterly
Desired performance	Approved and implemented partnership and collaboration framework
Indicator responsibility	Executive Manager: Corporate Services

Indicator title	Number of PSIF meetings held with communities surrounding Vaalputs
Definition	Number of public information meetings/stakeholder engagements held with communities surrounding Vaalputs
Source of data	Vaalputs PSIF meetings held in accordance with the requirements of the NNR Act (Act 47 of 1999)
Method of calculation / assessment	Meeting attendance register and minutes of meeting
Means of verification	PSIF Minutes and attendance registers
Assumptions	Availability of stakeholders at scheduled meetings (If no in-person PSIF meeting(s) are possible due to Covid- 19 compliance regulations, quarterly feedback will be in the form of quarterly information sharing correspondence via alternative digital communication platforms)
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: no limits for attendance and participation • Target for youth: no limits for attendance and participation • Target for disabled persons: no limits for attendance and participation
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A • GPS Coordinates: 30.1348o S, 18. 4967O E
Calculation type	Cumulative (Year to Date)

Indicator title	Percentage implementation of the Communications and Stakeholder Engagement Plan
Definition	Effective communication with stakeholders aims to ensure that stakeholders are aware of the objectives of a project as well as organisation. It also serves to help NRWDI understand those who will be affected by a project or the functions of the entity. It provides an opportunity for the share information and educate the stakeholders accordingly, thus leading to greater stakeholder satisfaction and improving the chances of successful initiatives/projects.
Source of data	Stakeholder engagements and feedback Survey analyses
Method of calculation / assessment	Stakeholder engagements and feedback Survey Reports
Means of verification	Bi – Annual Reports
Assumptions	Capacitated communications and stakeholder relations department
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Quarterly
Desired performance	80% implementation of the communications and stakeholder engagement plan
Indicator responsibility	Executive Manager: Corporate Services

Indicator title	Approval of the Corporate Governance Framework
Definition	A framework of guiding rules and procedures aimed at standardising and improving overall functionality of all the organizations governance structures, whilst also achieving accountability, fairness and transparency.
Source of data	King Code on Corporate Governance, Board Charter, Committee Charters, Exco TOR
Method of calculation / assessment	Board approved Corporate Governance Framework
Means of verification	King Code on Corporate Governance, Board Charter, Committee Charters, Exco TOR
Assumptions	Valid IODSA membership
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	N/A
Calculation type	Cumulative (Year-end)
Reporting cycle	Quarterly
Desired performance	Board approved Corporate Governance Framework
Indicator responsibility	Board Secretary



Indicator title	Unqualified audit report
Definition	The entity to obtain an audit report without material findings and without material financial misstatements
Source of data	Audit report
Method of calculation / assessment	Audit report without adverse findings
Means of verification	Audit reports, and annual reports
Assumptions	Adequate resources in NRWDI
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Annually
Desired performance	Unqualified audit report
Indicator responsibility	CEO

Indicator title	Number of quarterly risk reports produced
Definition	On an annual basis, entities are expected to hold a risk workshop to identify risks that impact on the key deliverables in the Strategic Plan and APP. On a quarterly basis, entities are required to report against the top 10 strategic risks to the shareholder.
Source of data	Risk register/risk reports
Method of calculation / assessment	Actual Risk Reports
Means of verification	Quarterly Risk Reports Submissions to the shareholder
Assumptions	Additional capacity will be allocated for Risk Management
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	N/A
Calculation type	Cumulative (Year to date)
Reporting cycle	Quarterly
Desired performance	4 quarterly risk reports
Indicator responsibility	Risk Manager

Indicator title	Organisational Performance Framework developed
Definition	DPME has a Policy Framework for the Government Wide Monitoring and Evaluation System. The aim of the framework is to contribute to improved governance and enhance the effectiveness of public sector organisations and institutions. Having an Organisational Performance Framework will assist NRWDI in the improving current and future management of outputs and targets.
Source of data	DPME Policy Framework for the Government Wide Monitoring and Evaluation system
Method of calculation / assessment	Organisational Performance Framework
Means of verification	Organisational Performance Framework
Assumptions	Additional resources will be reallocated to the Strategic Planning Unit in the Office of the CEO.
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	N/A
Calculation type	Non – cumulative
Reporting cycle	Quarterly
Desired performance	Approved Organisational Performance Framework
Indicator responsibility	Strategic Planning Manager

PROGRAMME 2: RADIOACTIVE WASTE OPERATIONS

Indicator title	Waste Acceptance Criteria (WAC) met
Definition	Waste packages received from waste generators can only be accepted for disposal at Vaalputs if these waste packages meet the requirements of the Vaalputs Waste Acceptance Criteria.
Source of data	WAC Compliance Checklist
Method of calculation / assessment	Actual number of waste packages disposed meeting the WAC
Means of verification	Waste shipment records/ Waste Disposal Records
Assumptions	<ul style="list-style-type: none"> • WAC checklist fully completed for every waste consignment • WAC checklists filed in records system • Provision made for waivers • WAC non-compliance addressed by means of non- conformance reports (NCR's)
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Quarterly
Desired performance	100% of the waste packages disposed meet WAC
Indicator responsibility	Chief Operations Officer



Indicator title	Physical Security upgrade Implementation plan completed
Definition	Upgrade Vaalputs security to meet National Key Point requirements in order to receive all classes of radioactive waste
Source of data	National Key Points Act and Nuclear Energy Act
Method of calculation / assessment	Physical Security upgrade Implementation Plan
Means of verification	Progress reports
Assumptions	Resources are available Stakeholders will provide adequate support and information Vaalputs remains operational
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Quarterly
Desired performance	Physical Security upgrade Implementation Plan finalised
Indicator responsibility	Chief Operations Officer

Indicator title	Draft National Waste Inventory Report completed
Definition	NRWDI must publish a report on the inventory and location of all radioactive waste in the Republic at a frequency determined by the Board
Source of data	National Key Points Act and Nuclear Energy Act
Method of calculation / assessment	Draft National Waste Inventory Report
Means of verification	Benchmarking/Progress reports
Assumptions	RAWIS is functional Waste Generators will provide waste inventories
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-end)
Reporting cycle	Quarterly
Desired performance	Draft National Waste Inventory Report completed
Indicator responsibility	Chief Operations Officer

PROGRAMME 3: SCIENCE, ENGINEERING AND TECHNOLOGY

Indicator title	CISF project progress reports
Definition	CISF project progress report are documents that explain in detail how far the project has advanced towards its completion, outline the activities carried out, the tasks completed, and the milestones reached vis-à-vis the project plan, and provide the status of the project at the point when the report is required.
Source of data	Literature. Consultants. Data from past/similar projects.
Method of calculation / assessment	Evaluative assessment performed to evaluate the content and quality of the quarterly targets (i.e., the reports to be delivered in each quarter).
Means of verification	Reviews by the Project Task Team. Reviews by the Technical Advisory Committee. Reviews by the Board Technical and Operations Committee. Reviews by the CISF Project Steering Committee. Reviews by the Gateway Review Team.
Assumptions	Availability of financial and human resources. Continuity of support by the CISF Project Framework Agreement parties (i.e., Necsa, Eskom and DMRE).
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for people with disabilities: N/A
Spatial transformation (where applicable)	N/A
Calculation type	Cumulative
Reporting cycle	Annually (tracking and monitoring is done on the quarterly basis)
Desired performance	Achieve the targeted output.
Indicator responsibility	Chief Technology Officer.

Indicator title	R&D scientific and technical reports
Definition	Scientific and technical reports are documents that describes the process, progress, or results of technical or scientific research or the state of a technical or scientific research problem. It might also include recommendations and conclusions of the research. A focus of this indicator is on scientific and technical report arising from the R&D on radioactive waste management and disposal.
Source of data	Literature. Experiments. Consultants. Data from projects.
Method of calculation / assessment	Evaluative assessment performed to evaluate the content and quality of the quarterly targets.
Means of verification	Reviews by Technical Advisory Committee. Reviews by Board Technical and Operations Committee. Reviews by external stakeholders.
Assumptions	Availability of financial and human resources.
Disaggregation of beneficiaries (where applicable)	Students at higher learning institutions Various R&D stakeholders
Spatial transformation (where applicable)	N/A
Calculation type	Cumulative
Reporting cycle	Annually (tracking and monitoring is done on the quarterly basis)
Desired performance	Achieve the targeted output.
Indicator responsibility	Chief Technology Officer.



PROGRAMME 4: RADIOACTIVE WASTE COMPLIANCE MANAGEMENT

Indicator title	SHEQ, Licensing and RP training/ awareness sessions conducted.
Definition	<p>SHEQ topics are topics on the Safety, Health, Environment and Quality Management systems. Training/ awareness on SHEQ topics involves the policies, standards, guidelines, procedures and works instructions that directs safety, health, environmental and quality aspects in the workplace.</p> <p>Licensing topics are topics on the conditions and requirements of the Nuclear Installation License and implementation of license binding documents. RP topics include the components of the Radiation Protection Program (RPP) which prescribes the radiation protection standards, requirements and procedures for safe operation in a nuclear facility.</p> <p>Training/ awareness sessions can either be conducted in person or virtually, depending on circumstances (Covid).</p>
Source of data	SHEQ, RP and Nuclear Installation License conditions, requirements, standards, procedures and work instructions (as applicable).
Method of calculation / assessment	Number of training/ awareness sessions conducted on SHEQ, Licensing and RP topics.
Means of verification	Attendance registers for training / awareness sessions.
Assumptions	<p>NIL issued in the name of NRWDI. NIL implemented.</p> <p>SHEQ system documented. RP Program documented.</p> <p>Resources available for implementation of SHEQ, Licensing and RPP requirements.</p>
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A. • Target for youth: N/A. • Target for disabled persons: N/A.
Spatial transformation (where applicable)	<p>Contribution to spatial transformation priorities: N/A.</p> <p>Spatial impact area: N/A.</p>
Calculation type	Cumulative (Year End).
Reporting cycle	Quarterly.
Desired performance	<ul style="list-style-type: none"> • 4 x SHEQ training / awareness sessions per annum. • 4 x Licensing and RP training / awareness sessions per annum.
Indicator responsibility	Executive Manager: Compliance Management

Indicator title	SHEQ, Licensing and RP inspections/ audits conducted.
Definition	<p>SHEQ topics are topics on the Safety, Health, Environment and Quality Management systems. SHEQ inspections/ audits involves verification of implementation of the policies, standards, guidelines, procedures and works instructions that directs safety, health, environmental and quality aspects in the workplace.</p> <p>Licensing audits/ inspections verify compliance with the Nuclear Installation License conditions and requirements and implementation of license binding documents. RP audits/ inspections verify compliance with implementation of the Radiation Protection Program (RPP) in a nuclear facility.</p> <p>Inspections/ audits can either be conducted in person or virtually, depending on circumstances (Covid).</p>
Source of data	SHEQ, RP and Nuclear Installation License conditions, requirements, standards, procedures and work instructions (as applicable).
Method of calculation / assessment	Number of inspections / audits conducted on SHEQ, Licensing and RP topics
Means of verification	Inspections/ audits reports.
Assumptions	<p>NIL issued in the name of NRWDI. NIL implemented.</p> <p>SHEQ system documented. RP Program documented.</p> <p>Resources available for implementation of SHEQ, Licensing and RPP requirements.</p>
Disaggregation of beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A. • Target for youth: N/A. • Target for disabled persons: N/A.

Indicator title	SHEQ, Licensing and RP inspections/ audits conducted.
Spatial transformation (where applicable)	<ul style="list-style-type: none"> • Contribution to spatial transformation priorities: N/A. • Spatial impact area: N/A.
Calculation type	Cumulative (Year End).
Reporting cycle	Quarterly.
Desired performance	<ul style="list-style-type: none"> • 4 X SHEQ inspections/ audits per annum. • 4 X Licensing and RP inspections / audits per annum.
Indicator responsibility	Executive Manager: Compliance Management



ANNEXURE 1

REVISIONS TO THE STRATEGIC PLAN

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CHANGES TO PLANNED OUTCOMES AND TARGETS IN THE STRATEGIC PLAN 2020 TO 2025

1. MEASURING OUTCOMES

The Strategic Plan 2020-2025 for the National Radioactive Waste Disposal Institute (NRWDI) was approved by the Minister of Mineral Resources and Energy in March 2020 and tabled in Parliament on 4th May 2020. The Strategic Plan 2020-2025 was prepared based on Department of Performance Monitoring and Evaluation's (DPME) Revised Framework for Strategic Plans and Annual Performance Plans. The new Board was appointed in August 2020. The new Chief

Executive Officer was appointed on 1st November 2021. The Nuclear Installation Licence (NIL) is also imminent and these aforementioned reasons justify a review of the Strategic Plan that is fully aligned with the mandate as contained in the National Radioactive Waste Disposal Institute Act (NRWDIA).

Page 30 of the approved Strategic Plan 2020-2025 highlights the four outcomes which are listed below:

Table 1: Outcomes in the original Strategic Plan 2020-2025

MTSF Priority	Priority 6: Capable, Ethical and Development State		
OUTCOME	OUTCOME INDICATOR	BASELINE	FIVE YEAR TARGET
1. An effective, efficient and responsive NRWDI	Percentage implementation of the support services strategic deliverables.	No baseline (new target)	80% implementation of support services strategic deliverables.
2. Safe disposal of all classes of radioactive waste	Percentage execution of waste disposal operational activities.	No baseline (new target)	100% execution of waste disposal operational activities.
3. Centralised storage of spent nuclear fuel	Percentage of project plan implementation towards the state of readiness for centralised storage of spent fuel.	No baseline (new target)	100% of project plan implemented.
4. Compliance with applicable legislative and regulatory requirements	Percentage compliance with the applicable legislative and regulatory requirements.	No baseline (new target)	100% compliance with the applicable legislative and regulatory requirements.

There are no revisions to the outcomes under Programme 1: Administration which is

"An effective, efficient and responsive NRWDI."

The second outcome relating to the safe disposal of all classes of radioactive waste is revised to read as follows in the table below.

Table 2: Programme 2 – Radioactive Waste Management Operations

MTSF Priority	Priority 6: Capable, Ethical and Development State		
REVISED OUTCOME	OUTCOME INDICATOR	BASELINE	THREE YEAR TARGET
2. Safe and secure disposal of all classes of radioactive waste	100% disposed waste packages meet Waste Acceptance Criteria (WAC)	No baseline (new target)	100% disposed waste packages meet WAC
	Security Plan	No baseline (new target)	Security upgrade implementation plan
	Draft National Waste Inventory Report	No baseline (new target)	Draft National Waste Inventory Report

The aim of the Programme is to ensure that NRWDI's core mandate which is (disposal of radioactive waste on a national basis) is executed in compliance with quality, health, safety, environmental and nuclear authorisation requirements,

relevant international standards and best practices The safe and secure disposal of all classes of radioactive waste must be carried out in a manner that is free from the potential risks of danger or harm to the public and the environment.

The third outcome in the original strategic plan relating to the Centralised Interim Storage Facility (CISF) is revised to incorporate the following outcomes in the table below.

Table 3: Programme 3 - Science, Engineering and Technology

MTSF Priority	Priority 1: Economic Transformation and Job Creation Priority 6: Capable, Ethical and Development State		
REVISED OUTCOME	OUTCOME INDICATOR	BASELINE	THREE YEAR TARGET
3. Capability for new radioactive waste disposal facilities established	Number of CISF progress reports produced	No baseline (new target)	Safety case developed EIA phase 3 performed (i.e.: Environmental Authorisation secured)
4. Established R&D programme for long-term radioactive waste management solutions	Number of research focus areas initiated	No baseline (new target)	4 research focus areas initiated

The following in the NRWDIA mandates the establishment of the CISF:

- Design and implement disposal solutions for all classes of radioactive waste;
- Investigate the need for any new radioactive waste disposal facilities and site, design and construct such new facilities as may be required;
- Conduct research and develop plans for the long-term management of radioactive waste storage and disposal.

Ministerial approval has been obtained for the CISF in terms of Section 46(2) and 46(3) of the Nuclear Energy Act, (Act 46 of 1999). NRWDI will use this critical and national infrastructure project as a catalyst for change resulting in job creation, skills development, skills transfer and inclusive growth. The

facility will require a nuclear authorisation to operate and will be entrusted with the safe storage of Oeberg spent fuel and other high-level fuels. Key activities and milestones will include pre-feasibility studies, feasibility studies and environment impact assessments over the next three years of the strategic plan cycle. Key to this project will also be the research and development focus areas.

The fourth outcome which is specific to the Compliance with applicable legislative and regulatory requirements will remain. The words “legislative” and “regulatory” will be replaced by statutory. The outcome indicators and targets will be stated more clearly so that they become more meaningful to our stakeholders who may not fully comprehend the nature of this industry and the NRWDI operations.

Table 4: Programme 4 – Radioactive Waste Compliance Management

MTSF Priority	Priority 6: Capable, Ethical and Development State		
REVISED OUTCOME	OUTCOME INDICATOR	BASELINE	THREE YEAR TARGET
5. Compliance with applicable statutory requirements.	Number of training and awareness sessions held	12 Training /12 Awareness sessions	<ul style="list-style-type: none"> • 12 X Safety, Health, Environment and Quality (SHEQ) training / awareness sessions • 12 x Licensing and Radiation Protection (RP) training / awareness sessions
	Number of inspections and audits conducted	12 Inspections/12 Audits	<ul style="list-style-type: none"> • 12 X SHEQ inspections/ audits • 12 X Licensing and RP inspections / audits

It is important to note that the nuclear industry is a highly regulated industry and these outcome indicators and targets are specific to the nuclear authorisation for NRWDI. The planned performance targets will detail the activities that are aimed at ensuring compliance to the statutory requirements.

The planned performance targets will also clearly articulate the training and awareness sessions as well as the audits and inspections that need to be conducted as to ensure compliance with nuclear authorisation requirements.



2. EXPLANATION OF THE PLANNED PERFORMANCE OVER THE REMAINDER OF THE 5 YEAR STRATEGIC PLAN CYCLE

All the revised outcomes contribute directly to the achievement of the National Development Plan (NDP) five-year plan, the monitoring framework for the NDP five-year implementation plan, the mandate of the institution and the priorities of women, children and people with disabilities.

The tables on pages 30-32 explaining the linkages of the outcomes to the various Chapters in the NDP is still relevant and applicable to the outcomes.

3. RATIONALE FOR THE CHOICE OF OUTCOME INDICATORS

3.1 Programme 2: Radioactive Waste Management Operations

Outcome 2: Safe and secure disposal of all classes of radioactive waste

Outcome Indicator: *100% disposed waste packages comply with the WAC*

The outcome indicator contributes directly to the outcome which is the safe and secure disposal of all classes of radioactive waste.

An important principle for the disposal of radioactive waste is that it must be contained and disposed of in a manner that will isolate the waste from man and the environment for the time periods associated with the lifetime of the radioactive waste. The disposal of radioactive waste is regulated by the National Nuclear Regulator.

Currently, only low-level waste (LLW) that complies with the Vaalputs Waste Acceptance Criteria which is approved by the National Nuclear Regulator can be accepted for disposal at Vaalputs. The WAC prescribes requirements that a pre-disposal operator must meet before radioactive waste packages may be dispatched and accepted for final disposal at Vaalputs.

Outcome Indicator: *Security Plan*

This outcome indicator contributes directly to the safe and secure disposal of all classes of radioactive waste.

In order to safely dispose of all classes of radioactive waste at Vaalputs it will be necessary to upgrade the physical security regime to comply with National Key Point requirements.

The following activities are inherently part of this outcome indicator.

- Operate the low-level national repository at Vaalputs; and
- Manage, operate and monitor operational radioactive waste disposal facilities including related predisposal management of radioactive waste on disposal sites.

Outcome Indicator: *Draft National Waste Inventory Report*

The outcome indicator contributes directly to the safe and secure disposal of all classes of radioactive waste.

NRWDI's mandate requires that a national radioactive waste database must be maintained and a report on the inventory and location of all radioactive waste in South Africa must be published. To manage radioactive waste over a long time period, there is a need to compile, manage and maintain the variety of records that are generated for record keeping.

All the necessary information that is captured will assist in the compilation of a draft National Inventory Report.

3.2 Programme 3: Science, Engineering and Technology

Outcome 3: Capability for new radioactive waste disposal facilities established

Outcome Indicator: *Number of CISF reports produced*

The outcome indicator contributes directly to the outcome which is Capability for new radioactive waste disposal facilities established.

The outcome indicator will assist in commencing with the planning for the Centralised Interim Storage Facility (CISF) for spent fuel which will have to be operated under a nuclear authorisation. This facility will provide for the safe storage Koeberg spent fuel. A project plan will provide the roadmap, milestones and schedules as well as required resources for achieving this outcome.

Key activities and milestones will include pre-feasibility studies, feasibility studies, technology selection, environmental impact assessments, licensing, construction, hot and cold de-commissioning as well as the nuclear authorisation to operate this facility.

Outcome 4: Enabling R&D Programme for long – term radioactive waste management solutions.

Outcome Indicator: *Number of additional research focus areas initiated*

The outcome indicator contributes directly to the outcome which is the Enabling R&D programme for long term radioactive waste management solutions.

The following activities as mandated by the NRWDIA are inherently part of the Science, Engineering and Technology division.

- Investigate the need for any new radioactive waste disposal facilities and to site, design and construct new facilities as required; and
- Define and conduct research and development aimed at finding solutions for long term radioactive waste management.

3.3 Programme 4: Radioactive Waste Compliance Management

Outcome 5: Ensure compliance with applicable statutory requirements.

Outcome Indicator: *Number of training and awareness sessions held*

The outcome indicator makes a direct contribution to the outcome which is to ensure compliance with applicable statutory requirements.

It is important to note that the nuclear industry is a highly regulated industry. The indicators and targets are aimed at ensuring compliance with the nuclear authorisation requirements and conditions. The performance targets will detail the activities required to ensure compliance to the statutory requirements. The performance targets will also clearly articulate the training and awareness sessions that need to be conducted to ensure compliance to the statutory requirements.

Outcome 5: Ensure compliance with applicable statutory requirements.

Outcome Indicator: *Number of inspections and audits conducted*

The outcome indicator makes a direct contribution to the outcome which is to ensure compliance with applicable statutory requirements.

It is important to note that the nuclear industry is a highly regulated industry. The indicators and targets are aimed at ensuring compliance with the nuclear authorisation requirements and conditions. The performance targets will detail the activities required to ensure compliance to the statutory requirements. The performance targets will also clearly articulate the inspections and audits that need to be conducted to ensure compliance to the statutory requirements.

Enablers to achieve the targets over the remainder of the 5-year strategic plan cycle

The enablers remain the same as per page 33 of the original strategic plan.

4. OUTCOMES AND CONTRIBUTIONS TO THE ACHIEVEMENT OF THE IMPACT

Impact Statement	Safe, secure, socially acceptable and environmentally sustainable solutions for radioactive waste disposal
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Table 5: Outcomes and Linkages to the MTSF

Outcome	How it contributes to the Achievement of the Impact	Linkage with the Medium- Term Strategic Framework (MTSF) 2019-2024
2. Safe and secure disposal of all classes of radioactive waste	This outcome focuses directly on the safe, secure and environmentally sustainable disposal of all classes of radioactive waste.	Priority 6: Capable, ethical and development state
3. Capability for new radioactive waste disposal facilities established	This outcome will contribute directly to the establishment of a disposal related facility for the safe and secure storage of spent nuclear fuel and high-level radioactive waste which needs to be established.	Priority 1: "Economic Transformation and Job Creation Priority 6: Capable, ethical and development state



Outcome	How it contributes to the Achievement of the Impact	Linkage with the Medium-Term Strategic Framework (MTSF) 2019-2024
4. Enhanced R&D programme for long-term radioactive waste management solutions	This outcome will contribute directly to the establishment of a disposal related facility for the safe and secure storage of spent nuclear fuel and high-level radioactive waste which needs to be established.	Priority 1: "Economic Transformation and Job Creation Priority 6: Capable, ethical and development state
5. Compliance with applicable statutory requirements	The outcome forms the basis to ensure that our overall waste disposal impact statement will be achieved in compliance with the applicable statutory requirements.	Priority 6: Capable, ethical and development state

5. KEY RISKS

Table 6: Key risks

OUTCOME	KEY RISKS	RISK MITIGATION
1. An effective, efficient and responsive NRWDI	a) Inadequate capacity and capability (people, systems and processes).	<ul style="list-style-type: none"> • Drive organisational culture change • Strengthen internal capacity to deliver on mandate by filling all funded vacancies • Build strategic partnerships • Identify and implement Leadership and management development programme (Coaching and mentorship programme)
	b) Lack of succession planning	<ul style="list-style-type: none"> • Implement effective talent management strategies: • Develop succession planning strategy • Organogram to be reviewed
	c) Inadequate budget appropriation to implement plans.	<ul style="list-style-type: none"> • Motivate and request a correction of MTEF baseline • Strategic engagement with Shareholder for NRWDI funding and finalisation of the Fund Bill
	d) Lack of financial viability of NRWDI	<ul style="list-style-type: none"> • Financial sustainability planning • Obtain Ministerial approval for donor funding • Seek alternative Revenue generation by providing disposal and related services
	e) Ineffective management of changes within the organisation	<ul style="list-style-type: none"> • Develop a Change management framework
	f) Failure to manage Vaalputs functional shift	<ul style="list-style-type: none"> • Develop and implement the Transitional plan for Vaalputs functional shift • Implement the change management plan
	g) Lack of public understanding and acceptance of NRWDI brand	<ul style="list-style-type: none"> • Review and implement Communications and Stakeholder engagement plan • Develop and implement the advocacy programme for policy and decision makers • Implement robust public awareness programmes • Ensure independence from waste generators
	h) Failure to comply with applicable statutory and legislative requirements.	<ul style="list-style-type: none"> • Legal compliance register checklist that is reviewed quarterly

OUTCOME	KEY RISKS	RISK MITIGATION
2. Safe and secure disposal of all classes of radioactive waste	a) Failure to ensure that physical security systems are in place	<ul style="list-style-type: none"> Liaison with SSA/SAPS in preparation for security assessments Development of the safety and security framework (national security) Develop and implement an effective communication plan with security cluster
3. Capability for new radioactive waste disposal facilities establishment	a) Lack of project funding	<ul style="list-style-type: none"> Explore and define the nature of collaborative ventures or partnerships that are available to NRWDI
	b) Failure to sustain the scientific and technical support	<ul style="list-style-type: none"> Develop the sustainability strategy for scientific and technical programme Leveraging of existing strategic partnerships and developing new
4. Enabling R&D programme for long-term radioactive waste management solutions	a) Failure to leverage collaborations and partnerships	<ul style="list-style-type: none"> Enter into binding agreements that define clear expectations and rights (intellectual property) Develop and implement R&D processes
	b) Lack of availability of research infrastructure	<ul style="list-style-type: none"> Undertaking collaborative research
	c) Misalignment in financial year reporting between NRWDI and research institutions	<ul style="list-style-type: none"> Develop and implement aligned processes and procedures between partners
5. Compliance with applicable statutory requirements	a) Inability of NRWDI to comply with conditions of the nuclear installation license	<ul style="list-style-type: none"> Regular compliance and assurance audit /inspections. Regular staff training /awareness sessions Timeous closing out of non-conformances

6. TECHNICAL INDICATOR DESCRIPTION (TID)

6.1 Programme 2: Radioactive Waste Disposal Operations

Indicator title	100% disposed waste packages comply with the WAC
Definition	Waste packages received from waste generators can only be accepted for disposal at Vaalputs if these waste packages meet the requirements of the Vaalputs Waste Acceptance Criteria.
Source of data	Waste shipment records/Waste Disposal Records
Method of calculation / assessment	Actual number of waste packages disposed/number of waste packages received from waste generators x100
Assumptions	<ul style="list-style-type: none"> WAC checklist fully completed for every waste consignment WAC checklists filed in records system Provision made for waivers WAC non-compliance addressed by means of non- conformance reports (NCR's)
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Reporting cycle	Quarterly
Desired performance	100% of the waste packages disposed meet WAC
Indicator Responsibility	Chief Operations Officer



Indicator title	Security Plan
Definition	The intention of the Security Plan is that it will serve as a basis to upgrade Vaalputs security to meet National Key Point requirements in order to receive all classes of radioactive waste.
Source of data	National Key Points Act and Nuclear Energy Act
Method of calculation / assessment	Physical Security upgrade Implementation Plan
Assumptions	Resources are available Stakeholders will provide adequate support and information Vaalputs remains operational
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Reporting cycle	Quarterly
Desired performance	Physical Security upgrade Implementation Plan finalised
Indicator responsibility	Chief Operations Officer

Indicator title	Draft National Waste Inventory Report
Definition	The Draft National Waste Inventory Report will provide a snapshot of the stocks of radioactive materials and waste around the country. NRWDI must publish a report on the inventory and location of all radioactive waste in the Republic at a frequency determined by the Board.
Source of data	Inputs received from stakeholders (waste generators)
Method of calculation / assessment	Simple count of the inputs received from the relevant stakeholders (waste generators)
Assumptions	RAWIS is functional Waste Generators will provide waste inventories
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Reporting cycle	Quarterly
Desired performance	Draft National Waste Inventory Report completed
Indicator responsibility	Chief Operations Officer

6.2 Programme 3: Science, Engineering and Technology

Indicator title	Number of CISF progress reports
Definition	Progress reports are documents that explains in detail how far a project has advanced towards its completion. It outlines the activities carried out, the tasks completed, and the milestones reached vis-à-vis the project plan. A CISF project progress report will provide the status of the project at the point when the report is required.
Source of data	Literature, consultants and data from past projects.
Method of calculation / assessment	Report review
Means of verification	Report review
Assumptions	Funding is available. Statutory requirements satisfied.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Reporting cycle	Annual
Desired performance	Progress reports
Indicator responsibility	CTO

Indicator title	Number of additional research focus areas initiated
Definition	A scientific or technical report is a document that describes the process, progress, or results of technical or scientific research or the state of a technical or scientific research problem, after the identification of research focus areas. It might also include recommendations and conclusions of the research. A focus of this indicator is on scientific and technical report arising from the R&D on radioactive waste management and disposal.
Source of data	Literature, experiments, consultants and data from past projects.
Method of calculation / assessment	Report review
Assumptions	Funding is available Human resource capacity is available
Disaggregation of beneficiaries (where applicable)	Students at higher learning institutions Communities in the vicinity of R&D activities Various R&D stakeholders
Spatial transformation (where applicable)	N/A
Reporting cycle	Annual
Desired performance	Status reports
Indicator responsibility	CTO



6.3 Programme 4: Radioactive Waste Compliance Management

Indicator title	Number of training and awareness sessions held
Definition	<p>Training and awareness interventions relating to the SHEQ topics on the Safety, Health, Environment and Quality Management systems (also referred to as the Integrated Management System (IMS) must be held. Training/ awareness on SHEQ topics involves the policies, standards, guidelines, procedures and works instructions that directs safety, health, environmental and quality aspects in the workplace. Training and awareness sessions on licensing aspects which are topics on the conditions and requirements of the Nuclear Installation Licence (NIL) and implementation of licence binding documents are also held. RP topics include the components of the Radiation Protection Program (RPP) which prescribes the radiation protection standards, requirements and procedures for safe operation in a nuclear facility.</p> <p>Training/ awareness sessions can either be conducted in person or virtually, depending on circumstances (COVID).</p>
Source of data	SHEQ standards, requirements, procedures and work instructions, Nuclear Installation Licence conditions, requirements and procedures
Method of calculation / assessment	Licence conditions, requirements and procedures, SHEQ standards, requirements, procedures and work instructions
Assumptions	<p>NIL issued in the name of NRWDI and NIL implemented SHEQ system documented</p> <p>Resources available for implementation of SHEQ system requirements</p>
Disaggregation of beneficiaries (where applicable)	<p>Target for woman: N/A Target for youth: N/A</p> <p>Target for disabled persons: N/A</p>
Spatial transformation (where applicable)	<p>Contribution to spatial transformation priorities: N/A</p> <p>Spatial impact area: N/A</p>
Reporting cycle	Quarterly
Desired performance	<ul style="list-style-type: none"> • 12 X SHEQ training / awareness sessions • 12 x Licensing and RP training / awareness sessions
Indicator responsibility	Executive Manager: Compliance Management

Indicator title	Number of inspections and audits conducted
Definition	External audits are performed on a regular basis. These include corporate audits in SHEQ, NNR audits of the nuclear installation licence and other third-party audits. Inspections and audits on conventional safety, radiological safety, environmental surveillance, nuclear licence compliance and quality are need to be conducted.
Source of data	SHEQ standards, requirements, procedures and work instructions, Nuclear Installation Licence conditions, requirements and procedures
Method of calculation / assessment	Licence conditions, requirements and procedures, SHEQ standards, requirements, procedures and work instructions
Assumptions	<p>NIL issued in the name of NRWDI NIL implemented SHEQ system documented</p> <p>Resources available for implementation of SHEQ system requirements</p>
Disaggregation of beneficiaries (where applicable)	<p>Target for woman: N/A Target for youth: N/A</p> <p>Target for disabled persons: N/A</p>
Spatial transformation (where applicable)	<p>Contribution to spatial transformation priorities: N/A</p> <p>Spatial impact area: N/A</p>
Reporting cycle	Quarterly
Desired performance	<ul style="list-style-type: none"> • 12 X SHEQ inspections/ audits • 12 X Licensing and RP inspections / audits
Indicator responsibility	Executive Manager: Compliance Management



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