

STRATEGIC **PLAN** 2025 2030

NRWDI

NATIONAL RADIOACTIVE WASTE
DISPOSAL INSTITUTE





NATIONAL RADIOACTIVE WASTE DISPOSAL INSTITUTE (NRWDI)

STRATEGIC PLAN FOR 2025 – 2030



EXECUTIVE AUTHORITY STATEMENT



MS DORAH MODISE
Chairperson: NRWDI

The 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 public entity. It is a pleasure to present the five-year strategic plan 2025-2030 which we believe sets the NRWDI on a path of progress and innovation. Our plan reflects a strong commitment to not only meeting but exceeding the expectations of stakeholders, ensuring that our practices are aligned with global standards for safety and sustainability. We aim to foster a culture of excellence and integrity, driving initiatives that bolster our capabilities in radioactive waste management.

As we embark on this journey, we invite all stakeholders, from government bodies to local communities, to join us in building a future where innovation and responsibility go hand in hand. This strategic plan marks a pivotal moment for the NRWDI as we embark on a transformative journey over the next five years. The Institute has redefined the impact we wish to make and we are committed to the sustainable management of radioactive waste disposal for South Africa's current and future generations and energy aspirations. Our mission will focus on protecting people and the environment by providing sustainable, safe and technologically innovative radioactive waste disposal solutions, whilst fostering innovation and building stakeholder trust. By fostering open dialogue and cooperative relationships, NRWDI can ensure that all parties are informed, engaged, and aligned with its goals.

Our vision is establishing ourselves as a globally recognised leader in managing radioactive waste disposal, recognized for our commitment to safe, sustainable, and innovative management of waste disposal solutions. To achieve this vision, we must focus on several critical areas.

Collaborative efforts with stakeholders, including government, industry partners, and the community, will be essential to ensure the safe and effective Management of Radioactive Waste Disposal. With the emergence of new technologies in energy generation in South Africa, particularly related to the nuclear energy sector, the Nuclear Waste Disposal Institute (NRWDI) requires a thorough strategy that emphasizes operational excellence, technological advancement, and strict adherence to regulations regarding radioactive waste management. To accomplish this, the Institute should take a proactive stance, utilizing its expertise and resources to create sustainable solutions for the waste produced, thereby promoting growth within the nuclear industry.

Establishing the Centralised Interim Storage Facility (CISF) by 2030 is a key priority in responding to the South African expansion of nuclear applications particularly in the energy generation space. Prioritising securing regulatory approvals, developing robust operational frameworks, and investing in state-of-the-art technology through research and development. Furthermore, securing our Nuclear Installation License (NIL) will require meticulous



planning, adherence to regulatory standards, and fostering transparent communication with all stakeholders.

As we anticipate an increase in nuclear capacity of at least 2500MW, we must prepare by enhancing our infrastructure, expanding our workforce with skilled professionals, and implementing cutting-edge waste management practices. Our focus will be on innovation, safety, and sustainability to handle the increased volume of nuclear waste efficiently.

To achieve our aspirations, we need an agile organisational structure that supports collaboration, innovation, and adaptability. This involves not only securing the necessary capacity and capability within our organization but also nurturing a culture that prioritizes nuclear security and safety. By fostering a culture of continuous improvement and learning, we will equip our team with the skills and mindset needed to meet future challenges.

A sustainable funding model is crucial for realizing our strategic goals. We will explore diverse funding sources and financial strategies to ensure the Institute's financial stability and ability to invest in essential projects. Our focus will be on transparent and accountable execution of the funding model to build trust with our stakeholders.

The NRWDI acknowledges the intricate challenges we face in our efforts to fulfil our mandate and create a significant positive impact on South Africa's landscape. Nevertheless, we are confident that this strategic plan positions us for success in achieving our objectives over the next five years, in alignment with national priorities and the mandate of the Ministry of Electricity and Energy.

In conclusion, this strategic plan sets the foundation for a future where the National Radioactive Waste Disposal Institute leads with confidence, collaboration, and commitment to excellence in managing radioactive waste disposal. Together, we will pave the way for a safer, more sustainable nuclear future.



MS DORAH MODISE

Chairperson: NRWDI Board

31 January 2025

ACCOUNTING OFFICER STATEMENT



MR A CAROLISSEN
Acting Chief Executive Officer

It gives me immense pleasure to present you with the Strategic Plan for the National Radioactive Waste Disposal Institute (NRWDI) for the period 2025 - 2030. This Strategic Plan is aligned with the Department of Electricity and Energy (DEE) strategic goals and it contributes to the priorities of the Government of National Unity. It further contributes towards the delivery of the objectives of the National Development Plan (NDP) as well as the Medium-Term Development Plan (MTDP). It establishes the key areas of focus that will enable the NRWDI to deliver on its mandate.

The strategic plan takes into consideration the Constitution of the Republic of South Africa, the NRWDI Act, and other laws and regulations that are applicable.

The organisation has been commended for having received unqualified audits from the Auditor General for the past seven (7) consecutive years. This clearly demonstrates their commitment to good governance, thereby reducing risks and enabling growth as well as improving reputation and fostering trust with the shareholder and stakeholders.

There have always been expectations for improved service delivery and improved governance from State owned institutions from citizens and institutions are required to operate effectively and efficiently with the limited resources. It is therefore necessary for them to be creative and innovative in the way they operate.

Amendments to the founding legislation are also being expected. This will assist the institute in focusing on the core mandate. The promulgation of the Radioactive Waste Management Fund Bill in this 5-year cycle will ensure financial sustainability for the NRWDI through the implementation of the "polluter pays" principle. These anticipated legislative changes will assist in transforming the NRWDI in the way it conducts its business.

The envisaged organisational review will focus on people, process, systems and overall improvement of organisational capacity. The development and implementation of the human capital strategy will outline the skills and resources that are required for the organisation to achieve its key deliverables. The organisational review and the Human Capital Strategy will jointly contribute to achieving organisational efficiency and effectiveness.

The 5-year plan to establish the CISF by 2030 will provide more clarity on the costing as well as the possible sources of revenue for this project to materialise. We envisage that the next 18 months will be characterised by a learning engagement with Eskom for the CISF for the safe management and disposal of spent fuel.

The safe management of radioactive waste disposal is the function of NRWDI. Research and development plays an important role in the success of any organisation and NRWDI will continue to engage in research and development and



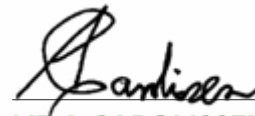
collaborate with international counterparts to benchmark and implement cutting edge technologies. It is our goal that NRWDI enhances its capability so that it can become a centre of excellence in this field.

Culture shapes our values and relationships which impacts on the way we relate to one another in the organisation and others outside of the organisation. A culture project is currently underway in NRWDI and will seek to bring about improved engagement, deliver unique employee experiences, and make staff feel more connected.

As the Accounting Authority, I will, together with the NRWDI management and staff be working to ensure that the organisation continues to strive for operational excellence, whilst maintaining good governance and utilising state funds efficiently and effectively.

I commit to working proactively and collaboratively with the colleagues at the DEE, Necsa, Eskom and NNR as well as all other stakeholders to ensure that we execute our mandate effectively. These efforts will improve public perception, trust and willingness to accept nuclear build programmes in South Africa, especially now as nuclear energy is included in the energy mix for the universal access of energy to all citizens in South Africa.

I would like to encourage all to embrace and accept this Strategic Plan and contribute towards realising the impact statement and outcomes contained therein.



MR A CAROLISSEN

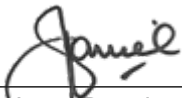
Acting Chief Executive Officer: NRWDI

31 January 2025

OFFICIAL SIGN-OFF

It is hereby certified that this Strategic Plan:

- Was developed by the management of the National Radioactive Waste Disposal Institute (NRWDI) under the guidance of the Acting Chief Executive Officer;
- Considers all the relevant policies, legislation and other mandates for which the NRWDI is responsible, and
- Accurately reflects the Impact, Outcomes and Outputs which the NRWDI will endeavour to achieve over the period 2025/26– 2029/30.



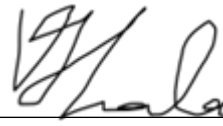
Mr Justin Daniel
Programme 1: Administration –
Finance & SCM



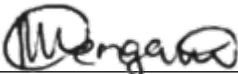
Dr Mehaulelo Melaletsa
Programme 1: Administration –
Corporate Services Division



Mr Alan Carolissen
Programme 2: Radioactive Waste Disposal
Operations Signature



Dr Vusi Twala
Programme 3: Science, Engineering and
Technology

pp 

Dr Peter Mkhabela
Programme 4: Radioactive Waste Compliance
Management



Mrs Deshnee Govender
Manager: Strategy, Planning, Performance
Monitoring, Evaluation and Reporting



Mr A Carolissen
ACEO of NRWDI



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LIST OF ABBREVIATIONS

Acronym/Term	Description/Definition
BoD	Board of Directors
CEO	Chief Executive Officer
ACEO	Acting Chief Executive Officer
CISF	Central Interim Storage Facility
DEE	Department of Electricity and Energy
DGR	Deep Geological Repository
EEA	Employment Equity Act
HLW	High Level Waste
ICT	Information and Communication Technology
IMS	Integrated Management System
IGRA	Intergovernmental Relations Framework Act
ISO	International Standards Organisation
ILW	Intermediate Level Waste
LLW	Low Level Waste
LTO	Long Term Operations
MoU	Memorandum of Understanding
MTEF	Medium Term Expenditure Fund
MTDP	Medium Term Development Plan
NDMC	National Disaster Management Centre
NDP	National Development Plan
NIL	Nuclear Installation Licence
NNR	National Nuclear Regulator
NRWDIA	National Radioactive Waste Disposal Institute Act
NRWDI	National Radioactive Waste Disposal Institute
Necsa	South African Nuclear Energy Corporation
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
R&D	Research and Development
RWMF	Radioactive Waste Management Fund
SCM	Supply Chain Management
SDA	Skills Development Act
UNFCC	United Nations Framework Convention on Climate Change



PART

A

OUR MANDATE

1. CONSTITUTIONAL MANDATE

The National Radioactive Waste Disposal Institute (NRWDI) carries out its work having due regard to the fundamental rights as 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 institution 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.

2. LEGISLATIVE AND POLICY MANDATE

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 no. 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 the NRWDIA became effective on the 1st December 2009. The NRWDIA endorsed the establishment of the National Radioactive Waste Disposal Institute (NRWDI). The functions of the 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/used 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 (No. 46 of 1999)

The Institute is an independent Schedule 3A 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. 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 Energy and are subject to such conditions that the Minister, in concurrence with the Minister of Environmental Affairs and the Minister of Water Affairs, deem fit to impose. The conditions imposed will be additional to any conditions contained in a nuclear authorisation as defined in the NNRA.

National Nuclear Regulator Act, 1999 (Act No 47 of 1999)

The Act provides for the establishment of a National Nuclear Regulator (NNR) whose function is 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.

Hazardous Substances Act 1973 (Act No. 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 NNR 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 to prevent radiation accidents that may be caused by the potential abuse and misuse of such sources, 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 promoting 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 (No. 01 of 1999 as amended by Act 29 of 1999)

The purpose of the Public Finance Management Act (PFMA) is to regulate financial management in the national government and provincial government: to ensure that all revenue, expenditure, assets, and liabilities of those governments are managed effectively and efficiently: to provide for the responsibilities of persons and trusted with financial management in those governments: and to provide for matters connected therewith.

The legislation enables government departments and state entities to manage accountability in terms of eliminating irregular expenditure, fruitless and wasteful expenditure, unauthorised expenditure as well as fraud and corruption. NRWDI is listed as a Schedule 3A entity in terms of the PFMA.

Promotion of Administrative Justice Act (No. 03 of 2000)

The Promotion of Administrative Justice Act (PAJA) ensures procedurally fair administrative actions, giving people the right to request reasons for administrative actions and decisions and to have such actions reviewed in court. It 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.

The purpose of the legislation is that it seeks to make the administration effective and accountable to people for its actions. The PAJA together with the Constitution embraces the Batho Pele Principles and promotes South African citizens' right to just administration.

Preferential Procurement Policy Framework Act (No. 05 of 2000)

The Act 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. The Act ensures regulation of the procurement policy and framework of organs of state. The purpose is to ensure the participation of Historically Disadvantaged Individuals including women, and small, medium, and micro enterprises (SMMEs) in the public sector procurement system.

Promotion of Access to Information Act (No. 02 of 2000)

The Promotion of Access to Information Act (PAIA) gives effect to the constitutional right of access to any information held by the State and any information that is held by a private person that is required for the exercise or protection of any other right.

The PAIA seeks to promote transparency, accountability, and effective governance of all institutions (both public and private) by empowering people to understand their access to information rights, act on them, and both scrutinize and engage with the decision making that affects them.

Intergovernmental Relations Framework Act (No. 13 of 2005)

The Intergovernmental Relations Framework Act (IGRA) 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. The IGRA was promulgated to facilitate cooperation and avoid legal proceedings between the different spheres of government.

Skills Development Act (No. 97 of 1998)

The Skills Development Act (SDA) provides an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce. The SDA aims to expand the knowledge and competencies of the labour force to improve productivity and employment. The main purpose of the Act is to improve the quality of life of employees, their prospects of employment and labour mobility.

Employment Equity Act, 1998 (Act 55 of 1998)

The Employment Equity Act (EEA) is the law that promotes

equity in the workplace, ensures that all employees receive equal opportunities, and that employees are treated fairly by their employers.

The Act serves as a mechanism to redress the effects of unfair discrimination and to assist in the transformation of workplaces, to reflect a diverse and broadly representative workforce. In addition to this, the Act also protects people with disabilities against unfair discrimination and entitles them to affirmative action measures

Disaster Management Act (No. 57 of 2002)

The Act aims to provide a coherent, transparent, and inclusive policy on disaster management appropriate for South Africa. The framework presents the intergovernmental structures and policy framework and creates as the main responsible organ, the National Disaster Management Centre (NDMC).

The Act seeks to optimise operational efficiency to rescue rehabilitation and render medical health and to restore normal operations. Disaster Management Plans should include Emergency Preparedness Plans, Emergency Response Teams, Emergency Communications, Emergency Responsibilities, Emergency Facilities and Emergency Actions. disasters, emergency preparedness, and rapid and effective responses to disaster and post- disaster recovery.

Spatial Planning and Land Use Management Act, Act No, 16 of 2013

The Act provides broad principles for a set of provincial laws which will regulate planning. It provides clarity on how planning law interacts with other laws and policies.

The purpose of the Act is to provide for a uniform, effective and comprehensive system of spatial planning and land use management for South Africa. The Act also ensures that the system of spatial planning and land use management promotes social and economic inclusion. It seeks to address historical, spatial imbalances and promotes sustainability development and planning.

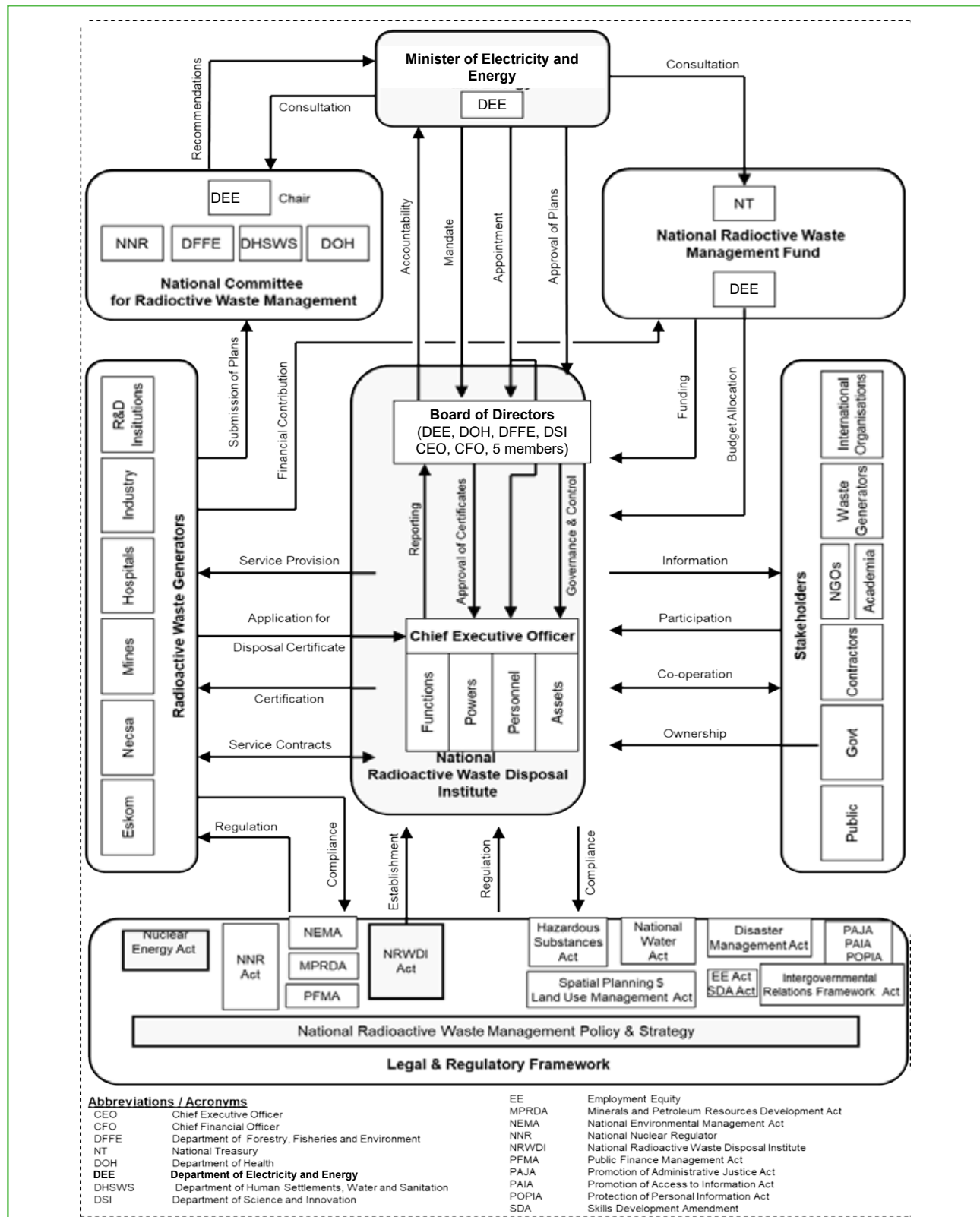
Protection of Personal Information Act, 2021 (Act 4 of 2013)

The purpose of the Protection of Personal Information Act (POPIA) is to protect people from harm by protecting their personal information. Personal information is any information that may identify a person such as a name, surname, identity number, contact number, email address, religion, medical history, education, financial or any other information that is unique to an individual. The Act seeks to protect the privacy of people which is a fundamental human right. The POPIA also makes provision for companies to have an Information Officer who will be responsible for the data compliance obligations of the company. Information officers will have to be registered with the Information Regulator using its online portal accessible on its website.

Intellectual Property Rights Act, 2008 (Act 51 of 2008)
Intellectual Property is a cluster of legally recognised rights associated with innovation and creativity. Legal protection of Intellectual Property is necessary to prevent others from making unauthorised use thereof to the detriment of the rightful owner.

The Act provides for more effective utilization of intellectual property, emanating from publicly financed research and development that is identified, protected, utilized, and commercialized for the benefit of the people of South Africa whether it be social, economic or any other benefit.

Figure 1 : Depicts the legislative and regulatory environment within which the Institute operates.



3. INSTITUTIONAL POLICIES AND STRATEGIES OVER THE FIVE-YEAR PLANNING PERIOD

There are several 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 which 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. It also represents a comprehensive radioactive waste management governance framework by formulating a policy and implementation strategy developed in consultation with all stakeholders. In addition to nuclear and other applicable legislation

Integrated Urban Development Framework (IUDF)

IUDF is a central urban policy that seeks to address urban spatial patterns through the creation of compact, co-ordinated 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

The National Energy Efficiency Strategy is a guiding document developed by government to support the implementation of energy efficient measures in South Africa. The strategy acknowledges that there exists

significant potential for energy efficiency improvements across all sectors of our national economy. The vision of the Strategy is to contribute towards affordable energy for all, and to minimise the negative effects of energy usage upon human health and the environment.

International Conventions

Apart from South African policies and strategies, the assurance of nuclear safety is reinforced by a number of international instruments. The 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 are legally binding on the participating 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 Member States to improve nuclear safety in line with international best practises. One of the objectives 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. This is carried out 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 used fuel and waste management facilities, radioactive waste inventories, ongoing decommissioning projects, used 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

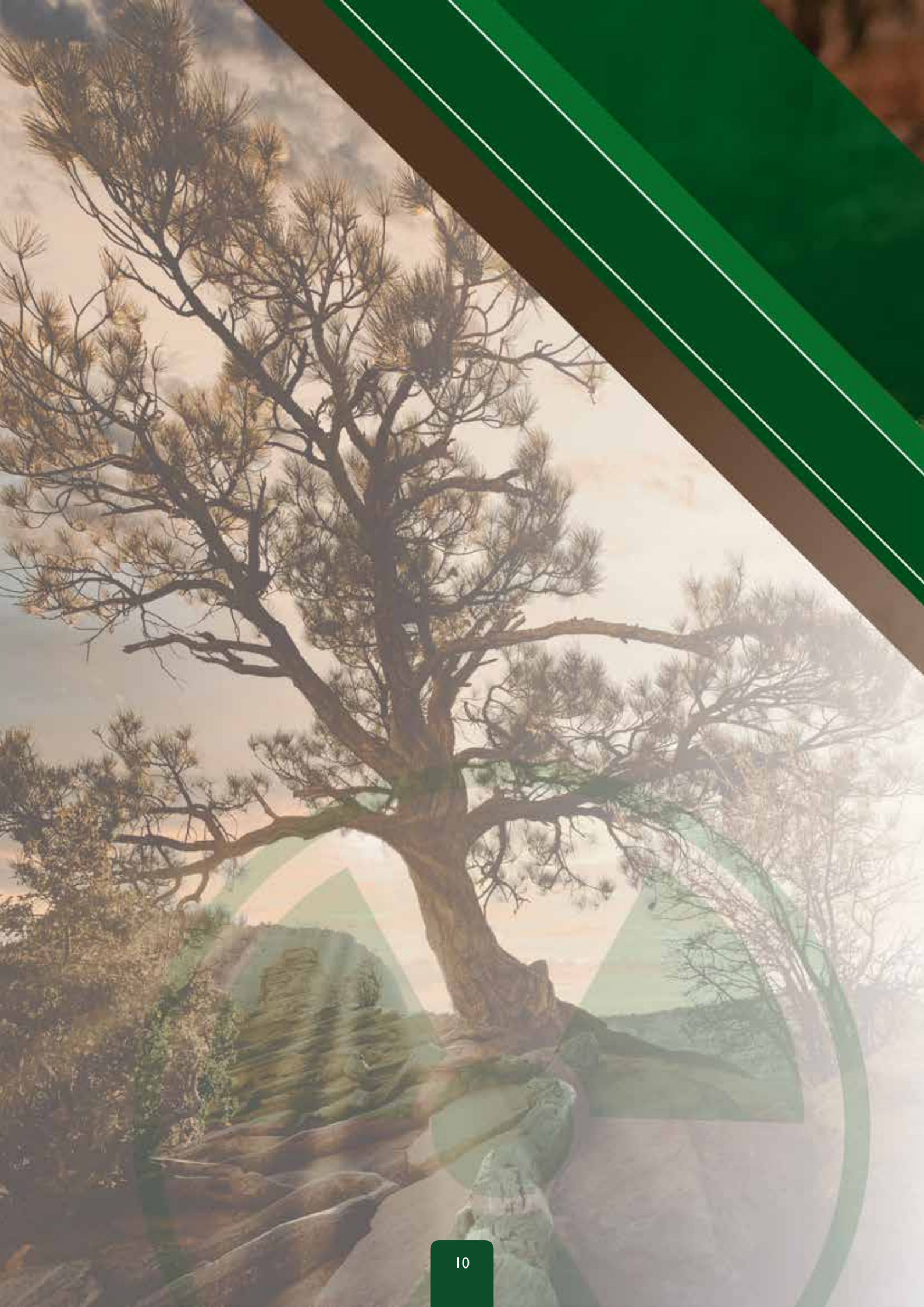
The Paris agreement guides international efforts towards reducing and limiting greenhouse gas emissions and the associated approach towards low carbon development. Article 4.19 of the Agreement encourages its signatories to formulate and communicate long term – low GHG emission development to the United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

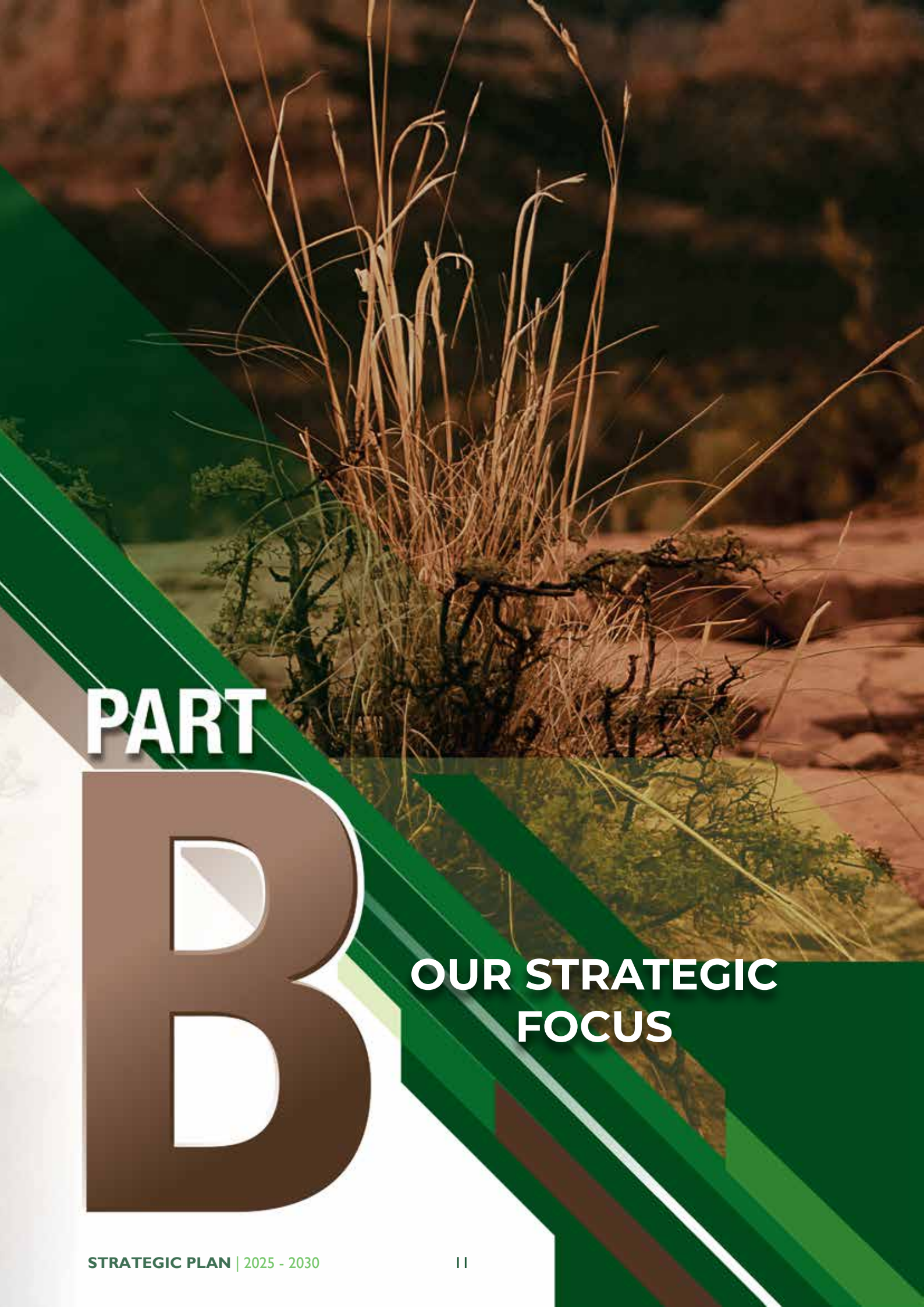
Sendai Framework for Disaster Risk Reduction 2015-2030
The Sendai Framework endorsed by the UN General Assembly is a non-binding voluntary framework; whose main focus is on the reduction of disaster risk.

4. RELEVANT COURT RULINGS

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







PART

B

**OUR STRATEGIC
FOCUS**

5. VISION

A globally recognised leader in the management of radioactive waste disposal.

6. MISSION

To protect people and the environment by providing sustainable, safe and technologically innovative radioactive waste disposal solutions.

7. VALUES

NRWDI has adopted the following corporate values, which serve as guiding principles around which its corporate culture and actions are governed and shaped. These corporate values are listed as follows:

Table 2: NRWDI Core 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 governs our country and regulates our industry
Work-life-balance	We are committed to the creation of a society dedicated to the enjoyment of both life and work.
Dedicated	We will demonstrate passion, dedication, 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. The 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 the NRWDI. Regular communication sessions will continue to be held detailing the 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.

8. SITUATIONAL ANALYSIS

The situational analysis is a process that helps companies identify the opportunities and challenges, both internally and externally in terms of its products and services.

The NRWDI has a huge opportunity in assisting government in achieving its broader socio- economic priorities through the alignment of its plans with that of the shareholder, the Department of Electricity and Energy (DEE), the Medium-Term Development Plan, the National Development Plan

Corporate values

The NRWDI's Values reflect traits or qualities that represent the requirements of the Constitution of South Africa, in particular Chapter 10 – Public Administration and Batho Pele principles. This emphasizes certain basic values and principles governing Public Administration and requires that Public Administration be governed by the democratic values and principles enshrined in the Constitution. The NRWDI's values are grounded in strong ethical considerations. As a result, NRWDI staff members are required to always maintain the highest standards of proper conduct and integrity and to ensure that there is no doubt as to what is required. To this end, the NRWDI has developed a set of core values. The NRWDI's value statements (in direct alignment with the Batho Pele principles) are reflected in the table below:

and ultimately impacting positively on the goals for Africa as well as the global goals.

The NRWDI aligns its planning with the three strategic objectives of the DEE namely Innovation and Industrialisation, Energy Demographic Transformation and South African Continental and Global Leadership.

The CISF and the DGR are projects within the NRWDI which has the potential to create jobs, develop skills, enhance innovation thereby contributing to industrial and economic growth which is one of the priorities of the DEE. Research and development into new and existing technologies for the safe management and disposal of radioactive waste will expand our knowledge base and result in innovative, cutting-edge technologies for South Africa leading to industrialisation.

One of the Ministerial priorities is the NRWDI Human Capital Strategy and educational initiatives plays an important role in NRWDI as it will help improve the quality of human resources by providing ongoing training and development for the advancement of historically disadvantaged individuals including women, youth and people with disabilities thereby creating a collaborative, inclusive and innovative work culture. Through these initiatives, we will be able to address and unlock leadership for the advancement of the electricity and energy sector,

South Africa has the potential to assert its influence and leadership in Africa in the safe management and disposal of radioactive waste as well as research and development into innovative solutions through the collaboration with African nations as well as the participation in international forums. Partnerships with other radioactive waste disposal entities in Europe will provide access to their expertise and experience resulting in time and resources being saved. NRWDI's continental and global collaborations will be in

alignment with the DEE's priority which relates to South Africa's Continental and Global Leadership.

The NRWDI's macro-environment was assessed, taking into consideration the Political, Economic, Social, Technological, Legal / Ethics & Environmental 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.

8.1 EXTERNAL ENVIRONMENT ANALYSIS

Table 3 : PESTEL ANALYSIS

POLITICAL	• New Ministry of Electricity and Energy with a clearer mandate to embrace nuclear technology • The new minister has clear priorities for the energy future as follows: • Universal access, availability, affordability and quality • Sovereign and regional energy security • Innovation and Industrialisation • Energy Demographic Transformation • South Africa's continental and global leadership • Higher levels of political commitment • Nuclear energy has been incorporated as a part of the energy mix for the country. • The need for radioactive disposal solutions increases. • Global commitment to triple nuclear power capacity by 2050. • Disposal of radioactive waste is an apex priority and NRWDI thus has the necessary political support.
TECHNOLOGICAL	• Significant progress is being made in a few countries, such as Finland where the construction for a disposal site for spent nuclear fuel is currently under way • Trend towards local and international partnerships to learn more about different waste disposal technologies and ensure that skills are transferred. • Drive towards small modular reactors and the need to develop back-end strategies to support waste disposal from these reactors. • 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 dry storage (up to 100 years) for spent nuclear fuel. • Cyber and Information security challenges. • Trend towards increasing the use of AI, automation, machine learning, IOT, etc. in the management of nuclear waste disposal • Complexity in the classification of specialised and legacy waste • Trend towards offsite storage of spent fuel
ECONOMIC	• South Africa has competing social, education, infrastructure and health budget priorities. • Potential for economic opportunities and employment due to establishment of new waste disposal and storage related infrastructure. • Lack of economic opportunities

LEGAL/ETHICS	• Changes in the legislative and regulatory environment might potentially influence operations. • RWMF is in the process of being promulgated but has been delayed • Licensing processes are complex and lengthy • Scarcity of legal nuclear expertise
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. • Social media and digital connectedness enable significantly better communication around nuclear risks. • 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. • Cultural factors impact on communities' perceptions of nuclear, with limited nuclear communication competencies to counter these factors • Trend to invest in host communities of nuclear waste disposal facilities • Trend towards consent-based siting in decisions about the location of waste disposal facilities
ENVIRONMENTAL	• Climate change and global warming has led to the environment becoming a global agenda item. • Global commitment to net zero emissions • Trend to keep the footprint of nuclear waste disposal facilities as small as possible • Impact of climate change on the environment

The 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.

8.2 INTERNAL ENVIRONMENT ANALYSIS

SWOT Analysis

In developing the APP, an internal environment scan using the SWOT analysis, defining the Strengths and Weaknesses the organisation. The purpose is for the NRWDI to optimise identified strengths, harness opportunities, offset identified weaknesses and mitigate threats.

A SWOT analysis is a powerful tool for assessing up an organisation's resource capabilities and deficiencies and opportunities to improve and grow. The NRWDI's internal strengths and weaknesses, together with the external opportunities and threats referenced earlier, were evaluated to provide a basis for re-aligning, re-prioritising and refining the NRWDI's impact statement, outcomes and outcome indicators

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. Every weakness holds within itself the opportunity to improve and grow.

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.

Table 4: SWOT: List of Strengths, Weaknesses

Strengths	Weaknesses
• NRWDI mandate is legislated and unambiguous. • Core staff is suitably qualified and experienced • Technical expertise in radioactive waste disposal. • World-class low-level waste disposal facility, Vaalputs, which is in operation for more than 30 years. • International partnerships and connectedness. • Clean audits as part of good reputation. • ISO 9001 certification. • Management systems are being integrated in an IMS • Providing a critical service contributing to public health and the environment	• Sustainability of funding – this negatively influences acting on the mandate. • Insufficient Project management • capability • Leadership succession not in place • Brand visibility not where we want to be • Organisation culture not yet optimal • Difficulty in attracting, retaining and rewarding highly skilled people • Communication with stakeholders not optimal
Opportunities	Threats
• Evolving culture. • Benchmark our policies against peers • Could be doing more to support employee wellbeing • Opportunity to assist other countries using NRWDI expertise to create additional income streams. • Render advisory services to the AU and SADC countries with regard to radio-active waste. • Funding opportunities: offer professional services, project waste consultation services, AFRA training opportunities. • Centre of excellence in radioactive waste management and disposal. • Build strong co-operative partnerships with IAEA, global and local waste management organisations to enhance and complement NRWDIs competencies. • Innovation for the disposal of other radioactive waste classes. • Providing opportunities for youth to learn in the nuclear space	• Possibility to lose highly qualified staff due to brain drain and poaching from other organisations in the very small nuclear industry • Negative public perception and sentiment regarding nuclear energy and radioactive waste • Delays in finalisation of 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 • 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

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.

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 instill 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

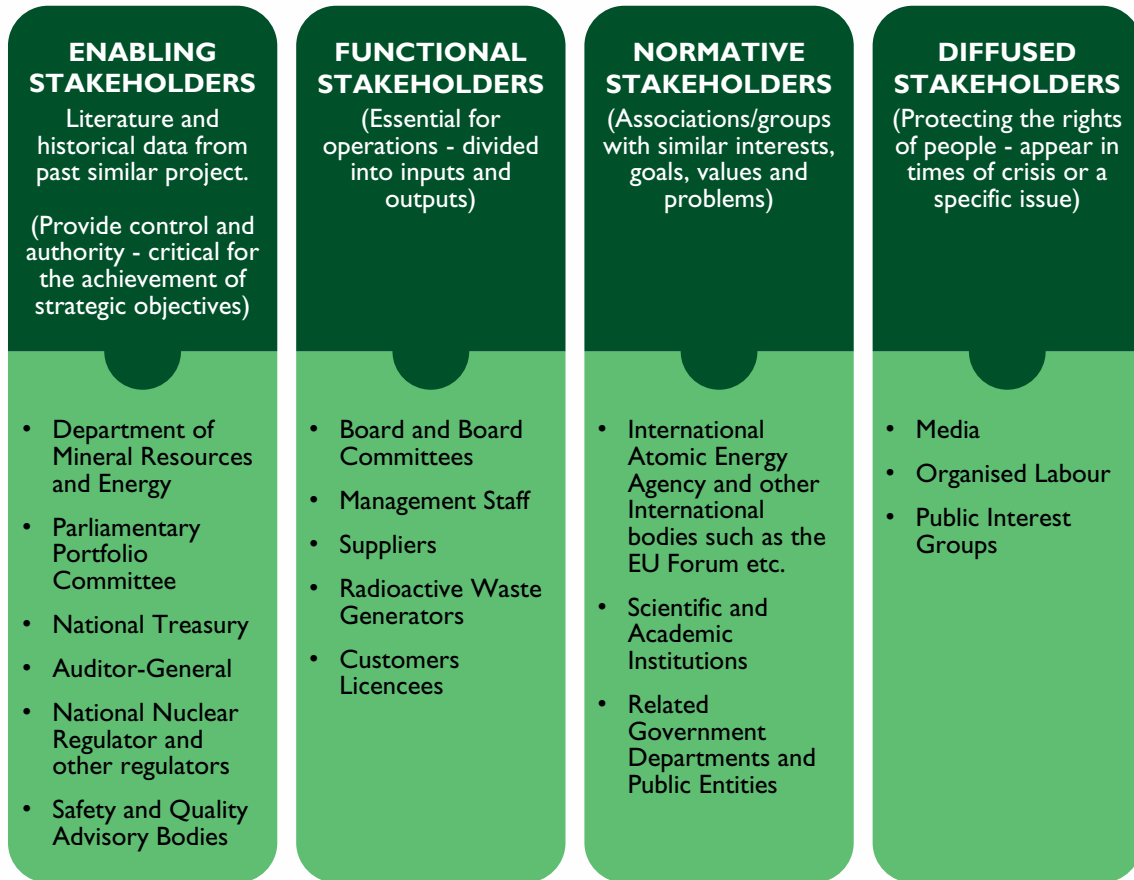


Table 5: Stakeholder Analysis Matrix

Stakeholder	Influence	Expectation
The Board and Governance Committees e.g., Technical Operations Committee, Social and Ethics Committee, Audit and Risk Committee	Strategic direction	- Transparency - Accountability - Governance, Integrity, Ethics - Stability - Visibility - Delivery
Department of Electricity and Energy	- Policy/strategy Setting - Administrative and governance oversight	- Conformance to policy - Governance Continuity and Reporting - Synergy and effective collaboration - Delivery of the mandate - Good governance
Parliamentary Portfolio Committees	- Sanction - Legislation - Oversight budget and reporting	- Accountability and reporting - Governance, Integrity, Ethics - Contribution to National Priorities - Provision of direction
Waste generators	- Public Perception - Risk Profile - Waste disposal infrastructure	- Extended waste packages to established waste disposal solutions - Extended waste packages to established waste disposal solutions - Information on waste management processes - Share information on waste management plans - Fair in operations - Consistent feedback based on operational processes - Fair in operation - Consistent feedback - Waste management inventory database - Good turnaround times - Honesty - Accountability - Integrity - Comply with their own license agreements - Transparency - Responsiveness - Guidance - Interaction - Accessibility, Fairness, Consistency, Feedback

Stakeholder	Influence	Expectation
Internal /Staff	• Morale • Public opinion • Performance/ productivity • Organisatioanal security and safety culture	• Respect of Worker Rights • Fair remuneration and incentives • Equity • Training and development • Technical assistance • Best Practice HRM policies/practices • Conducive work environment • Adequate resourcing • Transparency • Ethical Behavior • Optimal engagement • Principles of good governance • Ubuntu
Media	• Public perception and opinion • Public knowledge and exposure • Public behavior	• Regular Communication • Transparency • Access to Information
Organised Labour	• Policies • Productivity	• Framework for engagement • Willingness to work • Transparency • Communication • Fairness • Enabling environment for association
The Public/Public interest groups/Lobby groups/ Licensees	• Operations • Strategy • Culture • Advocacy • Future Projects Buy-in • Public perception • Community development initiative	• Transparency • Fairness • Consistent delivery • Integrity • Values orientation • Information sharing • CSI • Social and environmental initiatives • Meeting of licence conditions • Safety assurance
Suppliers	• Risk • Effectiveness • Turnaround	• Transparency • Fairness • Consistency • Ethical Behavior
National Treasury (NT)	• Regulatory environment • Financial Prudency • Budgeting	• Reporting • Governance • Compliance

Stakeholder	Influence	Expectation
Auditor General (AG)	- Regulatory environment - Compliance	- Reporting - Governance - Audit outcomes - Performance
International Atomic Energy Agency and other international bodies such as EU Forum etc.	- Policy - Guidance - Safety standards - Direction	- Compliance - Implement international best practice - Capacity building - Research and Development
NNR / regulators	- Source of regulation - Dependent on them for issuing of NIL and other licences / authorisations	- Corporate governance principles - Compliance to licensing conditions
Scientific and Academic Institutions	- Research and development agenda - Strategy	- Partnerships - Collaboration - Funding - Compliment the Research and development mandate
Vaalputs community	Safety	Community initiatives Jobopportunities/ socio- economic opportunities
Local and provincial authorities	Emergency response	- Corporate Social Responsibility Initiatives - Environmental initiatives

9. ORGANISATIONAL STRUCTURE

9.1 GOVERNANCE STRUCTURE

The NRWDI is a Schedule 3A public entity that reports to the Executive Authority i.e., the Minister of Electricity and Energy. The NRWDI's activities are funded by the provision of a budget from funds voted annually to the DMRE. The governance of the NRWDI is entrusted to a Board appointed in accordance with the Act, by the Minister of Mineral Resources and Energy. The NRWDI's Accounting Authority (Chairperson) is accountable for the NRWDI governance and oversight. The Chief Executive Officer and the Chief Financial Officer are ex- officio members of the Board.

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 Social and Ethics Committee, and the Technical Operations Committee. These committees' function by way of a formal Charter.

The Acting Chief Executive Officer, assisted by a senior management team which comprises of the Chief Financial Officer and Divisional Managers, are 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 operationalization of the NRWDI.

9.2 OPERATIONAL STRUCTURE

The current operational structure of the NRWDI was approved by the DMRE. The structure has been adjusted over time to ensure that it remains relevant and appropriate to organisational requirements. It ensures that the 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 NRWDI has a National Office in Pelindaba, Pretoria and an office based in Vaalputs in the Northern Cape. As the Vaalputs National Radioactive Waste Disposal Facility, is shifted from Necsa to NRWDI a key implication is that the shape of the NRWDI organisation structure may well change with a need for people with a different skill-set to that currently in place. This will mean that there may well be a need for current employees to undergo retraining to enable them to acquire the necessary skills. It will also require managers to hone and further develop their competencies to more effectively manage in a high tech, highly skilled, knowledge intensive work environment.

The NRWDI will continue to embrace Total Quality Management (TQM) by creating a total quality culture bent on continuously improving the performance of every task and value chain activity.

The organogram that follows represents the organisational structure for 2020/21 of the NRWDI. The structure will be reviewed in the 2025/26 financial year to ensure that the NRWDI's Strategy 2025-2030 and Annual Performance Plan 2025/26 is optimally supported.

The key driver with regard to the number and type of future resources required is related to the types and volume of waste generated. A variable amount requires a flexible and agile structure. The organisational structure of the NRWDI has therefore been designed according to the design principles of consistency, continuity, accountability, flexibility and efficiency.

In order to ensure consistency and continuity, the 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, the NRWDI, wherever possible, ensures that whole work processes with discrete work products are owned 'end to end' by functional teams. The 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. This allows for the work-force, and the consequent employment cost, to flex and adjust to the NRWDI's variable types and amount of radioactive waste. It also provides an opportunity for the NRWDI to carefully manage the transition process.

The CEO oversees the NRWDI. All executive managers therefore report directly to the CEO. The key divisions within the organisation are Administration, Radwaste Operations, Radwaste Technology and Siting and Radwaste 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, organisation design, strategic workforce planning and sourcing as well as human resource development, inclusive of a focus on ongoing learning.

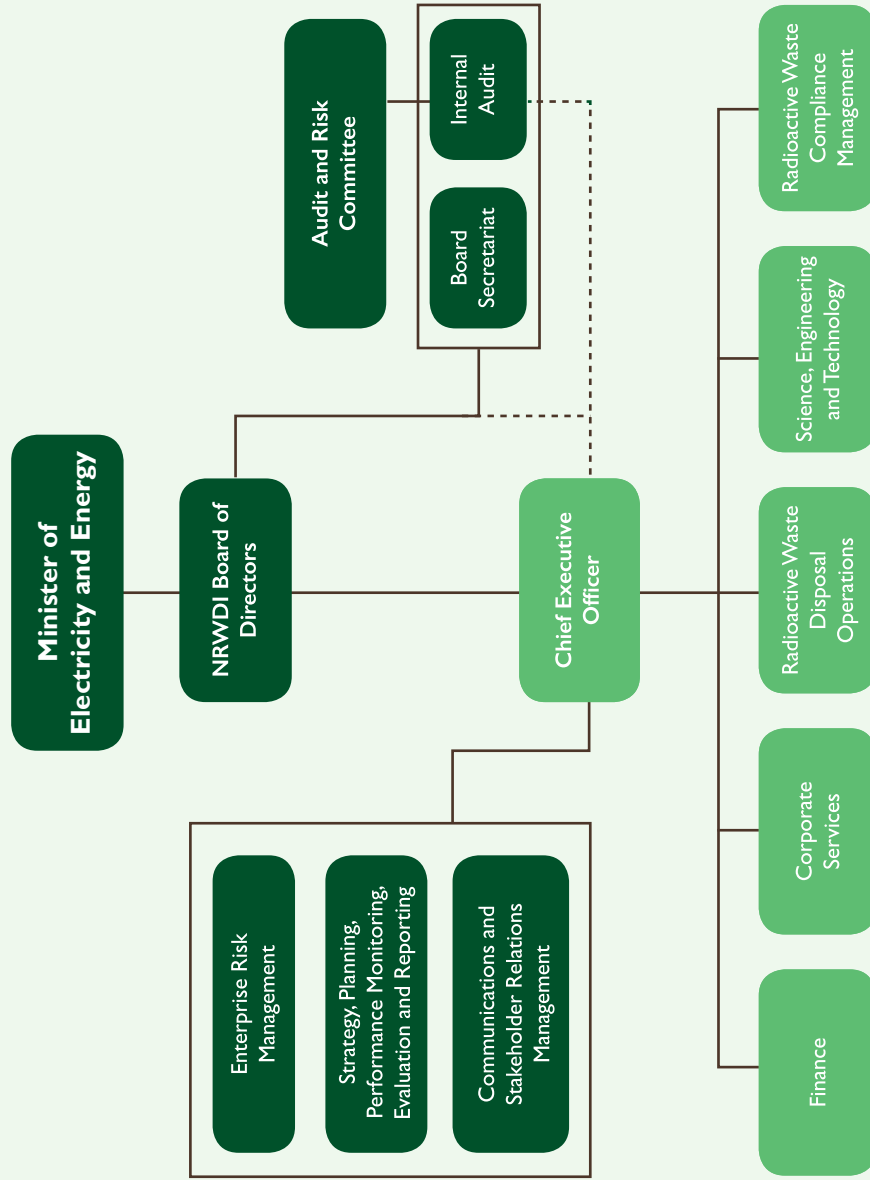
To ensure the consistent communication of business objectives and changes, as well as the engagement of all staff at all levels, Administration manages internal & external communications. The role of Administration in the NRWDI also includes ensuring employment-related regulatory compliance as well as 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.

The 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 the NRWDI workforce indicates a transition to a predominantly younger workforce over time. Managing this young, largely contingent workforce will require leadership within the NRWDI to develop the necessary skills to manage millennial employees.





National Radioactive Waste Disposal Institute Organisational Structure



MULTI-YEAR FINANCIAL PROJECTIONS

Allocations have been made to the NRWDI by National Treasury for the specific periods indicated in the table below. The following table sets out the budget and cash flows of the NRWDI for the next MTEF period.

Table 6: Income and Expenditure

	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	
REVENUE								
Non-tax revenue	1 299	2 553	4 026	2 000	2 000	2 000	2 000	2 000
Commission received	1	1	1	- 2 000	- 2 000	-	-	-
Interest, dividends and rent on land	1 177	2 552	3 947	2 000	2 000	2 000	2 000	2 000
Other income	121	-	78	-	-	-	-	-
Transfers received	49 166	50 304	50 486	47 916	47 916	52 344	54 710	54 710
Total revenue	50 465	52 857	54 512	49 916	49 916	52 023	54 344	57 210
EXPENSES								
Current payments	47 205	48 722	54 378	49 916	49 916	52 023	54 344	57 210
Compensation of employees	37 451	39 087	41 874	43 188	43 188	45 125	47 170	49 193
Salaries and wages	37 451	39 087	41 874	43 188	43 188	45 125	47 170	49 193
Goods and services: Of which	9 754	9 635	12 504	6 728	6 728	6 898	7 174	8 017
Administrative fees	23	24	30	45	45	50	50	52
Advertising	71	84	144	-	-	-	-	50
Minor assets	5	22	2	-	-	-	-	20
Audit costs: External	1 142	866	1 083	1 000	1 000	1 000	1 000	1 045
Catering: Internal activities	3	34	20	-	-	-	-	40
Communication (G&S)	240	321	334	170	170	190	430	449
Computer services	1 291	848	1 857	600	600	500	434	550
Consultants: Business and advisory services	870	647	585	400	400	500	500	550

	Audited outcome	Audited outcome	Audited outcome	Audited outcome	Budget estimate	Approved budget	Medium Term Estimates		
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28		
Legal services (G&S)	341	399	535	250	250	250	329		
Contractors: Maintenance and repairs of other machinery and equipment	22	24	230	-	-	-	-		
Contractors: Other	970	595	781	450	450	350	366		
Agency and support/outsourced services	1 446	1 825	1 089	300	300	300	380		
Consumable supplies	9	16	34	8	8	20	25		50
Consumables: Stationery, printing and office supplies	171	297	174	100	100	150	200		
Operating leases	888	940	1 158	1 400	1 400	1 400	1 450		
Travel and subsistence	472	993	2 523	505	505	520	677		
Training and development	315	23	47	100	100	100	115		
Operating payments	320	279	416	200	200	218	324		
Venues and facilities	-	251	249	-	-	150	170		
Depreciation	1 128	1 147	1 192	1 200	1 200	1 200	1 200		
Losses from sale of fixed assets	27		21	-	-	-	-		
Total Expenditure	47 205	48 722	54 378	49 916	49 916	52 023	57 210		
Surplus / Deficit)	3 260	4 135	134	-	-	-	-		

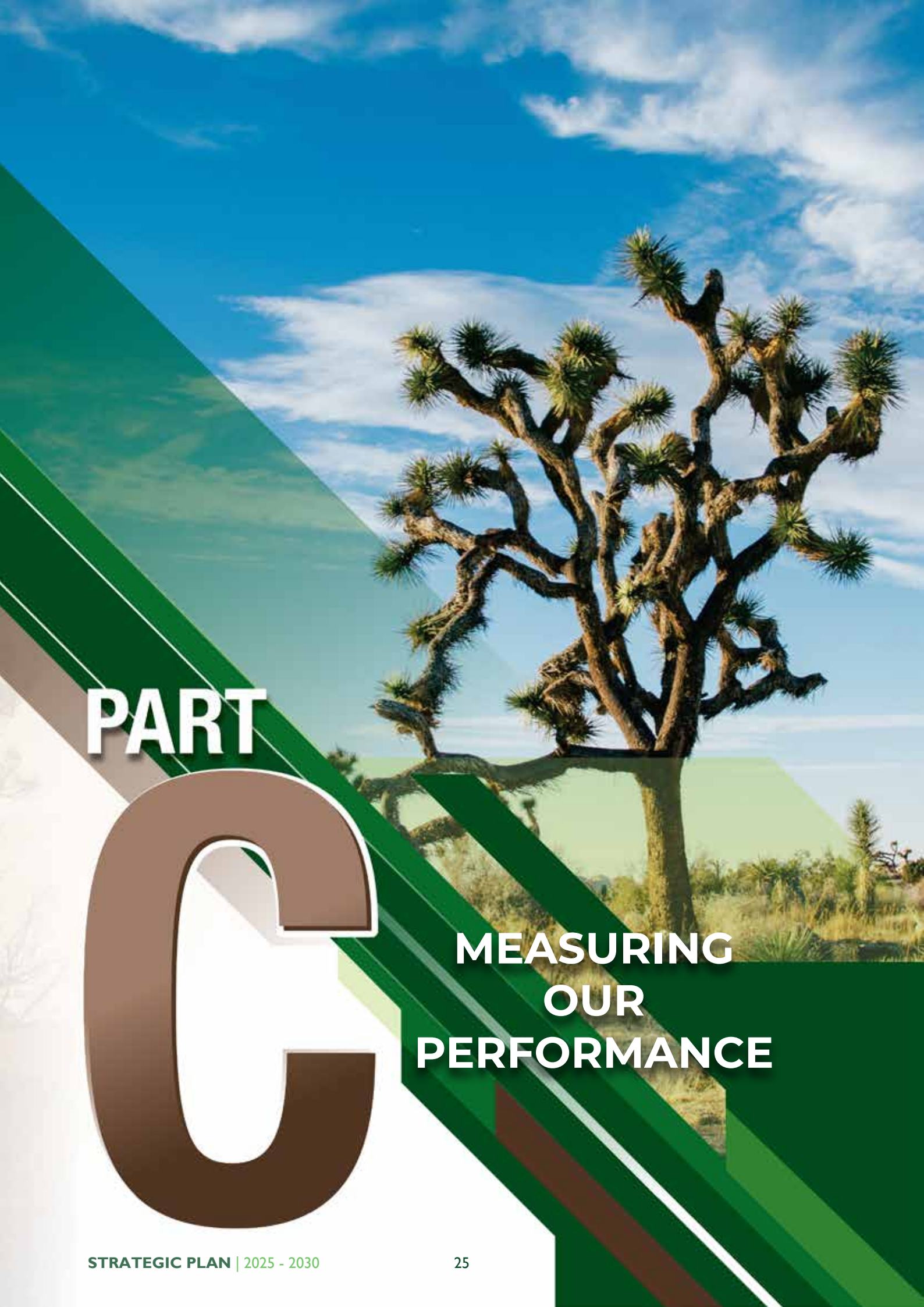
Additional notes to budget amounts for MTEF

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.

10. DESCRIPTION OF THE PLANNING PROCESS

The NRWDI is committed to an ongoing, inclusive process of strategy crafting, planning, alignment, and review. As an important part of this process, the NRWDI engages with its key stakeholders and obtains structured inputs into its planning and review process. The following workshops have been held to provide relevant input into the NRWDI's Strategy and Annual Performance Plan:

- On 8th October 2024, the NRWDI leadership team participated in an internal strategic planning session to give inputs to the NRWDI Strategic Plan 2025 - 2030 as well as the Annual Performance Plan 2025/26.
- On the 24th and 25th October 2024, NRWDI held its strategic planning session with stakeholders to receive inputs for the development of Strategic Plan and APP.



PART

C

**MEASURING
OUR
PERFORMANCE**

11. INSTITUTIONAL PERFORMANCE INFORMATION

11.1 Measuring the impact

Impact Statement	Sustainable management of radioactive waste disposal for South Africa's current and future generations and energy aspirations
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11.2 Measuring Outcomes

Outcome	Outcome Indicator	Baseline	Five-year target
1. Financially sustainable, capable and well governed organisation	Percentage implementation of the support services strategic deliverables	80% implementation of support services strategic deliverables	80% implementation of support services strategic deliverables
2. Safe and secure management of the disposal of all classes of radioactive waste	Percentage execution of waste disposal operational activities	95% execution of waste disposal operational activities	95% execution of waste disposal operational activities
3. Innovative and effective solutions for the management of radioactive waste disposal	Percentage of innovative and effective solutions researched for the management of radioactive waste disposal	No baseline	100% of innovative and effective solutions researched for the management of radioactive waste disposal
4. Compliance with applicable legislation and regulatory requirements for the disposal of Radioactive Waste	Percentage compliance with the applicable legislative and regulatory requirements for the disposal of Radioactive Waste	No baseline	100% compliance with the applicable legislative and regulatory requirements for the disposal of Radioactive Waste

11.3 Explanation of Planned Performance over the Five-Year Planning Period

All the selected outcomes contribute directly towards the achievement of the NDP Five- Year Implementation Plan, the Monitoring Framework for the NDP Five- Year Implementation Plan, the mandate of the institution and priorities of women, children and people with disabilities.

CHAPTER IN THE NDP	Contribution of the outcomes towards the achievement of the NDP 5-year Implementation Plan, Monitoring Framework for the NDP 5 year Implementation Plan, mandate of institution, priorities of women, children and people with disabilities, provincial priorities
Chapter 4 of the NDP: Economic Infrastructure	Outcome 3 and 4 contributes to this achievement. In order for the country to support the long term economic objectives and development goals, South Africa needs to extensively invest in economic infrastructure. The Institute will conduct site selections and investigations for the establishment of storage and disposal facilities. Site selections will include the identification, evaluation, characterisation and selection of suitable sites to make them available for the establishment and installation of storage and disposal facilities for all classes of waste not only from safety and environmental protection considerations but from all other aspects such as access, transportation and community and stakeholder acceptance. These facilities must be designed to receive, store and dispose all the high level waste and spent nuclear fuel from the country's power reactors and long lived intermediate level radioactive waste from the decommissioning of nuclear power plants. The Institute will also provide scientific and technical support facilities for regulatory compliance purposes.

CHAPTER IN THE NDP	Contribution of the outcomes towards the achievement of the NDP 5-year Implementation Plan, Monitoring Framework for the NDP 5 year Implementation Plan, mandate of institution, priorities of women, children and people with disabilities, provincial priorities
Chapter 5 of the NDP: Environmental Sustainability and Resilience	All outcomes contribute to this achievement. Developmental challenges must be addressed in a manner that ensures environmental sustainability and builds resilience to the effects of climate change. The overarching mandate of the Institute is to develop and implement a management approach for the long-term care of South Africa's radioactive waste that is technically sound, socially acceptable, environmentally responsible and economically feasible. In order to give effect to the overarching mandate, the following management approaches will be pursued by the Institute: A technically sound management approach which is informed by the best technical and scientific knowledge and experience available. At a minimum it must ensure: public health and worker safety; security of nuclear material. It must also meet international safeguards and non-proliferation obligations. A socially acceptable management approach which must emerge from a process of collaboration with all stakeholders. It takes into account the best available knowledge and expertise, and be responsive to the values and objectives which are imperative for stakeholders. An environmentally responsible management approach in which the physical, chemical and biological stresses on the environment, including the cumulative effects over long time periods, and the potential consequences of failure of any part of the containment system, are within the natural capacity of the environmental processes to accept and adjust to, thus ensuring the long-term integrity of the environment. An economically feasible management approach that ensures that adequate economic resources are available, now and in the future, to pay the costs of the selected approach. The cost must be reasonable. This approach ensures that funding shortfalls will not occur that would threaten the assured continuation of the necessary processes. A net-benefit management approach to ensure that disposal activities do not exceed the benefits of the practice that generates the waste and that waste producers fully cover the cost of the disposal cycle. The Institute will develop a quality management system for the NRWDI head office to discharge the obligations and regulatory requirements associated with holding a nuclear authorisation. The development of operating policies and procedures will give effect to implementing regulatory requirements with regards to safety, health, environment and a quality system. The development of these policies and procedures will assist in protecting the health and safety of people and the environment from the harmful effects of radiation. Furthermore, adaptation strategies in conjunction with national development strategies should be implemented, including disaster preparedness, investment in more sustainable technologies and programmes to conserve and rehabilitate ecosystems and biodiversity assets.
Chapter 8 of the NDP: Transforming Human Settlements	Outcome 3 and 4 contributes towards this chapter as it emphasises the need for effective and coordinated spatial planning systems. By 2030 we strive to achieve measurable progress towards breaking apartheid spatial patterns with significant advances made towards identifying specific sitings for NRWDI projects.



CHAPTER IN THE NDP	Contribution of the outcomes towards the achievement of the NDP 5-year Implementation Plan, Monitoring Framework for the NDP 5 year Implementation Plan, mandate of institution, priorities of women, children and people with disabilities, provincial priorities
Chapter 13 of the NDP: Building a Capable and Developmental State	All outcomes contribute to this achievement. The emphasis is on building a capable state to eliminate poverty, reduce inequality and unemployment by 2030. The outcomes contribute towards Building a capable state through working towards the following: • Stabilisation of the political administrative interface; • Development of technical and specialist professional skills; and • Improving relationships between the spheres of government.
Chapter 14 of the NDP: Fighting Corruption	All outcomes contribute to this achievement. Prevention focuses on the effectiveness of the available systems, institutional arrangements and accountability in the organisation. Education in society is about the society understanding the social dimensions of corruption and reporting it. Good governance, sound financial management and accountability remain the priority for NRWDI.
Chapter 15 of the NDP: Transforming Society and Uniting the Country	All outcomes contribute to this achievement. People must unite around a vision of a better South Africa. This indicates that citizens have an important role to play in bringing about transformation and holding government accountable for the services they deliver. NRWDI will work towards strengthening the functionality of oversight structures; improve timeous consultation, communication and feedback across stakeholders.

Outcome 1: Financially sustainable, capable and well governed organisation

All the following indicators are critical towards achieving this outcome.

Annual Legislative Compliance Report: The annual legislative compliance reports assist in ensuring that an organisation is compliant with laws and regulations to mitigate the risks of legal penalties and reputational damage. It will also assist in maintaining operational efficiency, identifying areas for improvement and guiding risk management.

Percentage Implementation of the Knowledge Management Strategy: The implementation of a Knowledge Management Strategy will improve decision making by providing employees with access to relevant information to make better and informed decisions at a fast pace. Knowledge Management increases efficiency, fosters innovation, supports growth and sustainability and enhances employee satisfaction.

Percentage Implementation of Human Capital Strategy: The Human Capital strategy seeks to understand and anticipate the organisations talent needs and secure these timeously and effectively in order to support the achievement of the NRWDI mandate.

The strategy will focus on attracting, maintaining and retaining appropriate human capital and providing opportunities for employee growth and advancement.

Percentage Implementation of the IT Strategy: The IT strategy outlines how technology should be used to meet IT and business goals.

Financial viability and sustainability: NRWDI's aim is to maintain financial sustainability over the longer term. In order to achieve this, the Financial Viability and Sustainability Strategy must be developed to monitor sustainable operations, support effective asset management, and deliver appropriate levels of service to stakeholders.

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

All three (3) outcome indicators are critical towards achieving this outcome. It is necessary to measure the compliance rates i.e. percentage acceptance rate for the disposal of waste packages received from waste generators for disposal and the average radiation exposure of workers at Vaalputs. Regular meetings with the communities surrounding Vaalputs to keep them informed and to learn about the changes in their environment and their needs is essential to contribute to achieving this outcome.

Outcome 3: Innovative and effective solutions for the management of radioactive waste disposal

Innovative and effective technologies and solutions for the management of radioactive waste disposal are an important strategic outcome and a function of research and development (R&D) strategy, which strategy is formulated with four R&D goals established around four target waste streams, namely, spent nuclear fuel, high-level waste, replaced reactor components and disused sealed radioactive sources. These R&D goals are essentially NRWDI's R&D programme, which drives the delivery on the NRWDI mandate and aims to deliver on this strategic outcome. All four (4) indicators namely the CISF project plans, EIA reports, Preliminary design reports and the LTO waste disposal plans will make a contribution to the achievement of the outcome.

Outcome 4: Compliance with applicable legislation and regulatory requirements for the disposal of Radioactive Waste

There are specific regulatory standards and safety practices for nuclear facilities that must be adhered to. All 3 indicators are necessary to measure compliance with these practices i.e., implementation of the IMS. Compliance assurance and enforcement reports and nuclear safety and security reports.

IMPACT STATEMENT	Sustainable management of radioactive waste disposal for South Africa's current and future generations and energy aspirations.
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OUTCOME	HOW IT CONTRIBUTES TO THE ACHIEVEMENT OF THE IMPACT
1. Financially sustainable, capable and well governed organisation	NRWDI must be adequately structured, resourced with skilled personnel who have the correct tools of trade and who work within a supportive, conducive and innovative environment so that they can provide support and expertise towards enhancing service delivery. Good governance and sound financial management are also imperative to achieving the outcome and ultimately the impact.
2. Safe and secure management of the disposal of all classes of radioactive waste	This outcome focuses directly on the safe, secure and environmentally sustainable solutions for radioactive waste disposal.
3. Innovative and effective solutions for the management of radioactive waste disposal	This outcome will contribute towards an infrastructure project eventually which will be designed to allow for safe, secure and environmentally sustainable solutions for radioactive waste disposal. It will contribute to job creation and skills development.
4. Compliance with applicable legislation and regulatory requirements for the disposal of Radioactive Waste	Only if there is compliance with regulatory standards and safety practises for nuclear facilities will the overall impact be achieved.

12. KEY RISKS

OUTCOME	KEY RISKS	RISK MITIGATION PLAN
1. Financially sustainable, capable, and well governed organisation.	Financial viability and sustainability of NRWDI.	Implementation of initiatives related to 6/8 or 75% of the revenue streams in the Financial Sustainability Plan.
	Misaligned ICT Strategy.	- ICT Strategy that aligns to Cybersecurity developed. - ICT Strategy Implementation Plan developed.
	Failure to develop partnership and collaboration tools.	- Develop Strategic Partnerships and collaborations process. - Implement Strategic Partnerships and Collaborations engagements.
	Lack of public understanding of the NRWDI brand.	- Develop, launch and implement integrated Communications and Stakeholder Relations Strategy. - Develop frameworks, policies and procedures, protocols, and M&E tools for improvement. - Develop Corporate Social Responsibility Strategy.
	Failure to enable a united coherent leadership team.	Implementation of the Turnaround Strategy
	Loss of intuitional memory.	Knowledge Management Strategy developed and approved.
	Inability to achieve a culture conducive to high performance and employee wellbeing.	- Implement Turnaround Strategy: - Implementation of Organisational Development Project.
	Employee turnover (critical skills).	Implementation of Organisational Development Project.
2. Safe and secure disposal management of all classes of radioactive waste and	Revocation of the Nuclear Installation License due to non- compliance.	Implementation of compliance assurance inspections and audits.
3. Compliance with applicable legislative and regulatory requirements for the disposal of radioactive waste.		
4. Innovative and effective solutions for radioactive waste management and disposal.	Failure to perform an Environmental Impact Assessment.	- Secure funding. - Outsource specialised skills. - Collaborate with CGS and NECSA. - CISF Feasibility Study Project Plan developed. - Initial environmental input information report developed. - Environmental Scoping Report drafted. - Environmental Scoping Report completed.
	Failure to perform the Preliminary Design for CISF.	- Outsource specialised skills. - Preliminary Design added to the Procurement Plan and prioritised for implementation in the 2025/2026 financial year. - CISF Feasibility Study Project Plan developed.

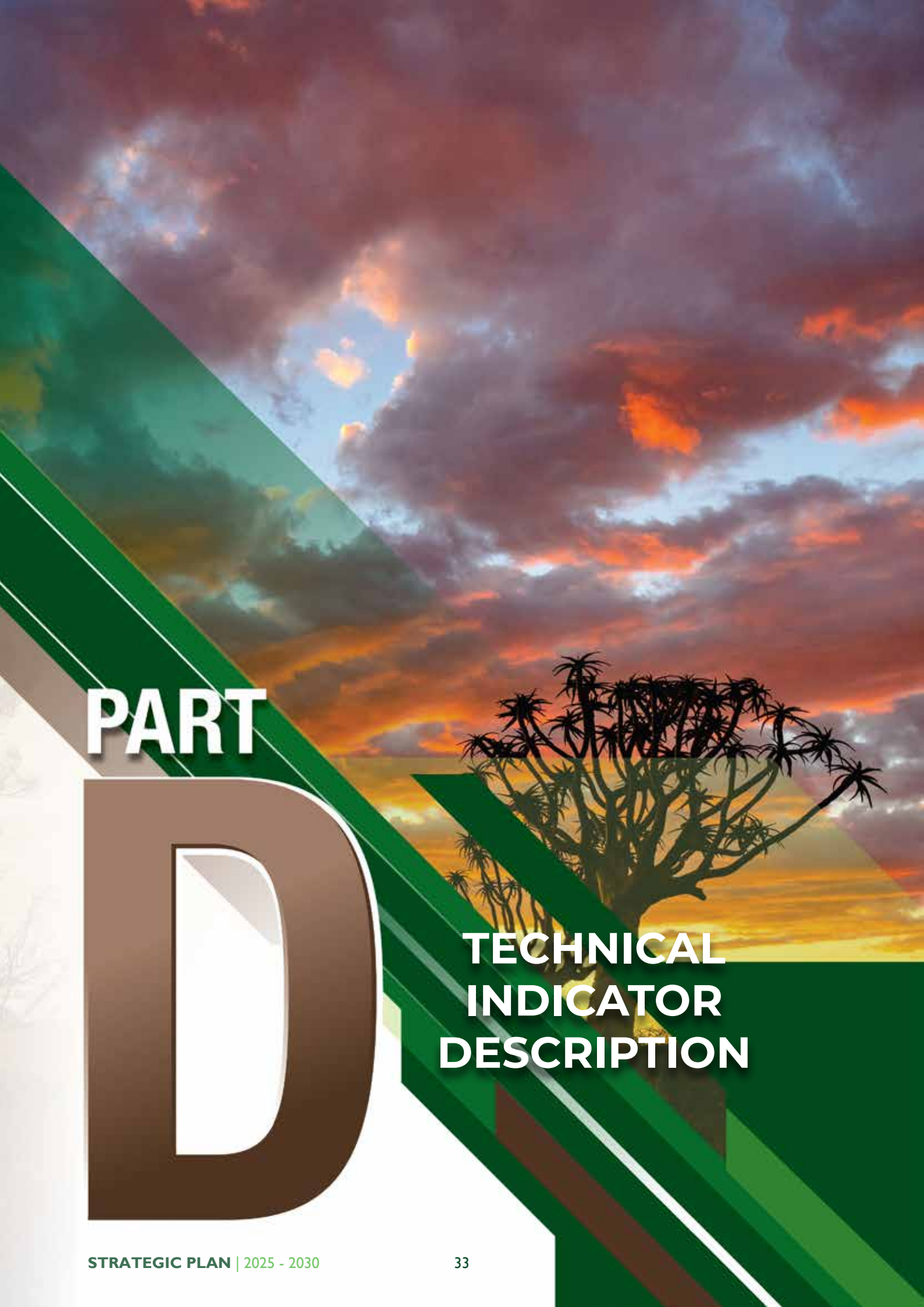
OUTCOME	KEY RISKS	RISK MITIGATION PLAN
	Unavailability of an R&D implementation Plan.	• Perform literature review. • Implement MoUs. • R&D Strategy drafted. • R&D Plan drafted. • R&D Strategy and Plan reviewed. • R&D Strategy and Plan completed.
5. Compliance with applicable legislative and regulatory requirements for the disposal of radioactive waste.	Revocation of ISO 9001 standard certification due to non-compliance.	• Continual improvement of Quality Management System.
	Failure to implement the IMS framework.	• IMS Implementation Plan. • RD-0034 Compliance Checklist. • IMS Audit Checklist.

13. PUBLIC ENTITIES

There are no public entities reporting to NRWDI.







PART

D

**TECHNICAL
INDICATOR
DESCRIPTION**

14. PROGRAMME 1: TECHNICAL INDICATOR DESCRIPTION (TID)

INDICATOR TITLE	% Implementation of support services strategic deliverables
Definition	The level of implementation of the support services deliverables achieved and expressed as a percentage of the number of outputs planned for the support services.
Source of data	• Implementation of Financial Sustainability Plan HCM strategy • Implementation of IT strategy Implementation of KM strategy Audit reports • Annual Legislative Compliance Reports
Method of calculation / assessment	$\% \text{ compliance} = \text{number of outputs delivered} / \text{total number of outputs required} \times 100$
Assumptions	• Implementation of Financial Sustainability Plan • HCM strategy developed and approved • Implementation plan and IT strategy approved • Reviewed organogram approved
Disaggregation of beneficiaries (where applicable)	• Target for women: 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
Calculation type	Cumulative
Reporting cycle	Annual
Desired performance	Equivalent or higher than the targeted performance
Indicator responsibility	CEO

15. PROGRAMME 2: RADWASTE OPERATIONS

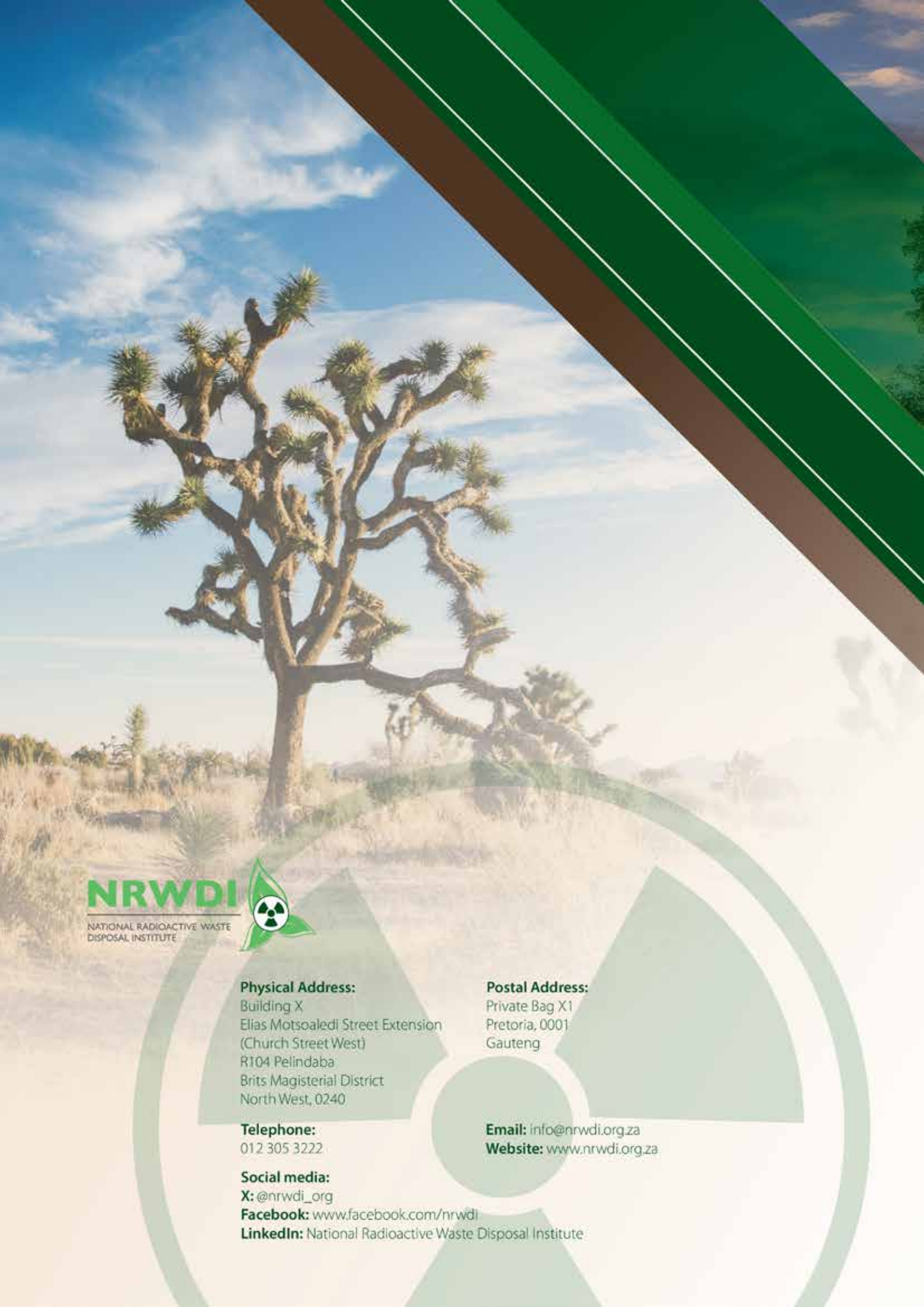
INDICATOR TITLE	Percentage execution of waste disposal operational activities
Definition	Operational activities make reference to the waste acceptance criteria being met, VPSIF meetings being held and average radiation exposure of workers at Vaalputs.
Source of data	• Operational reports • Attendance of VPSIF meetings • Minutes of VPSIF meeting • Radiation exposure reports
Method of calculation / assessment	$\% \text{ compliance} = \text{number of findings} / \text{number of requirements audited} \times 100$
Assumptions	Implemented IMS system
Disaggregation of beneficiaries (where applicable)	• Target for woman: N/A • Target for youth: N/A • Target for disabled persons: N/A
Special transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Non-cumulative
Reporting cycle	Annually
Desired performance	Equivalent or higher than the targeted performance
Indicator responsibility	Chief Operations Officer

16. PROGRAMME 3: SCIENCE, ENGINEERING AND TECHNOLOGY

INDICATOR TITLE	Percentage of innovation and effective solutions researched for the management of radioactive waste disposal
Definition	A R&D plan is a formal plan which will indicate the areas for research and development over the 5 year period.
Source of Data	Literature and historic data from past similar project.
Method of Calculation/ Assessment	By reference to the Annual Performance Plan quarterly assessments
Assumptions	Availability of financial and human resources
Disaggregation of Beneficiaries (where applicable)	- Target for Women: N/A - Target for Youth: N/A - Target for People with Disabilities: N/A
Spatial Transformation (where applicable)	- Reflect on contribution to spatial transformation priorities: N/A - Reflect on the spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting Cycle	Annual
Desired Performance	Equivalent or higher than the targeted performance
Indicator Responsibility	Chief Technology Officer

17. PROGRAMME 4: RADIOACTIVE WASTE COMPLIANCE MANAGEMENT

INDICATOR TITLE	Percentage compliance with the applicable legislative and regulatory requirements for the disposal of radioactive waste
Definition	- The NIL comprises the regulatory conditions and requirements for authorisation to manage and operate a nuclear facility. - Implementation includes development, compliance verification, monitoring and measurement, compliance oversight, awareness training and review.
Source of data	Database on compliance status with NIL conditions, safety case documents, management system documents, action plan
Method of calculation / assessment	$\% \text{ implementation} = \frac{\text{number of activities completed}}{\text{number of activities on action plan}} \times 100$
Assumptions	- NIL issued in the name of NRWDI - Non-conformance reports (NCR's) generated for non-compliances
Disaggregation of beneficiaries (where applicable)	- Target for woman: N/A - Target for youth: N/A - Target for disabled persons: N/A
Special transformation (where applicable)	- Contribution to spatial transformation priorities: N/A - Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Quarterly
Desired performance	Equivalent or higher than the targeted performance
Indicator responsibility	Executive Manager: Compliance Management



NRWDI

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