

# FY23/24 ANNUAL REPORT

Portfolio Committee Electricity and Energy (PCEE)

16 October 2024



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South African National Energy  
Development Institute

*Presented by*

**Mr Sicelo Xulu**

Board Chair

**Professor Prathaban Moodley (Pr. Eng)**

Acting Chief Executive Officer

**Ms Lethabo Manamela CA(SA)**

Chief Financial Officer

*Other members of the SANEDI team*

**Mr Solomon Mngomezulu**

Company Secretary & Legal Advisor

**Mr Mthetheleli Baqwa**

Corporate Planning, Monitoring and Evaluation Manager

**Mr Morakanele Thipe**

Manager in the Office of the CEO





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Additional Slides



# THE JOURNEY HAS STARTED



MUT, June 2024

UniVen, April 2024



JET Contracts (2023 to 2025)



DUT, August 2024



China EPPEI, September 2024





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# BACKGROUND

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# Constitutional Mandate

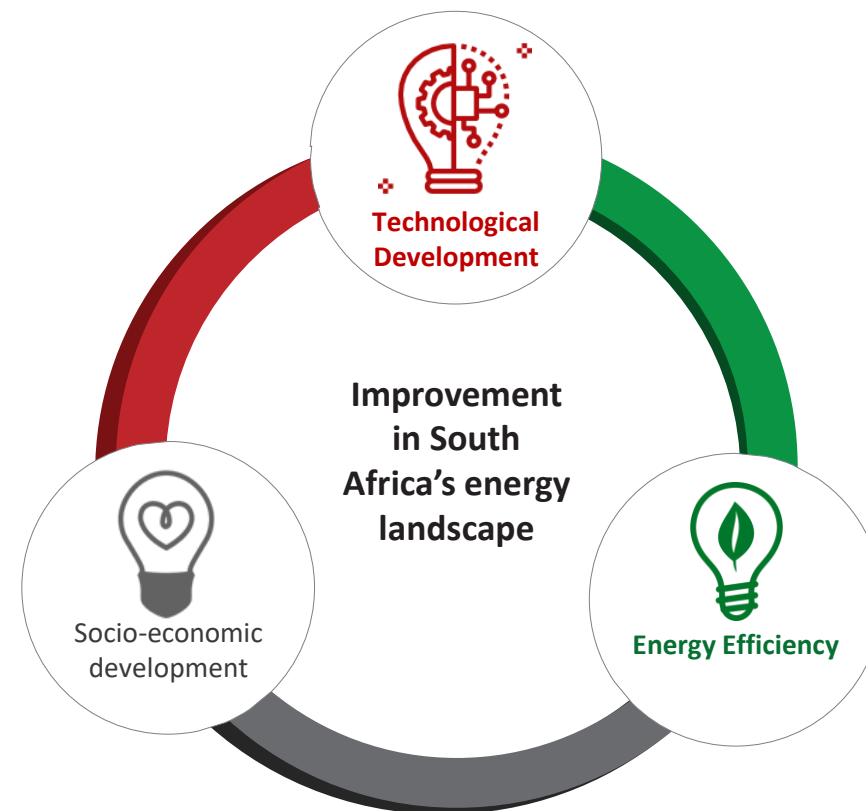


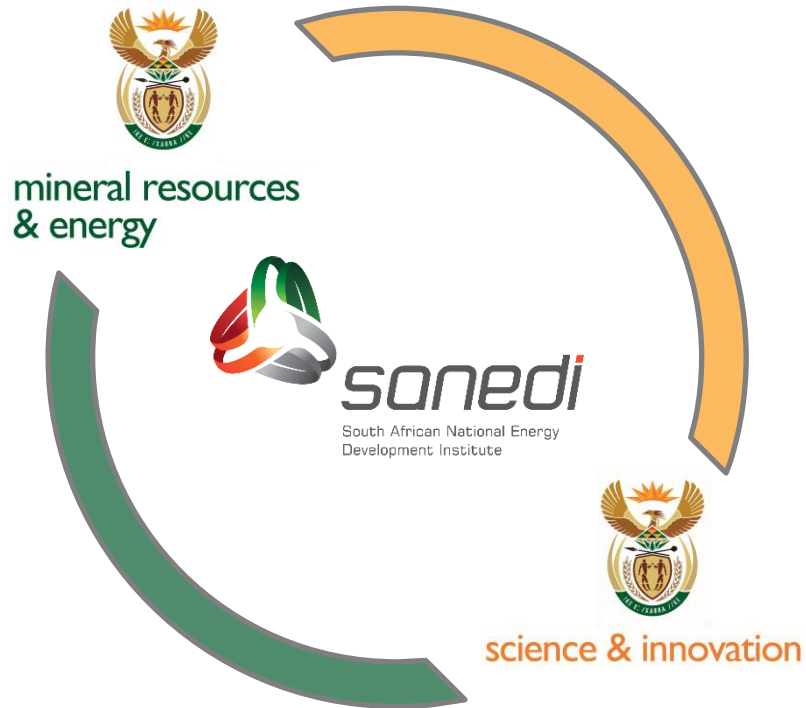
SANEDI, as an entity of the State, derives its Mandate from the **Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)** and **relevant Legislative and Policy Frameworks**. SANEDI has a functional responsibility towards **the technological development and Energy Efficiency (EE) in the field of energy (other than nuclear energy)** – thereby improving the overall energy landscape within the country.

The strategy developed by SANEDI seeks to ensure alignment with two critical components of the Constitution, namely:

1. Chapter 2, The Bill of Rights, where: Everyone has the right:
  - i. To prevent pollution and ecological degradation,
  - ii. To promote conservation, and
  - iii. To secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.
2. Schedule 4, The Functional Areas of Concurrent National and Provincial Legislative, specifically with respect to Municipalities and the issue of Local Government matters related to:
  - i. Electricity (and gas reticulation).

SANEDI has a clear role to play, contributing towards an environment that is sustainably utilised for the **socio-economic development of the country**, as well as municipal development for the distribution of electricity (and potentially other energy sources) to the residents of the country.





Objects of this Act are to:

- Ensure an uninterrupted supply of energy to the Republic
- Promote diversity of supply of energy and its sources
- Facilitate the effective management of energy demand and its conservation
- Promote energy research
- Promote appropriate standards and specification for Energy Efficiency



## ENERGY RESEARCH & DEVELOPMENT

- **Direct, monitor, conduct and implement** energy research and technology development in all fields of energy, other than nuclear energy, and **Promote energy research** and technology innovation;
- **Provide for:**
  - Training and development in the field of energy research and technology development,
  - Establishment and expansion of industries in the field of energy, and
  - The commercialisation of energy technologies resulting from ERD programmes;
- **Register patents** and intellectual property in its name resulting from its activities;
- **Issue licences** to other persons for the use of its patents and intellectual property;
- **Publish information** concerning its objects and functions, **Establish facilities** for the collection and dissemination of information in connection with Research & Development Initiatives (RDI);
- Undertake any other energy **technology development** related activity as directed by the Minister, with the concurrence of the Minister of Science and Technology, Promote relevant energy research through **cooperation with any entity, institution or person** equipped with the appropriate skills and expertise within and outside the Republic;
- **Make grants to educational and scientific institutions** in aid of research by their staff or for the establishment of facilities for such research;
- Promote **the training of research workers** by granting bursaries or grants-in-aid for research;
- Undertake **the investigations or research** that the Minister, after consultation with the Minister of Science and Technology, may assign to it; and
- **Advise the Minister** and the Minister of Science and Technology on research in the field of energy technology.



## ENERGY EFFICIENCY

- Undertake EE measures as directed by the Minister and Increase EE throughout the economy;
- Increase the Gross Domestic Product (GDP) per unit of energy consumed; and
- Optimise the utilisation of finite energy resources.



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# BOARD AND GOVERNANCE MATTERS

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# Governance Matters



## Highlights

1. The Board has been in place since 2022, with current year being last term.
2. The Board of the SANEDI continues to operate effectively and efficiently:
  - a. On Average 80% Meeting attendance at Board
  - b. Board also undertook a Board review process undertaken by an independent service provider. Overall, the effectiveness of the Board was confirmed.
  - c. AGSA also has not reported any adverse findings against the Board
3. Duly constituted and continues to have functional sub-committees of the Board.
4. Two vacancies exist on the Board however these are receiving the attention of the shareholder and have not negatively affected SANEDI.
5. All relevant assurance structures including an independent internal audit service are in place.



# Governance Matters



## Audit results per outcome area

Outcome area	Movement	2022-23	2021-22	2020-21
Financial statements	▶			
Annual performance report	▶			
<b>Compliance with legislation</b>				
• Annual financial statements	▶			
• Strategic planning and performance management	▶			
• Procurement and contract management	▶			
• Expenditure management	▶			
• Revenue management	▶			
• Asset management	▶			
• Consequence management	▶			

Unqualified / No material findings	Qualified	Adverse	Disclaimed	Material findings
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▲ Improvement	▼ Regression	▶ Unchanged
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Highlights

1. Board has maintained an effective and efficient internal control environment.
2. Effectiveness of internal controls is reviewed continually by internal audit and internal control deficiencies are adequately addressed.
3. The Board has maintained performance of the organisation at above 97%, with clean audit outcomes received for the three financial years.
4. No recent cases of irregular Expenditure.
5. Board and Executive training initiatives continue to ensure that SANEDI continues to be lead by a competent and skilled executive and Board.



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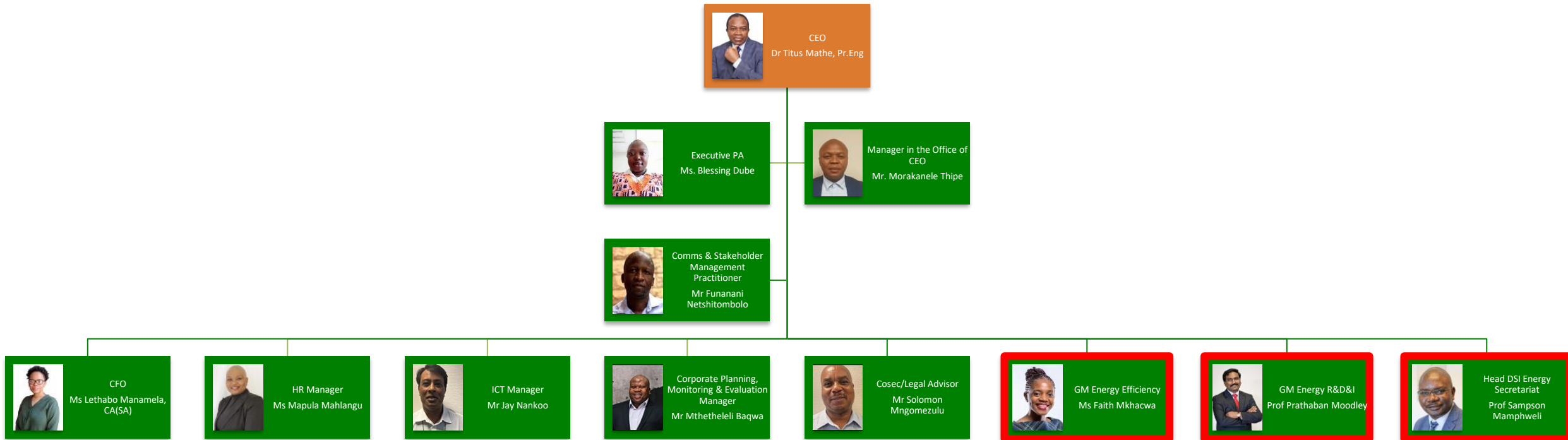


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# MANAGEMENT STRUCTURE AND KEY PROGRAMMES

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# SANEDI Management Structure



# Streamlining SANEDI's Programmes AND Key Initiatives



## STRATEGIC OUTCOMES

**SO1** Contribute towards sustainable energy solutions

**SO2** Build energy expertise and competence

**SO4** Inform and increase awareness of sustainable energy and provide thought leadership

**SO5** Inform policy through scientific and technological research with a view of supporting implementation

**SO3**

A capacitated, effective, efficient and sustainable operational environment (within which SANEDI will discharge its mandate)

1.1 Administration	1.2 Strategic Initiatives	2 Applied Energy Research, Development, & Innovation	3 Energy Efficiency	4 DSI Energy Secretariat
Human Resources	Intellectual Property & Commercialisation	Cleaner Fossil Fuels & Related Technologies	Section 12L Tax Incentives	Coal CO2-X RDI
ICT	Local, Regional & International Energy Partners	Renewable Energy	Cool Surfaces & Insulation	Energy Storage RDI
Finance	SMMEs & Enterprise Development	Smarts Grids	Energy Performance Certificates	Hydrogen SA (Hy SA)
COSEC, Governance, Legal, Risks & Compliance	Technical Skills Development	Data and Knowledge Management	ESCOs Market Development	Renewable Energy Hub and Spokes
Communications & Stakeholder Engagement	Energy Technical Support for SA participation in BRICS, G20, G7, AU	Cleaner Mobility	Standards & Labelling	
Logistics		Balancing Energy Supply & Demand Research	DMRE Strategic Initiatives (PMO'S)	
Supply Chain Management		Biofuels	Lighting	
Project Management Office				
Corporate Planning, Monitoring & Evaluation				

**+/- R80 million from MTEF (DMRE)**

**+/- R180 million from DSI**

# HOW SANEDI ADDRESSED NATIONAL CHALLENGES

We stand at the end of yet another challenging year in the energy sector, a year that as an organisation, we have managed to manoeuvre with agility and dedication. This is reflected in part by how SANEDI addressed National Challenges.



## Energy Security

- Energy security is the main challenge that does not only affect the government but also affects businesses and livelihoods in general. SANEDI has supported 30 companies with 834 437 MWh energy savings through the 12L Tax certificates that were issued to the companies.
- SANEDI reviewed the IRP23 to ensure its alignment and response to South Africa's short-, medium- and long-term energy security measures.
- SANEDI has contributed to the mitigation of climate change through the 12L Tax incentives project. To this end, a reduction of 0.59 Mt GHG emissions was realised through this project.
- Through Electronic Vehicle (EV) initiatives, significant progress has been achieved towards the delivery of the set milestones for the initial phase of the multi-year EV infrastructure charging infrastructure and Assessment of the 2018 Green Transport Strategy. We continue with our partnership with the DBSA on EV.



## Balanced Just Energy Transition (JET)

In addressing the Balanced Just Energy Transition challenge, we have undertaken a research study on a Cleaner Fossil Fuels Roadmap. SANEDI has collaborated with six universities on the JET Research Programme. Through this programme, 37 projects have been concluded thus far and we will contribute towards finding solutions to eradicate the ongoing energy crises in South Africa.



## Service Delivery

The Hoedspruit water treatment works project is a notable project that demonstrates service delivery. SANEDI installed flowmeters and valve replacements to support the local municipality of Maruleng within the Mopani District Municipality in Limpopo.



## Gender Mainstreaming & Youth Unemployment

SANEDI successfully hosted the Women in Energy Conference on 29 August 2023. The conference aimed at encouraging women and youth to take up careers in the Science Technology Engineering Mathematics (STEM) fields and other related career fields.



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# ORGANISATIONAL OVERVIEW

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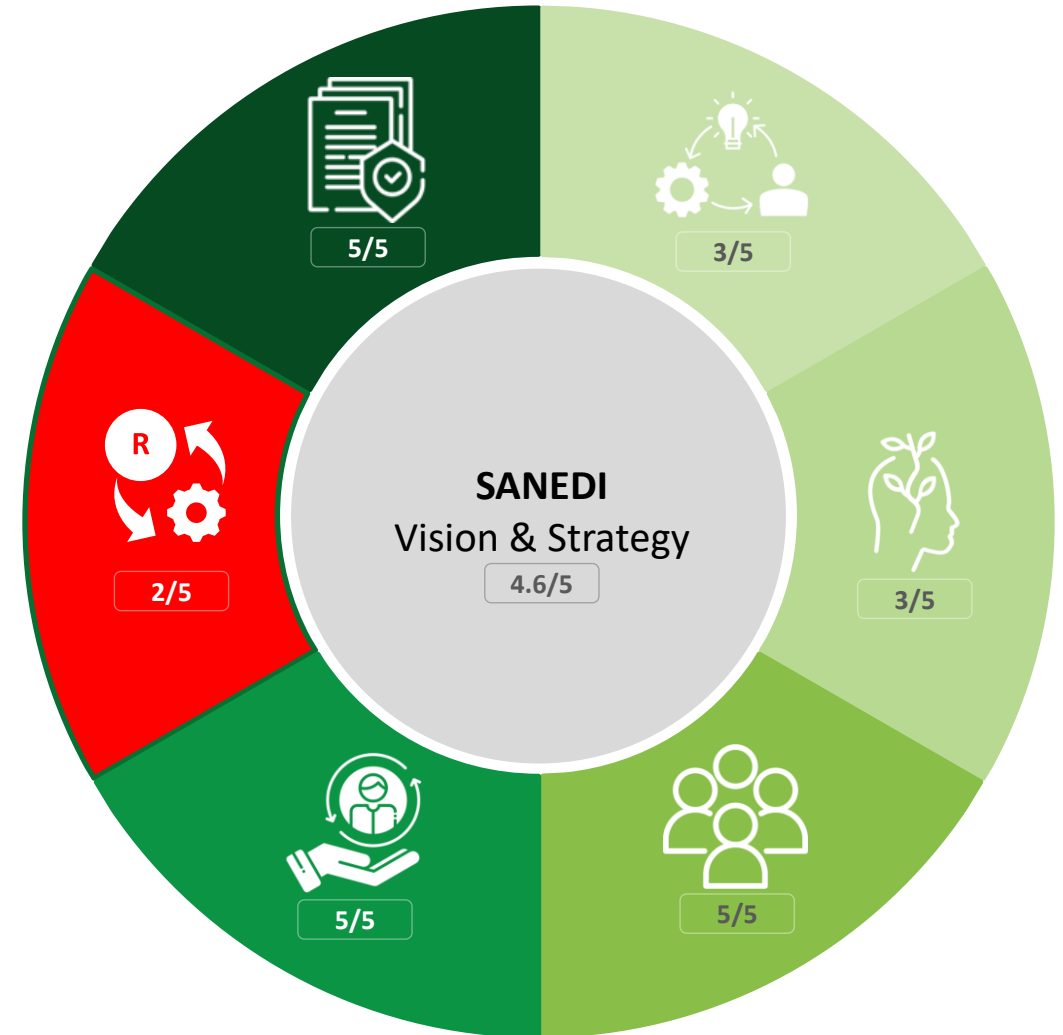
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# Balanced Score Card




SANEDI uses the Balanced Score Card as a strategic planning and management tool that aligns the entity’s functions with its vision and strategy. This defines the business areas that position SANEDI’s strategic success.

	<p><b>Internal Processes &amp; Core Business</b> Positions SANEDI’s core business initiatives which contribute towards sustainable energy solutions.</p>
	<p><b>Learning &amp; Growth</b> Drives initiatives to build energy expertise and competence.</p>
	<p><b>People</b> Enabling SANEDI’s support functions, HR, Supply Chain, and partnership initiatives to build a capacitated, effective, efficient, and sustainable operational environment.</p>
	<p><b>Customer &amp; Stakeholder</b> Positions SANEDI’s initiatives to keep its stakeholders informed and satisfied while also providing thought leadership.</p>
	<p><b>Financial</b> Positions the financial management and funding of SANEDI within which the organisation can discharge its mandate.</p>
	<p><b>Compliance</b> Positions SANEDI’s effective adherence to Compliance Universe, Risk management and Governance.</p>




# Organization Overview



## OUR AUDIT RESULTS


- SANEDI obtained a Clean Audit from AGSA for FY23/24.
- This being the Third year that SANEDI achieves a clean audit.
- No irregular expenditure reported
- AGSA highlighted concerns with the continued reduction of annual budget provisions.




## OUR FINANCES

- SANEDI has an accounting deficit of R59 million for the 2023/24 financial year. This is mainly due to surplus expenditure.
- Overall financial health is good, Net assets amounted to 131 Million.
- Cash and Cash equivalents amounted to R283 million
- SANEDI expected to continue to exist as a going concern in the near future.


## OUR PEOPLE



Total headcount



Female



Youth

FY	Total headcount	Female	Youth
2023/2024	74	63%	53%
2024/2025	90	62%	56%

- The performance of human resources has improved in terms of carrying out duties in accordance with the revised strategic direction.
- SANEDI has aligned the employees' salaries with that of the market.
- Continually conducts awareness sessions on all existing company policies.
- Employee turnover was reduced drastically by the interventions that deliberately targeted to attract, maintain and retain the highly sought after skills.





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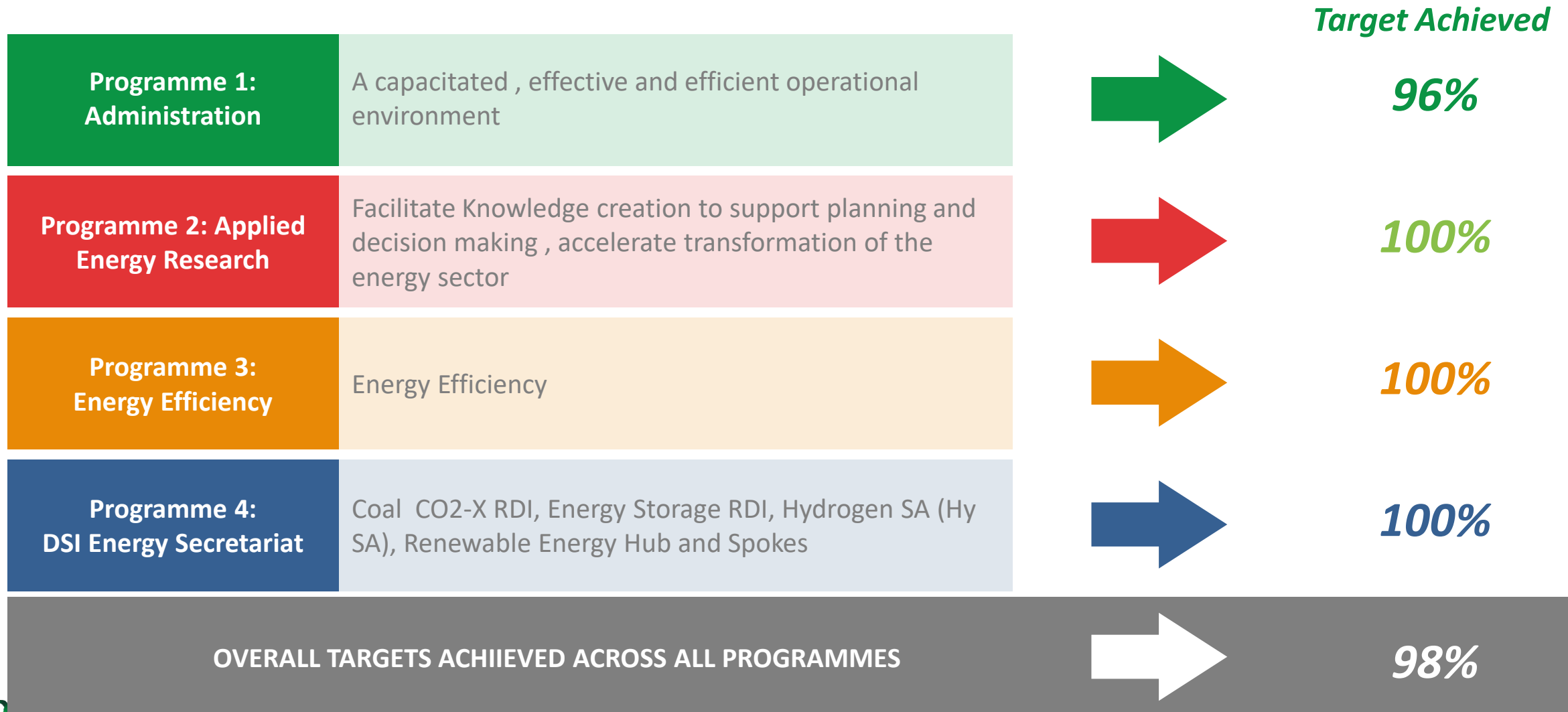
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# ORGANISATIONAL PERFORMANCE FY23/24

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# OVERALL PERFORMANCE (1<sup>st</sup> April 2023 to 31 March 2024)

In terms of this year's performance towards achieving the five-year goals, SANEDI managed to achieve and exceed all annual targets. SANEDI has executed well against programme performance targets with over 95% achieved.





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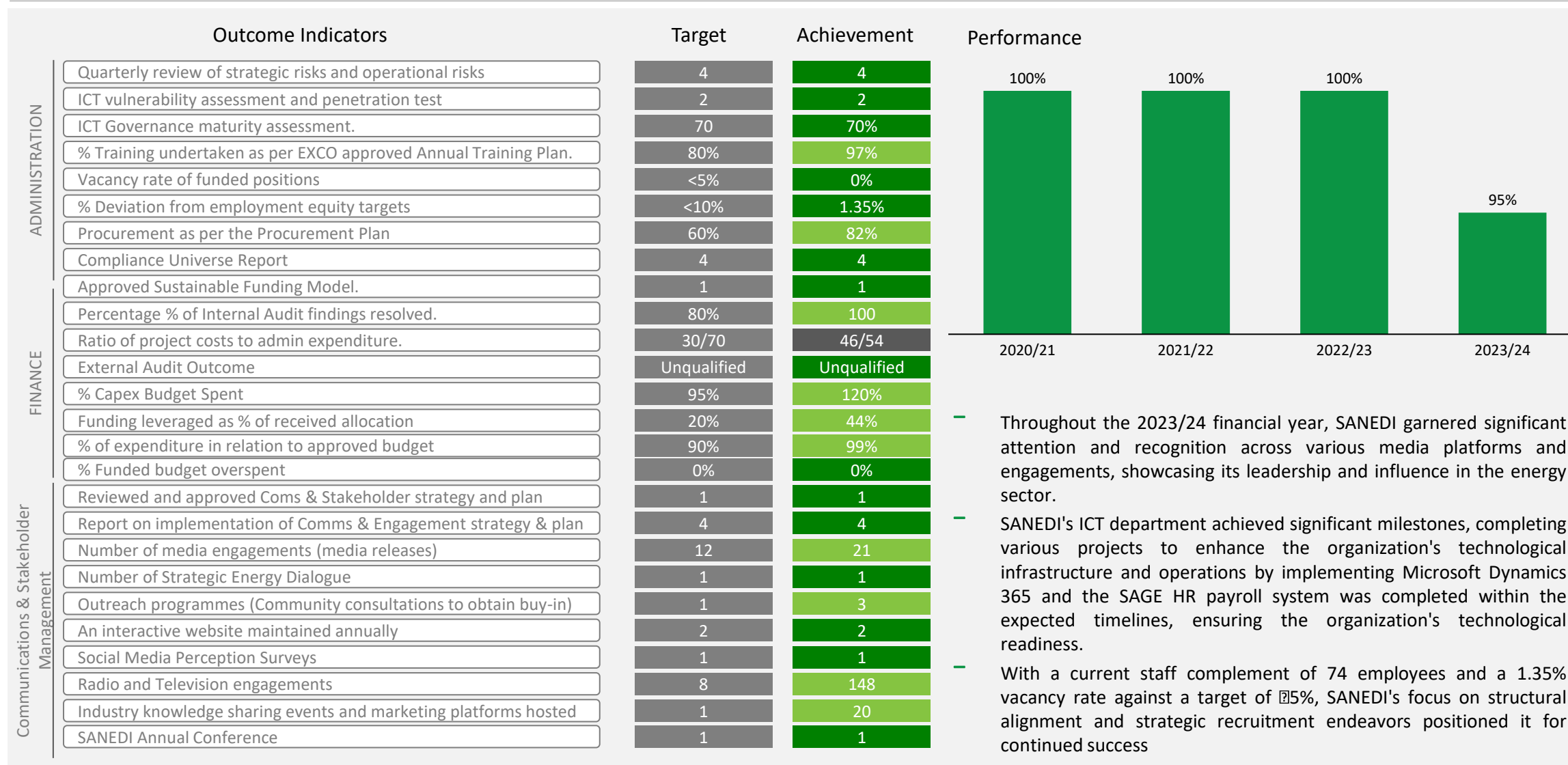
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# PROGRAMME 1

## ADMINISTRATION

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# Programme 1 Output Indicators & Target Achievements



- Throughout the 2023/24 financial year, SANEDI garnered significant attention and recognition across various media platforms and engagements, showcasing its leadership and influence in the energy sector.
- SANEDI's ICT department achieved significant milestones, completing various projects to enhance the organization's technological infrastructure and operations by implementing Microsoft Dynamics 365 and the SAGE HR payroll system was completed within the expected timelines, ensuring the organization's technological readiness.
- With a current staff complement of 74 employees and a 1.35% vacancy rate against a target of 5%, SANEDI's focus on structural alignment and strategic recruitment endeavors positioned it for continued success

Not Achieved
  Achieved
  Over-Achieved

# Programme 1: Summary of Activities

Overall, SANEDI made significant progress in stakeholder engagement, human resources, ICT, and legal compliance during the financial year.

## Stakeholder Management & Communication

- SANEDI actively engaged with stakeholders through various events and media channels.
- The 1<sup>st</sup> Annual Energy Conference was a success, attracting over 300 attendees and raising SANEDI's profile.
- Participation in international conferences like the IEA Global Conference showcased SANEDI's global commitment.

## ICT

- Upgraded the technological infrastructure by installing a new data center.
- Successfully implemented Microsoft Dynamics 365 and a new HR payroll system.
- Improved cybersecurity measures with a new Dell data domain.

## Human Resources

- SANEDI achieved compliance by submitting key financial reports (EMP501, IRP5s).
- Filled key leadership positions (Finance Manager).
- Addressed salary parity and filled vacant positions promptly.
- Invested in skills development through training initiatives and internships.
- Made progress on Employment Equity but needs to improve diversity at senior levels and disability inclusion.

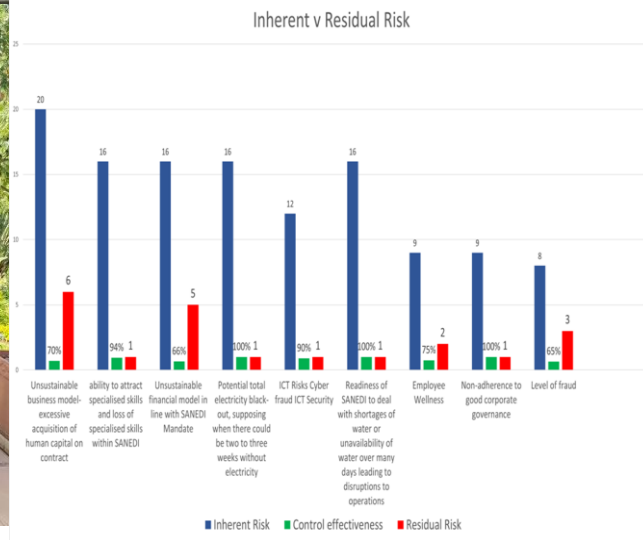
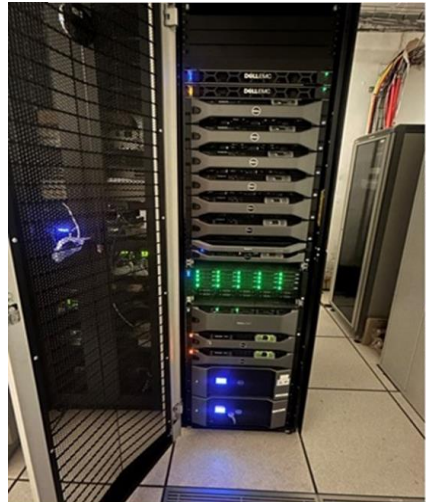
## Legal, Governance, Risk & Compliance

- Appointed a Company Secretary/Legal Advisor to strengthen legal expertise.
- Established a new LGRC department to manage legal, risk, ethics, and compliance matters.
- Implemented a risk-based approach to identify and mitigate potential threats.
- Achieved higher compliance rates and fostered an ethical culture within the organisation.



# Programme 1: Office of the CEO, Legal, ICT, HR, Finance, SCM,

ICT - Production Environment    ICT – Back-up Environment



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# PROGRAMME 2

Applied Energy Research, Development and Innovation

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# Programme 2 Output Indicators & Target Achievements

	Outcome Indicators	Target	Achievement	Performance
Cleaner Fossil Fuels	No. of energy solutions assessed	1	1	<p>2020/21: 97% 2021/22: 100% 2022/23: 100% 2023/24: 100%</p> <ul style="list-style-type: none"> <li><b>Research and Reports:</b> Produced reports on green hydrogen, cleaner coal technologies, and a roadmap for cleaner fossil fuels in South Africa.</li> <li><b>Industry Engagement:</b> Conducted annual energy industry status reports, assessed energy solutions, and hosted workshops on energy efficiency.</li> <li><b>Training and Education:</b> Provided training to energy professionals on various topics including clean energy transition and smart metering applications.</li> <li><b>Student Support:</b> Offered bursaries to energy-related research students.</li> <li><b>Publications:</b> Released an annual energy insights report and reports on electric vehicle charging infrastructure and emerging energy technologies SANEDI produced two sectoral reports on Smart Grids.</li> </ul>
	Approved report on Cleaner Coal Tech. Collaborations	1	1	
Renewable Energy	No. of energy solutions assessed	4	4	
	No. of Energy-related knowledge-sharing events	4	27	
	No. recipients of energy-related training facilitated by SANEDI	120	152	
	No. annual Energy industry status report	1	5	
	Min no. of energy-related datasets maintained per annum.	2	2	
	No. of policy support instruments	1	1	
	Approved research study providing insights on technology options	1	1	
	No. of stakeholders trained on Just Energy Transition	50	77	
	Smart Grids	No. of energy solutions assessed	2	
Annual energy industry insight		1	1	
No. of industry roadmaps, plans and industry support tools		1	1	
Data & Knowledge Mgt.	No. of energy solutions assessed	2	2	
	No. of industry roadmaps, sector plans and industry support tools	1	1	
	No. of approved Sectorial reports produced	2	2	
	No. of annual Energy industry status report	1	1	
	No of energy data analytics students/researchers supported	5	5	
	No. of recipients of energy data related training facilitated	20	171	
Cleaner Mobility	No of energy solutions assessed	1	1	
	Annual energy industry insight (trends) publication	1	1	
	No. of industry roadmaps, sector plans and industry support tools	1	1	
	No. of industry knowledge-sharing events	1	1	
	No. recipients of energy-related training facilitated by SANEDI	5	7	

Not Achieved
  Achieved
  Over-Achieved



# Programme 2: Summary of Activities

SANEDI made significant progress in promoting renewable energy, developing smart grids, managing energy data, and advancing clean mobility and fossil fuel technologies.

## Renewable Energy

- Participated in international forums (IEA) and national projects (SAREM).
- Supported water treatment works project with a focus on energy efficiency and renewables.
- Provided energy awareness training and conducted energy scoping for a biotechnology platform.
- Collaborated with international entities like the IEA, GIZ and Austrian Development Agency on renewable energy solutions.
- Completed the Green Hydrogen Framework Project and secured an extension for a related research project.
- Collaborated with the Minerals Council on a green hydrogen study.

## Smart Grids

- Collaborated on a project to assess the feasibility of a Demand Response Aggregator Model.
- Partnered with universities on a Just Energy Transition research program focusing on renewable energy integration and grid modernization.

## Data & Knowledge Management

- Organized workshops to raise awareness of energy programs (DDMP, DRP).
- Conducted a study to track employment trends of energy graduates (Masters & PhD).
- Developed annual energy insights based on various projects and activities.
- Awarded bursaries and sponsored postgraduate students in the energy sector.

## Cleaner Mobility

- Secured funding and finalized a project plan for a DBSA-funded electric bus project.
- Collaborated with the Department of Transport on electric vehicle (EV) infrastructure mapping and policy development.
- Partnered with UNIDO to potentially host a project on local EV battery manufacturing and charging infrastructure.

## Cleaner Fossil Fuels

- Submitted a report on clean coal technologies and initiated a skills assessment project.
- Participated in a coal research symposium.



# Programme 2: Applied Energy Research and Innovation



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# PROGRAMME 3

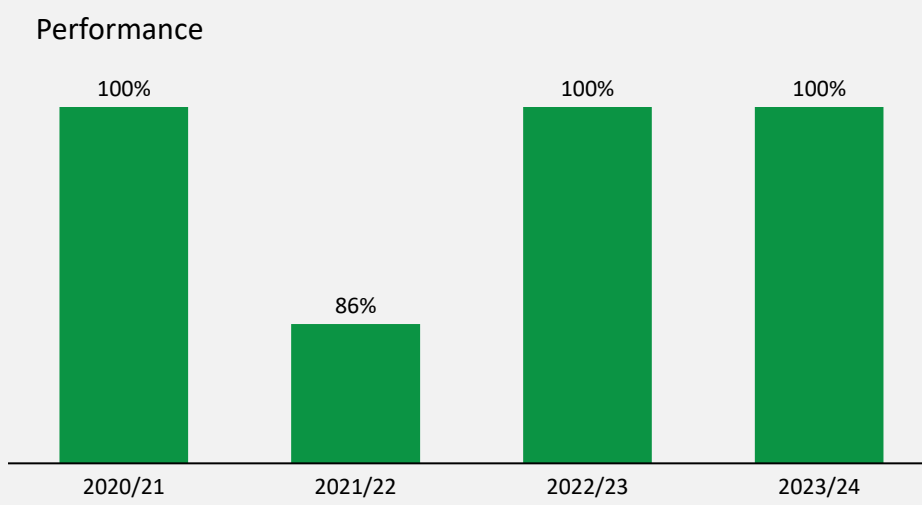
## Energy Efficiency

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# Programme 3 Output Indicators & Target Achievements

Outcome Indicators
12L EE tax certificates issued
GHG emissions reduced (tonnes CO <sub>2</sub> ).
No. of Energy Efficiency solutions assessed
No. of Energy Efficiency related datasets maintained per annum
No. of Energy Efficiency solutions implemented
No. of recipients of energy-related training facilitated
Min no. of energy-related datasets maintained per annum.

Target	Achievement
25	30
0.5 Mega tonnes	0.59 Mega tones
3	3
3	3
4	4
20	124
3	3



- **Company Incentives:** 12L helped create jobs (480) and unlocked investments in energy-saving interventions (R793 million). This resulted in significant energy savings (834 GWh) and reduced greenhouse gas emissions (0.59 million tons).
- **Building Efficiency:** Over 2,200 buildings were registered for energy audits, with more than 1,100 receiving certificates. Nearly 1,240 buildings are now compliant.
- **Training & Awareness:** Training programs were offered for building efficiency (471) and solar energy (30), along with a public education campaign.
- **Appliance Standards:** Regulatory assessments and strategies were developed for improving the energy efficiency of appliances.
- **ESCO Development:** Initiatives included training for energy auditors (18), resources for Energy Service Companies (ESCOs), and workshops to promote their development.

Not Achieved
  Achieved
  Over-Achieved

# Programme 3: Summary of Activities

Overall, SANEDI's energy efficiency programs made significant progress in 2023/24, achieving energy savings, reducing emissions, and fostering market development for energy-saving technologies.

## 12L Tax Incentives

Processed applications and issued certificates for energy efficiency projects, resulting in:

- 834,437 MWh energy savings
- 0.59 Mt CO2 emissions reduction
- R793 million tax benefit for businesses

## Energy Performance Certificates

- Conducted training sessions for municipalities and industry experts.
- Launched the National Building Energy Performance Register (NBEPR) for online registration.
- Achieved milestones: 2,241 buildings registered, 1,119 EPCs issued, and 1,238 buildings compliant

## Standards and Labelling

- Conducted research to identify inefficient household appliances.
- Promoted the Energy Efficiency Label through advocacy and capacity building.

## Balancing Energy Supply and Demand

- Secured approval for a smart geyser control roll-out project to optimize energy usage.
- Participated in workshops on energy demand-side management.

## Cool Surfaces

- Developed business cases for cool surfaces implementation.
- Collaborated with informal settlements to deploy reflective coatings.

## ESCo Market Development

- Upgraded the ESCo Market Development website and reopened registrations.
- Conducted awareness campaigns and workshops to promote ESCo participation.
- Partnered with the Industrial Development Corporation to explore funding opportunities for ESCos.



# Programme 3: Energy Efficiency





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# PROGRAMME 4

DSI Energy Secretariat

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# Programme 4 Output Indicators & Target Achievements

Outcome Indicators	Target	Achievement
Approved report detailing number of University of Technology/TVET graduates offered experiential learning opportunities in the energy sector.	4	4
Approved report detailing number of intellectual property rights(IPRs) filed based on energy RDI.	1	1
Approved report detailing number of stationary fuel cells/clean energy technologies deployed in partnership with Municipalities/District Municipalities.	4	4
Approved report detailing number of SMMEs assisted/supported with business development and commercialisation.	2	2

## Coal CO2-X Technology

- Discussions are underway with C Star Holdings for commercialization of the technology beyond the laboratory stage.
- The pilot demonstration project launched at Kelvin Power Station showcases the applicability of carbon capture for the coal-fired power industry.
- Training programs were conducted for students and officials on carbon capture technology.

## Hydrogen and Energy Storage

- 20 students received training through UWC's energy storage programs.
- HySA Infrastructure partnered on green hydrogen production at Masia Village.
- HySA Systems established collaborations for hydrogen and fuel cell technology development.

## Renewable Energy Hubs & Spokes

- The Masia Village and Russell Bungeni Science Lab projects were launched to support renewable energy education in rural communities.



# Programme 4: Summary of Activities

SANEDI made significant strides in advancing hydrogen and renewable energy technologies through research, collaboration, and infrastructure development.

## COAL CO<sub>2</sub> TO X

- The PtL-UCT project is developing methods to convert coal CO<sub>2</sub> into fuels and chemicals.
- Collaboration with Polytechnico di Milano has accelerated reactor design and catalyst testing.
- EPCM successfully demonstrated the technology at cement and power plants.
- Discussions are ongoing for deployment at an Eskom power station.

## ENERGY STORAGE

- The UWC program designed mobile UPS systems to provide backup power during load shedding.
- CSIR and UWC collaborated on developing a lithium-ion battery pack for a research project.
- UWC established a facility to test the safety of lithium batteries, highlighting a national need for such services.

## RENEWABLE ENERGY HUB AND SPOKES PROGRAMME

- The Microgrid Test Facility at UCT, established in September 2023, provides a cutting-edge platform for researching renewable energy grid integration.
- It includes advanced technologies like inverter systems, batteries, PV, synchronous generators, and a digital real-time simulator.
- Completed projects in locations such as Masia Village, Bungeni, and Ottosdal support local SMEs and TVET graduates, highlighting the university's dedication to renewable energy research and community development.

## HYDROGEN SOUTH AFRICA

- CSIR developed a material to remove impurities from biogas for hydrogen production.
- HySA Infrastructure designed a prototype hydrogen refuelling system for fuel cell vehicles.



# Programme 4: DSI Energy Secretariat





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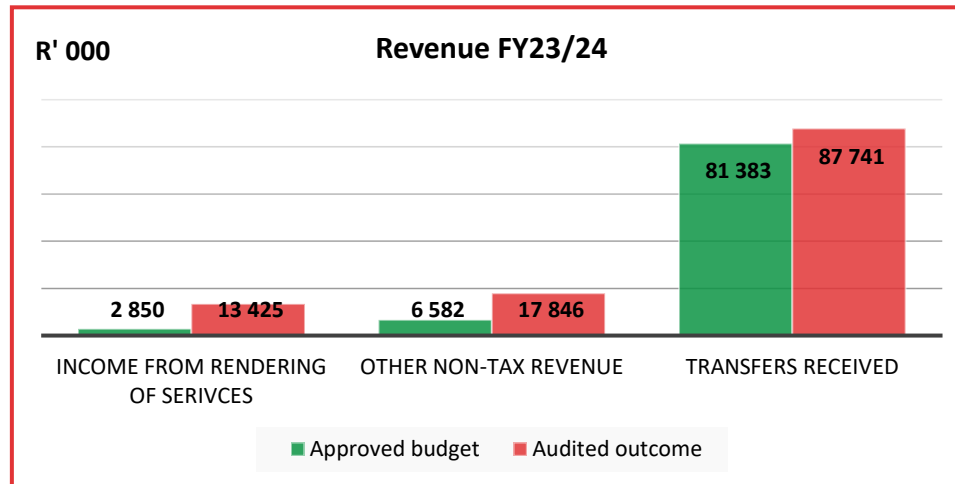
# Financial Performance FY2023/24

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# Financial Performance



Revenue				
Description	Approved budget	Audited outcome	Variance	
Income from rendering of services	2 850	13 425	10 575	a)
Other non-tax revenue	6 582	17 846	11 264	b)
Transfers received	81 383	87 741	6 358	c)
	<b>90 815</b>	<b>119 012</b>	<b>28 197</b>	

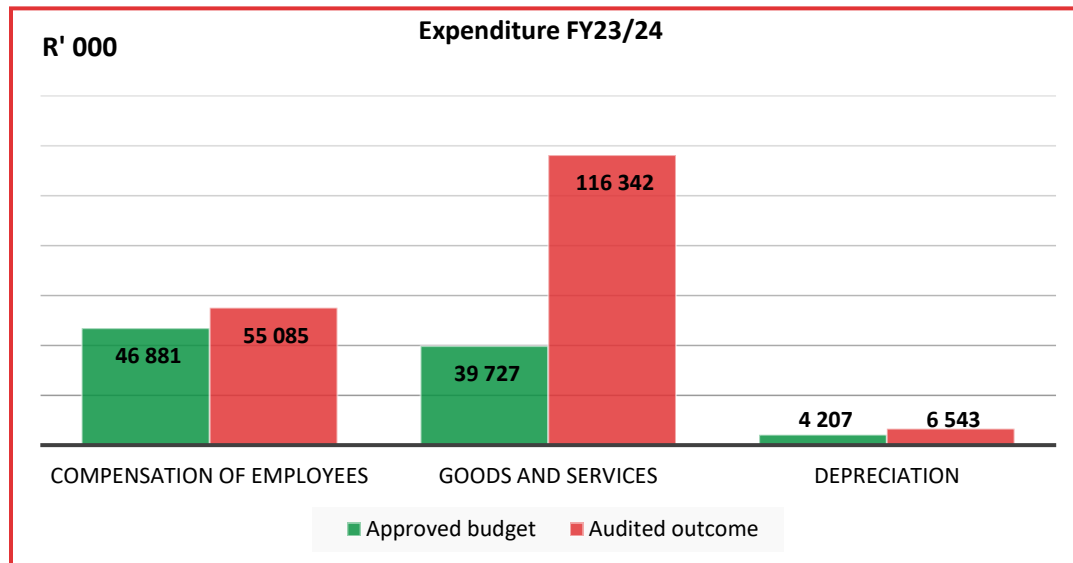


- a) The revenue from rendering of services relates mainly to research services rendered and management fees earned from various ring-fenced funded projects. During the year SANEDI generated more management fees due to new contracts signed during the current financial year.
- b) Other non-tax revenue comprises of interest received and sundry income earned during the year. Higher than budgeted due to the surplus from 2023 that was retained resulting in a higher cash balance.
- c) Transfers received include the MTEF allocation from the DMRE amounting to R81,3 million, R4,7 million income recognised from the realisation of ring-fenced funded projects and R1,7 million funding for internships received from Energy and Water SETA.
- d) Overall income for the year was 31% more than the approved budget.

# Financial Performance



Expenditure Description	Approved budget	Audited outcome	Variance	
Compensation of employees	46 881	55 085	8 204	a)
Goods and services	39 727	116 342	76 615	b)
Depreciation	4 207	6 543	2 336	c)
	<b>90 815</b>	<b>177 970</b>	<b>87 155</b>	



a) Compensation of employees:

- i. increase mainly due to implementation of externally funded projects that require additional resources as well as the externally funded internships programme.
- ii. The entity has also increased technical capacity within the organisation to align with the revised strategic plan through filling of key vacant positions in line with the approved organisational structure.

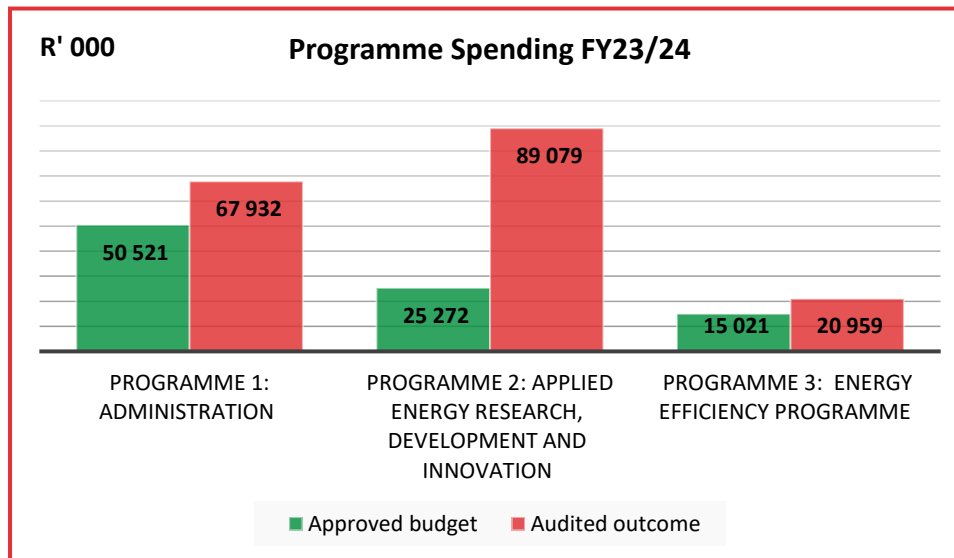
b) Goods and Services exceed budget due to following reasons:

- i. SANEDI received approval in terms of Section 53(3) of the PFMA to retain surpluses amounting to R174.7 million for the 2022/23 financial year. Of the total surpluses allocated for spending in 2023/24 financial years, R60 million was spent pushing up expenditure for the year.
- ii. SANEDI is implementing a number of projects on behalf of other entities, mainly Department of Science and Innovation, NCEDA , TIA etc. . As a result, SANEDI spent R8.8 million from externally ring-fenced projects.
- iii. Board conscious decision was made during the financial year to increase the visibility of the organization’s activities and outputs and to position SANEDI as a strategic partner to its stakeholders within the energy sector.
- iv. SANEDI also hosted its first Annual Conference for the first time in 2023/24 financial year.
- v. Spending on travel expenses was increased to implement stakeholder engagement plan through participation at key conferences and also participation in key committees that were gripped with resolving the energy crisis and to establish strategic partnerships

# Financial Performance



Programme Expenditure				
Programme	Approved budget	Audited outcome	Variance	% Variance
Programme 1: Administration	50 521	67 932	17 411	50%
Programme 2: Applied Energy Research, Development and Innovation	25 272	89 079	63 807	38%
Programme 3: Energy Efficiency programme	15 021	20 959	5 938	12%
	<b>90 814</b>	<b>177 970</b>	<b>87 156</b>	



- Majority has been spent on Programme two constitute 50%, while Programme one spent 38% and Programme 3: Energy Efficiency spent 12%
- Expenditure on the programmes was pushed up by spending on externally funded projects, Surpluses approved by the National Treasury.

# Financial Position



Assets		2024	2023	Variance	% Variance
<b>Non- Current Assets</b>		<b>297 543</b>	<b>369 119</b>		
Receivables from exchange		12 958	6 477	6 481	100%
Receivables from non exchange		1 672	-	1 672	100%
Cash and cash equivalents		282 913	362 642	-79 729	-22%
<b>Current Assets</b>		<b>297 543</b>	<b>369 119</b>		0%
Property, plant and equipment		10 875	9 212	1 663	18%
Intangible assets		7 877	4 265	3 612	85%
		<b>316 295</b>	<b>382 596</b>		

- a) Receivable increased due to purchases of software at the end of the financial year accounted for as prepayments as SANEDI continues its investments in IT systems to improve efficiencies.
- b) Cash and cash equivalents comprise of surpluses and third-party ring-fenced funds.
- c) During the year SANEDI made significant investments in It systems to improve efficiencies, replace assets that were damaged as a result of load shedding and to improve efficiencies.

# Financial Position



Liabilities	2024	2023	Variance	% Variance	
Payables from exchange transactions	9 233	10 859	-1 626	-15%	a)
Unspent conditional grants and receipts	164 897	175 372	-10 475	100%	b)
Employee benefit provisions	11 464	6 703	4 761	71%	c)
	<b>185 594</b>	<b>192 934</b>			

- a) Payables increased by 15% relative to the previous year. This was in line with expectations
- b) Unspent conditional grants increased by 6%. Funds received during the year was spent in line with project agreements.
- c) Employee benefit provision increased as a result of increase in the staff complement and compensation of employees.



Net Assets	2024	2023	Variance	% Variance
Accumulated surplus	130 701	189 662	-58 961	-31%

- a) Net Assets declined relative to the previous year because of projects that SANEDI implemented during the year funded from these surpluses approved by the National Treasury.



# Impact



# How do we measure value of the work we do?

(per project, per province, per municipality, etc)



## Capacity Building

4000 individuals have been capacitated through projects that have been implemented under SANEDI's initiatives such as the 12L Tax incentive, and Energy Performance Certificates.



## SMMEs Supported

93 SMMEs have been supported through ESCo Market development, the Energy Secretariate and Renewable Energy initiatives.



## Jobs

119 jobs were created through the 12L Tax incentive, Energy Efficiency, Smart Grids, Cleaner Mobility, Cleaner Fuels as well as the Energy Secretariat initiatives.



## Research

29 research reports produced from Renewables, Data and Knowledge Management, Standards and Labelling, Data and Knowledge Management, Smart Grids, Cleaner Mobility, Cleaner Fuels as well as Energy Secretariate



## Thought Leadership

- SANEDI hosted its first Annual Conference in November 2023.
- 148 broadcasting engagements.
- 21 media engagements.





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# Strategic Risks

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# Key Risks & Mitigations



Risk Management provides enabling environment in support of the identification, management and oversight of risks across strategic risks.



**Major business interruption**

Inability to adapt to new operating environment, resulting in a weak internal control environment and inefficiencies in operations. Inability to operate from the office / project sites.

- Business Continuity Plan
- Remote working capabilities (HS Committee and working from home protocols)
- Project funding strategies to supplement fiscal funds
- Project planning and monitoring
- Health and Safety Protocols
- Performance management system
- Insurance over assets
- Site visits for external stakeholders and stakeholder engagement

**Loss of specialised skills within SANEDI**

Lack of expertise to meet the needs of the changing environment (JET). Inability to attract and retain scarce and specialised skills.

- Retention and succession plan linked to training and development. Collaborations with other research institutions (CSIR, GIZ, Universities etc.)

**Disruption to operational Information Technology systems**




Inability to react timeously to disruptions.

- ICT Continuity Plan
- Off-site Disaster Recovery Plan
- Service Level Agreements (SLAs) in place with Information Technology (IT) service providers (MTN, hardware providers & Software providers)
- Insurance over hardware assets
- End point security for cyber attacks
- System documentation and operational architectural designs

# Key Risks & Mitigations (Cont.)



This role includes ensuring that countering fraud and/or corruption is made an integral part of the organisation's strategy.

 <b>KEY RISK</b>	 <b>RISK DEFINITION</b>	 <b>MITIGATION</b>
<b>Non-adherence to good Corporate Governance</b>	Key Governance structures are not in place.	<ul style="list-style-type: none"> <li>• Charters reviewed annually</li> <li>• Governance Policy</li> <li>• Exco recommends all relevant aspects to the Board and Board Committees</li> </ul>
<b>Fraud and corruption</b>	Illegal or improper acts by employees.	<ul style="list-style-type: none"> <li>• Loss of assets and resources</li> <li>• Reputational damage</li> <li>• Possible litigation</li> <li>• Non- achievement of SANEDI Mandate</li> <li>• Disruption of day-to-day business</li> <li>• Low staff morale</li> <li>• Irregular, fruitless and wasteful expenditure</li> <li>• Adverse impact on the external audit opinion</li> </ul>
<b>Insufficient funding from the fiscus</b>	The current trends demonstrate insufficient funding from the fiscus to accommodate growth of SANEDI in terms of building capacity and requisite expertise Multi Stakeholder interdependencies. Unavoidable reliance on external parties for the implementation of strategy.	<ul style="list-style-type: none"> <li>• Leveraging external funds (donor funds)</li> <li>• Budgetary controls (planning based on available funds, cost containment etc.).</li> <li>• Oversight monitoring over budget utilisation. Board Audit and Risk Committee (BARC) and Board</li> <li>• Stakeholder Engagement Plan</li> <li>• Contracts, Memorandum of Agreements (MoAs) and SLAs with all Third Parties</li> <li>• Legal function reviews all contracts</li> <li>• Monitoring of contracts at project level</li> </ul>
<b>Inadequate implementation of Stakeholder management</b>	Inadequate financial resources to implement effectively Stakeholder Management. Evolving Stakeholders groupings in the energy sector.	<ul style="list-style-type: none"> <li>• Stakeholder Engagement Plan</li> </ul>



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# Feedback from Previous Engagement

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# Feedback from 21-Aug-2024 Meeting

## Previous Queries from PCEE

Commercialization of Ideas

In progress

Recruitment and appointment of individuals with disabilities

In progress

Recruitment and appointment of people with colour

Completed

How will SANEDI ensure Universal access vs affordability

In progress



## Commercialisation:

- Commercialization Strategy Approved
- IP Policy in place
- IP Annual Targets for FY 2024/25:
  - 2 IP rights filed and
  - 2 business cases linked to IP application in the energy sector
- Support DSI ES commercialisation efforts



## Recruitment and appointment of individuals with disabilities and diversity:

- Diversified our internship pool



## How will SANEDI ensure Universal access vs affordability:

- On going, Covered by work SANEDI has committed to under JET programme, Cleaner Fossil Fuels, energy planning
- Collaboration work with various stakeholders which will cover modeling workaround the JET, infrastructure planning, Technology assessment etc.

# Concluding Remarks

1. Portfolio Committee to note SANEDI FY23/24 Annual Report
2. SANEDI is positioned to play a key role in South Africa's energy future. With the growing importance of hydrogen and electric mobility, SANEDI is actively supporting government initiatives in these areas. The successful execution of the DBSA-funded electric vehicle project will be a significant step towards cleaner public transportation
3. Despite staffing limitations, SANEDI has delivered impactful results. The organisation is committed to attracting and retaining talent by reviewing its remuneration packages. Additionally, SANEDI is exploring alternative funding sources, such as climate funds and donor agencies, to bridge the fiscal gap and support its research endeavors
4. SANEDI's successful first Annual Energy Conference signifies its growing influence in the energy sector. The organisation's outreach efforts will continue to raise awareness of its role in driving energy innovation and sustainability in South Africa. With a clear vision and strategic approach, SANEDI is well-positioned to ensure a sustainable energy future for the country







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# ADDITIONAL SLIDES

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# Responses from the previous engagement – 24/25 APP and SANEDI Budget



## Board Term

- 🇿🇦 The current Board members were appointed in January 2022, and their first term comes to an end on ***31 December 2024***
- 🇿🇦 In terms of section 8(6) of National Energy Act, **“A member of the Board, excluding the Chief Executive Officer, holds office for a period not exceeding four years, but may be reappointed”**



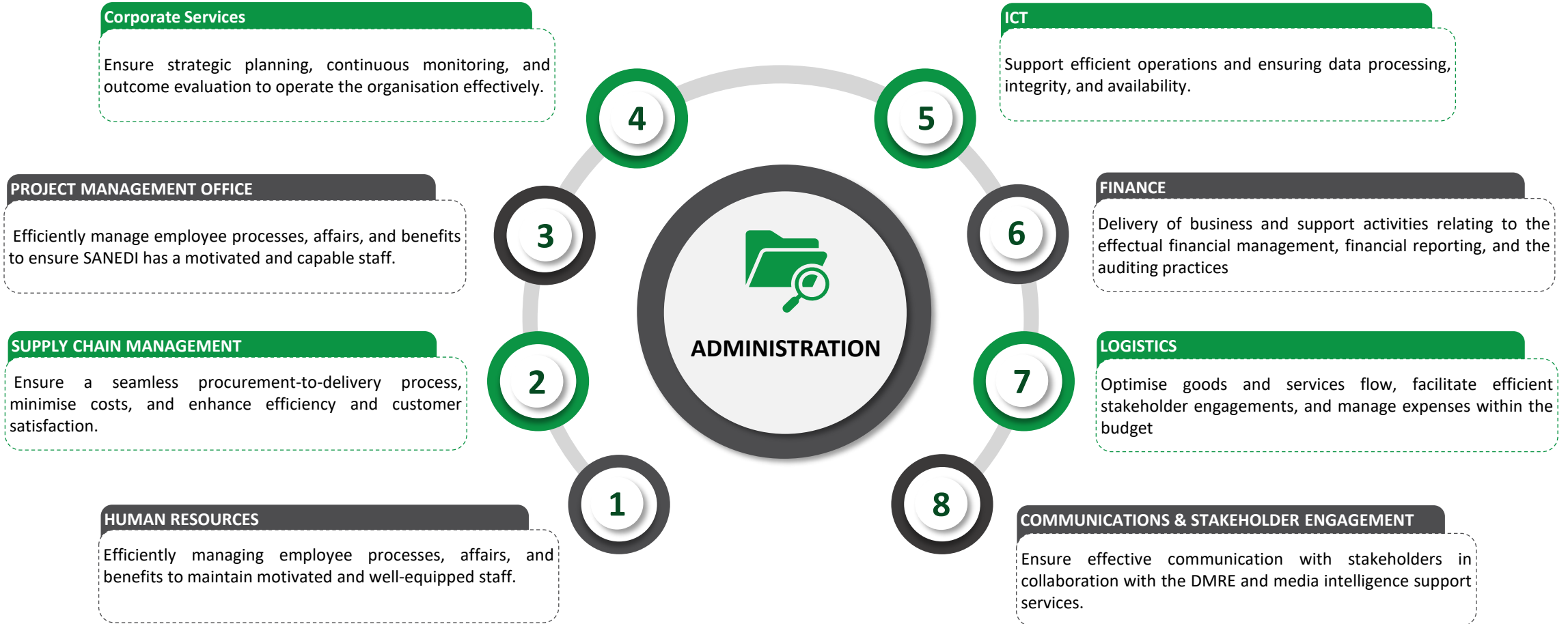
# CONTENTS

- 1 Administration
- 2 Applied Energy Research, Development, & Innovation
- 3 Energy Efficiency
- 4 DSI Energy Secretariat



# Programme 1 Summary

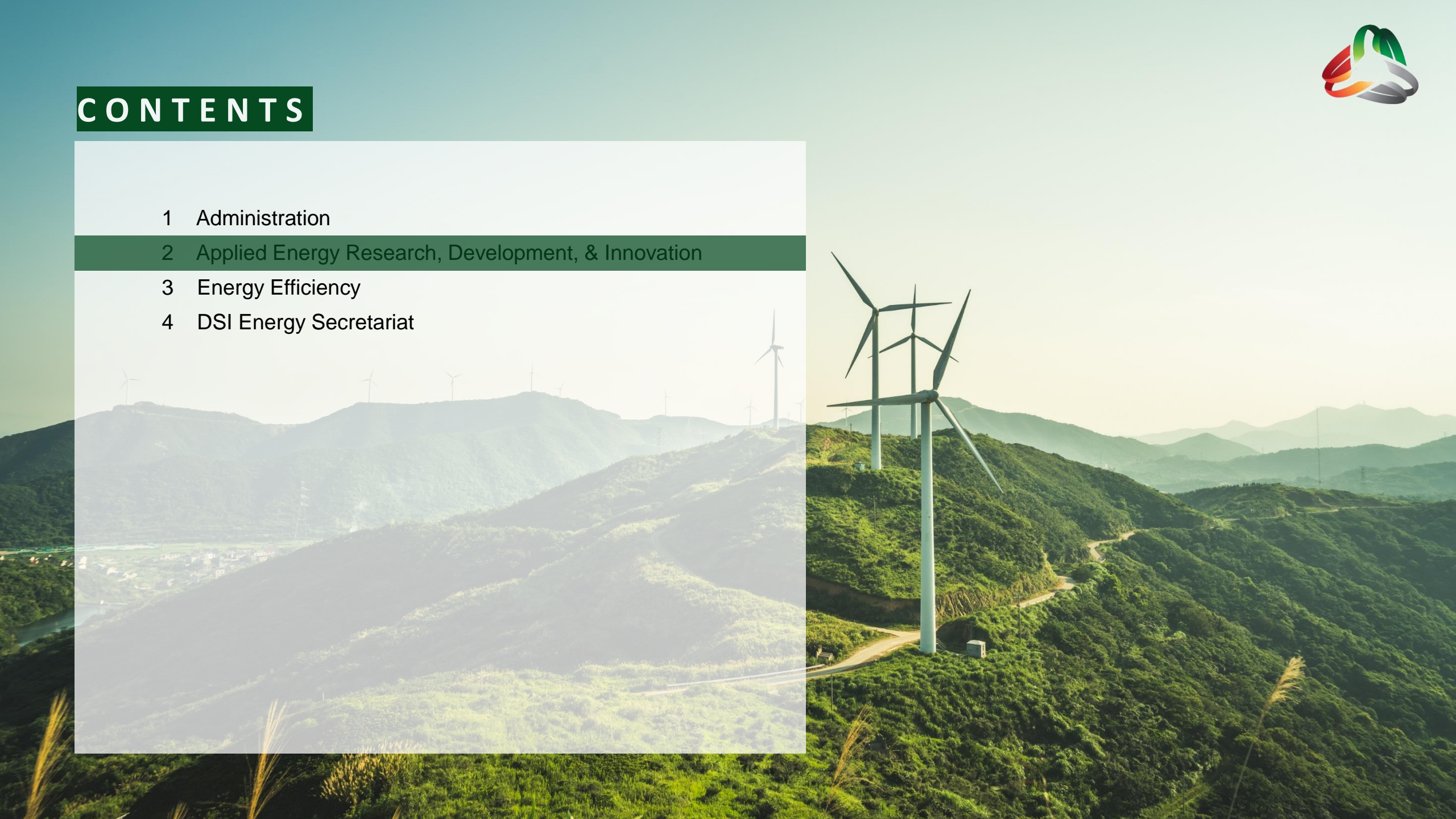
The purpose of the Administration Programme is to create an effective delivery environment for SANEDI that is fully compliant with all statutory requirements.





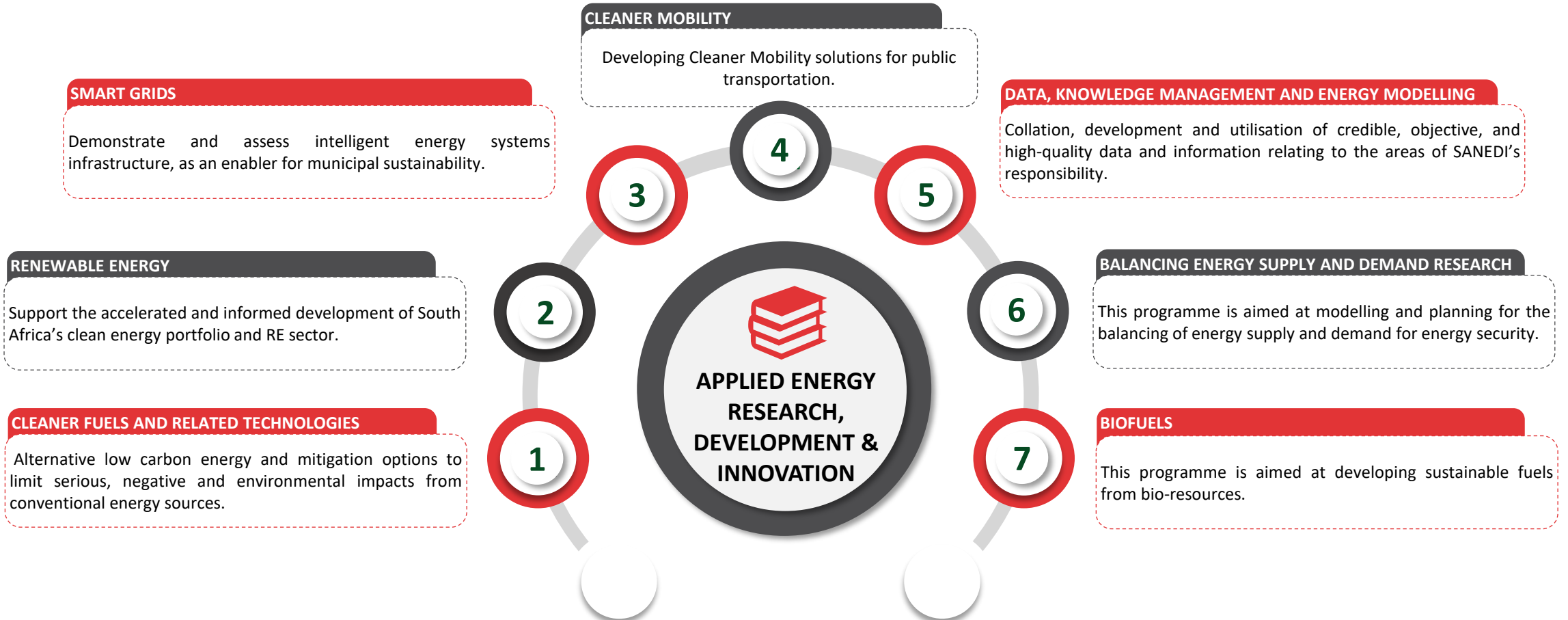
# CONTENTS

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# Programme 2 Summary

The purpose of Programme 2 is to facilitate knowledge creation that can support energy-related planning and decision-making and accelerating the transformation of the energy market and landscape in the country.





# CONTENTS

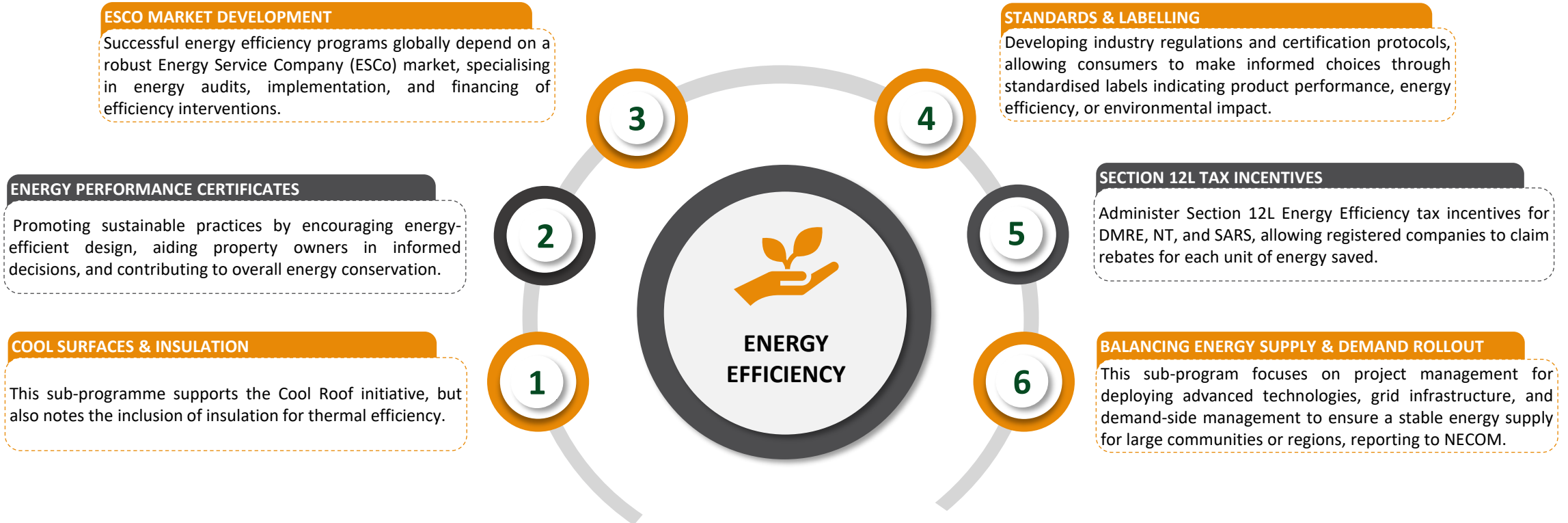
1. Administration
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# Programme 3 Summary

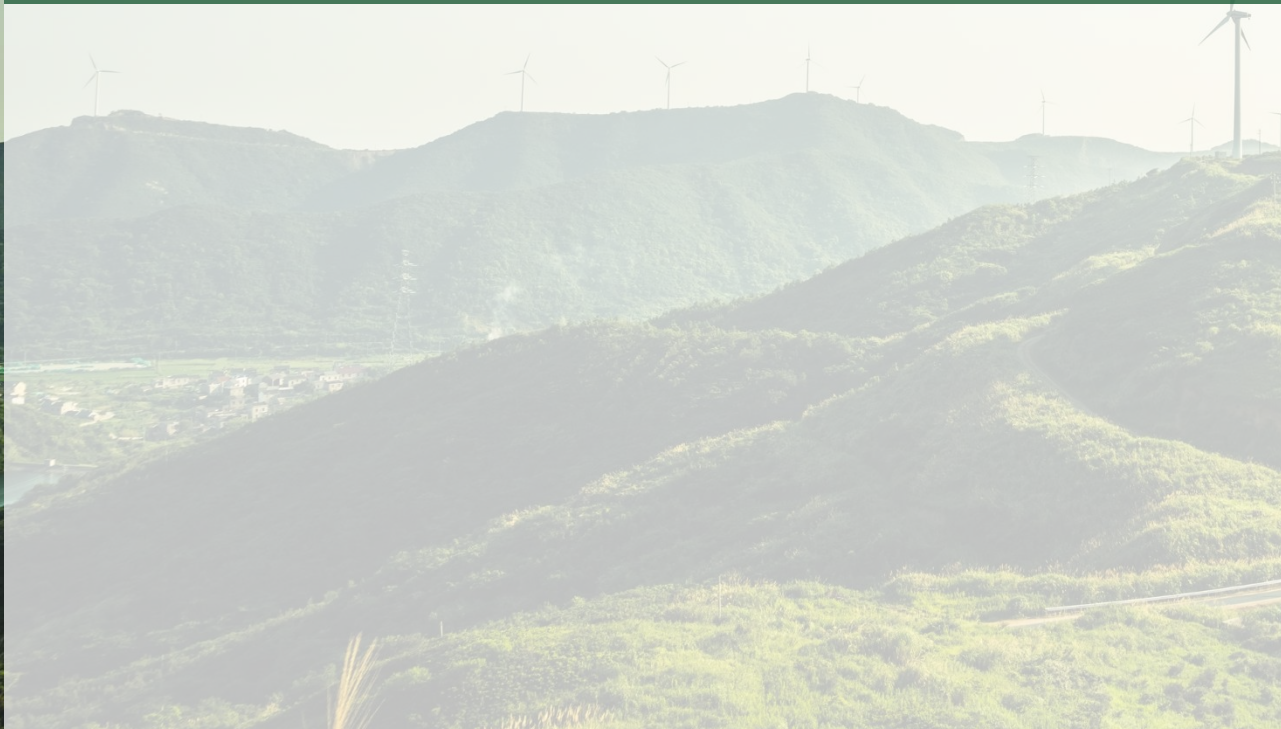
The purpose of Programme 3 is to accelerate a shift towards a resource and particularly, an energy (including gas, liquid fuels, electricity, and water) efficient society.





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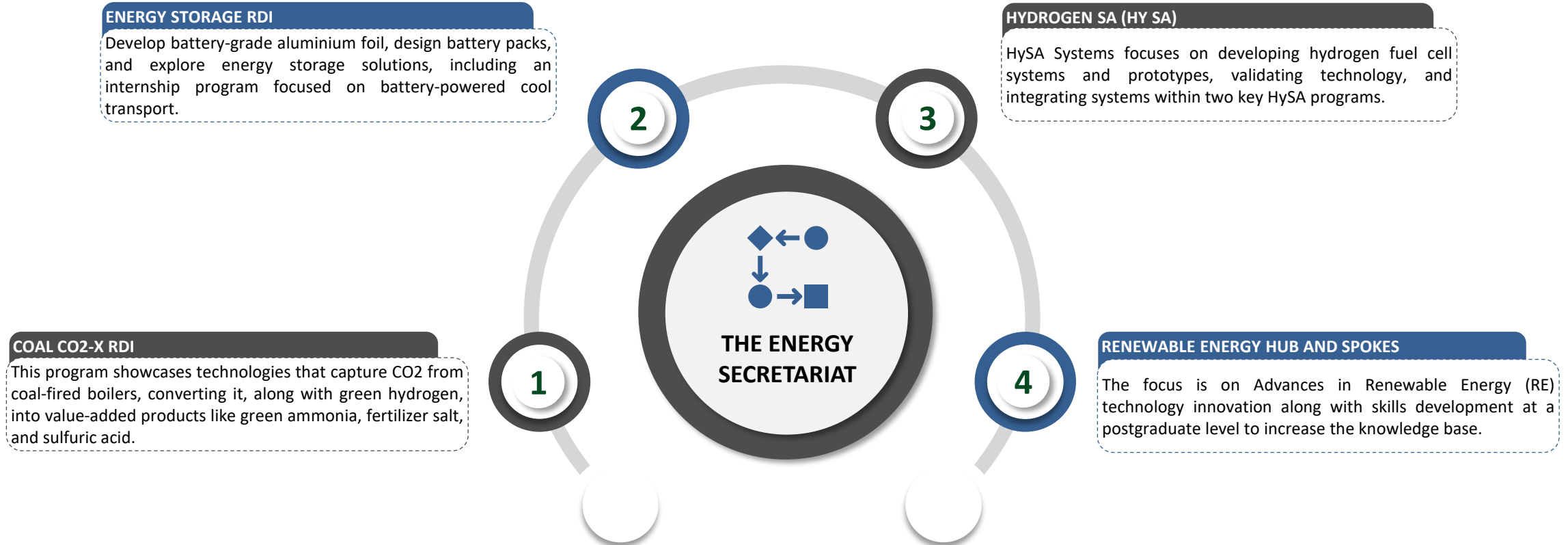
- 1 Administration
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- 3 Energy Efficiency
- 4 DSI Energy Secretariat



# Programme 4 Summary



The purpose of programme 4 is to commercialise and upscale knowledge outputs from the RDI portfolio.





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