Council for Geoscience

Annual Report
2023/24

mineral resources & energy
Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA

The Council for Geoscience Annual Report 2023/24 theme

‘Geoscience is the fulcrum of human development’

is the mantra that was pronounced by the CEO, Mr Mosa Mabuza, and adopted in 2019 by the organisation.

Annual Report Cover Image:
Diamond core drill rig for the geological characterisation of the proposed carbon capture, utilisation and storage (CCUS) reservoir at the pilot site near Leandra, Mpumalanga Province. Photographer: **Dr Valerie Nxumalo**, Council for Geoscience. Insert images below the Diamond core drill rig (from left to right): Cover page of the Geological Characterisation Report (2023) of the proposed CCUS pilot site near Leandra, Govan Mbeki Municipality by **Dr Taufeeq Dhansay**, Council for Geoscience. Hyperspectral core imagery of proposed CCUS reservoir sequences, various colour indices highlight various mineral spectra and their carbon dioxide absorption characteristics as well as photomicrographs of various mineral sequences within the proposed CCUS reservoir. Mineralogy highlights the presence of potentially reactive mineral sequences that can absorb anthropogenic carbon dioxide.

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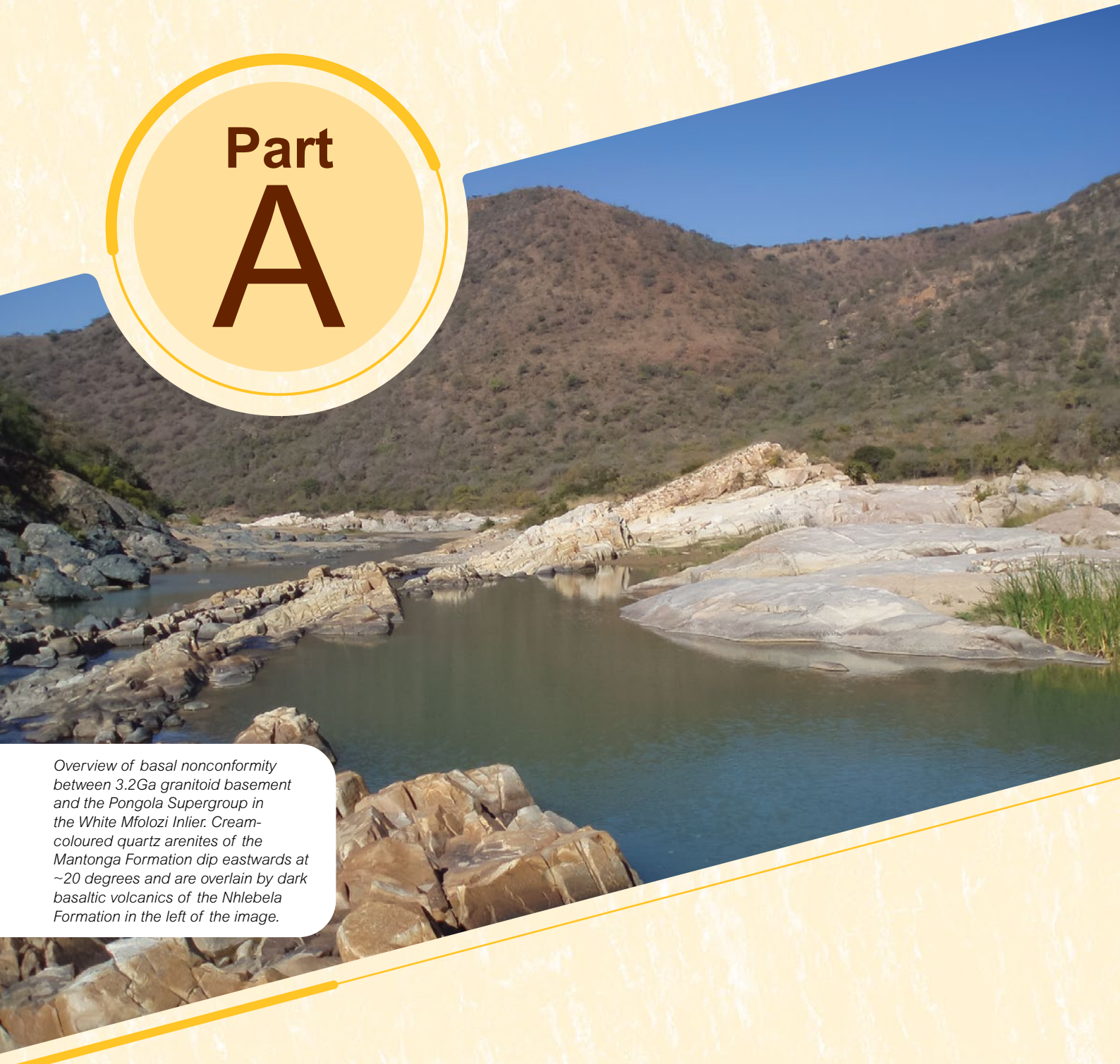
List of Abbreviations and Acronyms

3D	Three-dimensional
AI	Artificial intelligence
APP	Annual performance plan
AU	African Union
B-BBEE	Broad-based Black Economic Empowerment
BCEA	Basic Conditions of Employment Act
CCUS	Carbon capture, utilisation and storage
CEO	Chief Executive Officer
CGS	Council for Geoscience
COVID-19	Coronavirus disease 2019
DDM	District Development Model
DMRE	Department of Mineral Resources and Energy
DSI	Department of Science and Innovation
EE	Employment equity
EEZ	Exclusive economic zone
EMEs	Exempted micro-enterprises
ERP	Enterprise resource planning
ERRP	Economic Reconstruction and Recovery Plan
EXCO	Executive Committee
GIS	Geographic information system
GRAP	Generally Recognised Accounting Practice
GTP	Geoscience Technical Programme
HVAC	Heating, ventilation and air-conditioning
ICDP	International Continental Scientific Drilling Programme
ICT	Information and Communications Technology
IDC	Industrial Development Corporation
IEC	International Electrotechnical Commission
IGEO	Instituto Geológico de Angola
IMMP	Integrated and Multidisciplinary Geoscience Mapping Programme
ISET	Innovation, science, engineering and technology
ISO	International Organization for Standardization
ISPPIA	International standards for the professional practice of internal auditing
LIMS	Laboratory Information Management System
MEDP	Management and Executive Development Programme
MEWMP	Mine and Environmental Water Management Programme
MoA	Memorandum of agreement
MoU	Memorandum of understanding
MPRDA	Mineral and Petroleum Resources Development Act
MQA	Mining Qualifications Authority
MTEF	Medium-Term Expenditure Framework
MTSF	Medium-Term Strategic Framework
NDP	National Development Plan
NMCS	National Mine Closure Strategy
OAGS	Organisation of African Geological Surveys
OEM	Original equipment manufacturer
PAIA	Promotion of Access to Information Act
PanAfGeo	Pan-African Support to the EuroGeoSurveys – Organisation of African Geological Surveys Partnership
PFMA	Public Finance Management Act
PPPFA	Preferential Procurement Policy Framework Act
PSHA	Probabilistic seismic hazard assessment
QSE	Qualifying small enterprise
REE	Rare-earth element
SABC	South African Broadcasting Corporation
SANSN	South African National Seismograph Network
SP	Strategic plan
SSHAC	Senior Seismic Hazard Analysis Committee
UNICATT	Università Cattolica del Sacro Cuore (Catholic University of the Sacred Heart)
Unisa	University of South Africa
US	United States
WB	World Bank

Part A



Overview of basal nonconformity between 3.2Ga granitoid basement and the Pongola Supergroup in the White Mfolozi Inlier. Cream-coloured quartz arenites of the Mantonga Formation dip eastwards at ~20 degrees and are overlain by dark basaltic volcanics of the Nhlebela Formation in the left of the image.

General Information

General information

Registered name:	Council for Geoscience
PFMA national public entity:	Schedule 3A
Physical address:	280 Pretoria Street Silverton, Pretoria South Africa
Postal address:	Private Bag X112 Pretoria, South Africa 0001
Telephone number:	+27 (0)12 841 1911
Email address:	info@geoscience.org.za
Website address:	www.geoscience.org.za
External auditors:	Auditor-General South Africa
Bankers:	Nedbank and Absa in Silverton, Pretoria
Board secretary (acting):	Ms Nomkhosi Cele

Council for Geoscience

The Geoscience Act (No. 100 of 1993) as amended, established the Council for Geoscience (CGS) as, among others, the national custodian of geoscientific data, information and knowledge in the Republic of South Africa.

The CGS has evolved into a modern institution with specialised facilities, assets and expertise. The scientific focus areas of the organisation give expression to a set of thematic areas that include Minerals and Energy; Health, Groundwater and the Environment; Infrastructure and Land Use; Geoscience Innovation as well as Geoscience Diplomacy. The CGS has six regional offices in South Africa, with a head office in Silverton, Pretoria (Figure 1).

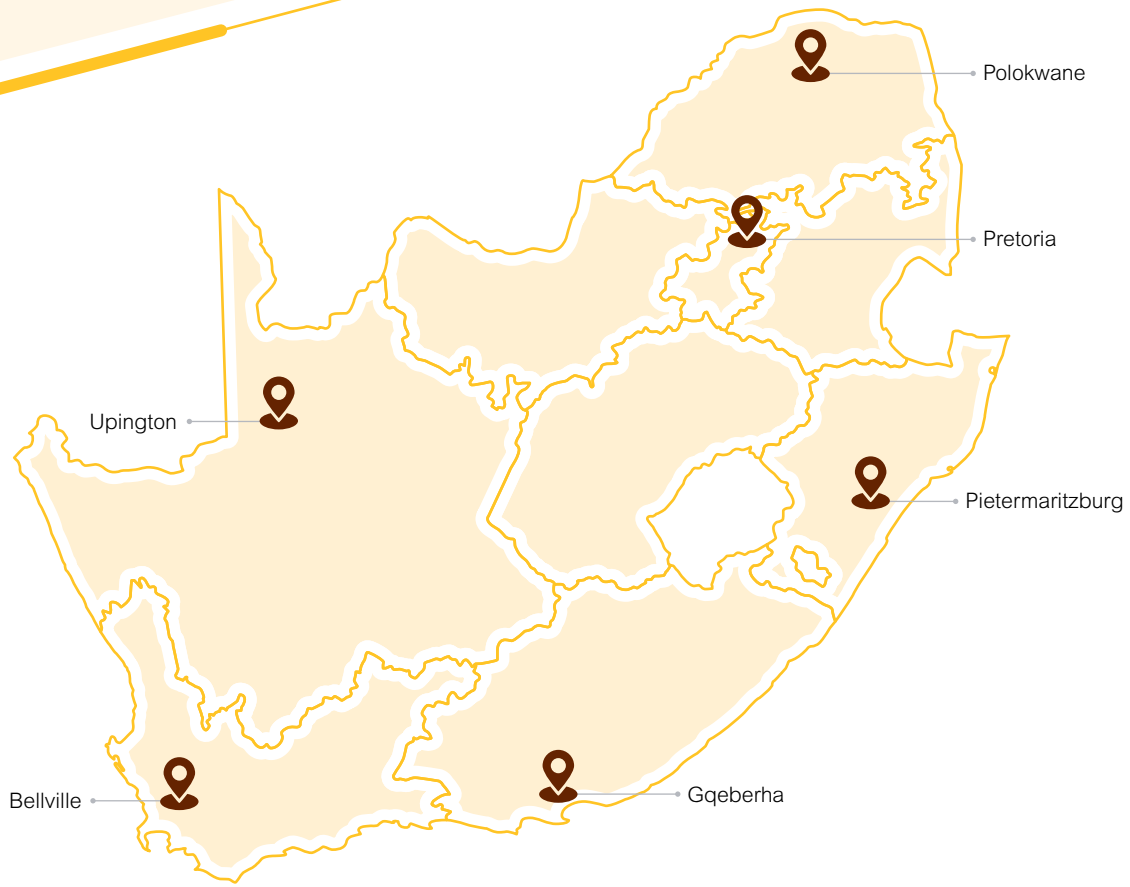


Figure 1: The six regional offices of the CGS in South Africa

1 Foreword by the Chairperson of the Board

It is my privilege and honour to present the Council for Geoscience (CGS) Annual Report for the financial year 2023/24. This period has been the first year of the Board's tenure, albeit a continuum of the organisational function, and has coincided with the end of the 6th administration of government. I reaffirm our commitment as a Board to guiding the CGS in pursuit of growth, sustainability and optimised delivery. The CGS has achieved significant accomplishments in the 2023/24 financial year, in accordance with the organisational mantra that *geoscience is the fulcrum for human development.*

Mr Kelepile Dintwe
Chairperson of the Board

The South African Government and people place reliance on the CGS as a pathfinder in the established vision of re-imagining the exploration landscape in the country. In this regard, the CGS is a signatory to the memorandum of understanding (MoU) between the erstwhile Department of Mineral Resources and Energy (now the Department of Mineral and Petroleum Resources) and the Industrial Development Corporation (IDC) for the Junior Exploration Fund, which was signed in February 2024 during the Africa Mining Indaba in Cape Town. The CGS' role is to ensure that mining rights holders are supported with the necessary geological expertise for the successful execution of their exploration work programme. Exploration timeframes are significantly optimised by appropriate utilisation of geological information and knowledge to de-risk each project and move steadily towards the establishment of sustainable mining activities intended to advance national developmental priorities.

In the reporting period the CGS, as an implementing agent in the partnership between the South African Government and the World Bank, continued its cutting-edge research into the decarbonisation of the country's economy through carbon capture, utilisation and storage (CCUS). This work remains a national flagship project and is an important scientific intervention in support of the government's Just Energy Transition Policy. I applaud the CGS for having completed drilling at the pilot project site in Leandra. This phase concludes the geological characterisation of the site and sets us in good stead to proceed to the next phases of the project.

Notably, South Africa is well endowed with coal resources and reserves and has elected to explore responsible use of these resources, consistent with climate mitigation measures. Although the partnership between the government and the World Bank has now ended, the CGS has partnered with private sector protagonists to advance the project to the second phase. These partners include, Sasol, Exxaro, Thungela, Arcelor Mittal, the Development Bank of Southern Africa and the Net-Zero Technology Centre (United Kingdom).

The success of the CGS' CCUS Project presents a real opportunity to achieve decarbonisation without hastily eliminating coal from the country's energy mix. The CGS has been very intentional and thus made significant progress in securing the support of critical stakeholders in this regard in the country. To this effect, the CGS ran a series of workshops in different provinces to share progress and the importance of this work with the general public, academia, industry, pupils and other relevant stakeholders. South Africans attending these CCUS workshops marvelled at the research capacity and scientific solutions that this research presents. I was particularly enthused that the CGS brought along school learners to some of the workshops, as this is a great step towards handing over the baton to the future generation. In addition, the CGS invited international speakers to the workshops to enable South Africa to leapfrog on the strength and lessons of those who have gone before us in the CCUS space.

The CGS continues to engage in collaborative partnerships, not only to advance and support the organisation's *Geoscience for Diplomacy* strategic intent, but also to augment its revenue generation efforts. On the sidelines of the African Mining Indaba, which took place in February 2024 in Cape Town, the CGS and its Angolan counterpart, Instituto Geológico de Angola, entered into a strategic partnership that seeks to promote regional cooperation on geoscientific research in pursuit of Agenda 2063. Moreover,

following the signing of an MoU between the governments of South Africa and South Sudan, the CGS is working on a project with South Sudan to render geoscientific services to map the country. The partnership with Eswatini Geological Survey is ongoing and ensures sustained growth of the footprint of South Africa's geoscience contributions on the subcontinent, in support of the South African Government's regional integration foreign policy.

The CGS continues to strengthen partnerships across Africa through its involvement with the Organisation of African Geological Surveys (OAGS), where it fulfils the function of Permanent Secretariat. I reported last year that the OAGS gained the recognition of the African Union, which was a significant development. In light of that, the OAGS has the requisite *locus standi* and the CGS has led and facilitated the registration of a non-profit company (NPC), which is a significant milestone in the OAGS' history and lays the foundation to achieve a greater level of sustainability.

The Board of the CGS diligently exercises its oversight responsibilities in working towards securing *a prosperous and transformed society, enabled by geoscience solutions.* It should be noted that the Auditor-General of South Africa completed the necessary audit procedures on the 2023/24 Annual Report of the CGS and we have obtained an unqualified audit outcome. Furthermore, I am delighted to report that the CGS has achieved an outstanding overall organisational performance of 91% in the current year, which is a great display of the dedication and effort of the management and staff, as well as the CGS Board.

The Board of CGS congratulates all staff members in the organisation who obtained new qualifications since the finalisation of the last annual report. I wish to congratulate the following colleagues upon whom Doctoral degrees were conferred: Dr Robert Netshitungulwana – Doctor of Philosophy in Geology; Dr Rebeca Singh – Doctor of Philosophy in Geography and Environmental Science; and Dr Rendani Matakanye – Doctor of Business Leadership. These illustrious achievements by our employees truly reflect the fruit borne by their assiduous efforts and our investment in preparing to build the legacy of a capable State for future generations.

The Board conveys its deepest condolences to colleagues who have lost family members and friends during the year. The sadness of loss hit the CGS family particularly hard with the loss of three colleagues within our organisation, namely Mr Sipho Johannes Mahlangu (Assistant Technical Officer – Drilling); Mr Johannes Sejamagapu Radebe (Senior Scientist) and Mr Brian Sibonelo Zulu (Senior Scientist).

> "In the reporting period the CGS, as an implementing agent in the partnership between the South African Government and the World Bank, continued its cutting-edge research into the decarbonisation of the country's economy through carbon capture, utilisation and storage. This work remains a national flagship project and is an important scientific intervention in support of the government's Just Energy Transition Policy.

In conclusion, I wish to extend our sincere gratitude to the Honourable Minister of Mineral Resources and Energy, Mr SG Mantashe (MP) for the confidence he has bestowed upon myself and the Board to oversee an organisation of such strategic importance to the Republic of South Africa. I thank the outgoing Honourable members of the Portfolio Committee of Mineral Resources and Energy, under the judicious leadership of Mr Zet Luzipho and look forward to working with the Honourable members of the Parliamentary Portfolio Committee on Mineral and Petroleum Resources of the 7th administration. I applaud the CGS executive management, together with all scientific and support staff, for their commitment and outstanding performance in executing the CGS mandate.

Mr Kelepile Dintwe
Chairperson
Board of the Council for Geoscience

31 July 2024

2 Overview by the Chief Executive Officer

I am thrilled to present the CGS Annual Report, detailing the activities of the organisation for the financial year 2023/24. This period not only marks the end of the Medium-Term Strategic Framework (MTSF) 2019–2024, but also concludes the first year of the tenure of the current Board, under the leadership of Mr Kelepile Dintwe as Chair. It is fitting to express my appreciation to all members of the CGS family for their continual dedication, passion and commitment to the organisation to ensure successful delivery of the CGS mandate.

Mr Mosa Mabuza
Chief Executive Officer

In our constant pursuit to advance the applications of geoscience to national developmental priorities, based on a strong heritage spanning in excess of 112 years since its establishment in 1912, we recognise the strong foundation laid by our forebears in geoscience. The strategic re-orientation of the organisation has enabled a swift shift towards an integrated and multi-disciplinary geoscience mapping strategy that is accelerating our stated objectives. This Annual Report presents a summary of our achievements in the year 2023/24, marking the continuous progress of implementation of the afore-stated strategy that has remained valid since its introduction. However, we have adjusted the tactics over time to align with the prevailing material conditions under which implementation is executed.

We have taken a deliberate approach to investing in public awareness of the CGS' services and products. This is evidenced by an increase in the interest and coverage of the work of the CGS across various media platforms. In this regard, **64 media articles** were produced, while the CGS brand was profiled through several channels, including exhibitions, billboards, social media, podcasts, radio and television. In addition, the level of stakeholder satisfaction saw an improved rating to 83% from the 79% reported in the previous financial year. As a Science Council, the CGS continued its focus on advancing the body of scientific knowledge through its various knowledge dissemination platforms. Over the course of the MTSF period thus far, the CGS team has published marginally less than **180 articles** that have been subjected to the scrutiny of the scientific peer review process. In giving expression to the multidisciplinary and integrated nature of our strategic thrust, publications focus on all of the thematic areas, the most pronounced being in the fields of geological mapping, seismology and marine geoscience. The substantive number of co-authored publications provides a clear expression of the collaborative partnerships that have been forged within the broader geoscientific community. This enunciates our keen focus in communicating the advancement of our scientific work to the local and global geoscientific community as well as the public at large.

Building and maintaining strategic partnerships with regional and international stakeholders to enhance geoscience diplomacy is one of the strategic outcomes of the CGS. During 2023/24, the organisation engaged and collaborated with African counterparts and those from other parts of the world. At the sidelines of the African Mining Indaba, which took place in February 2024 in Cape Town, the CGS and its Angolan counterpart Instituto Geológico de Angola, entered into a strategic partnership that seeks to promote regional cooperation on geoscientific research in pursuit of Agenda 2063. Further, in support of the country's regional integration efforts, the CGS engaged with Côte d'Ivoire, Niger, Central African Republic, South Sudan, Angola, and Eswatini. Equally, the CGS engaged with the geological surveys of United Kingdom, Saudi Arabia and Russia. In seeking to enhance geological collaboration between our counterparts, engagements were also held with the following embassies: Japan, European Union and Pakistan. This work supports Priority 7 of the national MTSF which aims to build "a better Africa and world".

The CGS continued to implement its approved strategy, the Integrated and Multidisciplinary Geoscience Mapping Programme (IMMP), which aims to contribute towards, inter alia, South Africa's Exploration Strategy and Implementation Plan, by securing a minimum of 5% of global exploration expenditure through the application of

geoscience information and knowledge. In the execution of its Geoscience Technical Programme (GTP), the CGS intends to unlock South Africa's mineral and energy resource potential and contribute to achieving a national just transition to a low-carbon economy. The GTP, during the year under review, focused on the production of 1:50 000-scale onshore and offshore geoscience maps, with a view to generating critical geoscience knowledge. The onshore geoscience map coverage increased from below 5% prior to the commencement of the IMMP, to **16%**. To date, 307 out of a total of 1 916 1:50 000-scale maps have been published, of which 77 were produced in 2023/24. The offshore mapping coverage of the country increased from 0.05% reported in previous years to **0.3%**. These outputs provide information on the seafloor along South Africa's near-shore environment and will assist with providing much needed geoscientific knowledge for the realisation of South Africa's expected substantial blue economy. Through the integration of various geoscience datasets, value-added geoscience outputs contributing to minerals, energy, groundwater, infrastructure development and land use, were produced.

The CGS supported the establishment of the Junior Miner's Exploration Fund, created by the erstwhile DMRE, in partnership with the Industrial Development Corporation. The CGS is a signatory to the MoU for this fund, the implementation modalities of which are close to finalisation. The CGS is also piloting an empowering provision in the Geoscience Act that enables it to undertake exploration. The implementation of this provision is part of a suite of interventions that are intended to effect a re-imagined exploration boom in the country, linked with, amongst others, the insatiable appetite for minerals (colloquially known as critical minerals) sought to fulfil the global commitment towards net zero emissions.

Carbon capture, storage and utilisation (CCUS) is renowned as one of the most promising climate change mitigation opportunities. With increased global pressure to reduce greenhouse gas emissions, the CCUS prospect in South Africa provides a great opportunity to reduce atmospheric carbon dioxide emissions and protect the livelihoods of many South Africans who are dependent on the coal value chain. In this light, the CGS continued with implementation of the national flagship CCUS Pilot Project in Leandra. Drilling of the deep stratigraphic borehole has been executed successfully. Technical studies have indicated preliminary conservative basaltic storage potential estimated to range up to 34 billion tons (Gt) within a 25 km2 perimeter of the research site. This is far greater potential than the initially estimated 5 Gt, which significantly improves the associated contribution towards a just transition to a lower carbon economy and climate resilient society. The CGS also participated in the United Nations Framework Convention on Climate Change (UNFCC) 28th Conference of the Parties (COP28) and presented the geological characterisation of the Leandra Pilot Project.

> "In the execution of its Geoscience Technical Programme, the CGS intends to unlock South Africa's mineral and energy resource potential and contribute to achieving a national just transition to a low-carbon economy.

The CGS supported Eskom with the safety case for the renewal of the long-term operating licence for the Koeberg Nuclear Power Station, and geoscientific assessments for future nuclear capacity installation. Numerous scientific studies were undertaken, which culminated in probabilistic seismic and tsunami hazard assessments, serving as fundamental inputs to the required engineering design and operating requirements of the power station. All primary scientific inputs to the safety case application to the National Nuclear Regulator were completed during the financial year, following rigorous external peer review and documentation of evidence and results. This works marks a significant contribution by the CGS towards the attainment of energy security for South Africa, whilst providing the required scientific assurances for the continued safe use of nuclear energy generation in the country. The CGS implemented this task in partnership with local and international experts, whose contribution towards the attainment of this critical programme is highly appreciated. Furthermore, the work was designed to enhance local capacity that will enable incremental reliance on State, academic and private sector institutions to undertake assessments in fulfilment of prospective projects under consideration by our government, as outlined in the energy policy.

The Minerals and Energy-related work, built on the multi-year implementation of work previously initiated across the Limpopo, Northern Cape and KwaZulu-Natal provinces, is already yielding desirable results. This work provides the required geoscientific knowledge to complete comprehensive datasets towards the strategic intent of securing more than 5% of the global exploration expenditure share. Value-added outputs that were compiled during

the year focussed on geochemical analysis reports and mineralising system assessments for greenstone-hosted gold in the Limpopo Province. In furthering contributions towards energy security and geoscientific knowledge to support national energy policy imperatives, the CGS published a comprehensive characterisation report on the geoscientific opportunities for carbon capture, utilisation and storage potential in Mpumalanga Province. The geological assessments relating to emerging renewable energy sources, particularly geothermal energy generation, were also concluded to assess their feasibility in South Africa.

Infrastructure and Land Use thematic projects support national MTSF priorities 5 (spatial integration, human settlements and local government) and 6 (social cohesion and safe communities). Thus, the CGS continued to support safe and sustainable development objectives across the Thaba Tshwane regions in Pretoria and critical national road infrastructure across the country. This key focus area for safe development and community safety is enhanced by continued research into local-scale characterisation of subsidence-prone dolomitic land and achieving a more refined characterisation of seismic sources and their subsequent associated risk determinations.

Geoscientific assessments focussing on health, groundwater and the environment progressed, with a focus on combatting the impacts of mine-affected water, contributions towards the alleviation of water supply shortages using hydrogeological modelling approaches, as well as mitigating risks inherent from legacy mining operations. This work provided scientific evidence-based inputs to the formulation of the National Mine Closure Strategy and its Implementation Plan, as well as the Derelict and Ownerless Mines Strategy of the erstwhile DMRE, now the Department of Mineral and Petroleum Resources. Regional hydrogeological mapping initiatives, especially in the eastern Mpumalanga Highveld regions, were concluded during the financial year, providing much needed scientific insight into regional groundwater dynamics. This work supports environmental safeguards and baseline establishment initiatives prior to anthropogenic carbon dioxide injection for piloting purposes.

The critical role of the CGS as a national custodian of all geoscience data and information requires a seamless and accessible geoscience information and knowledge management system, which allows effective decision-making on, among others, the sustainable management of natural resources and the mitigation of the impacts of geohazards. The Geoscience Data and Information Portal, launched in 2021/22, continues to provide geoscience data and information records published by the CGS in the form of maps, documents and databases. This information is made available to stakeholders and clients worldwide. Over 30 900 downloads were recorded in the year under review, with requests ranging from published geological maps, to bulletins, map explanations and geological shape files.

The CGS's Statement of Financial Position reflects total assets of R618.8 million, which comprise non-current and current assets amounting to R373.1 million and R245.7 million respectively. The CGS enhanced its performance significantly, particularly given the difficult economic climate, with total revenue of R860.5 million and a surplus of R51.3 million. The comprehensive report on financial information is contained in Part F of this report.

Sustainability is integral to the CGS mandate and business at the financial/economic, social, stakeholder and environmental levels. Sustainability is embedded in the scientific focus and innovation upheld within the organisation and the CGS is privileged to have a harmonious and diversified workforce that views the organisation as an employer of choice. I wish to extend a warm welcome to the new members of the CGS family, and to those who have left us, I thank you for your service and wish you every success in your future endeavours.

I would like to congratulate the following members of staff who obtained new qualifications in the 2023/24 Financial Year:

Name	Degree
Dr Robert Netshitungulwana	Doctor of Philosophy: Geology
Dr Rebekah Singh	Doctor of Philosophy: Geography and Environmental Studies
Dr Rendani Matakanye	Doctor of Business Leadership
Mr Lebogang Ledwaba	Master of Business Administration
Mr Sifiso Ngubelanga	Master of Science: Engineering and Environmental Science
Ms Andisani Makhado	Master of Science: Geographical Information System and Remote Sensing
Mr Mzoli Breakfast	Master of Science: Geology
Ms Connie Setladi	Master of Science: Geology
Ms Yasmeen Abrahams	Master of Science: Applied Geology
Ms Tshiamo Moleele	Master of Science: Applied Geology
Ms Nangamso Dunga	Master of Science: Geology

Every year is marked by highlights and low points. During the year under review, the CGS lost some of its talent, including some true stalwarts of the geosciences, through retirement. We celebrate the sterling contributions of these colleagues who served the organisation well. The following men and women are among those who dedicated much of their professional lives to the organisation:

Names	Position	Business unit	Years of service
Mr Willem Kupido	Junior Technical Officer	Geophysics and Remote Sensing	42
Ms Suzette Power	Senior Cashbook Administrator	Finance Management	37
Mr Timothy Thabang Molea	Technical Officer	Infrastructure and Land Use	36
Mr Molefe Letsoalo	Junior Technical Officer	Knowledge Management	21
Ms Pauline Mmakhwini Malatsi	General Assistant	Knowledge Management	16
Mr Christo Craill	Chief Scientist	Technical Services	9
Ms Maria Fafa Khosa	Cleaner	Facilities Management	7
Mr Lesios Shutelang Seerane	Food Service Assistant	Facilities Management	5

In the reporting year, we have sadly lost a few colleagues. These are Mr Sipho Johannes Mahlangu (Assistant Technical Officer – Drilling), Mr Johannes Sejamagapu Radebe (Senior Scientist) and Mr Brian Sibonelo Zulu (Senior Scientist). I extend my sincere condolences to their loved ones. An application for medical boarding for Ms Anea Harding was approved in the reporting year and our prayers are with her. To colleagues who are currently recovering from illness, we look forward to welcoming you back soon.

My special thanks go to the Minister of Mineral and Petroleum Resources, Mr Gwede Mantashe and the department, as well as our Board members under the judicious guidance of our chairperson, Mr Kelepile Dintwe, for their meticulous oversight and support. I am also grateful to the Parliamentary Portfolio Committee on Mineral Resources and Energy for their unwavering support, commitment, oversight and guidance.

I conclude my overview in the knowledge that we have built a solid foundation for the CGS that is stronger, and more delivery focussed, and that exemplifies a capable State institution. It bears repeating that this achievement is possible only because we are standing on the proverbial shoulders of giants in the form of all our forebears.

Mr Mosa Mabuza
Chief Executive Officer
Council for Geoscience

31 July 2024

3 Statement of Responsibility and Confirmation of Accuracy for the Annual Report

To the best of our knowledge and belief, we confirm the following:

All information and amounts disclosed in the Annual Report are consistent with the Annual Financial Statements audited by the Auditor-General.

The Annual Report is complete, accurate and free of any omissions.

The Annual Report has been prepared in accordance with the guidelines on annual reports, as issued by National Treasury.

The Annual Financial Statements (Part F) have been prepared in accordance with the Generally Recognised Accounting Practice (GRAP) standards applicable to the public entity.

The Board of the CGS is responsible for preparing the Annual Financial Statements and for judgments made on this information.

The Board of the CGS is responsible for establishing and implementing a system of internal controls which has been designed to provide reasonable assurance on the integrity and reliability of the information on performance, human resources and the Annual Financial Statements.

External auditors have been appointed to express an independent opinion on the Annual Financial Statements.

In our opinion, the Annual Report fairly reflects the operations, performance information, human resources and the financial affairs of the public entity for the financial year ended 31 March 2024.

Yours in service

Mr Mosa Mabuza
Chief Executive Officer
Council for Geoscience

31 July 2024

Mr Kelepile Dintwe
Chairperson
Board of the Council for Geoscience

31 July 2024

4 Strategic Overview

The core mandate of the CGS is inscribed in its founding prescripts. The vision, mission and core values of the organisation aptly find their expression, as outlined in the Geoscience Act (No. 100 of 1993) as amended, as follows:

Vision

The vision of the CGS is:

A prosperous and transformed society enabled by geoscience solutions.

Mission

The mission of the CGS is to contribute to a prosperous South Africa by:

- Providing integrated, systematic and thematic maps and conducting research on the onshore and offshore geology of South Africa, as mandated, to:
  - Facilitate mineral, energy and agricultural development;
  - Contribute to the assessment and sustainable management of mineral, geohydrological and geoenvironmental resources; and
  - Support infrastructure development
- Acting as a national advisory authority on geo-environmental pollution
- Providing an information repository and delivery platform that facilitates actionable decisions and the accessibility of relevant information by relevant stakeholders
- Discharging the mandate in a manner that supports transformation and national developmental imperatives.

Core values

The core values of the organisation are:

- **Innovation:** Generating and implementing novel ideas and outputs that create value
- **Diversity:** Embracing an inclusive culture that upholds transformation and recognises contributions from all stakeholders
- **Excellence:** Striving to excel in every aspect of our business
- **Accountability:** Fostering reliability and commitment, taking responsibility and ownership
- **Learning:** Advancing through knowledge creation
- **Safety, health, and environment:** Prioritising the health and safety of all employees and stakeholders, concomitant with environmental stewardship
- **Transparency:** Providing services impartially, fairly, equitably and transparently.

5 Legislation and Other Mandates

The Public Finance Management Act (PFMA) (No. 1 of 1999) lists the CGS as a Schedule 3A Public Entity.

The Geoscience Act (No. 100 of 1993) and the subsequent Geoscience Amendment Act (No. 16 of 2010) establish the CGS. The mandate of the CGS includes, without being limited to:

a) **The systematic onshore and offshore** geoscientific mapping of South Africa.
b) **Undertake geoscientific research** and related technological development.
c) The **collection and curation** of all geoscience data and act as a national geoscience repository.
d) The **compilation and development of comprehensive and integrated geoscience knowledge** and information, such as geology, geophysics, geochemistry, engineering geology, economic geology, geochronology, palaeontology, geohydrological aquifer systems, geotechnical investigations, marine geology, geomagnetism, seismology, geohazards, environmental geology and other related disciplines.
e) **Bring to the notice of the Minister any information in relation to the prospecting for and mining of mineral resources**, which is likely to be of use or benefit to the Republic.
f) Promote the search for and the exploitation of any minerals in the Republic.
g) Study (i) the **distribution and nature of mineral resources** and (ii) geoenvironmental aspects of past, current and future mineral exploitation.
h) Study the use of the **surface and the subsurface of the land and the seabed**, and from a geoscientific viewpoint advise government institutions and the general public on the judicious and safe use thereof with a view to facilitate sustainable development.
i) Develop and maintain **the national geoscientific library**, the national geoscientific information centre, the **National Borehole Core Depository**, the **national geophysical and geochemical test sites**, the **national geoscience museum**, the national seismological network and the national geoscience analytical facility.
j) Conduct investigations and render prescribed specialised services to public and private institutions.
k) Render geoscience knowledge services and **advice to the State**.

In terms of the amendments made to the Geoscience Act, sections 4(c), 4(eA), 4(f), 5(b) and 8 that deal with, among others, the custodianship of geoscientific information, the review and evaluation of geotechnical reports, the maintenance of certain national geoscientific facilities and the appointment of a Geotechnical Appeal Committee were held in abeyance. Synchronously, the Mineral and Petroleum Resources Development Act (MPRDA) explicitly provides for the CGS to receive, validate and curate geological information from prospecting and mining right holders as part of their regulatory compliance requirement. These amendments constitute organic growth prospects and significantly broaden the mandate of the CGS.

The policy mandate: The Minerals and Mining Policy for South Africa (1998) affirms the CGS as a science council that supports research and development underpinning the sustainable development of the mining industry. This further enunciates the Constitutional mandate, as elaborated in the founding prescripts of the CGS.

5.1 Other guiding policies

Given the urgent need to address national imperatives, the CGS ensures that its business model and all its activities address the following strategic national outcomes in alignment with the National Development Plan (NDP) Vision 2030:

- **Decent employment through inclusive economic growth:** Delivering spatial geoscience information and services that attract local and international investment to develop mineral and upstream petroleum resources.
- **A skilled and capable workforce to support an inclusive growth path:** Building capacity in respect of geoscientific, administrative and managerial/leadership skills while also developing innovative outputs, systems and services.
- **An efficient, competitive and responsive economic infrastructure network:** Geoscience information and services input into infrastructure development in support of South Africa's economic development of mineral and upstream petroleum resources.
- **Vibrant, equitable and sustainable rural communities with food security for all:** The provision of geoscientific information that enables agricultural development and groundwater exploration, among others.
- **Environmental assets and natural resources which are well protected and continually enhanced:** Conducting research into, among others, acid mine drainage and carbon capture and storage technologies and establishing environmental baselines for possible future shale gas development.
- **An efficient, effective and development-oriented public service and an empowered fair and inclusive citizenship:** Strengthening the CGS to optimise delivery of its mandate and effecting the transformative programme of the South African Government.

Further to the NDP and the MTSF, the objectives of the CGS have been formulated to support the objectives of the DMRE, whose core focus revolves around regulation, transformation and promotion of the minerals and energy sectors as well as provision of sustainable and affordable energy for growth and development to all South Africans.

Other objectives of the DMRE, supported by the CGS and with which its activities are aligned, include contributing to a just transition to a low-carbon economy; unlocking South Africa's high potential mineral and energy resources; diversification and supply of mineral resources in support of both mining and energy sectors; increasing investment in the mineral and petroleum sector, onshore and offshore; increasing South Africa's share of the global minerals and energy market; increasing South Africa's share of the global exploration budget; diversification of energy sources through implementing the Integrated Resource Plan 2019; increasing infrastructure investment by both public and private sectors; inclusive, equitable and competitive exploration as well as ensuring sufficient and relevant skills in the mining and energy sector. The CGS derives its strategic foundation from the government's MTSF 2019 to 2024, the Stakeholders' Declaration on Strategy for the Sustainable Growth and Meaningful Transformation of South Africa's Mining Industry of the DMRE, and the 2019 White Paper on Science, Technology and Innovation of the Department of Science and Innovation (DSI).

6 Organisational Structure

The organogram of the CGS (Figure 2) describes the reporting structure of the organisation. The structure was developed to support the efficient, effective and robust functioning of the organisation and streamline the composition of its Board of Directors and executive management. The executive management team of the CGS is headed by the Chief Executive Officer (CEO) who reports to the Accounting Authority (the CGS Board – see Part C of this report). The executive management team, in turn, oversees five portfolios: Integrated Geoscience Development, Geoscientific Services, Finance, Office of the CEO, and Corporate Services (see Part A, section 7).

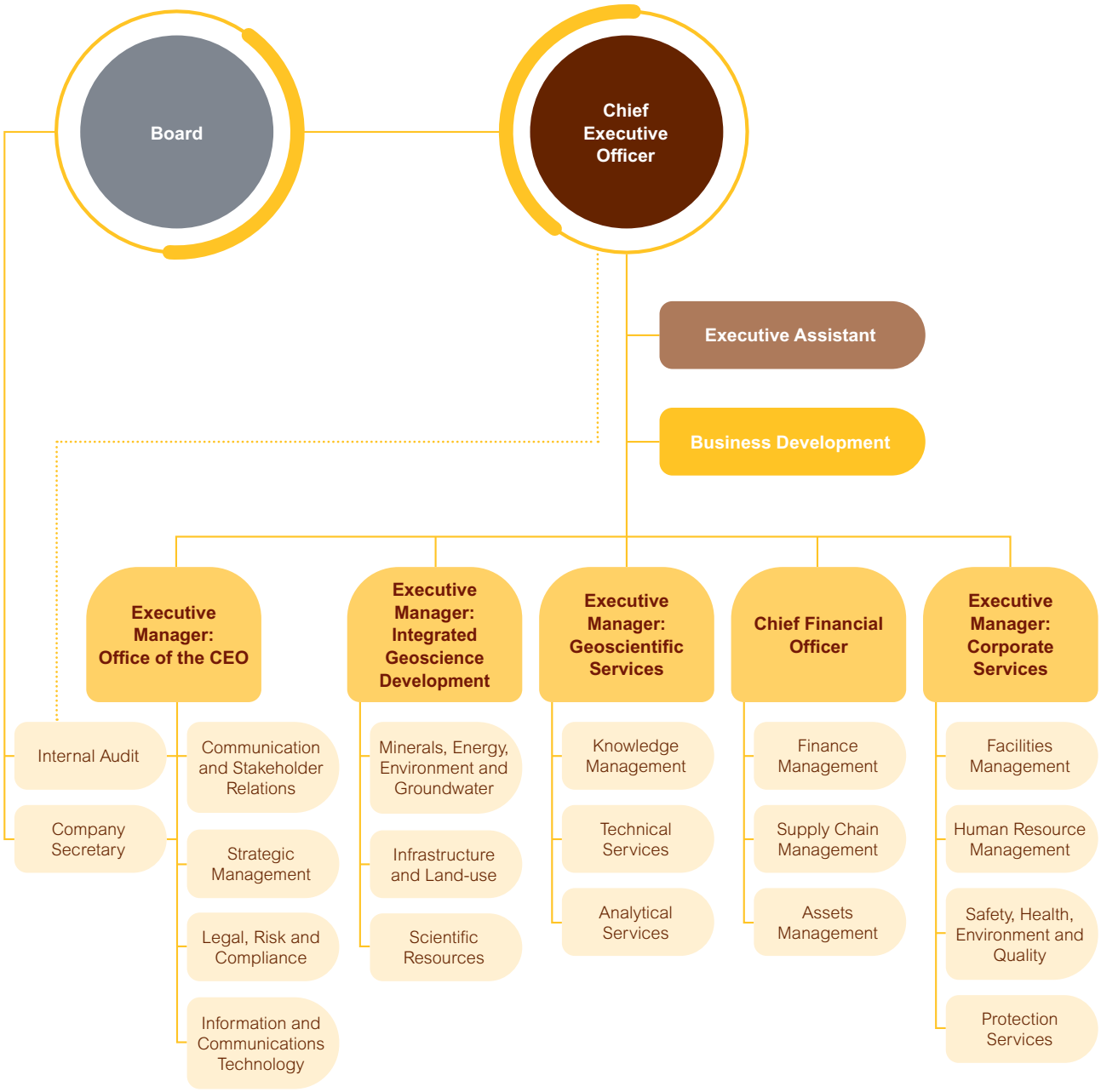


Figure 2: CGS organisational structure

7 CGS Executive Management Team

Mr Mosa Mabuza
Chief Executive Officer

Dr Thuli Khumalo
Executive Manager Office of the CEO

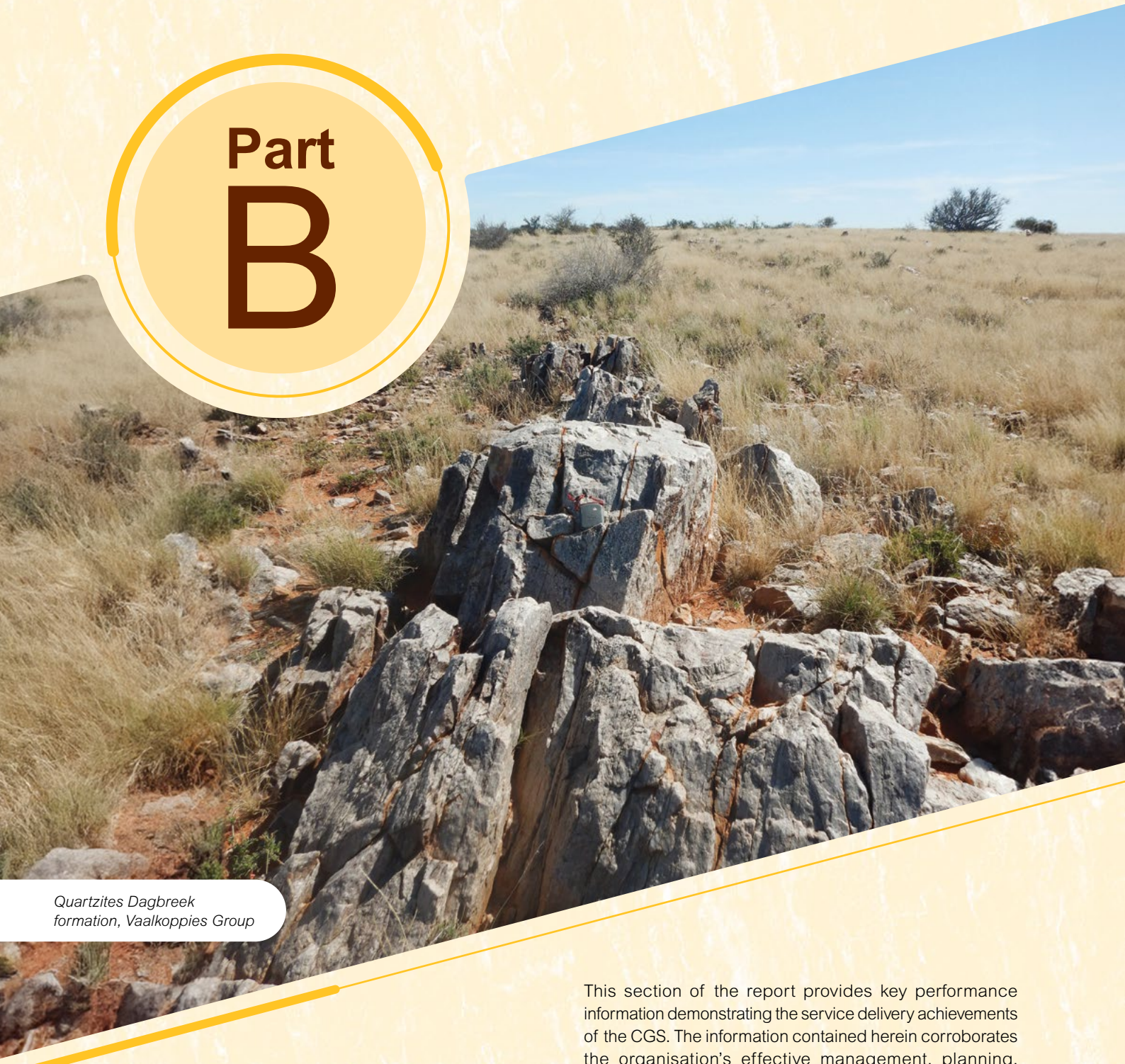
Mr Thabo Molikoe
Chief Financial Officer (Acting)

Ms Siphelele Buthelezi
Executive Manager Geoscientific Services

Mr Willem Meintjes
Executive Manager Integrated Geoscience Development

Ms Zodwa Mbatha
Executive Manager Corporate Services

Part
B



Quartzites Dagbreek formation, Vaalkoppies Group

Performance Information

This section of the report provides key performance information demonstrating the service delivery achievements of the CGS. The information contained herein corroborates the organisation's effective management, planning, budgeting, implementation, monitoring and evaluation of activities. The impacts and outcomes of its actions are underpinned by symbiotic planning, management inputs and activities to achieve the desired results.

The performance information affirms the alignment of the impacts and outcomes in the strategic plan (SP), the associated programme outputs, and the output indicators and targets in the annual performance plan (APP) and various budget-related documents. This section also highlights achievements measured against the performance indicators and targets identified in the SP, the APP and the budget documents.

1 Auditor-General's Report: Predetermined Objectives

The Auditor-General of South Africa (AGSA) performed the necessary audit procedures on the performance information of the CGS to provide reasonable assurance in the form of an audit conclusion. The audit conclusion on the performance against predetermined objectives is included in the report to executive management, with material findings being reported under the Predetermined Objectives heading in the report on Other Legal and Regulatory Requirements section of the auditor's report.

The Report of the Auditor-General, published as Part F: Financial Information, is on pages 100 to 105.

2 Overview of Performance

2.1 Service delivery environment

The year under review marks the end of the **MTSF** 2019–2024 and also represents the seventh year of continuous implementation of the current phase of the Integrated and Multidisciplinary Geoscience Mapping Programme (IMMP) as an instrument of delivery of the strategic re-orientation of the CGS. The IMMP decisively focuses on implementing the CGS mandate, inscribed in the founding legislation, the Geoscience Act (No. 100 of 1993) as amended. This includes collection, generation, compilation, interpretation and dissemination of high-quality geoscience data, information and knowledge for South Africa. The IMMP is executed within five core themes, listed hereafter, and in the operational highlights (see Part B, section 4). The CGS delivered the majority of its APP targets for the year under review, with an overall performance score of **91%**, subject to finalisation of annual audit by the AGSA. Figure 3 summarises the overall performance of the CGS since the beginning of the MTSF 2019–2024.

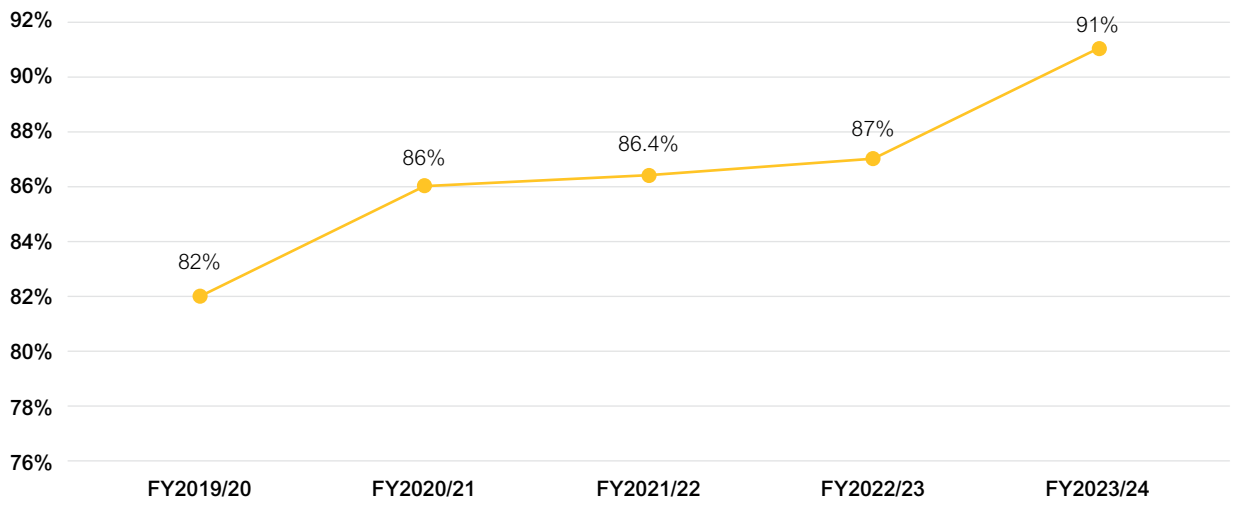


Figure 3: Overall organisational performance since the beginning of the MTSF 2019–2024

Theme 1: Geoscience for Mineral and Energy Resources

The South African Government announced its bold plan to attain a minimum of 5% of the global exploration budget of approximately US$10 billion per annum in the next three to five years. The CGS is privileged to be at the leading edge of rejuvenating and reimagining the country's exploration landscape, consistent with the quality of the geology that suggests that the country remains an exploration frontier. The attainment of this strategic intent for the country is underpinned by the availability, extent, and quality of fundamental geoscience datasets as one of the foundational pillars to de-risk exploration activities. In giving effect to this intent, the CGS continues to generate and analyse the fundamental geoscientific datasets required by its stakeholders through its multi-year Geoscience Technical Programme (GTP). This is further supported by increasing the geoscience mapping coverage of South Africa at a scale that is complementary to pre-competitive exploration requirements. The emerging and vast appetite for critical and strategic minerals, sought to achieve the net zero commitment, makes South Africa an exploration investment destination of choice. The CGS continues to provide essential geoscientific technical support in a number of DMRE-led initiatives such as the implementation of the Exploration Strategy and the Mine and Environmental Water Management Programme (MEWMP).

Continued priority is given to contributing to the broader energy landscape of South Africa under the minerals and energy resources thematic area. The CGS maintains a focus on characterising natural energy systems and regionalised mineral models that contribute to energy security. Most prominent, is investigation of the geothermal potential of South Africa which could augment the country's Sustainable Renewable Energy Programme in the medium to long term, as well as continued focus on characterising mineralising systems required for clean energy generation technologies and a low carbon economy.

The CGS, as the implementing agency, continues to carry out flagship CCUS research. This aims to pilot CCUS as one of the technological interventions that would contribute to achieving nationally determined emission contributions whilst simultaneously retaining conventional energy generation methods. This research intervention reaffirms the country's commitment to clean energy and climate change mitigation. Steady incremental progress in implementing this long-term focused programme continues to provide the technical basis from which much-needed inclusive economic growth and the energy security needs of the country can be attained.

Theme 2: Geoscience for Health, Groundwater and the Environment

Mineral exploration and exploitation activities are shifting focus, with increased emphasis on environmental stewardship. Striking a balance between mining development and environmental conservation has become one of the primary research focus areas of the CGS. In this regard, the seemingly conflicting phenomena are the subject of research that seeks to reconcile coexistence, balanced by scientific research. Furthermore, understanding water resources, particularly since South Africa is water stressed in most regions, is a priority research area under this thematic area. Data and information generated from this theme are intended to improve the understanding of the local and regional aquifer systems and their geological controls, to guide the sustainable use of groundwater resources.

Theme 3: Geoscience for Infrastructure and Land Use

The CGS is legislatively mandated to provide professional and technical advice on infrastructure development, especially in dolomitic terrains. This mandate was expanded with the Geoscience Amendment Act (No. 16 of 2010) to encompass assessments and reviews of all infrastructure development in areas broadly deemed susceptible to geohazards. The CGS continued engagements with key stakeholders responsible for infrastructure development to accomplish practical means to apply geoscience to inform optimal land-use and infrastructure development. The application of geoscience in community safety and disaster response preparedness remains a key focus. Notably, the CGS continues to carry out its mandate of maintaining the National Seismic Network, which continuously detects natural and mining-induced earthquakes in South Africa and undertakes research to characterise geological hazards at various scales across the country.

Theme 4: Geoscience Innovation

The CGS is steadily strengthening its scientific innovation capacity in various fields and applications in the geosciences. Drone technology has been adopted to advance the mandate of the CGS and to provide a novel way of capturing geoscience data to gain a perspective of the Earth to augment ground-based instruments. At the advent of the Fourth Industrial Revolution, the CGS has embarked on research into the use of artificial intelligence (AI) and machine learning in geoscience through the creation of applications to address, among other matters, complex regional mineralising systems and potential groundwater mapping challenges, as well as the integration of large geoscience datasets.

Theme 5: Geoscience Diplomacy

The CGS recognises and implements its role as a technical instrument for the foreign policy predisposition of the Republic of South Africa, through the prism of geoscience. During the year under review, a second phase of the high-resolution Geoscience Mapping Programme commenced in Eswatini. This included the production of various integrated

geoscience datasets in support of the respective minerals and energy developmental imperatives. Moreover, the Geoscience Diplomacy Programme also provided technical support to various diplomatic missions undertaken to South Sudan, Namibia, Kingdom of Eswatini, Ivory Coast, and Niger, focusing on finding additional areas of mutual benefit and applying the CGS's innovative techniques to accelerate geoscience development in these areas. The CGS held exploratory discussions and iterative engagements with Angola, the European Embassy, Embassy of Japan, Central African Republic, British Geological Survey, French Government, Russia, and the United States (US) Geological Survey, premised on advancing geosciences. The CGS continued to serve in the role of permanent Secretariat of the Organisation of African Geological Surveys (OAGS), which promotes close relations between African member states in the context of geoscience research. A significant milestone was reached when the OAGS entered into an agreement with the African Union (AU), making it an officially affiliated organisation of the AU. The OAGS represents the interests of African geological survey organisations and collaborates closely with the European Geological Surveys, among others, to implement the Pan-African Support to the EuroGeoSurveys – Organisation of African Geological Surveys Partnership (PanAfGeo) on capacity building across the African continent.

Business of the CGS

In the implementation of its mandate, collaborations between the CGS and various key stakeholders include, without being limited to:

- Strategic projects of other Government departments/ institutions and public entities
- Private sector projects.

As dictated by legislation, the CGS continued to implement mandatory projects and functions specified in the Geoscience Act (No. 100 of 1993) as amended. These include, among others, the following:

- The National Seismic Network (linked to global networks), which monitors seismic activity locally
- Monitoring of global infrasound activity as part of the collaboration with the Comprehensive Nuclear Test Ban Treaty Organisation
- The curation of the National Borehole Core Depository, equipped with hyperspectral scanning capability and housing approximately 850 km of borehole core and other valuable geological materials
- The curation of the National Geoscience Museum, which provides information and preserves rare, scientifically valuable and geological heritage samples
- The National Geoscientific Library and Bookshop, which provides geological publications and maps to the public
- The National Geoscience Analytical Facility, which is available to analyse, among others, geological samples, water samples and industrial raw materials.

Revitalisation of the National Geoscience Analytical Facility

Since the establishment of the Geological Survey (the predecessor of the CGS) in 1912, the Analytical Services Unit ("the laboratory") has played a pivotal role in realising the mandate of the CGS. In 2018, an unfortunate series of events occurred, forcing the laboratory to close due to aerial contamination. This was exacerbated by the national COVID-19 lockdown in 2020. The installation of the heating, ventilation and air-conditioning (HVAC) system also affected the resumption of duties and services previously offered by the laboratory. Subsequently, some sections of the laboratory have re-opened but offer limited services due to only partially suitable accommodation and environmental conditions.

CGS management commissioned the revitalisation of analytical services, commencing with the development of a value proposition to resuscitate the laboratory, which was approved in quarter 4 of 2022/23. At the same time, urgent operations of the laboratory were being restored. In the year under review, 70% of the value proposition was fully operationalised in preparation for accreditation to International Organization for Standardization (ISO) standards. The complete implementation of the value proposition relies on fully suitable laboratory environmental conditions. These include routine building and facilities maintenance, and the installation of an extraction system, which will allow the resuscitation of the Chemistry Laboratory, amongst others. The laboratory will be required to adhere strictly to an upgraded quality management system as an integral part of its improvement, and to implement quality control and quality assurance principles to demonstrate compliance with the requirements of the latest quality processes and standards set by ISO. This will ensure that good-quality services and processes are in place for efficacy and sustainability in a fully-fledged laboratory.

The revitalisation of the laboratory is critical for the implementation of the GTP in providing reliable and timeous analytical results which are essential for the development of scientific databases and mineral development. Furthermore, implementation of the laboratory value proposition and ISO accreditation provides an opportunity to further commercialise the laboratory's services, expanding its offering to a wider client base. Accordingly, in preparation for this expansion, the laboratory is developing a pricing strategy to facilitate this development. This will not only help the laboratory to occupy its space, but also add to the CGS's contribution towards the developmental imperatives of South Africa. These include economic growth, job creation, poverty eradication and a decent life for all.

With the expected upturn in exploration activities globally, as many countries seek to grow their economies and create better lives for their citizenry through the deployment of mineral resource programmes, the CGS laboratory is improving efficiencies by ensuring that all the operational

requirements of good laboratory practice are in place. In particular, the laboratory will take into consideration the Exploration Implementation Plan approved by the DMRE. The importance of prompt analytical services to the various key themes in the CGS cannot be overstated. This requirement includes supporting national programmes of energy, water, and food security as well as infrastructure development through innovative and tailor-made analytical services to key stakeholders. The resultant data and information from laboratory services are fundamental to the pre-competitive geoscience data, meant to boost investor confidence and make South Africa the attractive exploration jurisdiction which it was some decades ago. As in the past, the laboratory can once again become a leading service point for the African Continent.

Acquisition of two multifunctional drill rigs

In 2021/22, the CGS obtained approval to embark on the acquisition of two multifunctional drill rigs which are regarded as 'significant assets' in terms of the PFMA. The purchase of these drill rigs is intended to bolster the implementation of the GTP and the acquisition of geoscience data for use in rock characterisation and mineral, groundwater, and resource estimations. At the start of 2022/23, the appointed service providers, and the original equipment manufacturer (OEM) of the two multifunctional drill rigs began construction of the rigs. The Small Enterprise Finance Agency was instrumental in providing financial support for the service providers to commence with the project.

The OEM experienced numerous delays in assembling and fixing defects on the drill rigs, as a result of which the rigs could not be deployed as contemplated. The CGS, OEM and service providers (Gqozi Group Investment and Mission Point Investment Holdings) entered into tripartite agreements as part of a recovery plan to achieve the intended objectives. Due to the OEM's failure to assemble and deliver fully functional drill rigs by 30 June and 31 July 2023 respectively, as contemplated in the tripartite agreements, the CGS initiated urgent litigation proceedings in the KwaZulu-Natal Division of the High Court to legally resolve the matters and expedite delivery.

In December 2023, the Judge President of the KwaZulu-Natal Division of the High Court acceded to the request for a preferential hearing date and a consolidation of both matters to be heard on the same day. This request was granted and both matters were set down for hearing on 20 March 2024.

With respect to the second drill rig matter (Mission Point), the Court ordered Geosonic to deliver a fully functional rig to the CGS within seven court days. The decision by the court means that Geosonic's argument that it was not obliged to deliver the Mission Point rig until it was paid the balance claimed, was not accepted by the court.

With regard to the first drill rig matter, Geosonic argued that after the launch of the application, it had performed fully in terms of its obligations when it delivered the outstanding tooling. The CGS responded that the drill rig remained non-functional. In light of these submissions, the court found that there was still a factual dispute that needed to be clarified and ordered that the matter be postponed to a later date to allow both parties the opportunity to supplement their affidavits. It is expected that the matter will be heard in quarter 1 of the 2024/25 financial year. In the interim, the CGS has initiated supply chain processes to outsource drilling to a panel of drillers, to be appointed before the end of quarter 1 to augment the drilling activities of the GTP.

2.2 Organisational environment

During the financial year under review, the CGS had three vacancies for executive management, of which two were filled. One, in the Geoscientific Services portfolio, was filled by a female incumbent and the second, in the Integrated Geoscience Development Business portfolio, was filled by a male incumbent.

As the custodian of all on- and offshore geoscience data and knowledge in South Africa, the CGS continues to disseminate geoscience data and information to stakeholders and clients through its Public Information Office. Geoscience information and data were disseminated via data@geoscience.org.za and info@geoscience.org.za to a variety of stakeholders, including private citizens, the mining and exploration industry, engineering industry, learning institutions, other organisations and Government departments, as well as international companies (Figure 4). This geoscience data and information included borehole/drilling data; mineral maps; geological maps of various scales; geotechnical maps; and geochemical, seismic and marine data (Figure 5).

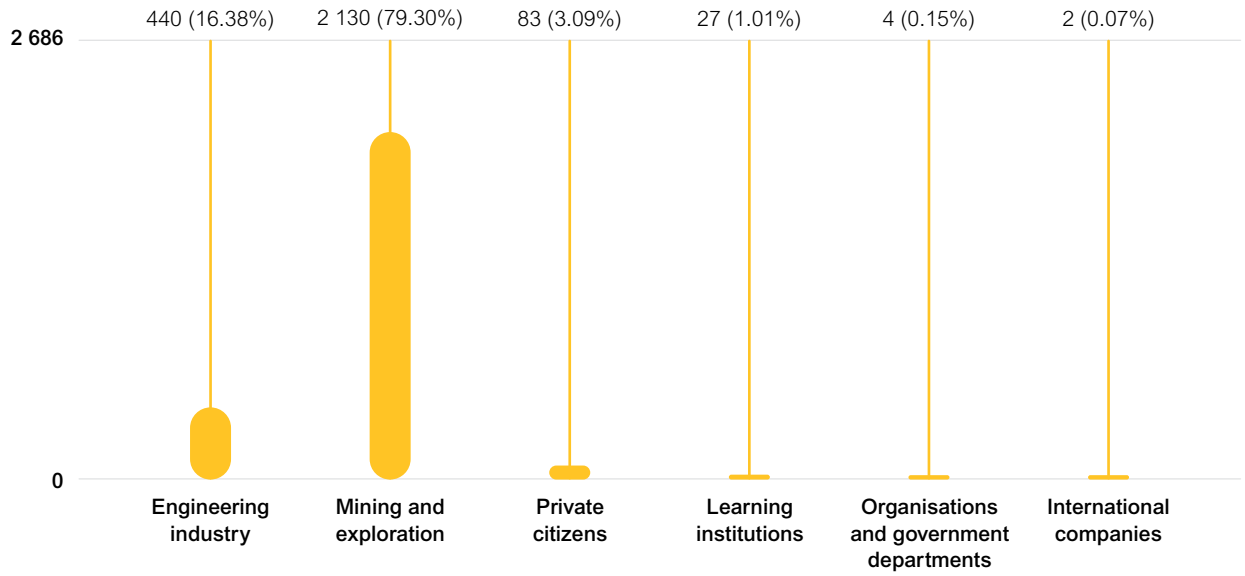


Figure 4: Number of requests through info@geoscience.org.za and data@geoscience.org.za per industry in 2023/24

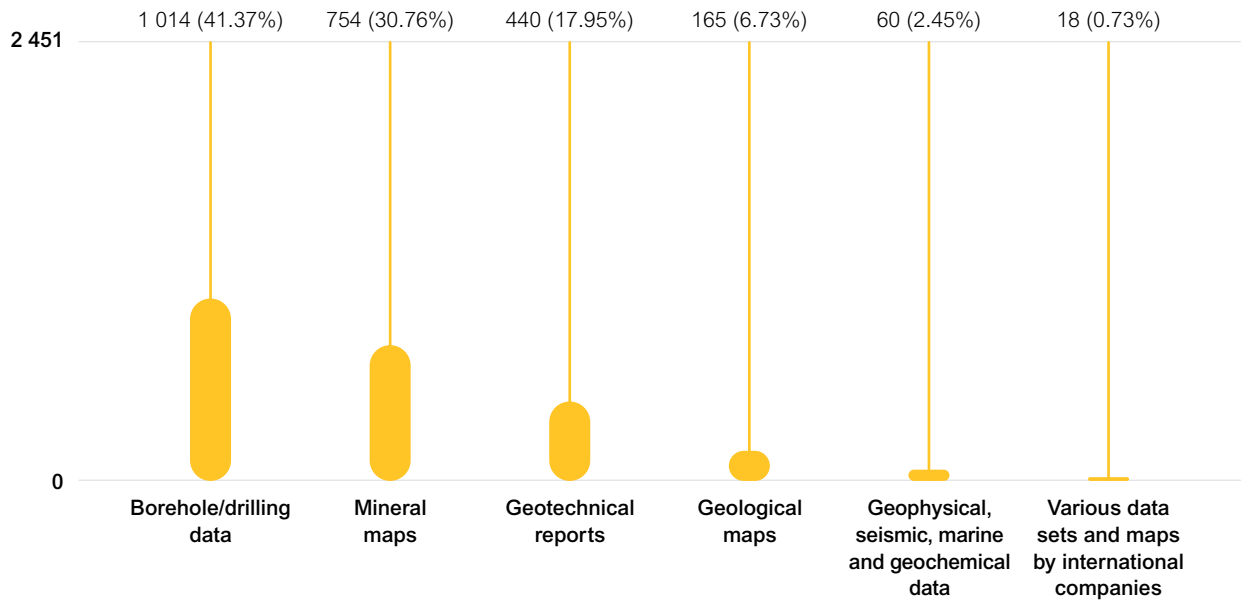


Figure 5: Data and information category requests for 2023/24

The geoscience data and information portal, launched in 2021/22, continues to provide geoscience data and information records published by the CGS in the form of maps, documents and databases. This information is made available to stakeholders and clients worldwide. Over 30 000 downloads (Figure 6) were recorded in the year under review with requests for geological maps, bulletins, map explanations, publications/reports and geological shape files.

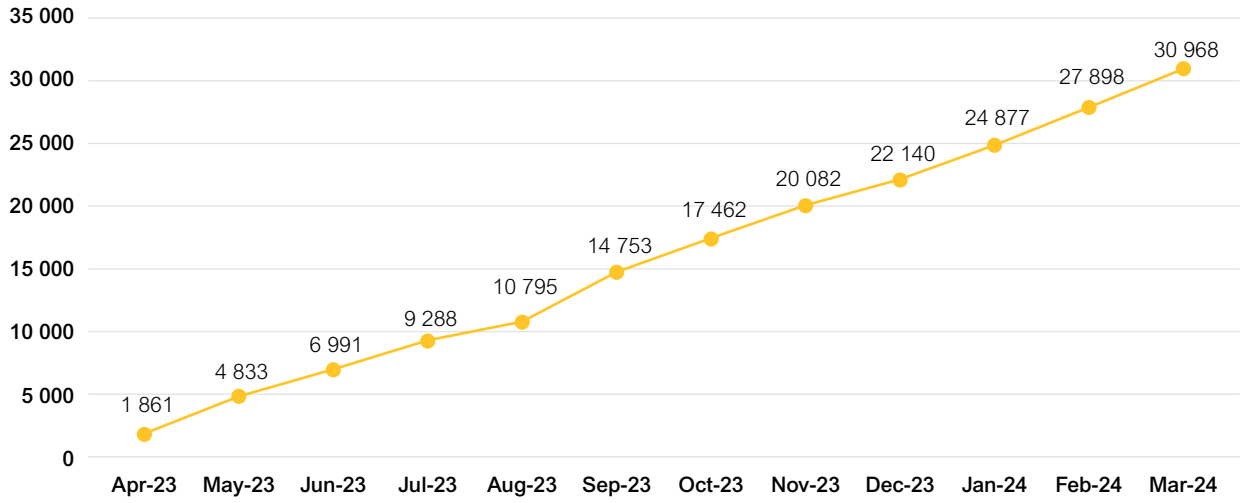


Figure 6: Data downloads through the geoscience data management portal, April 2023–March 2024

2.3 Key policy developments and legislative changes

There have been no key policy amendments to the Geoscience Amendment Act (No. 16 of 2010) since it took effect on 1 July 2012. In March 2022, the implementation of the Geoscience Act Regulations became a reality, in pursuit of the CGS's role as a custodian of on- and offshore geoscience data and information. The Geoscience Act Regulations were preceded by a comprehensive process of stakeholder engagement. On 22 February 2024, the DMRE gazetted the Geoscience Act Regulations for public comment. The gazetted Geoscience Act Regulations proposes the deletion of the following regulations:

a) Regulation 4 which deals with the lodgement of historical geoscience data and information
b) Regulation 5 which deals with the classification of lodged geoscience data and information either as confidential or non-confidential data
c) Regulation 7 which deals with the dissemination of geoscience data and information to external stakeholders.

The CGS has made a substantive statement and submission to the DMRE.

In 2023/24, the DMRE resuscitated the process of amending the Mineral and Petroleum Resources Development Act (MPRDA). The CGS was requested to participate in this process, culminating in the submission of written comments and representations from the CGS to the DMRE. These inputs proposed that amendments be made to the MPRDA where duplication of effort relating to collection of geoscience data and information was identified.

The CGS also made submissions providing critical scientific perspectives to strengthen the proposed Integrated Resource Plan 2023 as the anchor energy policy of the country. These considerations highlighted the significance of decarbonisation technological interventions to mitigate the impact of climate change by supporting a low carbon emissions developmental trajectory and meeting nationally determined emissions limits. Additionally, the emerging potential for renewable energy generation through geothermal energy resources was enunciated. Nuclear energy generation, as one of the long-term development pathways, was supported on the basis of the significant natural nuclear fuel resources, and the technical expertise in the nuclear energy development value chain that South Africa has built over the years.

2.4 Progress towards achievement of institutional impacts and outcomes

The impact statement of the CGS is drawn from its vision statement: "A prosperous and transformed society enabled by geoscience solutions." The adopted strategy of the CGS (the IMMP) underpins the sustainability of the organisation amidst changing ideologies, a fluctuating economy and a rapidly evolving technological landscape. The strategy is intended to ensure an impactful delivery of the core mandate and provide innovative geoscience solutions to support the NDP 2030 and other government plans that address economic growth, poverty, inequality, job creation, education, clean water, affordable and clean energy, and safer communities in South Africa. Figure 7 illustrates the impact pathway of the CGS strategy, its outcomes and areas of impact.

Table 1 illustrates progress made by the organisation towards the achievement of its five-year targets against the outcome indicators of its SP 2020–2025.

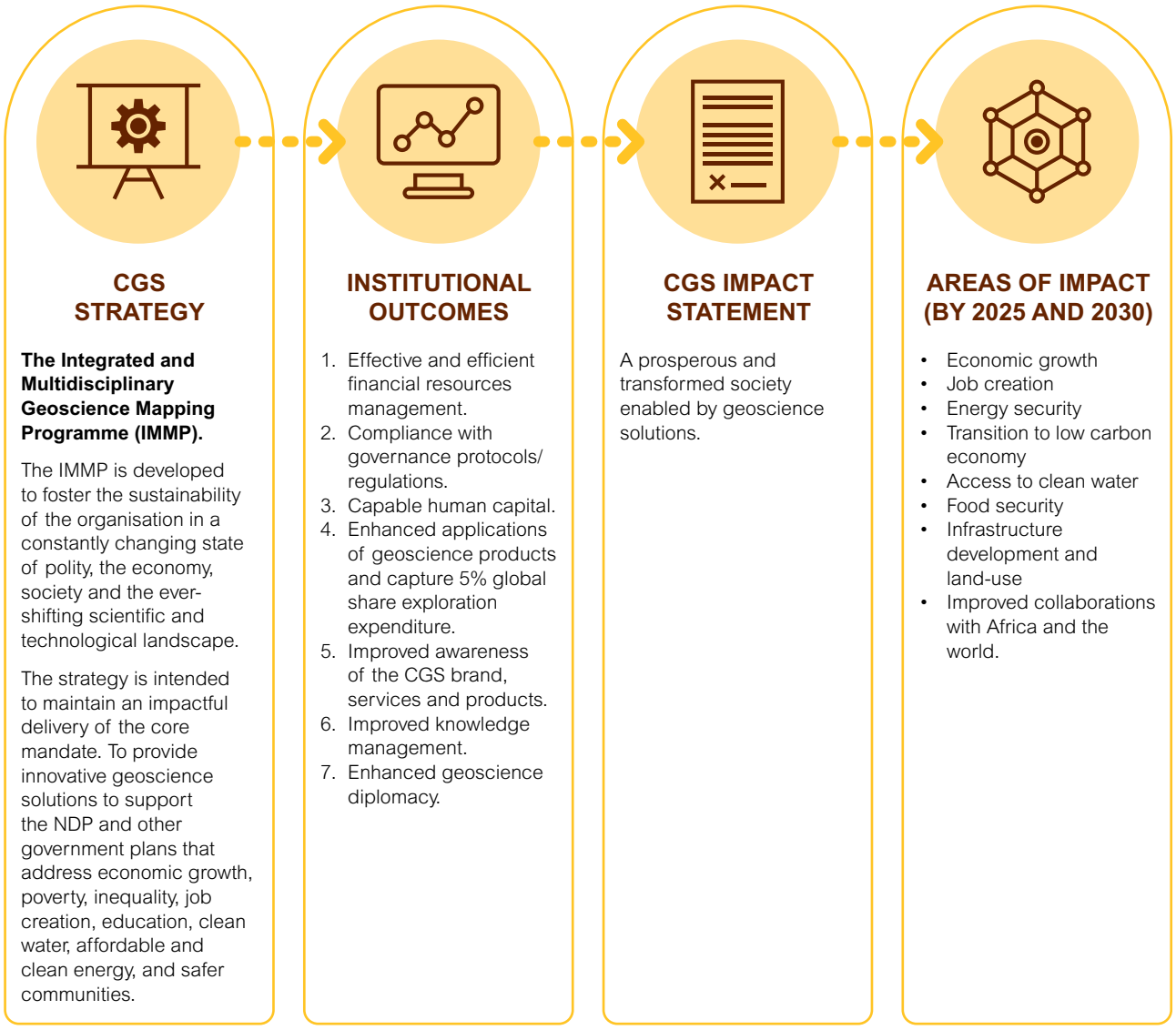


Figure 7: Strategic outlook and impact pathway of the CGS

Table 1: Progress made by the CGS in accomplishing its SP 2020–2025 targets

Outcomes	Outcome indicators	Baseline	Five-year target	Progress towards the achievement of the five-year target
MTSF priorities	**Priority 1: A capable, ethical and developmental State**			
Effective and efficient financial resources management	Absence of material audit findings	0	Clean audit attained by 2025	The CGS received an unqualified audit outcome for the fiscal year ending 2023/2024. Moving forward, we remain committed to continuously enhancing our internal controls to ensure sustained excellence in financial management and governance.
Compliance with governance protocols/ regulations	An organisation complaint with relevant prescripts	New indicator	100% compliant organisation by 2025	Five compliance checklists have been completed in line with the Regulatory Universe of the CGS. The CGS continues to remain 100% compliant with the PFMA as well as the Labour Relations Act. A total of 16 instances of non-compliance were identified during the assessment of the Promotion of Access to Information Act (PAIA), the Basic Conditions of Employment Act (BCEA) and the National Key Points Act 102 of 1980 (as amended by the Critical Infrastructure Act). CGS management is committed to addressing these issues and action plans have been put in place and will be tracked on a quarterly basis until resolved.
MTSF priorities	**Priority 3: Education, skills and health**			
Capable human capital	Talent management framework to build, nurture and sustain a capable workforce implemented	New indicator	An empowered, transformed, motivated and capacitated workforce by 2025	A talent management framework has been developed and is currently being considered for approval and implementation.
MTSF priorities	**Priority 2: Economic transformation and job creation** **Priority 5: Spatial integration, human settlements and local government** **Priority 6: Social cohesion and safe communities**			
Enhanced applications of geoscience information and knowledge to secure a minimum of a 5% share of the global exploration expenditure	Increased onshore geoscience map coverage	New indicator	16%	Continued focus on geoscientific mapping has seen a significant increase in onshore coverage from below 5% prior to the commencement of the IMMP, to 16%. To date, **307** of a total of 1 916 1:50 000-scale maps have been produced.
	Increased offshore geoscience map coverage	New indicator	0.6%	Offshore geoscientific mapping progressed with the publication of three more offshore maps adding to two offshore maps that were produced in previous years, bringing the total coverage to **0.3**% of the planned total of 1 828 maps.
	Implementation of the GTP for minerals, energy, groundwater, infrastructure, land use, innovation, and the environment	New indicator	Applications of geoscience knowledge towards societal development	The CGS continued to use and beneficiate geoscientific information from existing datasets and those collected and interpreted from the IMMP to contribute to mineral and energy characterisation intended to attract 5% of the global exploration expenditure in South Africa over the next three to five years. Critical value-added geoscientific outputs were produced to contribute to minerals and energy development, groundwater and infrastructure development, as well as the safe and judicial use of land.

Outcomes	Outcome indicators	Baseline	Five-year target	Progress towards the achievement of the five-year target
Improved awareness of the CGS brand, services and products	Integrated Communication and Stakeholder Relations Strategy implemented	New indicator	Stakeholders satisfied with the quality of CGS services and products	The investment made by the CGS towards the improvement of the knowledge, awareness and affinity of its brand is bearing fruit. Over time, the CGS has experienced a growing interest and coverage of its work on various media platforms. Moreover, the CCUS Campaign and Advocacy Programme has enabled the organisation to interface with a plethora of stakeholders from all corners of the country. Moreover, the responsiveness and prompt communication on earthquakes has etched its relevance and importance in society. Through its rigorous Stakeholder Engagement Programme, the CGS has been able to seamlessly deliver on its GTP and establish meaningful relationships with important stakeholders. During the year under review, 64 media articles were published, while the CGS brand was profiled on several communication channels such as exhibitions, billboards, social media, podcasts, radio and television. In addition, the level of stakeholder satisfaction saw an improvement of **83%** – up from 79.4% recorded in the previous financial year.
Improved geoscientific domain through effective knowledge management	Utilisation of the integrated geoscience information management system	New indicator	A proficiently managed geoscience data and information by 2025	The CGS is continuing with the multiyear data digitising, migrating, and auditing programmes, with a cumulative progress of 50% for the development of the integrated geoscience information system. To date, the CGS has achieved 105% (against the 100% target of year two) in the assessment of data inventories of year two). Digital migration (of existing geoscience data) has exceeded the target by more than double (against the 100% target) due to the intensified scanning of additional geoscience maps. The Geoscience Act Regulations Portal was completed, and a handover meeting was held in March 2024. The portal is now live and fully functional.
MTSF priorities	**Priority 7: A better Africa and world**			
Enhanced geoscience diplomacy	International strategic partnerships established	New indicator	Geoscience contribution towards "a better Africa and world" strengthened by 2025	The CGS has intensified its Diplomacy Programme by strengthening relations with international counterparts during the MTSF period. During the year under review, the CGS signed a memorandum of agreement with the Instituto Geológico de Angola (IGEO). This strategic partnership seeks to advance regional cooperation on research in pursuit of the African Agenda 2063 and the regional integration policy position of the country.

* A clean audit is defined as an unqualified opinion with no material findings. An unqualified opinion is given where material findings were identified but were corrected during the audit.

To achieve the outcome of effective and efficient financial resource management and the achievement of clean audits in terms of its current SP 2020–2025, the CGS will continue to develop and maintain transparent systems, put in place internal controls and manage risks that may arise. The CGS will continue to aspire towards achieving clean audits. The financial statements will continue to be prepared in accordance with GRAP and the requirements of the PFMA. Controls have already been implemented to ensure the responsible management of assets, revenue, expenditure and liabilities. The established supply chain management function will ensure an appropriate procurement and provisioning system that is fair, equitable, transparent, competitive and cost-effective. Through its internal audit and risk management functions, the CGS monitors the effectiveness of internal controls, assesses financial management controls and mitigates financial misconduct such as fraud, theft, irregular expenditure, and fruitless and wasteful expenditure.

Compliance with governance protocols, regulations and other prescripts is crucial in enabling the CGS to contribute to the achievement of Priority 1 of the MTSF, namely the achievement and maintenance of "a capable, ethical and developmental State." To achieve an acceptable level of compliance, the CGS aims to improve and further develop its compliance management maturity by putting the necessary policies and procedures in place to achieve its target of a fully compliant organisation by 2025. The CGS operates in a complex, diverse and extensive environment and regulatory universe, and has to comply with numerous prescripts. Compliance will be achieved in a structured and systematic manner to ensure full integration into its operations.

The competitive advantage of the CGS resides in the competence of its workforce. To attract, retain, engage and develop the right talent, the CGS has developed a talent management framework aligned with its strategy, which is being considered for approval and implementation.

The IMMP strategy aims to contribute to South Africa's Economic Reconstruction and Recovery Plan (ERRP) by securing a minimum of 5% of the global exploration expenditure through the application of geoscience information and knowledge. In the execution of its GTP, the primary strategy implementation tool of the CGS, the organisation intends to unlock South Africa's mineral and energy resource potential and contribute to achieving a just transition to a low-carbon economy. A primary focus area of the CGS is the continued production of 1:50 000-scale on- and offshore geoscience maps, through which critical knowledge is generated. This endeavour aims to uncover South Africa's mineral wealth potential. Fundamental geoscience mapping outputs are furthermore beneficiated and leveraged to support safe and sustainable infrastructure development, judicious land use and environmental stewardship. In the wake of the Fourth Industrial Revolution, emerging technologies such as machine learning and AI techniques are being harnessed to generate geoscientific knowledge. During the year under review, **77 new 1:50 000-scale** onshore geoscience maps were produced, resulting in an increase to **16%** of the national mapping coverage. This achievement marks a significant improvement from below 5% before commencement of the IMMP. Value-added applied geoscience outputs contributing to minerals, energy, groundwater, infrastructure development and land use, were also produced. In particular, the CGS undertook geological and basin characterisation studies in Mpumalanga Province, achieving a key milestone towards realising pilot-scale CCUS work, anticipated to make a substantive contribution to the just transition to a low-carbon economy in South Africa. Continued focus is placed on base- and precious metal mapping, especially with regard to mapping and characterising the so-called 'minerals of the future' across the Northern Cape Province. The CGS is therefore making progress towards securing 5% of the global exploration expenditure.

To improve CGS brand awareness, services and products, the Integrated Communication and Stakeholder Relations Strategy was implemented in the year under review. The CGS implemented the strategy in earnest and has started to reap the benefits of creating increased awareness, resulting in its growing public profile. The organisation continues to monitor the growth of its brand through tools such as stakeholder surveys.

As the national custodian of all geoscience data and information, the implementation of the Geoscience Act Regulations is reliant on ensuring adequate and holistic information and communications technology (ICT) infrastructure. Accordingly, the CGS developed a digital portal in various phases for the submission of geoscience data and information to enable compliance with the Geoscience Regulations. The CGS made further progress in Phase 1 of the project through the provision of mechanisms for the lodgement of physical geoscience data and information which can be fulfilled and inspected at any location and submitted at designated locations on CGS premises. In this regard, various exploration companies, mining companies and academic institutions that possess current and historical data have cooperated with the CGS by disclosing such geoscience data and subsequently arranging for such physical or digital data to be collected and delivered to the CGS.

In the year under review, the CGS successfully completed Phase 2 of the project, which digitises and automates the internal validation and evaluation of the lodged geoscience data and information**.** This was done to ensure that the CGS can meet its legislative obligations by providing the digital platforms for submission of geoscience data and information. The digital portal will also ensure compliance with different levels of confidentiality and integrity in respect

of the lodged geoscientific data and information (reports, physical boreholes, raw data, etc.).

The multiyear integrated digital migration project to convert historical analogue geoscience data, including publications, reports, seismograms, and maps into digital format through scanning, has made significant progress. To date, 112 154 documents (Figure 8) have been successfully scanned.

The CGS aims to enhance the implementation of the Geoscience Diplomacy thematic area in support of the national foreign policy intention to foster economic diplomacy and support programmes towards South Africa's contribution to building a **better Africa and world**, aligned with the United Nations Sustainable Development Goals 2030 and Agenda 2063 of the African Union. The geoscience programmes focus on aspects of human capital development, institutional reform, administrative and managerial/leadership, skills development and the implementation of mutually agreed programmes. During the year under review, the CGS signed a memorandum of agreement with the Instituto Geológico de Angola (IGEO). This strategic partnership seeks to cooperate on advancing national priorities, research, as well as geoscientific advice and development.

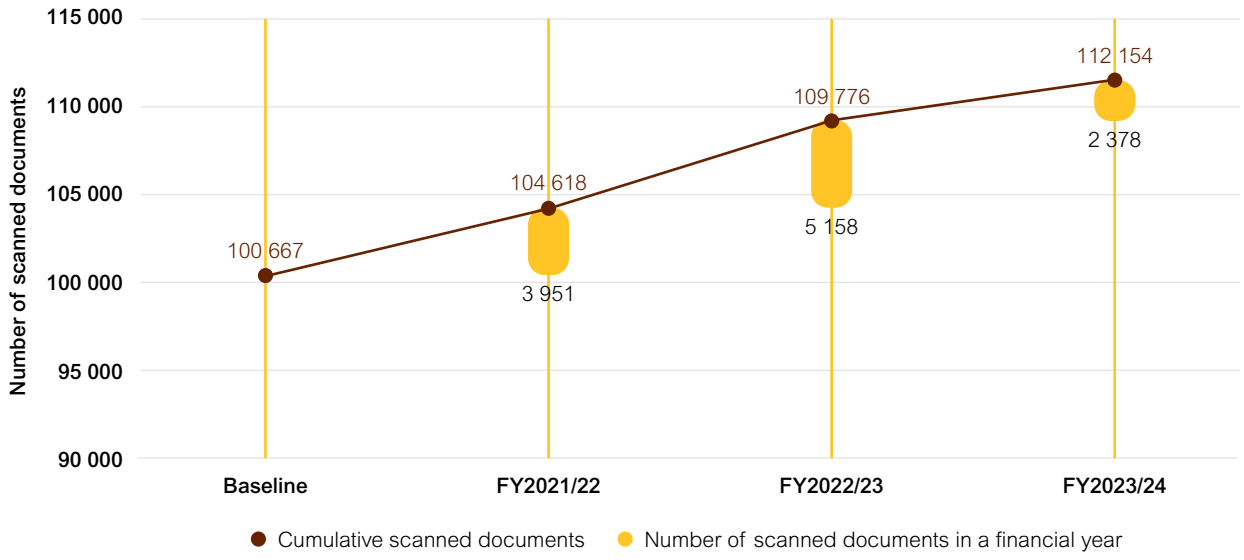


Figure 8: Strategic outlook and impact pathway of the CGS

3 Institutional Programme Performance Information

In accordance with the CGS strategy, a balanced scorecard methodology is used to provide an account of the overall performance of the organisation. The balanced scorecard essentially measures the performance of the CGS at a corporate business level and at an individual level. Five strategic programmes cover the CGS customers (stakeholders); internal business process (effective systems); learning and growth (world-class people); and financial growth perspectives (Figure 9). These programmes respond to seven institutional outcomes, as stipulated in the CGS's SP 2020–2025 and are aligned with Government's MTSF priorities. The strategic programmes also address the cross-cutting areas of women, youth and people living with disabilities.

The performance information of the CGS details its service delivery environment, broad service delivery disciplines, and the clients and stakeholders served. To evaluate the corporate performance of the CGS, the organisation has developed performance indicators which, together with the performance targets for 2023/24, are summarised in Table 2. Achievement of the targets for the output indicators for each strategic programme for the financial year under review are also detailed in Table 2.

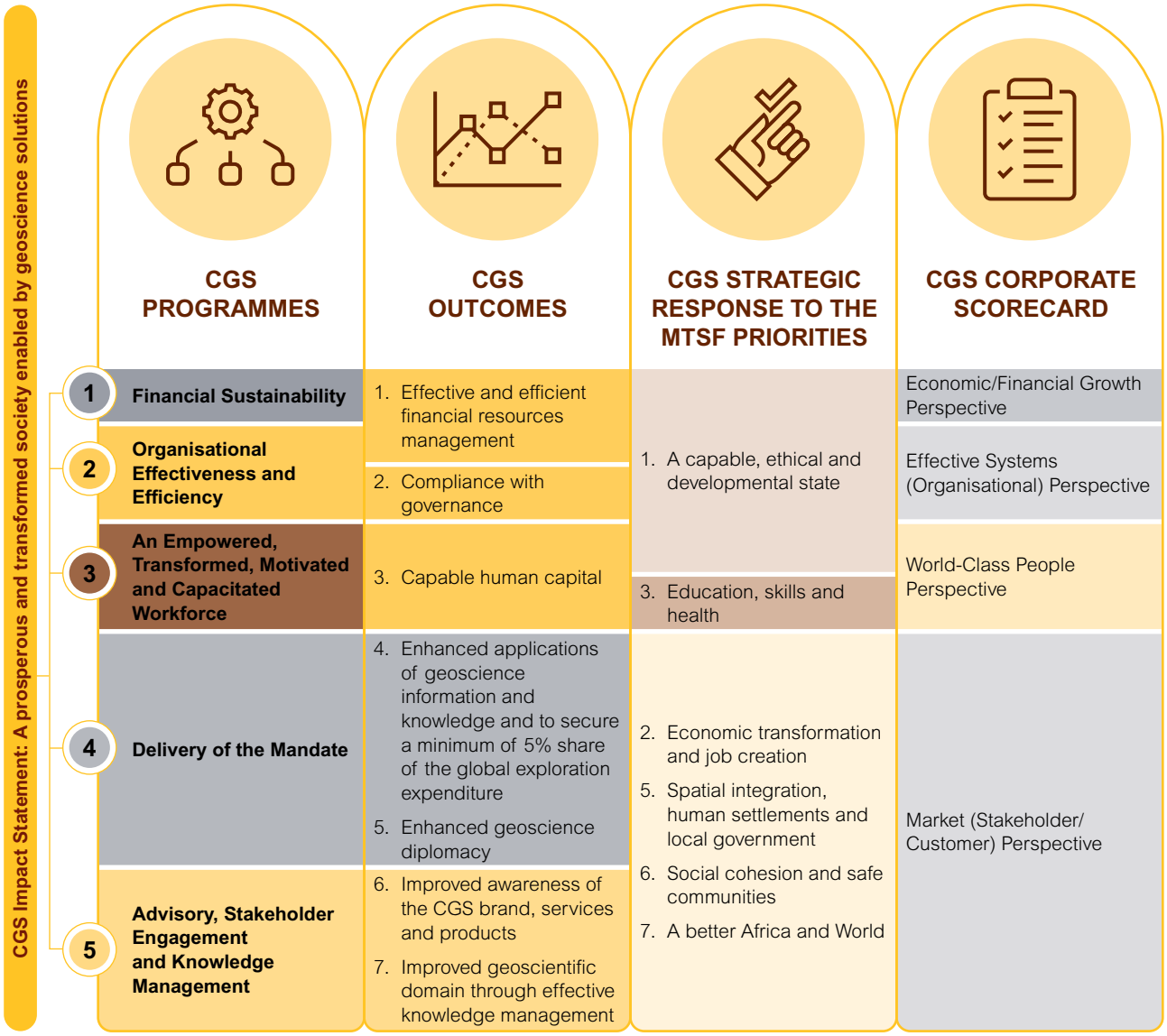


Figure 9: Summary of CGS programmes and links to MTSF 2019–2024 priorities and the corporate scorecard

3.1 Corporate Performance Report for 2023/24

Table 2: Corporate performance report against the tabled APP for 2023/24

Economic/Financial Growth Perspective								
Programme 1: Financial Sustainability **Purpose:** To ensure effective and efficient delivery of financial management services; to secure funding from the exploitation of collaborative activities and partnerships as well as to generate grant funding **Institutional outcomes of Programme 1:** Effective and efficient financial resources management								
Outcome	**Output**	**Output indicator**	**Audited actual performance 2021/22**	**Audited actual performance 2022/23**	**Planned annual target 2023/24**	**Actual achievement 2023/24**	**Deviation from planned target to actual achievement 2023/24**	**Reasons for deviations**
Effective and efficient financial resources management	Audited financial reports	1. Percentage of overhead costs to total costs	54.90%	60.67%	66%	52.09%	Not applicable*	Target achieved.
	Audited financial reports	2. Percentage of personnel costs to total costs	57.18%	52.41%	70%	44.82%	Not applicable*	Target achieved.
	Audited financial reports	3. Revenue from collaborative activities/ partnerships	R107.9m	R132.6m	R130.2m	R253.7m	+R123.5m	Target exceeded. Greater emphasis was placed on commercial projects to ensure that the CGS meets its targets, specifically with the Eskom and CCUS projects.
	Audited financial reports	4. Grant revenue	R464.3m	R420.3m	R559.4m	R580.3m	+R20.9m	Target exceeded. Baseline grant received in line with draw down schedule as well as deferred income from the prior year recognised in the current year.

* Not applicable: The planned target was a range rather than an absolute figure (Desired performance on the set target: A performance equal to or below the set threshold).

Effective Systems (Organisational) Perspective

Programme 2: Organisational effectiveness and efficiency

Purpose: To develop and implement effective and compliant policies, procedures and business processes in support of the CGS integrated service-delivery model; to adhere to best practice to achieve sustainable governance; to provide and operate flexible, expandable and secure ICT solutions

Institutional outcomes of Programme 2: Effective and efficient financial resources management and compliance with governance protocols/regulations

Outcome	Output	Output indicator	Audited actual performance 2021/22	Audited actual performance 2022/23	Planned annual target 2023/24	Actual achievement 2023/24	Deviation from planned target to actual achievement 2023/24	Reasons for deviations
Effective and efficient financial resources management and Compliance with governance protocols/ regulations	Audited annual report	5. Number of audit qualifications	0	0	0	0	0	Target achieved.
	Audited annual report	6. Percentage of total procurement spend on goods and services from small, medium and micro-enterprises (QSE and EMEs) in terms of the Preferential Procurement Policy Framework Act PPPFA of 2017	42.48%	49%	40%	53%	+13%	Target exceeded. This performance is due to a deliberate focus and targeting to procure from exempted micro-enterprises (EMEs) and qualifying small enterprises (QSEs).
	Availability report	7. Availability of key enterprise services	99.89%	99.62%	99%	100%	+1%	Target exceeded due to effective support and preventative maintenance of ICT services.

World-Class People Perspective

Programme 3: An empowered, transformed, motivated and capacitated workforce

Purpose: To attract and retain highly skilled scientific personnel in the geoscience industry; to build capacity in respect of geoscientific, administrative and managerial/leadership skills while also developing innovative products, systems and services; and to promote and invest in human resources transformation and diversity

Institutional outcomes of Programme 3: Capable human capital

Outcome	Output	Output indicator	Audited actual performance 2021/22	Audited actual performance 2022/23	Planned annual target 2023/24	Actual achievement 2023/24	Deviation from planned target to actual achievement 2023/24	Reasons for deviations
Capable human capital	Human resources reports	8. Percentage of scientific staff with Master's or Doctoral degrees	41.22%	48.51%	42%	56%	+14%	Target exceeded due to CGS Management's continual investment in learning and development initiatives.
	Human resources reports	9. Percentage of training expenditure to leviable amount of payroll	2.33%	1.93%	1%	2%	+1%	Target exceeded due to CGS Management's continual investment in learning and development initiatives.
	Human resources reports	10. Staff turnover rate	4.99%	7.89%	10%	10%	Not applicable*	Target not achieved due staff who left the organisation (i.e. through resignations, retirements, end of contract, death or dismissal) during the year under review.
	Human resources reports	11. Percentage of staff living with disability	1.86%	1.84%	1.8%	1.7%	-0.1%	Target not achieved due to exit of two employees with disabilities over the reporting period, which resulted in the decline of representation in this group.
	Human resources reports	12. EE Stats, scientific cohort (Female representation)	39%	42.57%	43%	49%	+6%	Target exceeded due to CGS Management's commitment to the Gender Diversification Programme.
	Human resources reports	13. EE Stats, Senior management (Female representation)	New measure	41.18%	50%	50%	0	Target achieved.
	Human resources reports	14. EE Stats, Top management* (Female representation)	20%	50%	50%	60%	+10%	Target exceeded due to CGS commitment to workplace gender diversification.

* Not applicable: The planned target was a range rather than an absolute figure (Desired performance on the set target: To achieve turnover lower than the target).

Market (Stakeholder/Customer) Perspective

Programme 4: Delivery of the mandate

Purpose: Execute the Integrated and Multidisciplinary Geoscience Mapping Programme

Institutional outcomes of Programme 4: Enhanced applications of geoscience information and knowledge; and to secure a minimum of 5% share of the global exploration expenditure as well as enhanced geoscience diplomacy

Outcome	Output	Output indicator	Audited actual performance 2021/22	Audited actual performance 2022/23	Planned annual target 2023/24	Actual achievement 2023/24	Deviation from planned target to actual achievement 2023/24	Reasons for deviations
Enhanced applications of geoscience information and knowledge and to secure a minimum of 5% share of the global exploration expenditure and Enhanced geoscience diplomacy	Onshore geoscience maps	15. Onshore geoscience map coverage	10.7%	12%	16%	16%	0	Target achieved.
	Offshore geoscience maps	16. Offshore geoscience map coverage	0.05%	0.11%	0.3%	0.3%	0	Target achieved.
	Value-added geoscience outputs such as integrated reports, 3D models, innovative solutions, mineral systems and emplacement models	17. Applied geoscience outputs for minerals and energy	4	7	9	10	+1	Target exceeded. This achievement is due to the implementation of the Exploration Programme to support South Africa's exploration strategy and its implementation plan.
	Value-added geoscience outputs such as integrated reports and, 3D models innovative solutions	18. Applied geoscience outputs for infrastructure, land use, health, groundwater and the environment	7	6	11	11	0	Target achieved.

Market (Stakeholder/Customer) Perspective								
Programme 5: Advisory, stakeholder engagement and knowledge management **Purpose:** To improve stakeholder relations through collaborations with strategically aligned institutions, the private sector and the general public **Institutional outcomes of Programme 5:** Improved awareness of the CGS brand, services and products as well as improved geoscientific domain through effective knowledge management								
Outcome	**Output**	**Output indicator**	**Audited actual performance 2021/22**	**Audited actual performance 2022/23**	**Planned annual target 2023/24**	**Actual achievement 2023/24**	**Deviation from planned target to actual achievement 2023/24**	**Reasons for deviations**
Improved awareness of the CGS brand, services and products	Media articles	19. Number of articles published on media platforms	24	48	32	64	+32	Target exceeded. This performance is due to aggressive implementation of the Integrated Communication and Stakeholder Relations Strategy to profile the CGS brand appositely in society.
	Stakeholder survey report	20. Stakeholder satisfaction level	66.4%	79.4%	70%	83%	+13%	Target exceeded. This is a result of focused and improved stakeholder engagements.
Improved geoscientific domain through effective knowledge management	Peer-reviewed articles published in scientific journals, book chapters and edited volumes	21. Number of peer-reviewed articles published	30	40	34	34	0	Target achieved.
	Examples: memoirs, bulletins, books and atlases	22. Number of CGS publications	8	12	10	10	0	Target achieved.
	Examples: abstracts, extended abstracts and conference papers and keynotes, etc.	23. Number of papers published in a conference proceedings	32	126	40	41	+1	Target exceeded due to participation in the 2023 Colloquium for African Geology (CAG'29).

Table 3: Performance linked to budget

Programme/activity/objective	2023/24 Budget R'000	2023/24 Actual expenditure R'000	2023/24 (Over)/ Under-expenditure R'000	2022/23 Budget R'000	2022/23 Actual expenditure R'000	2022/23 (Over)/ Under-expenditure R'000
Programme 1: Financial sustainability	59 138	51 735	7 403	65 013	73 566	(8 553)
Programme 2: Organisational effectiveness and efficiency	92 856	81 231	11 625	102 080	115 510	(13 430)
Programme 3: An empowered, transformed, motivated and capacitated workforce	13 242	11 584	1 658	14 557	16 473	(1 916)
Programme 4: Delivery of mandate	679 688	652 200	27 488	386 418	437 256	(50 838)
Programme 5: Advisory, stakeholder engagement and knowledge management	14 217	12 438	1 779	15 631	17 687	(2 056)
Total	**859 141**	**809 188**	**49 953**	**583 699**	**660 492**	**(76 793)**

Strategy to overcome areas of underperformance

Strategies to overcome areas of underperformance include:

- The CGS continues to position itself as the employer of choice by providing a conducive work environment, recognition of excellence, exposure to strategic projects and sound employee relations. In instances where employees leave the CGS, management commits to improving turnaround times in recruitment processes to curb lengthy vacancies.
- The CGS will continue with disability awareness campaigns focused on encouraging staff to declare any form of disability. It will target people with disabilities in its recruitment processes where practically possible and continue to provide reasonable accommodation for employees with disabilities.

4 Operational Highlights

4.1 Geoscience Technical Programme

The integrated and multidisciplinary approach of the CGS is the cornerstone of its Geoscience Technical Programme (GTP) and aims to contribute to the following thematic areas: Minerals and Energy; Health, Groundwater and the Environment; Infrastructure and Land Use; and Geoscience Innovation and Geoscience Diplomacy. The IMMP is currently implemented through the GTP and includes a collection of high-impact geoscientific research and mapping projects. In the year under review, the GTP comprised statutory and commercial projects. Highlights of the GTP's progress during 2023/24 are discussed in the following sections.

4.1.1 Geoscience for minerals and energy resources projects

During 2023/24, several key contributions were made towards South Africa's mineral and energy development aspirations. These include:

- Expanding South Africa's 1:50 000-scale onshore geoscience mapping coverage
- Extended offshore data collection which aims to accelerate South Africa's 1:50 000-scale offshore coverage.
- The production of 10 value-added minerals and energy outputs specifically focusing on base metals in Limpopo Province, geothermal energy potential and research on CCUS.

4.1.1.1 Onshore Geoscience Mapping Programme

The CGS Onshore Geoscience Mapping Programme made notable progress in expanding South Africa's onshore geological coverage. Coverage increased to 16% (Figures 10 and 11) across the mapping regions. This expansion is testament to the commitment made to provide comprehensive geological data for South Africa. The programme also resulted in the compilation of fundamental geoscience datasets that serve as a basis for value-added geoscience outputs in support of national developmental imperatives and the strategic objectives of the CGS. The programme has seen publications of critical mineral and energy outputs in various parts of the country, including the Provinces of KwaZulu-Natal, Northern Cape and Limpopo.

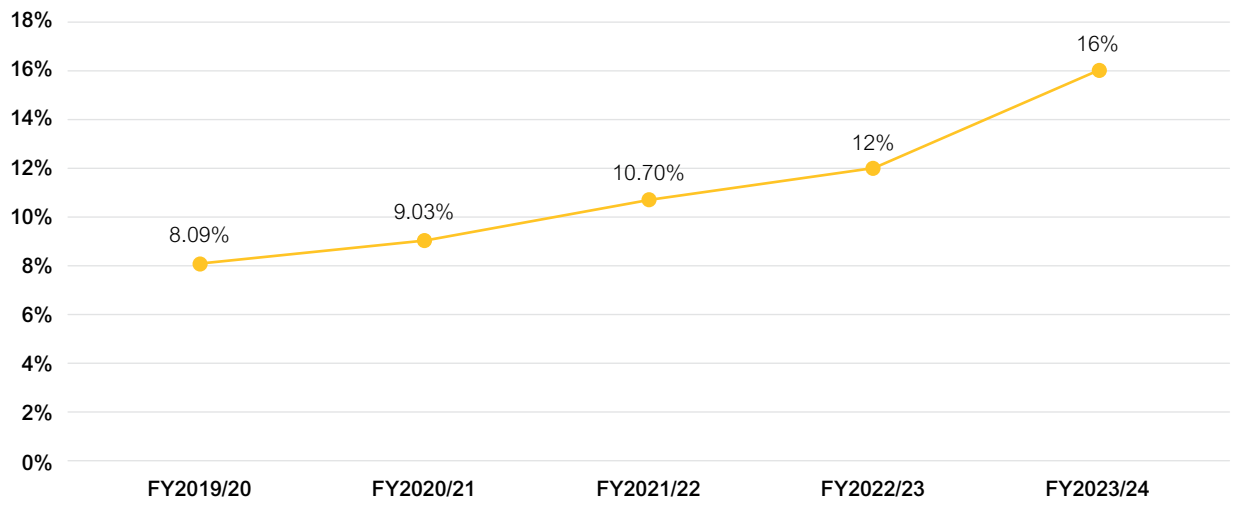


Figure 10: Percentage of onshore geoscience map coverage in the MTSF 2019–2024

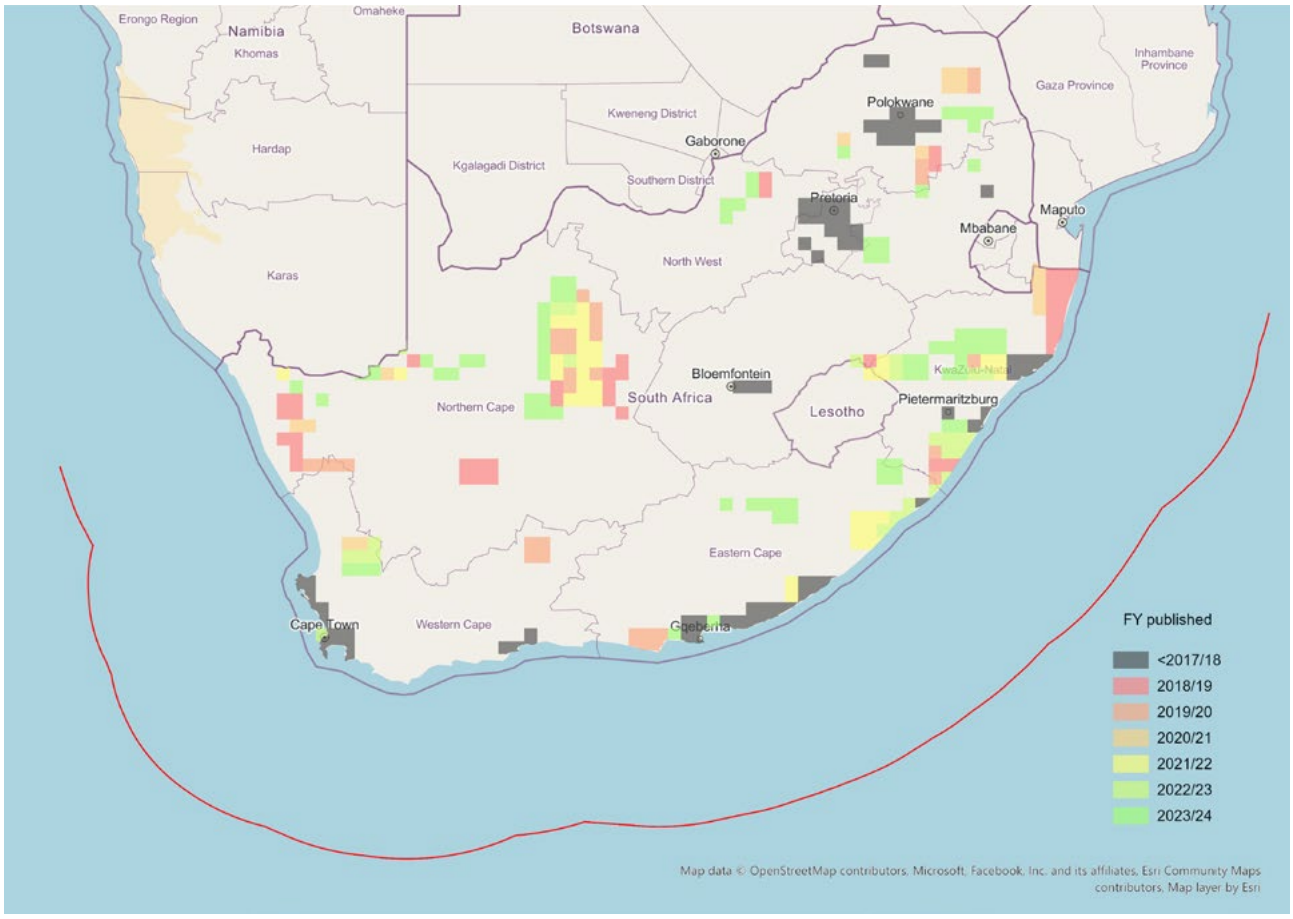


Figure 11: Progress made with national onshore map coverage by the end of FY2023/24

4.1.1.2 Offshore Geoscience Mapping Programme

The Offshore Geoscience Mapping Programme aims to compile a comprehensive geoscientific understanding of South Africa's offshore region towards unlocking the full potential of the blue economy of the country. South Africa's offshore exclusive economic zone (EEZ) covers significant extent which remains largely unexplored. As such, extensive mapping is required to characterise offshore territories and inform development planning requirements. Considering the largely unexplored nature of the offshore regions, re-prioritisation of geoscience mapping initiatives at the appropriate scale is advanced in obtaining a regional geological view, ahead of acquiring high-resolution geoscientific information. Furthermore, comprehensive inclusion of all offshore territories of South Africa – including islands and the country's demarcated EEZ – is considered holistically in mapping initiatives as an improved future approach, in contrast to the current approach that focusses on regions along the mainland of South Africa and its EEZ. By implication, the cumulative extent of mapping coverage is increased to accommodate all offshore territories of South Africa.

Offshore geoscience mapping initiatives to date focussed on high-resolution data acquisition along the near-shore regions, employing multibeam echosounder, pinger sub-bottom profiler and boomer sub-bottom profiler techniques to map the seafloor. The acquired data is processed using improved codes and algorithms, specifically for seafloor research. During 2023/24, offshore coverage increased to 0.3% (from 0.11% in previous years). This resulted from the publication of three offshore geoscience maps (i.e. 3418BA_Mitchell's Plain, 3418BB_Gordons Bay and 3418BC_Flase Bay) in the Western Cape Province and marks the most significant progress ever made in one year by the programme.

4.1.1.3 Mineral Mapping Programme

The CGS's Mineral Mapping Programme is responsible for providing geoscience data to support the characterisation and development of various mineral and energy resources in South Africa. These resources include base metals, precious metals and agricultural minerals, each of which plays a crucial role in technological advancement and industrial growth.

During the 2023/24 reporting period, three key geoscience outputs were produced, namely the Geochemical Synthesis Report of the Eastern and Northern Bushveld

Complex, the Integrated Mineralising Systems Report in Limpopo, and Remote Sensing in Support of Integrated Geoscience Mapping in Namaqualand. These have contributed to the characterisation of mineral resources and an improved understanding of regional mineralising systems. Moreover, the reports serve as a valuable resource for exploration companies, investors, and researchers seeking to understand the mineral wealth of these regions.

4.1.1.4 Energy Mapping Programme

The CGS's Energy Mapping Programme undertakes fundamental research with a view to supporting South Africa's just transition towards a low-carbon economy. To this end, the CGS continues to develop the fundamental and requisite geoscience data and information to support the characterisation and development of energy-linked resources in support of South Africa's just transition. The programme investigates various hydrocarbon and other natural gases in the Karoo region as well renewable energy resources, such as geothermal systems.

During 2023/24, work focused on renewable and sustainable energy sources. Considerable efforts were directed at KwaZulu-Natal and Limpopo provinces to understand the geothermal energy potential. Reports on the feasibility and viability of harnessing geothermal energy as a renewable resource from Shu-Shu and Tshipise were produced. Crucially, a value-added report on the characterisation of a proposed carbon sequestration site in Govan Mbeki Municipality, Mpumalanga, South Africa was published, which is a critical initiative in South Africa's pursuit of sustainable and environmentally responsible energy solutions.

4.1.1.5 Minerals Exploration Programme

The role of the CGS in aiding economic development and transformation in South Africa is well enshrined in the Geoscience Amendment Act (No. 16 of 2010). The mandate is extended to include promoting the search for and the exploitation of minerals in the republic, as well as to undertake any reconnaissance operation, prospecting and other related activities with a view to catalysing exploration activities. This has a direct impact on the exploration implementation plan target of capturing a minimum of 5% of total global exploration investment.

The implementation of the exploration programme is expected to increase the exploration outlook of South Africa and expedite and increase a pipeline of projects likely to graduate into mining. To this effect, the CGS was allocated additional budget in the current MTEF cycle to accelerate geoscience mapping in support of exploration. Onshore geoscience map coverage has increased to 16%, while offshore mapping attained 0.3 %. The Geoscience Mapping Programme is uncovering new areas of interest for investment in exploration and every effort is being made to coordinate the information to attain its intended objective.

4.1.1.6 Carbon Capture, Utilisation and Storage Project

The CCUS Project is another critical initiative towards South Africa's pursuit of sustainable and environmentally responsible energy solutions. Co-funded by the South African Government and the World Bank (WB), the duration of the WB funding came to an end on 29 February 2024. The project aims to establish the country's first pilot-scale anthropogenic carbon dioxide sequestration site, with the Govan Mbeki area in Mpumalanga Province identified and proposed as the injection site. This strategic location places the project close to major carbon dioxide emitters and significant coal reserves. During 2023/24, the CCUS Project achieved several milestones. Key highlights include the completion and publication of a geological characterisation report (Figure 12), completion of the environmental and social impact assessment (ESIA), and a detailed engineering design to ensure the safety and efficiency of the project. In addition, continuous stakeholder engagement activities were conducted. The geological characterisation report has been externally reviewed, confirming the geological feasibility of the targeted basalt formations. It further sheds light on other possible geological storage options in the area. The detailed engineering design and feasibility study has revealed an estimated storage capacity in the chosen site of up to 34 gigatons.

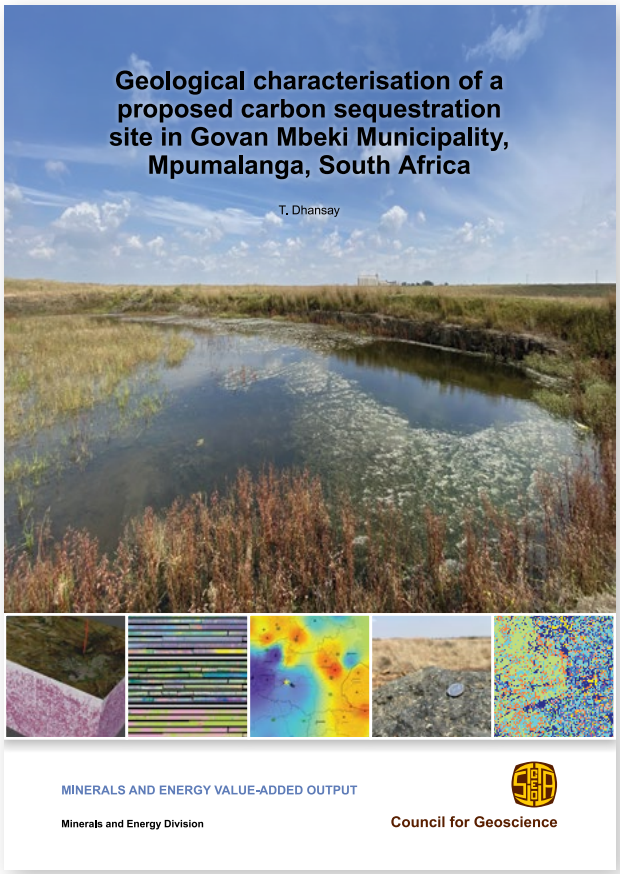


Figure 12: Cover page of the geological characterisation Report (2023) of the proposed CCUS pilot site near Leandra, Govan Mbeki Municipality

The CGS has forged successful strategic partnerships with Sasol, the Development Bank of Southern Africa, Exxaro and ArcelorMittal and is looking at further capture technologies and utilisation opportunities for the captured CO_2. Currently, the CGS is gearing up for Phase 2 of the project which entails construction of the pilot plant and injection at the pilot plant site. CO_2 has been sourced from Sasol, which is located 30 km from the pilot site.

4.1.2 Geoscience for infrastructure and land use projects

Under the theme, Geoscience for Infrastructure and Land Use, the CGS produced six value-added geoscience outputs, the majority of which were commercial in nature. These include integrated reports on feasibility levels of dolomite stability, geotechnical investigations in the Gauteng Province as well as probabilistic seismic hazard analysis (PSHA) for the Duynefontyn nuclear site, Western Cape Province. Other outputs include geotechnical series maps of Port St Johns.

The Duynefontyn Project is a commercial project, which the CGS is undertaking for Eskom in support of the licensing of the Duynefontyn nuclear site which hosts the Koeberg Nuclear Power Station. The primary activity involves a PSHA in line with the Senior Seismic Hazard Analysis Committee (SSHAC) Level 2 methodology, which is outlined in the nuclear regulations of the United States Nuclear Regulatory Commission (USNRC), while also adhering to all regulations and guidance of the National Nuclear Regulator (NNR). The PSHA is supported by a number of geological investigations into the regional geology, historical and instrumental seismology of the Western Cape, as well as an analysis of local site conditions. The majority of geological investigations and the PSHA were concluded during 2023/24. Work on a probabilistic tsunami hazard analysis (PTHA) for the site is ongoing.

4.1.3 Mandatory and statutory projects

The Geoscience Act (No. 100 of 1993) as amended, requires that the CGS undertake various mandatory functions, inter alia:

1. Operation and maintenance of the national seismograph network, the national geophysical test site and the national physical properties database
2. Provision of science-based evidence to State Authorities in the field of geohazards and geotechnical assessments to ensure safe development on dolomitic land.

4.1.3.1 Seismic monitoring and network maintenance

The purpose of the Seismic Monitoring and Network Project is to monitor and report on the occurrence of seismic events in and directly around South Africa. The South African National Seismograph Network (SANSN) has updated the databank with 5 505 epicentral solutions. The mine cluster network analysis located 5 980 events, with the far West Rand being the most seismically active and accounting for 82% of all events analysed. Moreover, an integrated parametric earthquake database was developed and updated, combining data from the SANSN and relocated mine cluster networks, and thus ensuring the availability of the latest parametric data for seismic hazard analysis.

4.1.3.2 National geotechnical report reviews

The CGS is also mandated by the Geoscience Act to review geotechnical reports and advise authorities on geohazards affecting infrastructure development and has been undertaking this advisory function since the 1950s. During 2023/24, the CGS received and reviewed **1 029** submissions, handled 477 technical queries, and held 51 meetings regarding development on dolomite land. A total of **565** letters of comment were issued, with an average turnaround time of 30 days. The CGS has also centralised and digitised information to develop geoscientific products that are accessible through a web portal.

4.1.4 Geoscience for health, groundwater and the environment projects

The Geoscience for Health, Groundwater and the Environment theme promotes environmental stewardship, particularly in areas prone to contamination through activities such as mineral exploration and exploitation. Under this theme, sources of groundwater are identified and delineated for communities, industries, and agriculture. Interventions such as artificial groundwater recharge are also considered as a continued subject of scientific research.

4.1.4.1 Mine and Environmental Water Management Programme

The Mine and Environmental Water Management Programme (MEWMP) continues to support the recommendations of the Mine Water Action Plan in developing mitigation interventions to sustainably manage mine water in the country. Research was undertaken under nine tasks, namely: Ingress control, Long-term Witwatersrand mine water management, Passive treatment, Coexistence of mining and environment, Geopolymer liner research, Air quality and climate change, Portal management, Coastal planning and management, and Sustainable development goals management. Importantly, during the year under review, the CGS continued to assess key groundwater ingress points in the East Rand basin to continue contributions to safeguarding water resources.

4.1.4.2 Integrated Research into Mine Closure

The focus of the Integrated Research into Mine Closure (IRMC) Project is twofold: support of the National Mine Closure Strategy (NMCS), and research into pre- and post-closure planning. Following the gazetting of the

NMCS, the implementation plan was completed, taking into account research outcomes and comments resulting from the consultation process. The research component of the project aims to assess the potential post-mining use of mining regions. Investigations are being carried out into soil, air and water quality and other physical properties such as ground stability. In the financial year under review, the extent of post-mining subsidence was investigated in the Klerksdorp–Orkney–Stilfontein–Hartebeesfontein (KOSH) area and in Mpumalanga Province. This is an ongoing project, and the integrated products will be presented in coming financial years. Progress has been made on the programme for the 2023/24 financial year in the following tasks: National Mine Closure Strategy and the Review of Derelict and Ownerless Mine Strategy; and Guidelines for the Implementation of National Mine Closure Strategy in the areas of ground stability, soil chemistry, surface and groundwater, and air quality.

4.1.4.3 Groundwater Assessment and Management

The CGS has undertaken hydrogeological mapping with the aim of understanding groundwater resources around areas of strategic minerals and energy projects. Understanding groundwater resources assists in ensuring sufficient monitoring and environmental preservation during the exploitation of minerals and other activities such as carbon capture, injection and storage. In the reporting period, mapping focussed on the Mpumalanga and KwaZulu-Natal Provinces, in both cases relating to the CCUS Project. Three 1:50 000-scale maps were completed in the vicinity of Delmas, Jozini and Evander. The hydrogeological mapping is in line with the Mapping Project undertaken by the CGS and aims to provide fundamental and reliable groundwater information on groundwater occurrences for various stakeholders. This will be achieved by mapping aquifers to assess groundwater quality and quantity distribution for better water resource planning, management and development. The project further aspires to provide information on groundwater resource potential and aquifer geology to professional and non-professional map users.

Notably, the Delmas and Evander 1:100 000 scale hydrogeological maps are envisaged to serve as baseline geoscientific information as part of the environmental safeguarding and future monitoring activities to allow for the safe injection of carbon dioxide at piloting stages.

Application of groundwater modelling is a developing field in the CGS and finds expression in various projects such as regional groundwater assessments. Increased testing is being undertaken and the applications being developed continue to improve confidence in the risk maps and groundwater-potential maps, based on Artificial Intelligence and machine learning applications. In the light of water scarcity and associated risks, geoscientific investigations into managed aquifer recharge are focussing on the identification of areas where managed aquifer recharge can be applied.

4.1.5 Geoscience diplomacy

In keeping with the strategic focus of the Geoscience for Diplomacy thematic area, the CGS continued to serve as technical advisor to give effect to the country's foreign policy in various multi-lateral treaties that South Africa has elected to ratify as a member of the global community of nations. During 2023/24, scientific work focused on the continuation of projects in Eswatini and Namibia, including the production of various integrated geoscience datasets. The final geological maps for the Namibian project were officially handed over to the Geological Survey of Namibia during the year, with ongoing training initiatives and finalisation of an integrated report to impart the regional knowledge and understanding gained for integration into geologically similar terrains along the larger Orange River basin region of South Africa. Following the successful completion of phase 1 of the Eswatini Project, phase 2 is being rolled out and includes the production of various integrated geoscience datasets in support of the respective minerals and energy developmental imperatives. Through the Diplomacy Programme, the CGS continued to provide technical support to diplomatic missions undertaken to South Sudan, Ivory Coast and Niger, with a view to finding areas of common benefit and applying innovative geoscientific techniques to accelerate development. The CGS, having been appointed as the Organisation of African Geological Surveys (OAGS) secretariat on a permanent basis, facilitated the strengthening of geological surveys and Pan-Africanism amongst the various member states across the continent.

Beyond the borders of the African continent, the CGS continued to serve as the technical expert on waveforms for the South African Council for the Non-Proliferation of Weapons of Mass Destruction. The council oversees implementation of the Non-Proliferation of Weapons of Mass Destruction Act (No. 87 of 1993), which feeds into the Treaty on the Non-Proliferation of Nuclear Weapons under the auspices of the Comprehensive Test Ban Treaty (CTBT). To this effect, a CGS scientist, Ms Tebogo Matlou, was duly appointed as vice-chairperson of Working Group-B, which is responsible for technical and scientific issues related to the ratification and implementation of the treaty across approximately 187 member states.

Furthermore, the CGS participated in the Conference of Parties (COP) 28, held in Dubai in November and December 2023, to advance the substantial progress made towards decarbonisation imperatives through the CCUS intervention, and focussing on geological characterisation and subsequent pilot injection of anthropogenic carbon dioxide.

5 Geoscience Knowledge and Information Management Services

The management of the CGS's mineral and fossil collection, borehole cores, digitisation of analogue records, and the distribution of associated data and information remain integral to the organisation's operational effectiveness. To enhance the national geoscience knowledge base, the CGS continues to evaluate its geoscientific repositories. In the year under review, the Digitisation Programme made significant progress with the scanning of over 2 378 records, comprising physical reports and maps, including records from the CGS regional offices.

The implementation of the GTP substantially relies on new and existing high-quality data and information. Knowledge management has been instrumental in providing high-quality spatial data which is essential for the development of scientific databases and the facilitation of map production. This wealth of spatial data and information is readily accessible through the data management portal and enterprise geodatabases, catering to the needs of both internal and external stakeholders.

The newly refurbished National Geoscientific Library and Information Centre remains a vital resource for the management of physical data and information for both internal and external users. The centre plays a crucial role in collecting, organising, and disseminating valuable geoscientific information to support research, exploration, and decision-making processes in various fields. With its updated facilities and enhanced capabilities, the centre continues to uphold the CGS's commitment to providing access to a wealth of knowledge and resources for the benefit of the scientific community and beyond.

The CGS initiated a dedicated three-year Geoscience Database Audit Programme to support the IMMP and establish a framework for an integrated geoscience data solution. This initiative is designed to address the diverse nature of data and information collected within the organisation. The audit evaluated the intended purpose of the data collected, determined whether the data still aligns with the organisation's objectives, and assessed its effectiveness in serving its intended purpose.

The assessment of the CGS Head Office palaeontology collection continues and entails a thorough comparison of each specimen's physical attributes with existing catalogues, records, and labels. Any inconsistencies identified are documented to ensure the collection maintains its status as a dependable resource for research and academic study. Additionally, the CGS undertook extensive experimentation with 3D photogrammetry techniques to digitally capture fossil specimens. The aim of this initiative is to investigate the potential advantages of integrating these technologies, which could offer an added layer of preservation for these invaluable heritage artefacts.

To further contribute to the national geoscience body of knowledge, the CGS continues to execute borehole core recovery campaigns. Notably, prominent cores were scanned using the CGS hyperspectral scanner and subsequently stored at the National Borehole Core Depository during 2023/24. These cores originate from projects such as the International Continental Scientific Drilling Programme (ICDP), Duynefontyn Probabilistic Seismic Hazard Analyses (PSHA), and the CGS CCUS Project. The scanning room of the National Borehole Core Depository is currently undergoing improvement through expansion and installation of a power-driven modular conveyor roller table to facilitate the transportation of cores to and from the hyperspectral scanner.

6 Information and Communications Technology

During 2023/24, the following key ICT activities were undertaken to improve the effectiveness and efficiency of the CGS.

6.1 Availability of key enterprise services

ICT value is created by providing a connected information community with effective and efficient access to geoscience information and services. For the period under review, various ICT solutions, maintenance, assessments and monitoring measures contributed to an overall achievement, on average, of 100% service availability, which is slightly above the target of 99%.

The overall efficiency and effectiveness of the CGS was enhanced through continuous monitoring, and maintenance of systems.

6.2 Cybersecurity and technological enhancement

6.2.1 Cybersecurity

The CGS has entrusted various assurance bodies, such as the State Security Agency (SSA), with continuously surveying the CGS's cybersecurity risk landscape and keeping the CGS informed of potential risk in its cyberspace. Various cybersecurity tools and controls such as policies, firewall devices and maintenance remained in place to maintain the secured cyberspace posture and assets of the CGS during 2023/24.

To further strengthen the CGS's cybersecurity environment, the CGS implemented multilayered authentication to reduce the risk of theft of users' login credentials. Continuous user awareness training on cybersecurity to educate staff on emerging cyber threats, and the role of each staff member in maintaining the CGS cybersecurity posture, was conducted during the financial year.

6.2.2 Technological enhancement

During 2023/24, the CGS appointed a new service provider to conduct a thorough assessment of the current CGS systems landscape, and to design, configure and implement an enterprise resource planning (ERP) system with all the functionalities/processes/modules required to address the CGS's requirements.

The main purpose of this project, titled Project GeoSync, is to provide an integrated solution and a single view of the organisation's information, processes, and operations, as well as improve service offerings to employees, stakeholders, and the Board. The ERP system should offer functionality in all business units and be accessible to the Head Office in Pretoria as well as all regional offices.

The CGS launched the revamped website, intranet, mobile application, OAGS and African Seismological Commission (AfSC) website during the review period. The modernised website now incorporates, among other things, an online job application tool as well as the Geoscience Act Regulation portal which enables the collection of geoscience data and information. In addition, the CGS has developed a mobile application to modernise the publication of geoscience information, including the disseminating of seismic event alerts.

The provision of a mobile application, revamped website and intranet translates into improved CGS efficiency and effectiveness. The revamped website and mobile application are crucial to the digital transformation of the CGS's public service delivery and to facilitate effective information dissemination between the CGS and the geoscience community.

6.3 Business continuity

During 2023/24, the CGS enhanced its Disaster Recovery Plan including conducting various backup and recovery tests on critical systems to identify areas of improvement and remediation to ensure business continuity should a disaster occur. Continuous improvement of the organisation's Business Continuity Plan remains a focus area for the CGS.

7 Geoscience Research Outputs

The CGS disseminates the results of its research to stakeholders via a publication series, including, but not limited to memoirs, bulletins, explanations, media articles, and conference proceedings. These outputs are presented in sections 7.1 to 7.3. By refocussing on its mandate and the acquisition of new multidisciplinary data, the CGS forged new external collaborations and partnerships and was able to produce additional publications.

The CGS continued to give credence to the advancement of the body of geoscientific knowledge through its dissemination platforms. The result of its research is shared with stakeholders via a series of publications, including memoirs, bulletins, explanations, media articles, conference proceedings and peer-reviewed scientific articles. These outputs are presented in sections 7.1 to 7.3. By refocussing on its mandate and the acquisition of new multidisciplinary data, the CGS forged new external collaborations and partnerships and was able to produce additional publications. In giving effect to this focal point of the mandate, the CGS contributed a substantive number of co-authored peer reviewed articles through continued scientific collaborations with other geoscientists, and further authored its own papers.

7.1 CGS publications

(CGS staff are indicated in bold)

1. Abstract Book (2023). Council for Geoscience Quarterly Technical Workshop.
2. **Botha, G.A.**, Porat, N., **Marè, L.** and **Havenga, M**. (2023). Memoir 105: The geology of Maputaland.
3. Geoclips volume 70, June 2023, 10 pp.
4. Geoclips volume 71, September 2023, 11pp.
5. Geoclips volume 72, December 2023, 11pp.
6. Geoclips volume 73, March 2024, 8pp.
7. **Marè, L.P**. (2023). Petrophysics Series: volume 4. Seismic velocities of South African rocks.
8. **Marè, L.P**. (2023). Petrophysics Series: volume 3. Time-domain resistivity of South African rocks.
9. **Reddering, J.S.V.**, Rohwer, M.H., Majokweni, L.B. and Roberts, M.P. (2024). Geological Explanation: The geology of the Wild Coast area.
10. **Tegegn, K.**, **Mashiloane, L.**, **Lombard, D.** and Gabavana, C. (2024). Geotechnical explanation: National Geohazards Mapping Programme (NGMP): Port St Johns geotechnical map explanation.

7.2 Peer-reviewed articles

(CGS staff are indicated in bold)

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2. Bayon, B.L., Plunder, A., **Thomas. R.J.**, Fullgraf, T., Chales, N., Nyalugwe, V., Boger, S.D., Lach, P., Frei, D. and Lahaye, Y. (2024). Crustal evolution of the northern Nyika subdomain of the Palaeoproterozoic Ubendian Belt in Malawi. https://doi.org/10.1016/j.jafrearsci.2024.105216
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12. Esteban, I., **Cawthra, H.C.**, Pargeter, J., and Fisher, E.C. Waterfall Bluff, Eastern Cape Province. (2023). In: Beyin, A., Wright, D.K., Wilkins, J., Olszewski, D.I. (Eds.) Handbook of Pleistocene Archaeology of Africa. Springer Nature, Cham, Switzerland. pp. 115-116. ISBN-13:978-3031202896. https://link.springer.com/chapter/10.1007/978-3-031-20290-2_115#DOI
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7.3 Conference proceedings

(CGS staff are indicated in bold)

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2. Castleman, B., **Doucet, F.J.** and Van Der Merwe, E.M. (2023). Thermochemical treatment as a promising process for the valorisation of diamond mine residues. The Southern African Institute of Mining and Metallurgy Hybrid Conference, 24–25 October 2023, Johannesburg.
3. **Cawthra, H.C.**, Jacobs, Z. and Marean, C.W. (2023). A review of the coastal and marine Pleistocene deposits of the southern Cape of South Africa. INQUA 2023, Rome, Italy. 13–20 July 2023.
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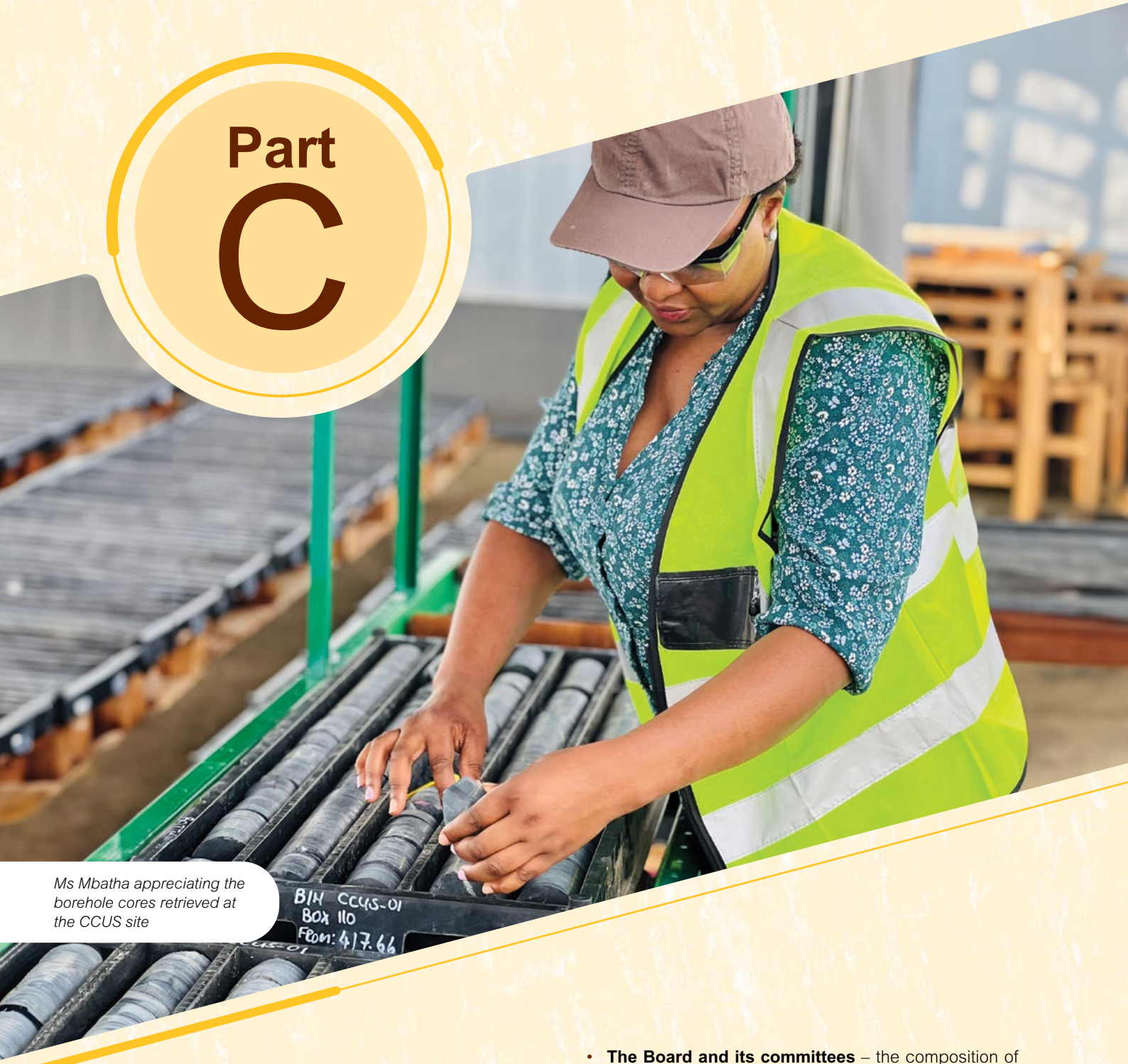
Mr Maupa, CCUS Geoscientist, explaining how the drill rig machine operates

Part C



Ms Mbatha appreciating the borehole cores retrieved at the CCUS site

Governance

Corporate governance at the CGS embodies systems, structures and processes by which the entity is directed, controlled and held to account. Governance is applied through the prescripts of the enabling Act of the CGS, the Geoscience Act (No. 100 of 1993) as amended, the PFMA (No. 1 of 1999) as amended, National Treasury Regulations, the Protocol on Corporate Governance in the Public Sector, and policies of the organisation. This part of the report details the organisation's governance systems, structures and processes.

- **The Board and its committees** – the composition of the Board and committees, Board induction, Board remuneration and conduct, and role and responsibilities of the Board
- **Compliance with laws and regulations** – the status of CGS compliance with legislative prescripts
- **Internal control and risk management** – the risk management framework implemented and the effectiveness of internal controls in the organisation
- **Fraud and corruption** – measures to detect and combat fraudulent activities
- **Internal audit** – activities of the internal audit function
- **Quality assurance** – status of quality assurance
- **Health, safety and environmental issues** – compliance with safety, health, environment and quality standards.

1 Executive Authority

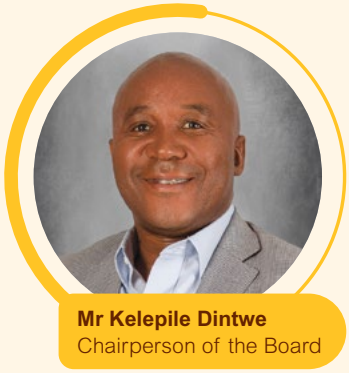
The Minister of Mineral Resources and Energy (The Minister), through the CGS Board, is accountable for the control, management and performance management of the CGS. Accordingly, the organisation submits reports quarterly and annually in terms of National Treasury Regulation (26.1) to the DMRE, on 30 April, 31 July, 31 October and 31 January, unless directed otherwise by National Treasury.

2 Board of the Council for Geoscience

2.1 Board composition and duties

The Minister appoints the CGS Board. The term of the previous Board ended on 30 April 2023, and the current Board was appointed with effect from 1 June 2023 in terms of section 4 of the Geoscience Act (No. 100 of 1993) as amended. The Board includes the Chairperson (independent), ten non-executive members, two alternate members and the CEO (executive member).

2.2 The Current Board – 1 June 2023 to 30 May 2026



Mr Kelepile Dintwe
Chairperson of the Board

Mr Dintwe has over 25 years' experience in the gold mining industry and was appointed Chairperson of the CGS Board on 1 June 2023. He is currently leading the Business Improvement and Technology undertaking at Harmony Gold Ltd, where he started in 2021. He has 13 years' cumulative experience in various technical and junior management roles at AngloGold Ashanti Ltd (AGA) and 10 years' cumulative experience in various senior management roles at AGA, including that of Vice President across several corporate disciplines such as Business Strategy; Business Planning; Investor Relations; Government and Community Relations; and Environmental Management. He also completed a three-year secondment as an expatriate worker in the role of Vice President at the AGA business in West Africa, Republic of Ghana. His production operational leadership as a General Manager covers several deep-level underground mines, surface re-mining operations and various gold metallurgical plants. His career highlights outside the mining sector include managerial roles in the Altron Group (Willard Batteries) and Engineering Manager accountabilities at Eskom's Grootvlei Power Station's RTS project. His leadership experience in a governing body includes Board appointments in AGA Ghana Ltd subsidiaries and recently as Board Chairperson of the South African-based Bigen Africa Group Holdings. He holds a BSc Electrical Engineering degree from the University of the Witwatersrand and an Executive Leadership Development Programme qualification through the University of Pretoria in partnership with Harmony Gold.

Mr Mosa Mabuza
Chief Executive Officer

Mr Mabuza holds a BSc (Hons) in Geology and a Postgraduate Diploma in Business Administration. He was re-appointed as a member of the CGS Board on 1 June 2023. He is the CEO of the CGS having been appointed on 15 July 2017. His contract was renewed, effective 15 June 2022, for a five-year term. He served, among others, at De Beers as an Explorationist, Laboratory Geologist and Senior Business Analyst; at the DMRE as Chief Director of Mineral Promotion; at Anglo American Platinum as Head of Government Relations; and at the DMRE as Deputy Director-General for Mineral Policy and Promotion.

Mr Xolisa Mvinjelwa
Deputy Board Chairperson

Mr Mvinjelwa holds a BSc in Chemistry from the University of Cape Town, a Master's degree in Business Administration and a Certificate in the Management of Advanced Programmes from the University of the Witwatersrand Business School. He also holds a Diploma in Production Management from the Production Management Institute of South Africa. He was re-appointed Deputy Chairperson of the CGS Board on 1 June 2023. He has over 30 years' experience in the mining industry, having started his career at Vereeniging Refractories (Anglo American subsidiary) as a Technical Assistant in the R&D Department, and progressed through the company as a Process Controller, Quality Superintendent, Plant Manager, Market Analyst and Technical Sales Representative. He later joined Rhino Minerals (ANGLOVAAL subsidiary) as an Assistant Technical Marketing Manager where he was responsible for developing new markets globally. He has been working for IMERYS South Africa (IMERYS subsidiary) for the past 20 years and has occupied various positions, including Sales & Marketing Manager; Director: Special Projects; Head of HR, Policy & Strategy; Head of Strategy & Corporate Services; and Board Secretary. He is currently Executive Director: Ethics & Transformation at IMERYS South Africa and Chairman of the Social & Ethics Committee of the Board. He serves on various boards of companies mainly in mining and associated industries. He is Chairman of Coastal Fuels, which is a junior coal mining company with coal assets. He is also Chairman of Ticamode, a B-BBEE company and a partner of IMERYS.

Advocate Ntika Maake
Board member

Advocate Maake was re-appointed as a member of the CGS Board on 1 June 2023. He holds B. Iuris and LLB degrees; a Diploma in Corporate Governance (Unisa); a Diploma in Project Management (Executive College); a Postgraduate Certificate in Climate Change and Energy Law; a Postgraduate Certificate in Water Law (University of the Witwatersrand); and a Master of Laws degree in the Extractive Industries in Africa. He is an LLD Candidate in Property Law (Property Clause) (University of Pretoria). He has served several public entities, including Eskom Holdings, the City of Tshwane and the Department of Justice and Constitutional Development. He is currently Chairperson of the Water Tribunal at the Department of Human Settlements, Water and Sanitation. Advocate Maake is also a Member of the Disciplinary Committee of the Premier Soccer League.

Mr Andries Moatshe
Board member

Mr Moatshe was re-appointed as a member of the CGS Board on 1 June 2023. He holds a Master's degree in Environmental Management and a Higher Diploma in Public Health. He is currently working for the DMRE as Chief Director for Mine Environmental Management and has contributed to the department's policy development.

Dr Mayshree Singh
Board member

Dr Singh was appointed as a member of the CGS Board on 1 June 2023. She has a Bachelor's degree in Physics and Geology; a Master's in Geophysics; and a PhD in Geomatics. She runs her own consultancy, Maya Geophysics, which specialises in earthquake hazard and risk-related research and applied site investigations. She has more than 20 years of research and industry experience and specialises in the field of seismotectonics. She has worked on projects for the nuclear and reinsurance industries, large dams, and power stations. She has lectured at the University of KwaZulu-Natal and worked as a researcher at the Council for Geoscience. She mentors and supervises postgraduate students and teaches fundamental science courses at university level. Dr Singh has fostered collaborations with researchers at academic institutions and participates in research efforts targeting the understanding of vulnerability of buildings to earthquake ground motion and improving our understanding of tectonic-related earthquakes and fault structures.

Dr Siyanda Mngadi
Board member

Dr Mngadi holds a PhD in Geophysics from the University of the Witwatersrand, and has published peer-reviewed papers in international journals. He was appointed as a member of the CGS Board on 1 June 2023. He began his career as a graduate student at the CSIR Centre for Mining Innovation and later worked in asset management as a junior quantitative and fundamental investment analyst covering the mining and energy sectors. He has held several positions, including that of executive manager responsible for mergers and acquisitions for an investment company with interests in mining and energy. He has served as a non-executive director for several organisations including Anglo American Inyosi Coal, Inyosi Coal, UJU Mining and on the board committees of the CGS. He is managing director of Ntuthuko Resources, involved in mineral exploration, mining and energy industries. Ntuthuko Resources is currently involved in exploration for rare-earth elements (REE), lithium, iron ore, manganese, and nickel.

Ms Ntombifuthi Nxumalo
Board member

Ms Nxumalo was appointed as a member of the CGS Board on 1 June 2023. She is a geoscience professional with a BSc (Hons) degree in Geology (University of the Witwatersrand) and an MBA in Global Business & Sustainability (UNICATT). She has undertaken a PhD research study titled,**South Africa's coal mine closures: An enabling regulatory framework for post-closure land uses to support self-reliant mining communities**. The research explores the role of current South African minerals and mining legislation and the regulatory framework in achieving sustainable post-mining land uses towards self-reliant mining communities post-closure. Ms Nxumalo has a diverse working career across the mining and energy sectors. She began as a geologist for Free State Goldfields, then joined the DMRE: Mineral Regulation Directorate. She has also worked for Eskom in its Primary Energy Division. In the last few years, as an entrepreneur, she has managed a Sustainability Consultancy, Luhlaza-ISS. She served on the board of the South African Diamond and Precious Metals Regulator as deputy chairperson and chairperson of the Technical Committee between 2016 and 2019. She has also served as chairperson of the Pelindaba Safety Information Forum of the National Nuclear Regulator and as a member of the Panel of Experts that mentors entrepreneurs at the Innovation Hub.

Ms Thobeka Njozela
Board member

Ms Njozela holds an MBA from the University of Pretoria, a BCompt (Hons) from the University of Transkei and a BCom from the University of Fort Hare. She has also completed a GIBBS Executive Management Programme and Management Programme at Rhodes University. As a Certified Director, she obtained a Certified Internal Audit qualification and holds certifications in Control Self-Assessment, and Risk Management Assurance. Ms Njozela was appointed as a member of the CGS Board on 1 June 2023. She has served as a member of audit and risk committees of national, provincial departments and public entities. She has extensive knowledge of public sector management, governance and financial management; risk management; internal audit; policy development; business process optimisation; and strategy development, implementation, monitoring and evaluation.

Dr Moloko Matlala
Board member

Dr Matlala holds a Doctor of Philosophy (PhD) in Genetics from the University of Pretoria, a Master of Science (MSc) in Zoology from the University of Limpopo, and a Master of Business Administration (MBA) from the University of the Witwatersrand Business School. He also holds a Secondary Teachers Diploma (STD) from Setotolwane College of Education. He is a published author in the fields of Science and Management. He has more than 20 years' experience in the water sector where he started his career as a water pollution control officer (WPCO) in Mpumalanga regional office of the Department of Water and Sanitation specialising in amongst others water use authorisations for mines in the Olifants catchment area. Throughout his career, he has held several positions, including Deputy Director, and Director in the Department of Water and Sanitation. He is currently Chief Director: National Water Resource Information Management at the Department of Water and Sanitation. He is a member of the Executive Council on Genetically Modified Organisms, a council which advises the Department of Agriculture, Land Reform and Rural Development on development, production, use and application of genetically modified organisms in the country. Dr Matlala was appointed as a member of the CGS Board on 1 June 2023.

Mr Mandla Malindisa
Board member

Mr Malindisa was appointed as an alternate Board member to Dr Moloko Matlala on 1 June 2023. He holds a Bachelor of Commerce degree, a certificate in Programme Forensic and Investigative Auditing and other certificates. He is currently working for the Department of Water and Sanitation as Chief Director Risk and Compliance Management with more than 19-years' experience in the field of risk management, internal control, internal audit, and special financial fraud investigations. He has served as Chief Risk Officer for three national government departments; Risk Management Specialist at the KwaZulu-Natal Provincial Treasury; Chief Risk Officer at Sekhukhune District Municipality; Risk Management Professional at Statistics South Africa; and as a Senior State Accountant at the KwaZulu-Natal Department of Education.

Dr Mmboneni Muofthe
Board member

Dr Muofhe is Deputy Director-General (DDG) of Socio-Economic Innovation Partnerships at the Department of Science and Innovation (DSI). He was appointed as a member of the CGS Board on 1 June 2023. He previously held positions as DDG for International Resources and Cooperation and DDG for Technology Innovation in the same department. He has years of experience in science, technology and innovation systems including scientific research, managing research, international cooperation, development and innovation funding schemes and implementation of various DSI initiatives and instruments. He has led the implementation of various science, technology and innovation strategies such as the National Space Science Strategy, Bioeconomy, and Hydrogen South Africa (energy). He also led the process of developing the report on South Africa's Technical Readiness to Support the Shale Gas Industry. He serves in different governance roles, including the Boards of Biovac (South Africa's vaccine manufacturing company), and now CGS and is on the Steering Committee of the World Health Organization's mRNA Technology Transfer Hub. He served as a member of the Board of Governors of the International Centre for Genetic Engineering and Biotechnology and is currently the Lead Co-Chair of the Group on Earth Observations. He holds a BSc (Univen), MSc (UCT), MBA (UP) and a PhD in Management of Technology and Innovation (da Vinci Institute).

Dr Patience Gwaze
Board member

Dr Gwaze was appointed as a Board member on 27 July 2023. She has a PhD in the physical and chemical properties of aerosol particles from the University of the Witwatersrand's Max Planck Institute for Atmospheric Science, and a Master's degree in exploration geophysics and BSc (Hons) in physics through the University of Zimbabwe. She has worked in the field of atmospheric science for over 20 years and has played a leading role in the development and implementation of the National Emissions Inventory System (NAEIS) and the South African Air Quality Information System (SAAQIS). Dr Gwaze joined the Department of Forestry, Fisheries and the Environment in 2010, and is currently Chief Director: Air Quality Information, and the designated National Air Quality Officer.

Dr Sabelo Malaza
Board member

Dr Malaza was appointed an alternate Board member to Dr Patience Gwaze on 27 July 2023. He has a PhD in Business Management, Master's degree in Business Administration, a BPhil degree in Knowledge and Information Management, a BSc degree and a qualification in Management Development from the Gordon Institute for Business Science. He is an environmental management practitioner with more than 18 years' experience in the public sector. Dr Malaza has served at the Department of Water and Sanitation and the Department of Forestry, Fisheries and the Environment in diverse capacities. He is currently Chief Director, responsible for processing environmental impact assessments at the Department of Forestry, Fisheries and the Environment.

Dr Jennifer Mirembe
Board member

Dr Mirembe was re-appointed as a Board member on 27 July 2023. She achieved her Doctorate in Town Planning on the impact of Technology (specifically ICT) on people, space and planning through the University of Pretoria. For her Master of City Planning and Urban Design degree, through the University of Cape Town, she was awarded the best thesis award by the Urban Design Institute of South Africa. Dr Mirembe has international training on the impact of technology on human settlements and holds a number of certificate qualifications spanning management, and urban and regional planning specialities. She is a senior research associate at the University of Johannesburg, heads the Education portfolio of the Urban Design Institute Gauteng Region, is deputy treasurer for the Gauteng Institute for Architects, and focus manager of Innovation and Transformative Technologies at the National Department of Human Settlements. She is an activist for equity and resilience for women in architecture in Africa. Dr Mirembe's current role is that of Director for Delivery Channel Management/Chief Town and Regional Planner at the National Department of Human Settlements.

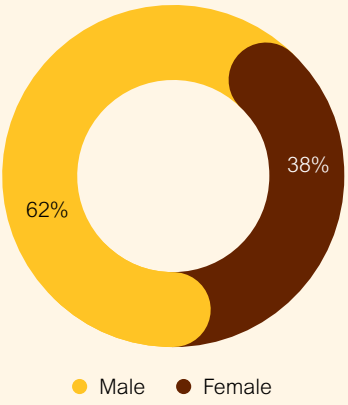


Figure 13: Summary of the CGS Board members' gender statistics

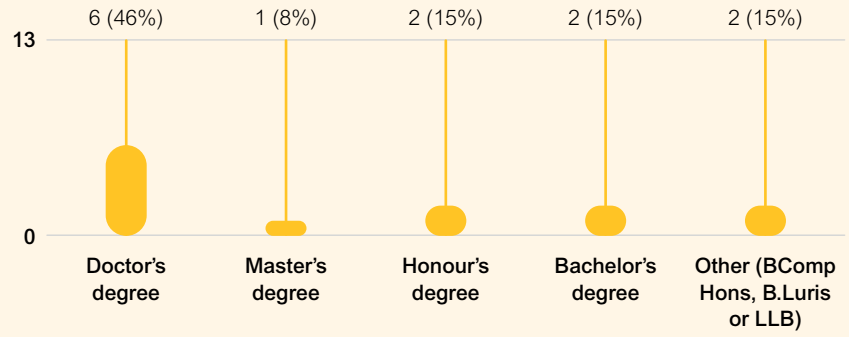


Figure 14: Summary of the CGS Board members' qualifications

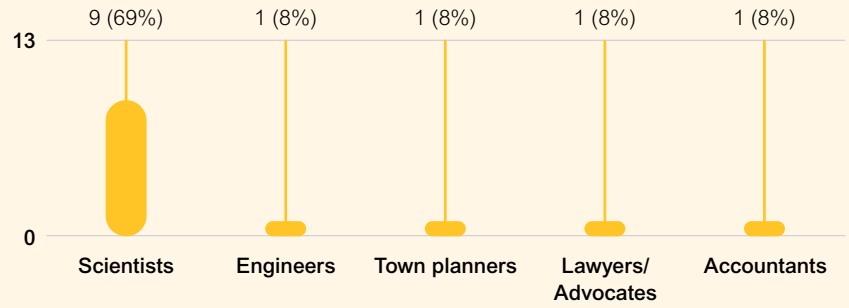


Figure 15: Summary of the CGS Board members' skills sets

The Board upholds and embraces its fiduciary duties outlined in section 50 of the PFMA Act (No. 1 of 1999) as amended, which require that Board members:

a) Exercise the duty of utmost care to ensure reasonable protection of the assets and records of the CGS
b) Act with fidelity, honesty, integrity and in the best interest of the CGS in managing the financial affairs of the organisation
c) Refrain from acting in a way that is inconsistent with responsibilities assigned to them
d) Refrain from using their position and/or privileges or confidential information they obtain as members of the Board for personal gain or to improperly benefit another person, and
e) Disclose and declare any direct or indirect interests that they or their spouse or close family member(s) may have that could pose a potential conflict of interest.

The Board implements annual declarations of interest (financial disclosure) and a declaration of interest at every committee and Board meeting to ensure that members disclose real or perceived conflicts in any matter before the Accounting Authority. Board members must withdraw from proceedings when such matters are considered unless the Board decides otherwise.

Subject to the provisions of the Geoscience Act (No. 100 of 1993) as amended, read together with the PFMA, the Board is accountable for the performance of the CGS. The Board must exercise control and manage the affairs of the CGS, set the strategic direction of the organisation, and approve its vision, mission, strategic objectives and policies.

In addition, the Board monitors compliance with policies and performance with scientific, administrative and financial objectives. The Board is solely responsible for ensuring that the CGS has and maintains effective, efficient and transparent systems of financial management, risk management and internal audit, and fair, equitable, competitive and cost-effective procurement practices.

The Board has the authority to lead, control and manage the business of the CGS, and has adopted a comprehensive delegation of authority framework in accordance with section 56 of the PFMA, which delegates the day-to-day management of the affairs of the CGS to the CEO. The delegation of authority policy does not in any way divest the Board of its responsibility and accountability for the organisation.

2.3 Board Charter and Board responsibilities

The Board Charter, which is reviewed annually, provides for the following:

a) Leadership role of the Board, judgment and strategic direction
b) Board composition
c) Accountability, fiduciary duties and responsibilities
d) Code of conduct for the Board
e) Constitution and appointment of committees
f) Governance and meeting procedures
g) Management of conflicts of interest
h) Responsibility for the adoption of strategic plans and the monitoring of operational performance and management
i) Determination and approval of policies
j) Risk management
k) Board selection, orientation and evaluation.

2.4 Board induction and orientation

The CGS has a Board Induction Programme for new members.

2.5 Training of new Board members

A Director Development Programme ensures that Board members are adequately and continually trained to ensure that they have the necessary knowledge of, and are developed in regard to, best practices and principles of corporate governance. Adequate and deliberate courses offered by reputable institutions are identified or customised to strengthen the Board's skills and participation. Board and committee members are encouraged to notify the Board Secretary when they identify additional training that may enhance their contribution to the organisation. Through quarterly reports and policies, Board members are kept abreast of CGS governance structures, strategic projects and organisational performance to enable them to fulfil their duties and responsibilities.

2.6 Board meetings

The previous Board held one meeting in 2023/24, before its tenure ended on 30 April 2023. Table 4 details the attendance of meetings by each Board member during April 2023.

Table 4: CGS previous Board – meetings in 2023/24

Board members	26 April 2023	Number of meetings attended
Dr H Mathe (Chairperson)	Present	1
Mr M Mabuza (CEO)	Present	1
Mr X Mvinjelwa (Deputy Chairperson)	Present	1
Dr P Gwaze	Apology (alt member present)	0
Dr S Malaza	Present	1
Ms D Mochotlhi	Present	1
Mr P Nel	Present	1
Ms R Mdubeki	Present	1
Ms P Tsotetsi	Apology (main member present)	0
Adv. N Maake	Present	1
Ms A Chowan	Present	1
Dr J Mirembe	Present	1
Mr B Gerryts	Present	1
Mr A Moatshe	Present	1

The current Board held three meetings in 2023/24. Table 5 details the attendance of meetings by each Board member during 2023/24.

Table 5: CGS current Board – meetings in 2023/24

Board members	29 May 2023	28 July 2023	27 October 2023	28 February 2024	Number of meetings attended
Mr K Dintwe (Chairperson)	No active Board	Present	Present	Apology	2 of 3
Mr M Mabuza (CEO)	No active Board	Present	Present	Present	3 of 3
Mr X Mvinjelwa (Deputy Chairperson)	No active Board	Present	Present	Present	3 of 3
Dr P Gwaze	No active Board	*	Apology	Present	1 of 2
Dr S Malaza	No active Board	*	Apology	Apology	0 of 3
Adv. N Maake	No active Board	Present	Present	Present	3 of 3
Ms T Njozela	No active Board	Present	Present	Present	3 of 3
Dr J Mirembe	No active Board	*	Present	Present	2 of 2
Mr A Moatshe	No active Board	Apology	Present	Apology	1 of 3
Dr M Matlala	No active Board	Present	Apology	Present	2 of 3
Dr S Mngadi	No active Board	Present	Present	Present	3 of 3
Dr M Muofhe	No active Board	Present	Present	Present	3 of 3
Dr M Singh	No active Board	Present	Present	Present	3 of 3
Mr M Malindisa	No active Board	Present	Present	Present	3 of 3
Ms N Nxumalo	No active Board	Present	Present	Present	3 of 3

* Means not yet a member.

2.7 Board remuneration

The remuneration of Board members is determined by the Minister of Finance in consultation with the Minister of Mineral Resources and Energy and published annually in the National Treasury's Service of Benefit packages. The rates provide for a daily rate that caters for meeting preparation and attendance as well as travel costs.

Table 6: Remuneration of CGS Board members (2023/24)

Board members	Remuneration	Other allowance	Other re-imbursements	Total
Mr K Dintwe	R145 449			R145 449
Dr H Mathe*	R37 308			R37 308
Mr X Mvinjelwa	R195 405			R195 405
Adv. N Maake	R149 749			R149 749
Dr M Singh	R131 014			R131 014
Ms T Njozela	R164 546			R164 546
Ms N Nxumalo	R130 348			R130 348
Dr S Mngadi	R224 300			R224 300
Adv. A Chowan*	R80 132			R80 132

* Members of the previous Board, whose tenure ended 30 April 2023.

2.8 Committees of the Board

In terms of section 15 of the Geoscience Act (No. 100 of 1993) as amended, the Board may establish a committee that will, subject to the direction of the Board, perform such functions of the Board as determined from time to time. Furthermore, section 56 of the PFMA Act (No. 1 of 1999) as amended provides that some Board responsibilities and aspects of the management of the CGS may be delegated to Board committees without divesting the Board of its roles and responsibilities. The Board committees are, therefore, required to make recommendations to the entire Board before strategic decisions are implemented by management. Mandated by section 15 of the Geoscience Act (No. 100 of 1993) as amended, section 56 of the PFMA and the recommendations of the King Code, the Board has constituted and delegated some of its functions to the following four Board committees:

a) Audit and Risk Committee
b) Finance Committee
c) Technical Committee
d) Personnel, Remuneration and Transformation Committee.

2.9 Audit and Risk Committee

The Audit and Risk Committee was established in terms of section 77 of the PFMA and National Treasury Regulation 27. The committee discharges its responsibilities in terms of the Audit and Risk Committee Charter, which sets out the composition, roles and responsibilities of the committee. It continually monitors the quality and reliability of the CGS's financial information used by the Board, financial statements issued by the CGS and various functions within the organisation. The Audit and Risk Committee ensures that emerging risks are timeously identified, and that appropriate and effective control measures are put in place to mitigate these risks. The composition of the committee and attendance of its meetings from 1 April 2023 to 31 March 2024 are reflected in Table 7.

Table 7: Audit and Risk Committee meetings in 2023/24

Committee members	20 April 2023	21 July 2023	19 October 2023	23 February 2024	Meetings attended
Ms K Maroga	Present	*	*	*	1 of 1
Mr S Maetle	*	Present	Present	*	2 of 2
Mr O Willcox	Present	Present	Present	Present	4 of 4
Dr S Mngadi	Present	*	*	*	1 of 1
Mr M Malindisa	*	Present	Present	Present	3 of 3
Ms D Morabe	Present	Present	Present	Apology	3 of 4
Adv. A Chowan	Present	Present	Present	Present	4 of 4
Adv. N Maake	Present	Present	Present	Apology	3 of 4
Mr S Xulu	Apology	*	*	*	0 of 1
Mr X Mvinjelwa	*	Present	Present	Present	3 of 3
Ms T Njozela	*	Present	Present	Present	3 of 3
Dr M Singh	*	Present	Present	Present	3 of 3
Mr R Maboe	*	Present	Apology	Present	2 of 3

* Member was not active during the period reported.

2.9.1 Audit and Risk Committee report

The Audit and Risk Committee reports that it has complied with its responsibilities arising from section77 of the PFMA and National Treasury Regulation 27.1. The committee also reports that it has adopted the Audit and Risk Committee Charter as its appropriate terms of reference, has regulated its affairs in compliance with this charter and has discharged all the responsibilities contained therein.

In executing its duties, the committee has performed, among others, the following functions:

2.9.2 Evaluation of internal controls

The committee has directed, monitored and evaluated the activities of the internal audit function. Through the internal audit function, the committee constantly monitored the effectiveness of the internal controls within the CGS and assessed whether the internal audit function had fulfilled its roles. During 2023/24 the internal controls were once again reported to have significantly improved in some areas, however the overall control rating was reported to require improvement. There is room for improvement in regard to the following:

a) Supply chain management
b) Asset management
c) Financial management
d) Geoscience data management
e) ICT application controls
f) Performance information
g) Safety, health and environment
h) Facilities management
i) GTP project management.

The committee reports that progress on the implementation of corrective measures to resolve findings is being monitored and that progress reports are compiled on a quarterly basis.

2.9.3 Evaluation of the annual report

The committee has:

a) Reviewed the CGS report on corporate performance information
b) Reviewed the CGS accounting policies and practices
c) Reviewed the adequacy and usefulness of the financial information provided to the Auditor-General
d) Evaluated, reviewed and discussed with the Auditor-General the audited CGS Annual Financial Statements included in the present Annual Report
e) Reviewed the Auditor-General's management report and the Auditor's report.

Based on the information provided to the committee, the committee has concluded that the Annual Financial Statements comply with the requirements of the PFMA, National Treasury Regulations and the South African GRAP standards.

2.9.4 Risk management

The committee reports that during the year under review it approved the Strategic Risk Register, Anti-Fraud and Corruption Policy and the Enterprise Risk and Compliance Management Policy. These policies were subsequently communicated to staff and incorporated into the culture of the CGS. The committee reviewed:

a) The organisation's risk appetite and tolerance levels
b) The significant financial risk exposures of the CGS and directed management to monitor and develop mitigation strategies for such exposures, including risks relating to reputation, operations, fraud, strategy, ICT systems, disaster recovery and business continuity.

2.9.5 Evaluation of financial statements

The committee reviewed and discussed with the Auditor-General the financial statements of the CGS for the year ended 31 March 2024. The committee also reviewed the management letter of the Auditor-General and management responses thereto. The committee is of the opinion that the financial statements are compliant, in all material respects, with the requirements of the PFMA and South African GRAP standards.

2.9.6 Auditor's report

The Audit and Risk Committee reviewed the implementation plan for the audit findings of 2022/23 before the completion of its term of office and reported at the time that a significant number of findings had been resolved. Management has committed to resolving all audit findings that are still in progress.

The committee concurs with and accepts the conclusions of Auditor-General with regard to the 2023/24 financial statements. It is of the opinion that the audited Annual Financial Statements should be accepted and read together with the report of the Auditor-General.

Mr L Lepulana
Chairperson
Audit and Risk Committee of the Council for Geoscience

31 July 2024

2.10 Finance Committee responsibilities and composition

The Finance Committee of the CGS is mandated to consider and recommend, for the Board's approval, the following matters:

a) Significant financial activities
b) Liquidity and financial condition of the CGS
c) Write-off of bad debts
d) Material variances in the approved annual and/or revised budgets in accordance with the Materiality and Significance Framework Plan
e) Proposed capital and operating budget for capital expenditures
f) Financial statements for the Annual Report
g) All policies that have financial implications
h) Corporate performance information management against the approved budget.

The Finance Committee consists of nine non-executive members and the CEO (executive member). Member details are presented in Table 8, with meeting attendances logged from 1 April 2023 to 31 March 2024.

Table 8: Finance Committee meetings in 2023/24

Committee members	20 April 2023	21 July 2023	19 October 2023	23 February 2024	Meetings attended
Mr P Nel	Present	*	*	*	1 of 1
Ms D Morabe	Present	Present	Present	Apology	3 of 4
Dr S Mngadi	*	Present	Present	Present	3 of 3
Mr M Mabuza	Present	Present	Present	Present	4 of 4
Ms N Nxumalo	*	Present	Present	Present	3 of 3
Mr O Willcox	Present	Present	Apology	Present	3 of 4
Adv. N Maake	Present	Present	Present	Apology	3 of 4
Dr J Mahachi	Present	Present	Present	Apology	3 of 4
Mr M Malindisa	*	Present	Present	Present	3 of 3
Ms T Njozela	*	Present	Present	Present	3 of 3
Mr R Maboe	*	Present	Present	Present	3 of 3

* Member was not active during the period reported.

2.11 Technical Committee

The Technical Committee of the CGS is mandated to consider and recommend for the Board's approval the annual scientific and strategic technical programme (GTP) of the organisation, to evaluate the scientific and technical output and to oversee the implementation of the ICT strategy as well as the end-term evaluations.

The composition and meeting attendance of the Technical Committee from 1 April 2023 to 31 March 2024 are reflected in Table 9.

Table 9: Technical Committee meetings in 2023/24

Committee members	20 April 2023	20 July 2023	18 October 2023	22 February 2024	Meetings attended
Mr B Gerryts	Present	*	*	*	1 of 1
Mr X Mvinjelwa	Present	*	*	*	1 of 1
Dr S Mngadi	*	Present	Present	Present	3 of 3
Dr S Malaza	Present	*	*	Present	2 of 2
Dr M Matlala	*	Apology	Present	Present	2 of 3
Dr M Singh	*	Present	Present	Present	3 of 3
Mr M Mabuza	Present	Present	Present	Present	4 of 4
Ms T Njozela	*	Present	Present	Present	3 of 4
Dr M Mayekiso	Present	Present	Present	Present	4 of 4
Mr A Moatshe	Present	*	*	*	1 of 1
Dr J Mahachi	Present	Present	Present	Apology	3 of 4
Mr S Ndaba	*	Present	Apology	Present	2 of 3
Ms N Nxumalo	*	Present	Present	Present	3 of 3

* Member was not active during the period reported.

2.12 Personnel, Remuneration and Transformation Committee

The Personnel, Remuneration and Transformation Committee is mandated to consider and recommend for the Board's approval the human resources strategies and policies of the CGS, the organisational remuneration model, remuneration for executive management and annual salary increases. The committee also evaluates and makes recommendations on the payment of performance bonuses and considers organisational performance reports on labour-related matters, employment equity and employee training and development matters.

The composition and meeting attendance of the Personnel, Remuneration and Transformation Committee from 1 April 2023 to 31 March 2024 are reflected in Table 10.

Table 10: Personnel, Remuneration and Transformation Committee meetings in 2022/23

Committee members	19 April 2023	20 July 2023	18 October 2023	22 February 2024	Meetings attended
Ms R Mdubeki	Present	*	*	*	1 of 1
Mr X Mvinjelwa	Present	Present	Present	Present	4 of 4
Dr M Muofhe	*	Present	Present	Present	3 of 3
Mr M Mabuza	Present	Present	Present	Present	4 of 4
Dr M Mayekiso	Present	Present	Present	Present	4 of 4
Mr R Maboe	*	Present	Present	Present	3 of 3
Dr J Mirembe	Present	*	*	*	1 of 1
Ms M Seane	Present	*	*	*	1 of 1
Dr S Malaza	*	*	*	Present	1 of 1
Mr S Ndaba	*	Present	Apology	Present	2 of 3
Adv. A Chowan	*	Present	Present	Present	3 of 3
Dr M Matlala	*	Apology	Present	Present	2 of 3
Mr A Moatshe	Apology	Present	Apology	Present	2 of 4

* Means not yet a member/not yet appointed.

3 Risk Management

The CGS Board is responsible for entrenching risk management governance through effective leadership. Management accounts to the Board for the integration of risk management into the daily operations of the CGS and for the implementation and monitoring of the risk management process. The Audit and Risk Committee is an independent entity responsible for overseeing risk exposure related to governance and risk management. The CGS develops a strategic risk register annually based on the organisational strategy. This is monitored quarterly and provides assurance to the Board that the CGS is adequately managing identified risks. The strategic risk register is also workshopped with the Board annually. Operational risk is managed through operational and strategic risk registers and both risk registers are discussed during the Operational Risk Management and Combined Assurance Committee meetings. The Enterprise Risk and Compliance Management Policy was last reviewed and updated in April 2022. The organisational risk management governance structure of the CGS is presented in Figure 13.

Figure 16: Organisational risk management governance structure of the CGS

4 Internal Control

Management is responsible for designing, implementing and continually reviewing internal controls to provide assurance on the effectiveness and efficiency of operations and on the reliability of financial reporting, and for the safeguarding and maintenance of accountability for the assets of the organisation. These controls are monitored throughout the CGS by management and employees, with a necessary segregation of duties. The internal audit function performs independent reviews on the adequacy and effectiveness of these controls as part of the approved annual internal audit plan, and the internal audit reports are presented to the Audit and Risk Committee.

5 Internal Audit

The internal audit function was established in terms of the PFMA and has adopted the risk-based audit approach aligned with International Standards for the Professional Practice of Internal Auditing (ISPPIA). The internal audit function therefor conforms to ISPPIA. The Audit and Risk Committee reviewed and approved a formal internal audit charter.

The Audit and Risk Committee approved an annual internal audit plan, and internal audit reports were presented to the committee quarterly. Follow-up audits were conducted on prior-year audit findings. The internal audit function also performed preliminary investigations into matters reported on the whistleblowing hotline and ad hoc assignments requested by management.

6 Compliance with Laws and Regulations

The CGS complies with National Treasury Regulations through the PFMA compliance checklist and calendar, which are continually monitored and updated. Compliance with laws and regulations is monitored through the activities of the Audit and Risk Committee and by the Risk and Compliance Unit at an operational level, based on the regulatory universe of the CGS which was approved by the Board in July 2022. Compliance checklists are developed for all applicable laws and regulations listed in the regulatory universe and monitored systematically. The level of compliance is discussed during Operational Risk Management and Combined Assurance Committee meetings.

7 Fraud and Corruption

In terms of the PFMA, the CGS has a legal responsibility to take steps to prevent unauthorised, irregular, fruitless and wasteful expenditure as well as losses resulting from criminal conduct. The CGS Anti-Fraud and Corruption Policy was reviewed and approved in April 2022, and an anonymous whistleblowing tip-off line duly established. This function is administered externally by Whistle Blowers (Pty) Ltd. Reports are made available as and when whistleblowers report through the hotline, and all suspicions of fraudulent conduct are investigated by the internal auditors and reported to the Audit and Risk Committee. Fraud risks are identified during the risk assessment process and monitored through the various risk registers at the CGS.

8 Minimising Conflict of Interest

All suppliers of goods and services to the CGS are required to complete standardised National Treasury documentation (SBD4 Declaration of Interest). In view of possible allegations of favouritism and conflicts of interest, should the resulting bid, or part thereof, be awarded to persons employed by the CGS, or to persons connected with or related to CGS employees, it is required that the bidder or their authorised representative declare their position to the evaluation/ adjudication authority. In addition, staff members of the CGS involved in the Bid Specification, Bid Evaluation and Adjudication Committee are required to complete declaration and non-disclosure forms at each meeting.

9 Code of Conduct

The CGS's Code of Conduct governs the behaviour of every member of staff, and all new employees receive training with regard to this code during their induction. Every member of staff is required to sign an annual declaration, indicating that they understand the content of the code and that any contravention of the code has a consequence, which may include disciplinary action. The organisation's Code of Conduct includes the following areas:

- CGS Values
- General behaviour at work and tolerance and respect for all
- Declaration and conflict of interest
- Acceptance of gifts and gratuities
- Zero tolerance of fraud and corruption, sexual harassment, and intimidation
- Politics in the workplace
- Due care and attention to work undertaken
- Care of and attention to assets
- Electronic communication and protection of confidential information.

Furthermore, the CGS subscribes to the following principles:

- Fairness and integrity in all business dealings, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships
- Respect for the human rights and dignity of all employees
- Acceptance of diverse cultural, religious, race, gender and sexual orientations
- Honesty, transparency and accountability
- Adherence to sound standards of corporate governance and to laws
- Behaving in a way which is beyond reproach when representing the organisation and taking responsibility for these actions at all times
- Acting with integrity in all dealings with Board/Committee members, employees, suppliers, customers and other stakeholders
- Obeying all applicable government laws, rules and regulations and desisting from committing criminal offences
- Avoiding conflict of interest and declaring them when they arise
- Not using corporate information for any purpose other than that for which it was intended and keeping information confidential
- Refraining from engaging in practices or pursuing private interests that conflict with those of the CGS or that could result in the CGS suffering loss or damage as a result.

In terms of the CGS Code of Ethics, all persons representing the CGS must uphold the highest standards of business ethics and integrity. Furthermore, all staff, contractors, consultants and others acting on behalf of the CGS must accurately and honestly represent the organisation and refrain from engaging in any activity or scheme intended to defraud anyone of money, property or services. The reputation and integrity of the CGS are central to the ability of the organisation to operate as an effective State-owned organisation.

10 Board Secretary

The Board Secretary provides advisory services to the Board and notifies Board members of regulatory changes and new developments in corporate governance. Furthermore, the Board Secretary guides the Board and Board committees on how to discharge their responsibilities in the best interests of the organisation. The Board Secretary facilitates and attends Board and Board committee meetings and takes custody of all policy documents.

11 Health, Safety and Environment

The CGS regards the provision of a safe and healthy work environment as key to driving high performance. This is evidenced in the intentional and focused efforts to foster a safe and healthy culture as expressed in the Safety, Health and Environment Management Policy which is aligned with the Occupational Health and Safety Act (No. 85 of 1993) and Regulations and aims to provide a safe workplace without risk to human life. The policy also places responsibility and a duty on employees to work and behave in compliance with the safety directives of the organisation. The CGS enables the organisation to drive compliance by tracking compliance with Occupational Health and Safety regulations on quarterly basis. The compliance checklist used provides various indicators against which performance in this area is monitored, ensuring the elimination of hazards and the reduction of risks. The current compliance status is at 93%. Processes are afoot to address non-compliance areas. The organisation has established a Safety, Health and Environment Committee that meets at least once every three months to discuss occupational health and safety issues that affect workers. The CGS has also appointed safety representatives with a focus on all areas of health and safety.

12 Social Responsibility

The CGS's organisational strategy is primarily driven and enabled by integrated communication and effective stakeholder engagement. The organisation has adopted an Integrated Communication and Stakeholder Relations Strategy that is premised on building and maintaining strong, constructive and mutually beneficial relationships with key stakeholders, particularly in areas where the CGS operates.

The CGS continues to strive towards building collaborative relationships with its stakeholders for mutual benefit, improving its relationships and managing expectations by disseminating accurate, pertinent and up-to-date information. Where possible, the organisation has given back to communities where it has operated by partnering with other state-owned entities, as well as provincial, district and local municipalities to share knowledge and information on geoscientific subject matters and contribute to uplifting the socio-economic conditions of the relevant area.

The following are but some of the initiatives that the CGS implemented in the year under review:

- Actively participated in the National Disaster Management Centre, which seeks to promote an integrated and coordinated system of disaster prevention, mitigation and risk management. The organisation shared its research pertaining to landslides, as an advisory authority on the risk of subsidence in dolomitic terrains that may affect infrastructure development and land-use.
- Produced mine-induced land subsidence and susceptibility maps that aid spatial planning decision-making and disaster management plans. The maps categorise mined areas and their surroundings into zones with varying degrees of subsidence susceptibility and likelihood.
- Continuously monitors seismic activities and proactively shares information regarding the occurrence of seismic activities with the media and public, as and when they occur. In the year under review, the CGS responded to many enquiries from various media channels and publications, municipalities and concerned members of the public on specific earthquakes that garnered public attention.
- Supplemented the supply of water in five villages around the Nzimakwe area, South Coast of KZN. To this effect, the CGS drilled boreholes that can potentially provide portable drinking water to around 1 280 people per day.
- Assisted various communities in the Govan Mbeki Local Municipality with the supply of groundwater in areas affected by the unavailability of water, focussing on four regions in the municipal area.
- Assisted the community of Umgababa, south of KZN, where a local church was affected by the April 2022 flooding and landslide disasters in KZN. The CGS scientific team assisted with technical assessments and advised around the landslide-affected area and identified subsequent geological risks to empower local stakeholders to make informed decisions.
- Short-term employment of casual workers in various technical projects to support scientific activities, thus building capacity through training in areas where the CGS operates.
- Coordinated as well as participated in career expos for high school learners across the country. Furthermore, the CGS was invited to share its work at talks organised by the geoscience departments of various universities.
- Participated in various District Development Model (DDM) forums through which municipalities are beginning to realise the importance of geoscience in their strategic planning, such as Integrated Development plans.

- Commemorating Nelson Mandela Day by painting, cleaning and donating stationery, appliances, food, and blankets to improve the lives of the least fortunate in local communities.

The CGS is committed to delivering geoscience solutions that impact society and ensuring that communities derive value from its geoscientific research. In addition, the organisation continues to be a responsible corporate citizen that cares for its communities and the environment. Through these initiatives, the CGS is also able to raise the profile of its brand and bring awareness of its work to key stakeholders and the public.

12.1 Building the CGS brand

In the year under review, the CGS coordinated brand awareness initiatives to increase stakeholder knowledge of its work. To accomplish this endeavour, campaigns, events, stakeholder involvement, attending conferences, creating and managing media relations as well as strategic alliances and partnerships were coordinated accordingly.

Brand-building highlights included:

- A media feature article was published in *Mining News* on critical minerals of South Africa at the official launch of African Critical Minerals Summit.
- A media advertorial was published in *SAICE Civil Engineering* on in-situ iron and manganese removal: a solution for biofouling in groundwater.
- A media article was published in *Mining Weekly* on the CGS inspiring the next generation of young professionals in the organisation.
- Numerous media publications, such as Business Day Live, Beeld, Germiston News, News 24, Times Live, SABC News, Nozindaba, Suidkaap Forum, Eyewitness News, Cape Town ETC, and IOL, published the occurrence of the East and West Rand as well as Cape Town seismic events.
- A media advertorial was published in *Mining Weekly* which centred on the CGS's role in promoting exploration in South Africa.
- A media article highlighting future innovation initiatives by the CGS was published in *Black Business Quarterly*.
- An article was published in the *Mpumalanga Business Journal* on the Council for Geoscience's mapping for safety and economic growth.
- The CGS published an article in *Mining Review Africa* on its role and contribution towards ensuring access to sustainable portable water.
- Two scientists were profiled in *Innovation, Science, Engineering and Technology (ISET) Careers SA* as part of the organisation's drive to promote careers in earth sciences.
- A media advertorial was published in *African Science Stars* focused on marine geology and its role in supporting the blue economy.
- A feature article was published in *Mining Weekly* on the CGS highlighting the importance of companies sharing historical data to revive exploration.
- A media article on the CGS and SASOL collaboration to advance CCUS research in South Africa was published in various media publications such as *Mining Weekly*, *Engineering News* and *Carbon Capture Journal*.
- The CGS profiled Ashley Philander's journey, from intern to emerging scientist, in *The Courier* based in Beaufort West.
- The CGS CEO, Mr Mosa Mabuza was profiled in *Mining Review Africa*.
- A media article was published in *Mining Review Africa*'s flagship *Elites* publication on the organisation's quest to unlock research and mineral potential through partnerships.
- A media advertorial profiling the CGS's Analytical Services was published in *African Decisions*.
- A media article on the national geoscience data portal was published in *Africa Mining News*.
- A media article on the acceleration of onshore geoscience mapping was published in *Opportunity*.
- A media article on the CGS and Exxaro Resources' agreement for decarbonisation was published in *Enterprise Africa*.
- A number of articles on the CCUS pilot project were published in various publications including the *IOL Business Report*, *City Press*, *The Citizen*, *Miningmx*, *Polokwane Observer*, *Sunday Times, Engineering News, Sowetan, South Africa Mining Magazine, Cape Town Today,* and *Government News* which covered the CCUS public advocacy sessions that took place in different provinces.
- A total of 64 advertorials were published in various trade and mainstream media, profiling and promoting the organisation's work and role in society.
- Real-time newsfeeds showcasing organisational developments, stakeholder engagement initiatives, campaigns, events and geoscience information contributed to the steady growth of followers on CGS social media platforms such as Facebook, X, YouTube and LinkedIn.

Media interviews included:

- Dr Eldridge Kgaswane was interviewed by Turf FM and SAFM on the West and East Rand earthquake.
- Various media houses such as SABC News's @ Theagenda, eNCA, Newsroom Afrika, SAFM, INX Prime and Chai FM interviewed Mr Willem Meintjes on the East Rand and Roodepoort earthquakes.
- Various media houses such as eNCA, Capricorn FM, 5FM and SABC News Full View interviewed Ms Michelle Grobbelaar on the East Rand earthquake.
- Mr Mosa Mabuza was interviewed by BizNews on the oil and gas landscape in South Africa.
- Ms Nomvelo Mkhize was interviewed by Radio Pulpit on the East Rand earthquake.
- Various media houses such as Kragbron FM, OFM, and Capricorn FM interviewed Dr Taufeeq Dhansay and Mr Ngqondi Nxokwana on the CCUS pilot project.
- Dr Taufeeq Dhansay's presentation was covered by Eswatini TV at the launch of Phase 2 of the Multi-Disciplinary Geoscience Mapping Programme in Swaziland.

- Ms Siphelele Gobeni was interviewed on Radio 2000 on the role of the CGS on the sidelines of the Group Earth Observations Ministerial Summit in Cape Town.
- The CGS profiled the CCUS pilot project through live reads on various radio stations such as Rise FM, Gagasi FM and Capricorn FM.
- The CGS Board Chairperson, Mr Kepile Dintwe, was interviewed on Rise FM about the CCUS pilot project.
- Media houses such as Gagasi FM, Capricorn FM, and Newzroom Afrika interviewed Mr Mosa Mabuza on the CCUS project.
- Several media houses, such as Gagasi FM, OFM, Ikwekwezi, Kosmos, Voice of the Community, Kragbron FM and Jozi FM featured Mr Ngqondi Nxokwana on the importance of the CCUS project.
- Mr Mbuyiseni Ngcobo was interviewed by uKhozi FM on the role of CCUS technology.
- Several interviews were organised across different media platforms, including Newzroom Afrika, SABC News, SAFM, Mining Mx, and Financial Insight Zambia, discussing the CGS's participation at the African Mining Indaba held in Cape Town.
- In addition, the CGS responded to frequent ad hoc print and online media enquiries on earthquakes as and when these occurred.

Campaigns and events included:

- During Heritage Month in September, the CGS commemorated the month by showcasing its cultural diversity through internal and external communication platforms.
- An Out of Home (billboard), located on Pretoria Road in Silverton, profiled the CGS and its key messaging on a monthly basis.
- The CGS increased publicity and public awareness of its CCUS initiatives through street pole and trailer advertisements in Secunda, Mpumalanga; social media banners, squeeze-back television advertisements and web banners featured on the Business Live digital publication.
- In celebration of youth month, the CGS profiled a few of its young employees through internal and external communication platforms.
- The CGS participated in the Junior Indaba Conference in June 2023, where Mr Mosa Mabuza gave a presentation on South Africa's geological endowment to support junior mining.
- The CGS participated in the World Mining Congress in June 2023 in Australia. Dr Thakane Ntholi gave a presentation titled 'Progress towards Responsible Environmental Management for Sustainable Mining' and also served as a panellist in a discussion titled 'International Approaches to Environmental Sustainability'.
- The CGS participated in the DMRE-coordinated Northern Cape Mining and Energy Conference. The CEO, Mr Mosa Mabuza was a panellist in a discussion titled 'Incentives and uplifts needed to boost exploration and mining in South Africa'.
- The CGS participated in the International Seabed Authority 28th Session Council & General Assembly Meeting in July 2023, in Kingston Jamaica.
- The CGS participated in the Human Settlement Women Indaba in August 2023, in Kimberley, Northern Cape and Dr Thakane Ntholi was a panellist in a discussion titled 'Innovation & Alternative Building Technologies'.
- The CGS participated in various career expos in Mpumalanga, Western Cape, Gauteng, and Limpopo provinces to entice learners to take up career opportunities in the earth science field.
- The CGS participated in the African Critical Minerals Summit in August 2023, in Johannesburg Gauteng. Mr Mosa Mabuza was a panellist in a discussion titled 'Mapping and exploring Africa's critical minerals: unlocking the continent's resource potential'.
- The CGS participated in the Africa Down Under Conference in Perth, Australia, in September 2023. Mr Mosa Mabuza was part of a panel discussion on South Africa's mining investment case.
- The CGS participated in the International Association of Hydrogeologists' Congress in Cape Town, in September 2023, where it showcased its work relating to hydrogeology through oral and poster presentations.
- The CGS participated in the 29th Colloquium of African Geology (CAG) Conference in Windhoek, Namibia in September 2023. Participation included oral and poster presentations.
- The CGS participated in the Joburg Indaba Conference in October 2023, in Johannesburg, where Mr Mosa Mabuza was a panellist on a discussion titled 'Reviving mining and exploration in South Africa – how do we breathe new life into mining and exploration?'.
- The CGS participated in the DMRE Mining Investment Conference in October 2023, in Polokwane, Limpopo. Mr Sibongiseni Hlatshwayo was part of a panel discussion on exploration and beneficiation.
- The CGS participated in the Group Earth Observations Ministerial Summit in November 2023, in Cape Town. The purpose of participation was to engage with various stakeholders on combating climate change.
- The CGS participated in the Conference of the Parties (COP 28) from November–December 2023 in Dubai, UAE. Mr Mosa Mabuza, Dr Thuli Khumalo, Dr Taufeeq Dhansay and Mr Ngqondi Nxokwana engaged on various platforms on developments with the CCUS project in South Africa.
- The CGS hosted a series of CCUS public advocacy gatherings in Mpumalanga, Free State, KwaZulu-Natal, Western Cape, Gauteng and Limpopo provinces to create awareness and share knowledge on climate change.
- The CGS participated in the African Mining Indaba Conference in Cape Town, in February 2024. Participation included presentations, panel discussions, radio, television and magazine interviews and enabled the reinforcing of strategic relationships.
- The CGS participated in the Prospectors & Developers Association of Canada Conference in March 2024, in Toronto, Canada. Participation was through panel discussions and enabled the reinforcing of strategic relationships.

12.2 Stakeholder engagement

The CGS's Stakeholder Engagement Programme is embedded in its governance, strategy, and operations to enable effective and efficient delivery of its mandate. Stakeholder engagement is designed to build, nurture, and strengthen symbiotic relations underpinned by the mantra that "geoscience is the fulcrum for human development". Accordingly, the Stakeholder Engagement Programme enables the CGS to navigate through the myriad of stakeholder groupings where it operates using environmental scanning, and rigorous stakeholder satisfaction assessments. As such, the CGS engages and communicates with a broad spectrum of stakeholders, including employees, international, national and provincial departments, municipalities, traditional authorities, State-owned entities, farmers, fora, environmental non-government organisations, academic and professional bodies, private companies and the public in general.

In the year under review, a concerted effort was made to improve the quality and frequency of interactions with stakeholders with a view to fostering a supportive and collaborative environment within which the CGS can fulfil its mandate and achieve its strategic priorities. The CGS Stakeholder Engagement Programme follows an integrated approach that includes understanding, aligning and managing stakeholder expectations, underpinned by corporate responsibility, good governance and transparency. Stakeholder management is viewed as a valuable and effective enabler for the efficient implementation of the GTP and commercial projects. To this end, CGS management, scientific, technical and support staff all embrace stakeholder engagement as it profoundly affects the organisation's brand and reputation.

During 2023/24, introductory and iterative engagements were held with key stakeholders to enable the seamless implementation of the GTP, diplomacy, corporate engagements and events. Following is a summary of engagements which demonstrate that the CGS brand and role is beginning to be embraced by stakeholders.

Northern Cape: Base Metal Mapping Project

In its quest to undertake fundamental research on various types of magmatic and hydrothermal base metals, the CGS engaged with a variety of stakeholders in the Northern Cape Province to galvanise their support, especially to ensure that the affected community allows CGS scientists access to private property to collect geological data. Scientists collected data for base metal mineralisation characterisation in Namaqualand within the framework of the 1:50 000-scale mapping campaign. The stakeholders consulted included representatives of the ZF Mgcawu, Kai!Garib, Khâi-Ma, David Kruiper, and Nama-Khoi municipalities; farmers; and mining operators. In addition, the CGS held a meeting with Oranjerivier Landbou-Unie (ORLU) under the leadership of Agri Noord-Kaap to provide updates on results from the mapping programme of the previous year and to seek support for activities planned for 2023/24. The union emphasised the importance of respecting 'Farm Access Protocol', stressing that timeous appointments must be made with farmers and the details of scientists, including vehicle details, must be shared as part of security requirements.

The CGS has been tasked with the responsibility of implementing CCUS and considering all interrelated aspects of social, economic, technical and environmental factors. In the Mpumalanga Province, the Stakeholder Engagement Programme provided support to the fundamental Geoscience Mapping Programme with a view to expanding the repository of 1:50 000-scale maps, and research and development to characterise the geological formations that are suitable for the implementation of CO_2 sequestration. The objective of this work is to ensure South Africa's energy security through CCUS and to facilitate the country's transition to a low-carbon economy. This research advances South Africa's commitment to shift towards a low-carbon economic growth trajectory, consistent with commitments to international climate change protocols. The CGS held numerous engagements with stakeholders, including communities, business forums, industry and local authorities. Through these meetings, the CGS has cemented working relations with Sasol, Exxaro, ArcelorMittal and Thungela Resources, which will to pave the way for greater collaborations in respect of CCUS research.

As part of capacity building initiatives, the CGS led a study tour to Iceland and the UK to investigate various CCUS technologies. The tour formed part of the World Bank-funded activities of the CCUS Capacity Building and Advocacy Programme. The tour was well timed as it corresponded with the completion of the geological characterisation, engineering and design research phases prior to construction and injection. The study tour follows unanimous agreement on the importance of CCUS technologies during the COP 28 Summit. Importantly, several critical stakeholders were included in the tour, including Govan Mbeki Municipality, industry and CGS scientists. These are stakeholders whose businesses are carbon intensive and are therefore affected by South Africa's Just Transition aspirations. CCUS technologies provide a direct carbon reduction intervention for them.

KwaZulu-Natal: Central and Far North Mapping Programme

To promote intergovernmental relationships, the CGS CEO held an engagement with KwaZulu-Natal's Head of Department for Economic Development, Tourism and Environmental Affairs (EDTEA) to explore areas of collaboration as contemplated in a prior collaborative framework proposal. The CGS has a long-standing relationship with the province, having coordinated meetings that have advanced to various structures such as the Economic Sectors, Investment, Employment and Infrastructure Development (ESIEID) Cluster and the

Provincial Political Cluster. A number of short-, medium- and long-term projects were discussed in the clusters, as preambulatory value propositions had been tabled before the aforesaid structures. These include projects within the CGS's strategic thematical areas, including minerals and energy; infrastructure development and land use; and health, environment and groundwater.

Gauteng: Mine Environment and Water Management Programme and National Geohazards Programme

Ingress control is the primary concern of the Mine Environmental and Water Management Programme (MEWMP). The CGS held stakeholder engagements with the City of Ekurhuleni in relation to the Water Ingress Control Measure Project in the Witwatersrand Basin. The purpose of the meeting was to appraise the Ekurhuleni Municipality of the Water Ingress Control Measure Project in the Van Ryn Canal and to present designs for the stormwater plan. The CGS received support from the municipality to ensure that the work continues uninterrupted and that interested and affected stakeholders are contacted. Visits were also undertaken to the project sites located in the Modderbee and Van Ryn canals within the jurisdiction of the Ekurhuleni Municipality.

This activity was recommended by a team of experts on Acid Mine Drainage in the Witwatersrand Goldfields in 2010/11. Accordingly, the DMRE tasked the CGS to implement ingress control measures to reduce surface water from flooding the abandoned mine workings of the Witwatersrand Goldfields.

In accordance with the National Geohazards Programme the CGS sought to refine the areas considered as 'dolomite land' for the entire country, by drilling boreholes and using available borehole information. Consequently, meetings were held with local government and schools in Kwa-Thema to seek their support and cooperation during both the mobilisation and drilling (data acquisition) periods.

The CGS commenced, in March 2024, with the drilling of three targeted boreholes along the boundary of the dolomite land within the Kwa-Thema region, situated on the East Rand within the Ekurhuleni Metropolitan Municipality. The primary objective of this drilling operation is to accurately refine the dolomitic land boundary in some areas of Kwa-Thema, which is crucial for comprehensive dolomite hazard assessment and dolomite risk management in the region.

Limpopo: Giyani Greenstone Belt

The CGS presented at a strategic planning session held in Limpopo, hosted by the Traditional Councils in Giyani, namely, Mabunda and Hlaneki. The CGS presentation highlighted research work undertaken within the Mopani District Municipality, including geological mapping, and geotechnical and groundwater assessments. Comments emanating from the discussion included the availability of data from the recent research, and availability of the preliminary report and its findings. The Traditional Leaders requested a detailed close-out report on the iterative engagements that had taken place prior to and during the GGB research. The CGS plans to visit the Traditional Councils in Giyani to present the summary of the Giyani Greenstone Belt Project, which will assist them in making informed decisions that are backed by science.

Free State: Mapping Programme

The Free State Provincial Government, led by Premier Mxolisi Dukwana, invited the CGS to a meeting in Bloemfontein in October 2023 to strengthen working relations between the two parties. The meeting focused on the work of the CGS (geotechnology and hydrogeology), and opportunities for the exploration of mineral and natural resources in the province. Consequently, the CGS was invited to the Free State Investment Conference, which focused on five key areas: the energy action plan and future implications; agriculture as a frontier to economic growth; infrastructure investment opportunities; financing; and mining. The conference presented the CGS with the opportunity to expand its 1:50 000 scale geoscience maps by quantifying known mineral deposits and new mineral prospects in the province.

Western Cape: Mapping Programme

The CGS ramped up its research on the prevalence of bivalent iron (Fe^{2+}) and manganese (Mn^{2+}) ions in groundwater in the Western Cape Province. These minerals present challenges related to both water supply (quantity) and quality, and more specifically to the clogging (and ultimate failure) of production boreholes. Engagements were held with the City of Cape Town regarding the production borehole, with the intention of re-establishing the pilot plant to determine system parameters for ozonation treatment in a primary aquifer. The intended outcome is to determine optimum system parameters in order to report on the performance of the plant and provide related recommendations. The meetings sought to formalise working relations through the establishment of a memorandum of understanding (MoU). The understanding remains subject to finalisation.

Institutionalised Agreements

The CGS and Sasol institutionalised their working relationship through the signing of an MoU on CCUS, to leverage existing synergies and competencies.

The CGS also entered into an MoU with Exxaro to advance their sustainability and decarbonisation efforts using CCUS technology, in support of South Africa's just energy transition commitment.

The DMRE and the IDC concluded a memorandum of agreement (MoA) that establishes the Junior Mining Exploration Fund. The CGS, as a signatory to the MoA, is tasked with providing technical support.

13 B-BBEE Compliance Performance Information

Table 11 has been completed in compliance with the Broad-based Black Economic Empowerment (B-BBEE) requirements of the B-BBEE Act (No. 46 of 2013) as amended, and as determined by the Department of Trade, Industry and Competition.

Table 11: CGS B-BBEE compliance performance information

Has the Department/Public Entity applied any relevant Code of Good Practice (B-BBEE Certificate Levels 1–8) with regards to the following:		
Criteria	**Response Yes/No**	**Discussion** *(include a discussion on your response and indicate what measures have been taken to comply)*
Determining qualification criteria for the issuing of licences, concessions or other authorisations in respect of economic activity in terms of any law?	No	The CGS does not issue licences as it is not within its mandate. The issuing of mining licences is done by the DMRE.
Developing and implementing a preferential procurement policy?	Yes	Preferential procurement is incorporated in the Supply Chain Management Policy and implementation is on-going depending on new National Treasury statutes.
Determining qualification criteria for the sale of state-owned enterprises?	No	It is not within the mandate of the CGS to sell state-owned enterprises.
Developing criteria for entering into partnerships with the private sector?	Yes	The CGS can collaborate with the private sector; it depends on how the skills sets complement each other, and each partnership has its own criteria.
Determining criteria for the awarding of incentives, grants and investment schemes in support of Broad-based Black Economic Empowerment?	No	The CGS does not issue grants and investments schemes; however, bursaries are issued based on the CGS Bursary Policy.

Part

D

Borehole cores recovered from the CCUS pilot site (Leandra) in Mpumalanga Province

Human Resources Management

This section presents key focus areas of the Human Resources Business Unit for the 2023/24 reporting period, including training and transformation initiatives.

The section also includes:

- Performance measurement systems to assess performance
- Management of employee wellness to ensure the health and wellbeing of staff
- Key human resources activities for the year
- Human capital challenges
- Human resources goals
- Human resources statistics.

The CGS regards its staff as a resource pivotal to the delivery of its strategic objectives. To this end, the Human Resources Business Unit is a strategic partner in the organisation whose role is to ensure that the CGS attracts and retains the required resources and expertise to carry out its legislative mandate and strategic objectives.

1 Overview of Human Resources Matters

1.1 Staff complement

The CGS has a total staff complement of 458 across six regions, namely Pretoria (Head Office), Gqeberha, Bellville, Limpopo, Pietermaritzburg and Upington. Of the 458 staff members, 32 are interns, 41% are employed in core (scientific) functions and 59% are employed in support functions (Figure 17). The organisation invests significantly in its staff with a major focus on youth and women. The CGS takes pride in a staff complement of whom 48% are women.

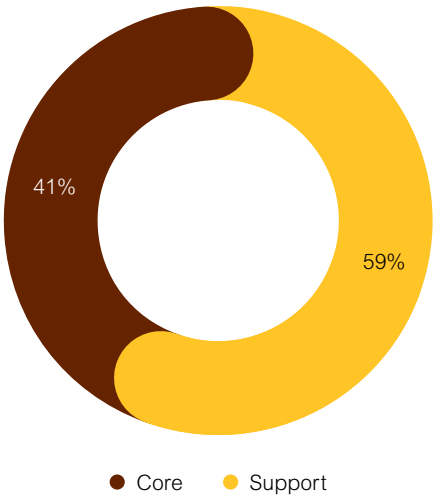


Figure 17: Composition of the CGS staff complement in 2023/24

1.2 Key human resources activities and achievements during 2023/24

- The Mining Qualifications Authority (MQA) granted the CGS a discretionary grant for the Intern programme and the Management and Executive Development Programme (MEDP). Funding for five internships and two staff members currently studying under the MEDP was approved. This achievement demonstrates the CGS's commitment to performance management and to supporting staff development with a view to creating a healthy talent pipeline and fair performance targets.
- Successful staff inductions were held during the year under review, where executive managers and managers presented the activities and important policies and procedures applicable to their respective business units. The appointed Employee Health and Wellness service provider presented services available in this regard to CGS staff members and their extended family members.
- The Employee Health and Wellness service provider conducted two awareness workshops, namely on disability and mental awareness. The Disability Awareness Workshop highlighted different types of disability and the available support offered to employees living with disabilities. The Mental Health Awareness Workshop was aimed at capacitating employees to deal with mental health-related challenges and to encourage employees to utilise the Employee Health and Wellness services which are provided at no cost to CGS employees and their immediate extend families.
- Workshops to create awareness of Workplace Rules and Policies were conducted internally. The aim of the workshops was to educate employees about workplace rules and CGS policies.
- The CGS successfully implemented Career Progression for Junior Scientists, whereby those qualifying are promoted to the position of Scientist. This is one of the staff recognition initiatives aimed at staff retention.
- Two executives, one female and one male, were successfully appointed to fill the vacant positions of Executive Manager: Geoscientific Services and Executive Manager: Integrated Geoscience Development. The two appointments resulted in the CGS meeting its target of 60% female representation at executive level.
- The CGS successfully paid performance bonuses to all qualifying staff in December 2023. Payment of performance bonuses demonstrates the CGS's commitment to motivating and rewarding staff for good performance.
- The CGS's Leave Policy was successfully reviewed and approved by the Board.
- As a science institution, the CGS advertised and offered new bursaries to 55 deserving bursars. Part-time bursaries were awarded to CGS staff and full-time bursaries were granted to non-staff, with a view to contributing to the government's initiatives of skills development and creating employment opportunities. The bursary initiative further demonstrates the CGS's commitment to staff development.
- An Employment Equity Report was successfully submitted to the Department of Labour and Employment.
- A Workplace Skills Plan and Annual Training Report was successfully submitted to the MQA.
- Salary negotiations were concluded timeously.

1.3 Staff turnover analysis

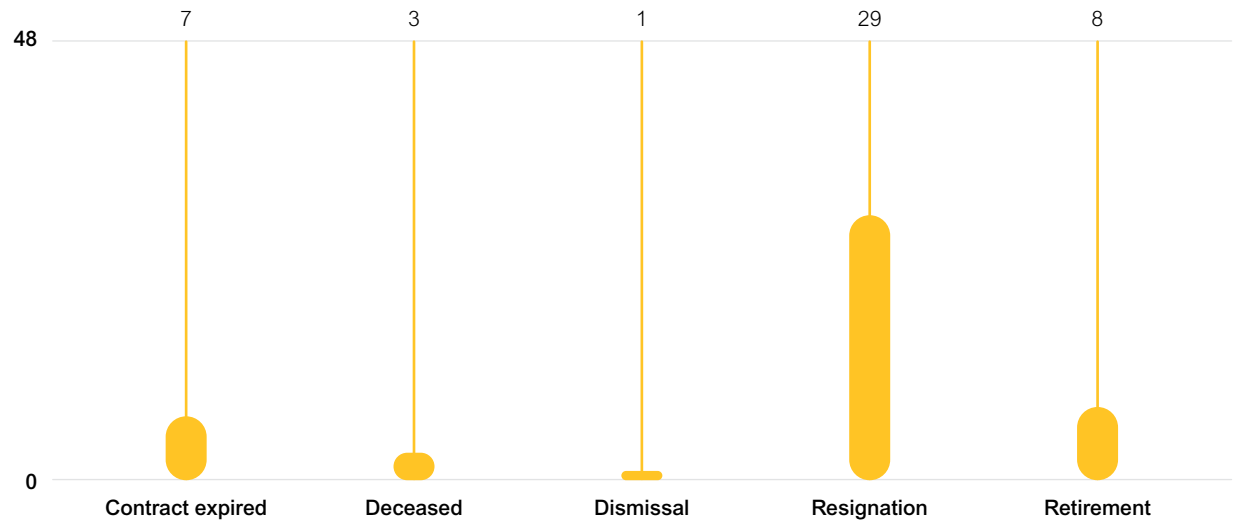


Figure 18: CGS staff turnover in 2023/24

Employee turnover measures the percentage of employees who left the CGS during the year under review, as well as the rate at which vacancies are filled. The year ended with a staff turnover of 10%, with resignations accounting for 62% of terminations and 15% of terminations resulting from retirement. Core staff represented 38% of all terminations while support staff represented 62%.

1.4 Overall employee tenure

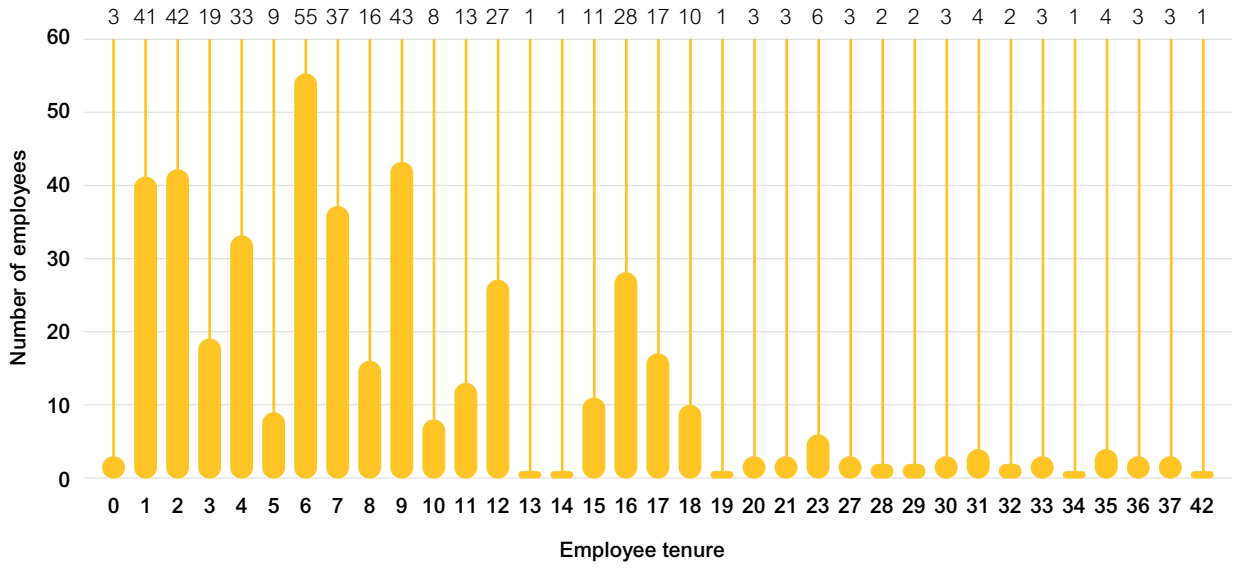


Figure 19: Overall employee tenure within the CGS

Of the total staff contingent, 69.87% of the CGS staff have remained at the CGS for five years or longer. While longer-tenured employees have knowledge of the culture, services, and mandate of the CGS, it is important to balance the value of retaining this knowledge with the equally important goal of hiring new employees who contribute new and fresh ideas. It is to the CGS's advantage that its workforce reflects a blend of the two cohorts.

1.5 Workforce age analysis

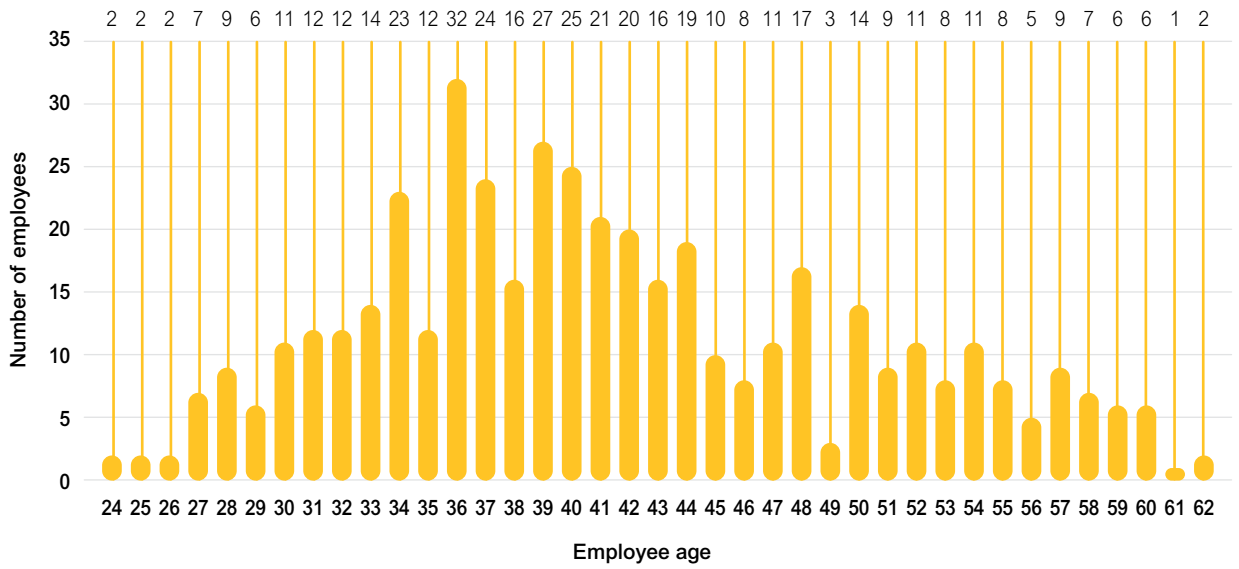


Figure 20: Analysis of the ages of CGS employees

Of the total CGS workforce, 24% are classified as youth. This statistic represents an increase from 22% in 2023/24. To capacitate its youth, the CGS continues to grant opportunities to staff (and the citizens of the country) through its Bursary and Internship programmes.

1.6 Internship programme

Figure 21 presents an overview of the CGS's Internship Programme for the year under review.

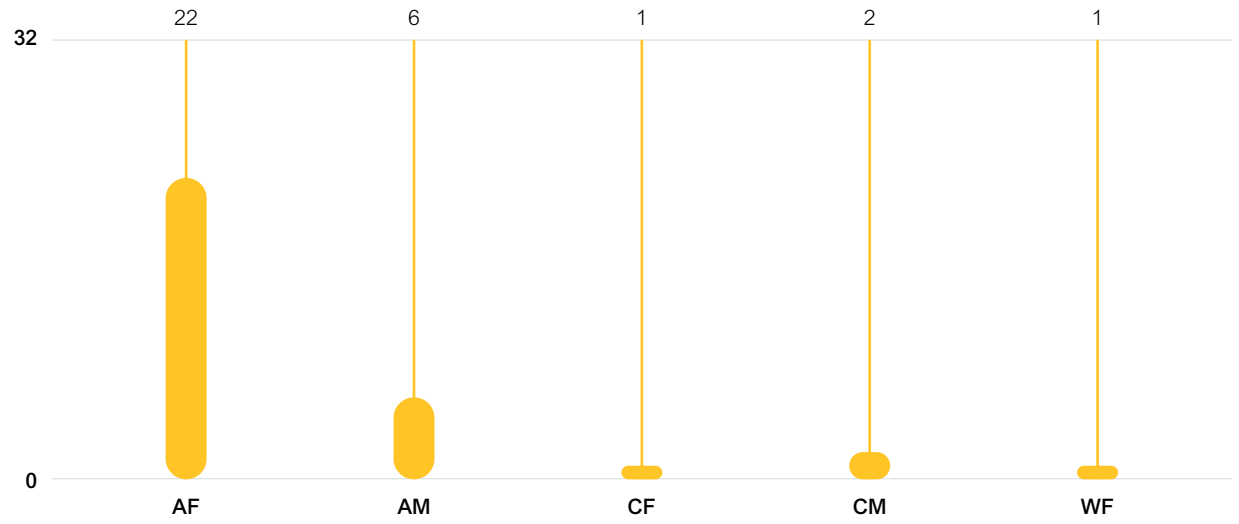
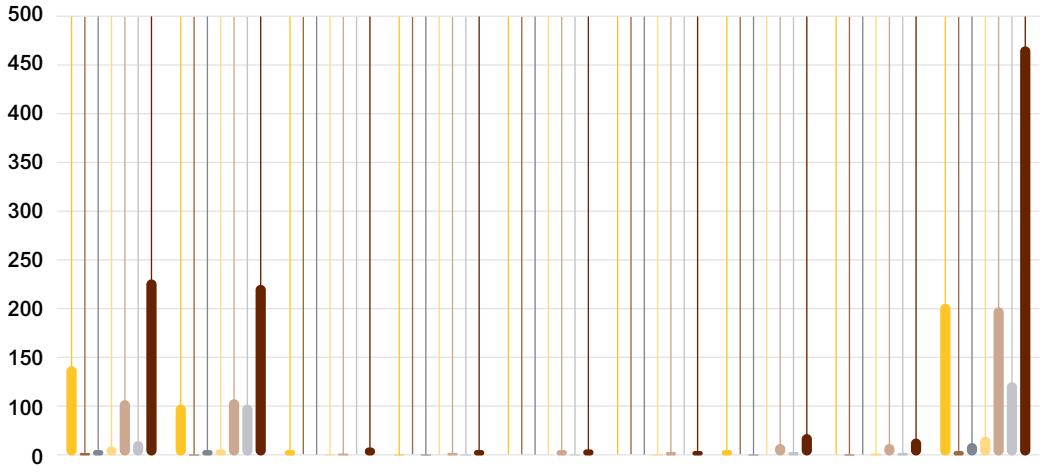


Figure 21: CGS Internship Programme in 2023/24

Note: AF – African female; AM – African male; CF – Coloured female; CM – Coloured male; WF – White female

There are currently 32 interns at the CGS on a programme that runs for a period of two years. Thirty-one percent (31%) of the interns are placed with the core staff of the organisation, while 69% are in support functions. The programme gives graduates much-needed practical exposure to increase their prospects of employment. Some interns are offered permanent employment while others are offered fixed-term contracts during or after their internship contracts, following a rigorous recruitment process.

1.7 Workforce analysis



	AF	AM	CF	CM	IF	IM	WF	WM	Total
Administration	100	57	6	1	0	0	6	0	**170**
Executive	3	1	0	0	0	0	0	1	**5**
Management	6	6	0	1	0	0	1	0	**14**
Professional Administration	10	7	1	0	0	1	0	2	**21**
Scientists	62	63	2	3	6	4	13	13	**166**
Technical Officers	16	57	0	1	1	0	4	3	**82**
Total	**197**	**191**	**9**	**6**	**7**	**5**	**24**	**19**	**458**

Figure 22: CGS staff profile: demographics by race, gender and job category

Note: AF – African female; AM – African male; CF – Coloured female; CM – Coloured male; IF – Indian female; IM – Indian male; WF – White female; WM – White male

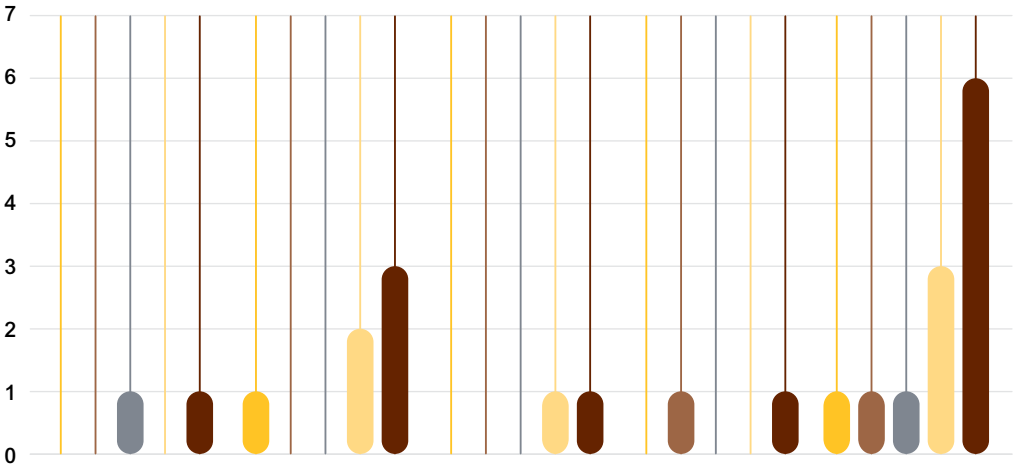
While gender representation has been achieved at organisational level, there is an opportunity to improve representation in some key and strategic areas. Noticeably, 51% of African women occupy administrative roles, while 3.05% are in management positions. Management is considering implementing affirmative action measures to ensure that more African women are appointed to critical positions.

1.8 Bursaries

The Learning and Development Policy makes provision for bursaries for both full-time and part-time studies. The Learning and Development Committee is tasked with the responsibility of considering all applications for bursaries and making recommendations to the CEO. The selection process is guided by criteria set out in the advertisement as informed by the relevance of the field of study to the CGS environment.

1.8.1 Full-time bursars

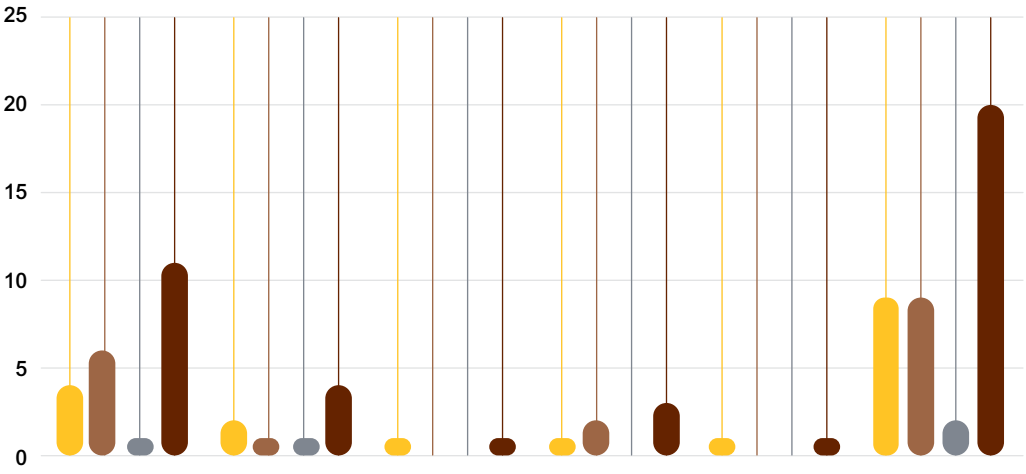
The external full-time Bursary Programme supports talented students from previously disadvantaged backgrounds. In the 2023 academic year, the CGS had a total of 26 bursars with a gender distribution of 77% female and 23% male. Six of the 26 bursars completed their studies in the year under review (Figure 20). Of the 20 active full-time bursars, six female bursars are pursuing doctorates and eight are engaged in master's degrees (Figure 23). This demonstrates the CGS's commitment to empowering women in the geoscience environment.



	AM	IF	IM	WF	Total
Doctoral Degree	0	1	0	0	**1**
Master's Degree	0	0	0	1	**1**
Honours Degree	1	0	0	0	**1**
Bachelor's Degree	0	2	1	0	**3**
Total	**1**	**3**	**1**	**1**	**6**

Figure 23: Profiles the full-time bursars who have completed their studies for the year under review

Note: AM – African male; IF – Indian female; IM – Indian male; WF – White female



	AF	AM	IF	CF	WM	Total
Doctoral Degree	4	2	1	1	1	**9**
Master's Degree	6	1	0	2	0	**9**
Bachelor's Degree	1	1	0	0	0	**2**
Total	**11**	**4**	**1**	**3**	**1**	**20**

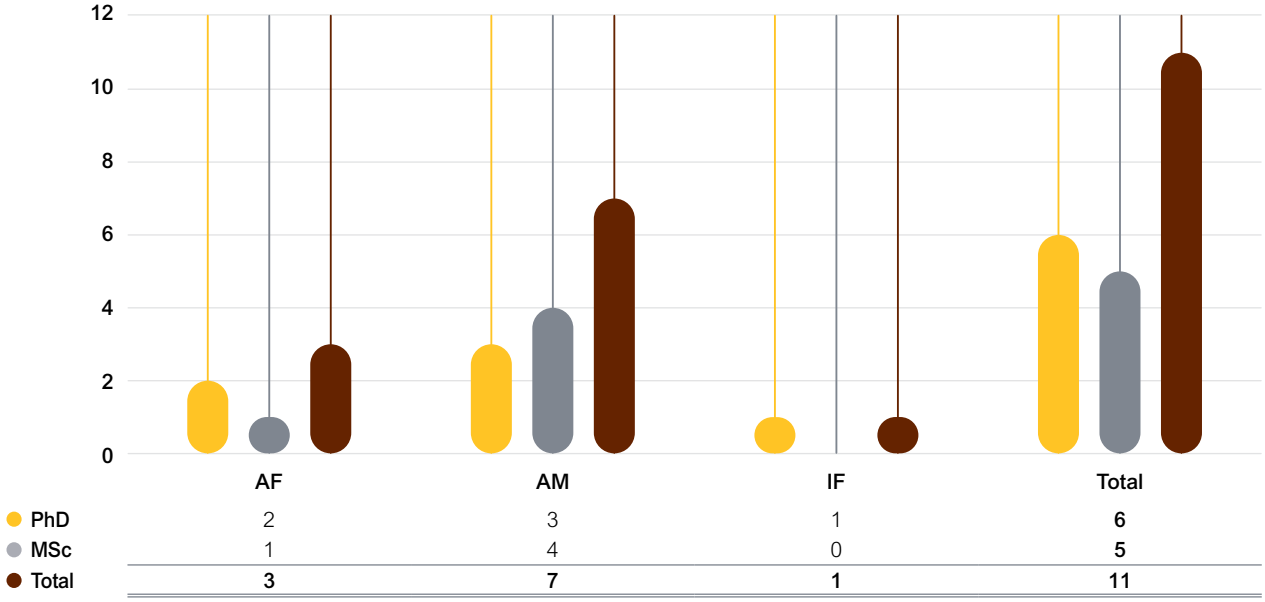
Figure 24: Full-time CGS bursars in 2023/24

Note: AF – African female; AM – African male; IF – Indian female; CF – Coloured female; WM – White male

1.8.2 Part-time bursars

Part-time bursaries are offered to CGS staff for scientific and non-scientific studies. The Part-Time Bursary Programme is integral to the CGS's career development and retention strategies. There were 34 new part-time bursars in the year under review. Of these, seven are for core-related qualifications and 17 are for support-related qualifications. Fifty-nine (59%) percent of the bursars are female while 41% are male. This skills development initiative demonstrates the CGS's commitment to creating and supporting a capacitated and skilled workforce.

Figure 25 provides an overview of the six part-time bursars pursuing PhDs and the five pursuing Master's degrees for the year. Notably, 57% of the bursars are female and 43% are male.



	AF	AM	IF	Total
PhD	2	3	1	**6**
MSc	1	4	0	**5**
Total	**3**	**7**	**1**	**11**

Figure 25: Part-time PhD and Master's degree bursars at the CGS

Note: AF – African female; AM – African male; IF – Indian female

1.9 Training interventions completed during the year

Training interventions completed during the year under review are presented below:

1. Bid Committee
2. Snake Training
3. Supervisory Skills Training
4. First Aid Training
5. XRF Training
6. ISO 14001:2015 Implementation
7. NEBOSH National Environmental Certificate
8. ISO 14001:2015 Internal Auditor Training
9. ISO 9001:2015 Understanding and Implementation of QMS
10. Aerial Surveying (UAV) for 3-D Surface Modelling and Detailed Mapping
11. Mineral Resource Management
12. Mineral Policy and Investment
13. Environmental Management Systems
14. Mineral Economics, Resource Estimation and Policy and Investment
15. Data Analysis
16. Adobe Illustrator
17. Adobe Photoshop
18. Adobe InDesign
19. Transport Logistics and Fleet Management Training
20. Incident Investigation
21. Root Cause Analysis
22. Fall Arrest and Rescue Training
23. Data Analysis for Internal Auditors using Excel (DAEX) Training
24. Introduction to Stable Isotopes Training
25. ISO 9001:2015 Top Management (Quality Management Systems) Awareness Training
26. ISO 9001:2015 Staff (Quality Management Systems)
27. ISO 14001:2015 Staff (Environmental Management Systems)
28. ISO 45001:2018 Staff (Occupational Health and Safety Management Systems)
29. Mental Health Wellness Awareness.

1.10 Investing in staff

In line with the employment equity priorities of the country, the CGS takes its responsibility to empower staff seriously, especially those from historically disadvantaged communities, and grows a scientific and support services human resources base that is gender representative. Our people love what they do, as the following profiles of some of our star performers confirm.

Dr Rebekah Grow

When did you join the CGS?

I joined the CGS on 8 January 2001.

What did you want to do when you were in matric?

During my matriculation year, I became interested in pursuing a career in science. When I began my BSc degree studies, I was uncertain of the scientific field I wanted to pursue. While at university, a poster showcasing the benefits of a career in Geology caught my interest. Encouraged by my family, I chose to pursue Geology as my career path.

How did the CGS assist you in fulfilling your dreams?

Being a young woman in South Africa, I found invaluable support from the CGS in pursuing my dream of becoming a scientist. Upon completing my BSc (Hons) degree at the University of Durban Westville as a CGS bursar, I embarked on my career at the CGS as a junior scientist. Progressing steadily, I advanced to the position of senior scientist. During my ongoing tenure, I have participated in diverse geoscience projects that have enriched my expertise and opened doors for further academic endeavours. With the CGS's support, I obtained my MSc degree in Geology from the University of the Witwatersrand in 2009, and recently concluded and was awarded a PhD from Stellenbosch University. My professional growth within the CGS is largely attributable to the guidance and encouragement I received from both the management and my colleagues. I am profoundly grateful for the CGS's dedication to employee development, demonstrated through their investment in formal qualifications, and their unwavering support throughout my career.

What is your current role?

I am currently a senior scientist in the Geophysics and Remote Sensing Unit.

What does the role entail and what about it is rewarding?

As a senior scientist I am a co-task leader for landslide mapping studies. In this role I oversee and provide guidance on various landslide task activities. I also utilise remote sensing and geospatial technologies to identify and delineate landslide zones. The most fulfilling part of my role is contributing to community safety by creating tools such as susceptibility maps for landslide hazards. These tools can aid in the mitigation of landslide risks and promote sustainable land use planning.

How is your role linked to the CGS's strategic objectives?

In my specialised role in landslide mapping studies, I support the CGS's strategic objectives under the National Geohazards Mapping Programme by advancing CGS expertise on landslide-related risks in South Africa.

What challenges you?

Staying updated with evolving geospatial technologies, interpreting complex geological data, and balancing technical work with clear communication with various stakeholders.

With hindsight, would you have chosen a different career?

No, I have a genuine passion for my scientific career.

How would you encourage:

Youngsters wanting to follow your career?

Uphold strong beliefs in your path, nurture a curious mindset, and trust in your own abilities as well as in others. Show determination in pursuing your goals and always aim to excel. Take advantage of mentorship and practical project exposure roles to gain hands-on experience and forge meaningful connections with industry professionals.

Ambitious CGS employees below your level?

Prioritise continuous learning and skills development, foster strong networks, and take initiative in the different project activities assigned to you. Always seek feedback, cultivate leadership skills, and stay updated on industry trends to pave the way for your advancement within the CGS.

Ms Andisani Makhado

When did you join the CGS?

I joined the CGS on 3 August 2015 as a geophysics intern.

What did you want to do when you were in matric?

I wanted to pursue Electrical Engineering, but after reading a geology article from my geography textbook I changed my mind and decided to pursue Geology.

How did the CGS assist you in fulfilling your dreams?

When I came to the CGS in 2015 as an intern. I had a B-tech in Geology, and I always knew that I am not limited. Through exposure to various projects, and the passion I have for science, the CGS afforded me the opportunity to further my studies by allowing me to utilise one of their projects as the focus for my MSc research. On top of all that, the CGS funded my studies, and it automatically became a part of the realisation of my dreams of furthering my studies.

What is your current role?

I am a scientist in the Geophysics and Remote Sensing Division under the Minerals and Energy Business Unit.

What does the role entail and what about it is rewarding?

My role involves participating in multiple geoscience projects and conducting research. Knowing that the products I make contribute to the development of maps is satisfying.

How is your role linked to the CGS's strategic objectives?

I am working on projects that seek to alleviate the burden of greenhouse gases such as CO_2 from the atmosphere. One of the NDP goals is to improve the conditions of our climate by reducing emissions of gases in the atmosphere and the CGS also takes part in ensuring that this goal is achieved.

What challenges you?

The person I am today should always strive to be better than the person I was yesterday.

With hindsight, would you have chosen a different career?

Given that I am privileged to work in various geoscience units, I am able to choose what I am passionate about, as I have broad knowledge of most of the programmes carried out by CGS. I do not think I could have asked for a better place to be. Certainly, I would not have chosen to work anywhere else than where I am right now.

How would you encourage:

Youngsters wanting to follow your career?

You are not limited, and you can achieve anything you commit yourself to. Today we have programmes such as career expos, providing an opportunity to meet your potential employer and gain more insights into your career choice. Become informed.

Ambitious CGS employees below your level?

The CGS affords its employees a vast number of opportunities, including involvement in various projects, training through the Individual Development Plan Programme, workshops, bursaries, and conferences. These are all learning platforms in which one can participate and improve.

Ms Nangamso Dunga

When did you join the CGS?

I joined the Council for Geoscience in June 2019 as an intern in the Mapping Unit, which is now an integral part of the Minerals and Energy Unit.

What did you want to do when you were in matric?

I wanted to study Environmental Health, which I did apply for and was accepted. My physical sciences teacher thought I was good in the subject though I did not have passion for it. I attended a science school (St John's College – Mthatha), so I was majoring in Physics, Geography, Mathematics, and Biology. I have always had good grades so my Physics teacher thought I would be a good candidate for Geology. The interesting part is that I thought Geology meant Geography until I did thorough research on it. I went to the internet café, looked for institutions that offer the programme, and applied that same afternoon to study Geology. I was accepted and I have been happy with this choice ever since.

How did the CGS assist you in fulfilling your dreams?

In my first internship after university, I thought Geology was just about mining, as someone who did not fully understand what Geology is. It has been an honour for me to be exposed to other projects that are useful to communities through the Council for Geoscience. I can remember being an intern when I joined the Landslide Mapping Project in KwaZulu-Natal, and I was able to learn as well as interact with communities and see how I was able to make a difference. As far as my professional career growth goes, I had a Master's in Geology when I joined the CGS, with the aim of obtaining a PhD in Geology one day.

What is your current role?

I am a junior scientist in the Minerals and Energy Business Unit.

What does the role entail and what about it is rewarding?

My role entails mainly field mapping and geoscientific research. What is rewarding about this role is the opportunity to apply these skills in different areas and projects.

How is your role linked to the CGS's strategic objectives?

The CGS's strategic objectives include economic growth and environmental sustainability. In addition to improving the geological understanding of South Africa, I am involved in mapping for exploration purposes, among other uses. I am also involved in a research project which focuses on achieving energy that is secure and sustainable, and the just transition in support of the NDP.

What challenges you?

Myself, I always strive to outdo the person I was when I joined the Council for Geoscience.

With hindsight, would you have chosen a different career?

Definitely not. I did not choose this career path; I was advised to do so but until today I have no regrets.

How would you encourage:

Youngsters wanting to follow your career?

I would say make sure you enjoy being outdoors first because I believe that is a big part of being a geologist. No matter what you do, you cannot avoid ground truthing (getting information by direct observation). Other than that, you must also be passionate about research and be open to learning throughout your career because with Geology you must always keep your "search" engine on. Lastly, have fun! I mean, Geologists rock!

Ambitious CGS employees below your level?

I would say build a good reputation for yourself, let your work speak for itself. Make sure you are known for going the extra mile in everything. That will take you far – I believe it has taken me this far.

Dr Robert Netshitungulwana

When did you join the CGS?

I began working at the CGS in April 2006 as a junior scientist in the Laboratory and Geochemistry Unit.

What did you want to do when you were in matric?

Growing up in a rural village, I often played with stones and rocks for various purposes. I was fascinated by the unique physical properties of each material, which sparked my interest in pursuing a degree in science at university or technikon.

How did the CGS assist you in fulfilling your dreams?

The CGS played a significant role in my career development after completing my professional degree, for which I am grateful. I began my tenure at the CGS as a junior scientist (P9) in the Geochemistry Section. Prior to this, I had experience as a trainee geologist in the field of exploration with De Beers Consolidated Mines Pty (Ltd) and had conducted analytical chemical fingerprinting (LA-ICP-MS, SEM) of South African and Zimbabwean gold for source identification, which was the focus of my MSc project. In 2010, I progressed to the position of scientist (P8) through career path progression. The role involves fieldwork planning for projects, managing projects, supervising projects (including international projects such as Uganda and Rwanda), conducting supervised XRF analysis and interpretation of data, and writing of quarterly reports. In 2011 I was promoted to the position of senior scientist and joined the Environmental Geoscience Unit where I was involved in geo-environmental impact assessment projects for hydro, mine residue deposits, and stream sediment geochemical studies. The role involved supervising and mentoring junior scientists in project planning, fieldwork, data interpretation and report writing. The work led to my PhD qualification, which was wholly supported by the CGS. In 2014, I joined the Minerals and Energy Unit as a senior scientist after the restructuring of the CGS. My tasks included project management (including acting as Unit Manager), mentoring, and supervising of junior scientists and report writing. Skills I have acquired so far include conducting geochemical surveys (both by helicopter and on foot), exploration geochemistry, environmental geology, and analytical techniques such as LA-ICP-MS, SEM, XRF and humidity cell leach testing, as well as experience in geochemical modelling using Geochem Workbench software.

What is your current role?

Since 2018, I have held the position of chief scientist, conducting research and development in the fields of geochemistry, mineral exploration, and economic geology.

What does the role entail and what about it is rewarding?

My role is to manage the Minerals Programme in the Mineral and Energy Unit as part of the integrated and Multidisciplinary Geoscience Mapping Programme. This programme largely contributes to the strategic outcome of attracting a 5% share of global exploration expenditure.

How is your role linked to the CGS's strategic objectives?

It contributes significantly to the delivery of the CGS mandate, supporting socio-economic growth through sustainable exploration and exploitation of mineral commodities, as well as providing energy security.

What challenges you?

The genesis of economic deposits is a complex topic. Additionally, the provenance of the gold in the Witwatersrand Basin is also complex. We will not delve into the theological versus the Big Bang theories of genesis.

With hindsight, would you have chosen a different career?

My current career aligns with my youthful interests, and I thoroughly enjoy working as a geologist.

How would you encourage:

Youngsters wanting to follow your career?

It is a very interesting career for young people, and still wide open (capable of producing plus thousands of PhDs). To respond to the challenging phenomenon that the geo is facing, such as climate change, or the need for and use of high-tech minerals, we need forward looking, motivated young people to bring up new knowledge in this dimension, and innovation is very welcomed.

Ambitious CGS employees below your level?

There are basic principles of life that we have been taught in our various schools (primary, secondary, tertiary, home, church, and community). The goal of these principles is to make us humble, honest, and disciplined. If we can live according to these principles, we will be able to achieve our goals.

Mr Ngqondi Nxokwana

When did you join the CGS?

I joined the CGS in 2009 as a junior scientist in the Petrography Section of the Analytical Services Unit.

What did you want to do when you were in matric?

I was curious about how the mining environment works and wanted to be a part of it.

How did the CGS assist you in fulfilling your dreams?

The CGS has given me opportunities to further my studies. Through the CGS Bursary Programme I have attained a Master's degree in Geology, certificates in Project Management and have completed the Management Development Programme. I am currently in the final year of my Master's degree in Business Leadership. I have also been given opportunities to grow in the organisation, from starting out as a junior scientist 15 years ago to being a chief scientist today.

What is your current role?

I am currently a project manager for the Carbon Capture, Storage and Utilisation Project.

What does the role entail and what about it is rewarding?

The role involves coordinating the various project activities and ensuring that the deliverables are met, on time and within budget. This is one of South Africa's important interventions towards climate change abatement. It is rewarding to be a part of a scientific endeavour of such remarkable societal importance.

How is your role linked to the CGS's strategic objectives?

My current role speaks to environmental sustainability, energy security and economic growth. All of these are at the centre of the CGS's strategy and South Africa's developmental imperatives.

What challenges you?

It's an exciting challenge to be part of an organisation charged with such critical flagship projects for the country. As scientists we have a responsibility to ensure that these bring about the much-needed solutions and deliver the necessary societal impact.

The project management environment is very dynamic with a lot of moving pieces to bring together on a daily basis. It's mostly unpredictable, challenging and exciting.

With hindsight, would you have chosen a different career?

This career has given me many opportunities for learning, growth and a platform to make a difference in some of the critical challenges facing South Africa, such as energy security and climate change. I cannot imagine my professional trajectory any differently.

How would you encourage:

Youngsters wanting to follow your career?

This is a field with vast opportunities for the taking. New opportunities continue to emerge in such areas as renewable energy and the search for critical minerals. Find your niche and make the most of it.

Ambitious CGS employees below your level?

The CGS provides opportunities for further studies through the Bursary Programme. Taking this up to further your studies would expand your horizon in this vast field. Secondly, get out of your comfort zone and put your hand up for other roles you wouldn't have otherwise considered yourself suited for. Just take that leap and you will be surprised at how much you are capable of!

Mr Sivuyile Ngamlana

When did you join the CGS?

I joined the CGS in 2008 as a technical officer in the Analytical Services Unit.

What did you want to do when you were in matric?

When I was in matric, I wanted to pursue a career in the engineering field.

How did the CGS assist you in fulfilling your dreams?

When I joined the CGS in 2008 as a technical officer I only had a matric certificate, and I was working in both the Laboratory and Geochemistry units where my role was to prepare soil/rock samples for analysis. I was also working in the field doing helicopter sampling. Meeting different people in the CGS with different careers motivated and reminded me of what I had promised to do. I then decided to enrol for a National Diploma in Information Technology and completed it.

Through the CGS Bursary Programme, I enrolled and completed an Advanced Diploma in Information Resource Management and a BSc (Hons) in Computing. These two qualifications have put me in a position to qualify and thrive in my current role.

What is your current role?

I am a scientific database coordinator in the Analytical Service Unit.

What does the role entail and what about it is rewarding?

Ensuring that Analytical Service Unit staff can access the Laboratory Information Management System (LIMS) all the time; creation of report templates and forms to be used for results and quarterly reports; training of analytical services staff on LIMS; and configuration of the system as per user requirements. I have to learn new skills every day and ensure that access to client information/data is limited to only authorised users.

How is your role linked to the CGS's strategic objectives?

Currently, the Analytical Service Unit is working towards obtaining ISO/IEC 17025:2017 accreditation; my role as Scientific Database Coordinator ensures that analytical service personnel are trained and are capable of using the system and continuously updating records. Attaining ISO/IEC 17025:2017 accreditation is key to ensuring that the CGS Analytical Services Unit is a world-class analytical facility.

What challenges you?

Always do things better than the previous day. It's an exciting challenge being in the fast-evolving ICT space, having to keep up with new technologies almost daily.

With hindsight, would you have chosen a different career?

I am happy with my current career. All I am inspired to do is to further my studies and broaden my knowledge in my current field.

How would you encourage:

Youngsters wanting to follow your career?

My encouragement to youngsters is that it is never too late to start. I still remember when I first enrolled for my National Diploma, I was 29 years old.

Ambitious CGS employees below your level?

Focus on what you want to achieve in life and never stop learning.

Mr Sashan Manikam

When did you join the CGS?

I joined the Council for Geoscience on 2 January 2024.

What did you want to do when you were in matric?

I wanted to study Geology to learn and understand how our landscapes and environments formed and evolved over time. I particularly wanted to be involved in creating knowledge and improving our understanding of Earth processes in a South African/African context.

How did the CGS assist you in fulfilling your dreams?

The CGS has provided an environment conducive for marine geoscientific research and mapping by providing equipment, software and resources that are otherwise hard to access. The CGS is also supportive and encouraging of staff to further their studies, for which I am grateful.

What is your current role?

My current role is as a scientist within the Minerals and Energy Unit.

What does the role entail and what about it is rewarding?

My role includes conducting coastal and marine geological mapping and research within South Africa's coastal and marine domain. This involves collecting marine geophysical and hydrographic data of the seafloor and subsurface from aboard a survey vessel. These data are used to create various thematic maps of the offshore environment and conduct in-depth research.

It is rewarding to be able to create knowledge and contribute towards the understanding of South Africa's offshore environment. Most of South Africa's offshore environment is yet to be mapped using up to date methods and technologies, so to be involved in that is exciting and a privilege.

How is your role linked to the CGS's strategic objectives?

My role is linked to the strategic objectives in the following ways:

- Mapping and generating baseline knowledge of the marine environment contributes directly towards increasing South Africa's mapping coverage collectively and specifically in an offshore context.
- Determining offshore resource potential informs decision-making processes on economic and environmental viability.
- Providing baseline knowledge on the character of the seabed and sub-surface helps to advise on safe land-use and facilitate sustainable development where possible.

What challenges you?

Unravelling the complexities of a unique environment is an exciting challenge in and of itself. However, our country faces multiple socio-economic and developmental challenges in relation to our coasts and offshore environment, which drives my work. Determining offshore resource potential and its viability may contribute towards creating sustainable and equitable socio-economic and infrastructural conditions that can benefit and facilitate development of coastal communities. Many coastal communities are also vulnerable to threats of rising sea level, storm surges and coastal flooding. I hope that the knowledge generated can contribute towards improving adaptability, resilience, and sustainable development of these communities.

With hindsight, would you have chosen a different career?

I have always had an interest in learning, researching and writing about the natural environment for a wide range of audiences.

How would you encourage:

Youngsters wanting to follow your career?

Persistence and exposure help immensely. It may not necessarily follow a smooth trajectory and that is okay. Try to take note of the natural environment beyond just its beauty. Ask questions about what makes it the way it is. Try to access available resources online if possible and they do not have to be courses. Books, talks, videos, popular news all provide valuable information and can act as steppingstones. If such resources are hard to come by, try to root your curiosity in your immediate community. Engage with teachers and classmates where possible and try to get your family involved too. Geology can be picked up gradually over time by engaging with the natural environment so always be curious.

Ambitious CGS employees below your level?

Try to get involved and broaden your horizons. There are plenty of opportunities and people to learn from. Collaboration is key, important especially in big projects and really fun all round. The field is incredibly diverse and is rapidly evolving so try to maintain curiosity and an open mind.

1.11 Employee relations

During the year under review, cases of misconduct that were concluded resulted in the following outcomes: four counselling, eight verbal warnings, one written warning, one final written warning, one dismissal and two mutual separations.

Nature of disciplinary action	Number
Counselling	4
Verbal Warning	8
Written Warning	1
Final Written Warning	1
Dismissal	1
Mutual Separation	2

1.12 Safety time lost through injury

During the period under review 15 injury-on-duty cases were reported and measures are being taken to prevent a recurrence of these.

1.13 Planned activities for 2024/25

The Human Resources Business Unit is planning the following activities for 2024/25:

a) Performance management – contracting, mid-year review and final assessment
b) Workplace Skills Plan and Annual Training Report to the MQA
c) Employment Equity Plan implementation and report to the Department of Employment and Labour
d) Policy reviews
e) Policy awareness workshop
f) Resuscitation of Mentorship Programme
g) Staff inductions
h) Disability awareness campaign
i) Implementation of the targeted interventions of 2022/23 staff survey, and
j) Implementation of the approved talent management framework.

Part E

Drill rig operation at the CCUS site (Leandra)

PFMA Compliance Report

This part of the report provides information relating to the CGS's compliance with the Public Finance Management Act. The section covers the following information:

- Irregular, fruitless and wasteful expenditure and material losses
- Late and/or non-payment of suppliers
- Supply chain management.

1 Irregular, Fruitless and Wasteful Expenditure and Material Losses

1.1 Irregular expenditure

a) Reconciliation of irregular expenditure

Description	2023/24 R'000	2022/23 R'000
Opening balance	-	-
Adjustment to opening balance	-	-
Opening balance as restated	-	-
Add: Irregular expenditure confirmed	-	-
Less: Irregular expenditure condoned	-	-
Less: Irregular expenditure not condoned and removed	-	-
Less: Irregular expenditure recoverable	-	-
Less: Irregular expenditure not recoverable and written off	-	-
Closing balance	**-**	**-**

Reconciling notes

Description	2023/24 R'000	2022/23 R'000
Irregular expenditure that was under assessment	-	-
Irregular expenditure that relates to the prior year and identified in the current year	-	-
Irregular expenditure for the current year	-	-
Total	**-**	**-**

b) Details of irregular expenditure (under assessment, determination, and investigation)

Description	2023/24 R'000	2022/23 R'000
Irregular expenditure under assessment	-	-
Irregular expenditure under determination	-	-
Irregular expenditure under investigation	-	-
Total	**-**	**-**

c) Details of irregular expenditure condoned

Description	2023/24 R'000	2022/23 R'000
Irregular expenditure condoned	-	-
Total	**-**	**-**

d) Details of irregular expenditure removed – (not condoned)

Description	2023/24 R'000	2022/23 R'000
Irregular expenditure NOT condoned and removed	-	-
Total	**-**	**-**

e) Details of irregular expenditure recoverable

Description	2023/24 R'000	2022/23 R'000
Irregular expenditure recoverable	-	-
Total	**-**	**-**

f) Details of irregular expenditure written off (irrecoverable)

Description	2023/24 R'000	2022/23 R'000
Irregular expenditure written off	-	-
Total	**-**	**-**

Additional disclosure relating to Inter-Institutional Arrangements

g) Details of non-compliance cases where an institution is involved in an inter-institutional arrangement (where such institution **is not** responsible for the non-compliance)

Description	2023/24 R'000	2022/23 R'000
None	-	-
Total	**-**	**-**

h) Details of irregular expenditure where an institution is involved in an inter-institutional arrangement (where such institution **is** responsible for the non-compliance)

Description	2023/24 R'000	2022/23 R'000
None	-	-
Total	**-**	**-**

i) Details of disciplinary or criminal steps taken as a result of irregular expenditure

Disciplinary steps taken
None

1.2 Fruitless and wasteful expenditure

a) Reconciliation of fruitless and wasteful expenditure

Description	2023/24 R'000	2022/23 R'000
Opening balance	18 496	18 496
Adjustment to opening balance	-	-
Opening balance as restated	-	-
Add: Fruitless and wasteful expenditure confirmed	-	-
Less: Fruitless and wasteful expenditure recoverable	-	-
Less: Fruitless and wasteful expenditure not recoverable and written off	-	-
Closing balance	**18 496**	**18 496**

Fruitless and wasteful expenditure was identified in regard to the implementation of the Humidity, Ventilation and Air-Conditioning (HVAC) system up to 2017. The work was found to be technically unacceptable and needed remediation. Management remains committed to eliminate and avoid any fruitless and wasteful expenditure.

Reconciling notes

Description	2023/24 R'000	2022/23 R'000
Fruitless and wasteful expenditure that was under assessment	-	-
Fruitless and wasteful expenditure that relates to the prior year and identified in the current year	-	-
Fruitless and wasteful expenditure for the current year	-	-
Total	**-**	**-**

b) Details of fruitless and wasteful expenditure (under assessment, determination, and investigation)

Description	2023/24 R'000	2022/23 R'000
Fruitless and wasteful expenditure under assessment	-	-
Fruitless and wasteful expenditure under determination	-	-
Fruitless and wasteful expenditure under investigation	-	-
Total	**-**	**-**

c) Details of fruitless and wasteful expenditure recoverable

Description	2023/24 R'000	2022/23 R'000
Fruitless and wasteful expenditure recoverable	-	-
Total	**-**	**-**

d) Details of fruitless and wasteful expenditure not recoverable and written off

Description	2023/24 R'000	2022/23 R'000
Fruitless and wasteful expenditure written off	-	-
Total	**-**	**-**

e) Details of disciplinary or criminal steps taken as a result of fruitless and wasteful expenditure

Disciplinary steps taken
None

1.3 Additional disclosure relating to material losses in terms of PFMA Section 55(2)(b)(i) &(iii))

a) Details of material losses through criminal conduct

Material losses through criminal conduct	2023/24 R'000	2022/23 R'000
Theft	-	-
Other material losses	-	-
Less: Recoverable	-	-
Less: Not recoverable and written off	-	-
Total	**-**	**-**

b) Details of other material losses

Nature of other material losses	2023/24 R'000	2022/23 R'000
None	-	-
Total	**-**	**-**

c) Other material losses recoverable

Nature of losses	2023/24 R'000	2022/23 R'000
None	-	-
Total	**-**	**-**

d) Other material losses not recoverable and written off

Nature of losses	2023/24 R'000	2022/23 R'000
None	-	-
Total	**-**	**-**

2 Late and/or Non-payment of Suppliers

Description	Number of invoices	Consolidated value R'000
Valid invoices received	5 213	329 286
Invoices paid **within** 30 days or agreed period	3 887	235 634
Invoices paid **after** 30 days or agreed period	1 326	93 651
Invoices older than 30 days or agreed period **(unpaid and without dispute)**	-	-
Invoices older than 30 days or agreed period **(unpaid and in dispute)**	-	-

The invoices paid after 30 days were invoices in dispute with suppliers regarding either price or quantity of goods or services received.

3 Supply Chain Management

3.1 Procurement by other means

Project description	Name of supplier	Type of procurement by other means	Contract number	Value of contract R'000
Appointment of a single source for the renewal of the existing Microsoft software enterprise licences contract for a period of three (3) years	Microsoft	Deviation	n/a	R19 403 358.21
Appointment of a single source for a 3D high-resolution reflection seismic survey over the potential CCUS storage site near Leandra Mpumalanga	University of the Witwatersrand	Deviation	n/a	R17 535 966.36
Appointment of a single source for a period of one (1) year, to provide Tsunami Modelling Services	WSP USA Environment and Infrastructure Inc	Deviation	n/a	R4 754 995.00
Appointment of a single source for a period of one (1) year for the provision of wave propagation modelling services	PRDW Consulting Port and Coastal Engineers	Deviation	n/a	R4 100 000.00
Appointment of a service provider for the provision of PPE	Cape Union Mart	Deviation	n/a	R3 000 000.00
Appointment of a sole source for the hyperspectral processing software licence (IntelliCorp) over a period of three (3) years	Geospectral Imaging (Pty) Ltd. T/A Terracore Africa	Deviation	n/a	R2 210 817.50
Appointment of a single source to supply, deliver, and install additional fence adjacent to the CGS pilot project site for the CGS CCUS Project, approximately 1 000 meters in total Length, located on the farm Goedehoop, Leandra, Mpumalanga Province	Spec Africa	Deviation	n/a	R3 951 036.69
Appointment of a single source for diamond core drilling of eight (8) holes at Nchwaning 267	Mzansi Exploration Drilling and Mining	Deviation	n/a	R25 233 788.07
Appointment of a single source for one corporate licence for Oasis Montaj and Leapfrog software	Bentley Systems International Limited	Deviation	n/a	R4 397 500.00
Appointment of a single source for engineering and design services to design and prepare the specifications for the proposed pilot injection site in South Africa	Carbfix HF	Deviation	n/a	R5 000 000.00
Appointment of a single source for the extension of a lease period of two backup generators for a period ending 31 January 2024	AGP Engineering	Deviation	n/a	R1 688 775.00
Appointment of a drilling consultant for technical advisory services for the drilling of a 1 800 m vertical stratigraphic borehole	Colin Rice Exploration and Training	Deviation	n/a	R700 000.00
Appointment of a service provider for the supply of Picarro equipment to support geoenvironmental baseline investigations on the CCUS project	Elemental Analytics (Pty) Ltd	Deviation	n/a	R2 354 613.50
Appointment of a service provider as a single source supplier of high-resolution airborne geophysics data collection for commercial integrated geoscience mapping in the Kingdom of Eswatini	New Resolution Geophysics (NRG)	Deviation	n/a	R17 653 311.90
Appointment of a service provider through direct selection/single source procurement method to implement and develop an environmental and social management plan (ESMP)	Nemai Consulting	Deviation	n/a	R1 040 543.00
Appointment of Microsoft Corporation through a single source process for the provision of Microsoft suite enterprise licences	Microsoft Corporation	Deviation	n/a	R1 636 200.00

Project description	Name of supplier	Type of procurement by other means	Contract number	Value of contract R'000
Appointment of a service provider through a single source process for the provision of additional server storage media	NEC XON	Deviation	n/a	R1 984 131.11
Appointment of a service provider for the provision of hosting services for the CGS' Disaster Recovery and Offsite Backup Data Centre	The Council for Scientific and Industrial Research (CSIR)	Deviation	n/a	R2 283 224.08
Appointment of a service provider for the provision of internet connectivity and related services on a month-to-month basis for a period of up to 12 months	Dimension Data	Deviation	n/a	R1 500 000.00
Appointment of a service provider for accelerated Abbreviated ESIA activities for a period of 12 months	Nemai Consulting	Deviation	n/a	R3 888 380.00
Appointment of a service provider for the provision of internal audit services (co-source) and risk management services for a period of twelve (12) months	SONDLO Chartered Accountants	Deviation	n/a	R3 000 000.00
Total				**R127 316 640.42**

3.2 Contract variations and expansions

Project description	Name of supplier	Contract modification type (Expansion or Variation)	Contract number	Original contract value R'000	Value of previous contract expansion/s or variation/s (if applicable) R'000	Value of current contract expansion or variation R'000
Contract extension with additional financial implication for the Reverse Circulation drilling of seven (7) holes at Nchwaning 267 Exploration Project for a period of 7 weeks	Gobora Drilling (Pty) Ltd	Variation	n/a	R2 563 752.50	n/a	R2 172 177.50
Contract extension with additional financial implications for the library and bookshop renovation project	Masana Mashold Projects (Pty) Ltd	Variation	n/a	R3 537 222.00	n/a	R204 725.03
Contract variation with additional financial implications for Nemai Consulting PO-053337 to undertake accelerated abbreviated ESIA completion in support of the CCUS project	Nemai Consulting	Variation	n/a	R1 543 875.00	n/a	R1 837 325.00
Contract variation between the Council for Geoscience and Gobora Exploration Drilling	Gobora Exploration Drilling	Variation	n/a	R2 563 752.50	R2 172 177.50	R216 545.00
Contract variation between Mzansi Exploration, Drilling & Mining Pty Ltd and Council for Geoscience	Mzansi Exploration, Drilling & Mining Pty Ltd	Variation	n/a	R25 233 788.07	n/a	R2 841 558.00
Total						**R7 272 330.53**

Part F

A waterfall cliff of sandstone of Vryheid formation (Karoo Supergroup) interbedded with thin layers of carbonaceous shale (Mcitsheni Village, Ladysmith, KZN)

Financial Information

This part of the report provides insight into the financial wellness of the CGS and covers the following information:

- Report of the Chief Financial Officer, which includes the general financial review and matters related to the proposed activities, retention of surplus, supply chain management, audit report and plans for the future.
- Report of the Auditor-General to Parliament on the CGS. This report gives an opinion regarding the fairness of the Annual Financial Statements in presenting the organisation's financial position, financial performance, cash flow in accordance with South African GRAP standards and requirements of the PFMA in all material aspects. It reports on performance on legal and regulatory compliance, internal control and related matters.
- Annual Financial Statements, comprising the Statement of Financial Position, Statement of Financial Performance, Statement of Changes in Net Assets, Cash Flow Statement and notes to the financial statements.

1 Chief Financial Officer's Report

"Do not save what is left after spending, but spend what is left after saving"

~ Warren Buffet

Mr Thabo Molikoe
Chief Financial Officer (Acting)

Background

The CGS is listed as a Schedule 3A Public Entity in terms of the Public Finance Management Act (No. 1 of 1999) as amended by Act No. 29 of 1999 (PFMA). The objectives underlying the establishment of the CGS are to develop and publish world-class geoscience knowledge products and to render geoscience-related services to the South African public and industry.

Financial position

A steady Statement of Financial Position has been maintained over the last 14 years and total assets have increased by an average of 4% over the period. An additional R220 million is ringfenced over the Medium-Term Expenditure Framework (MTEF) to fund a multi-year capital renewal plan. Notwithstanding the ageing research infrastructure, the CGS remains solvent, with total assets to the value of R618.8 million exceeding total liabilities of R235.9 million. Financial metrics indicate that the CGS is in a healthy financial position. The current ratio improved to 1.1:1 from 1.0:1 in 2022/23 and the cash ratio increased to 0.74:1 from 0.6:1 over the same period.

Financial performance

The CGS posted a net surplus of R51.3 million which represents a positive year-on-year growth of 37% to R140.8 million, from R89.5 million deficit in the 2022/23 financial year. The surplus is mainly attributed to commercial revenue which far surpassed planned projections for the year.

Property and equipment

During the period under review R37.4 million was invested in property, plant and equipment. Continued investment in scientific infrastructure and equipment remains a priority to ensure world-class facilities and equipment are acquired and maintained.

Cash flow management

The cash and cash equivalents decreased from R170.2 million in 2022/23 to R140.9 million in the 2023/24 financial year, resulting in a net cash outflow of R29.3 million. This outflow was mainly due to expenditure incurred on projects that support the acceleration of economic recovery through the implementation of the geoscience mapping programme.

Going concern

The CGS's Annual Financial Statements have been prepared on the going concern basis. Executive management has performed a formal review of the CGS's ability to continue as a going concern in the foreseeable future and, based on this review, considers that the presentation of the financial statements on this basis is appropriate.

Events after the reporting date

The CGS is not aware of any material event that occurred after the reporting date which may influence the economic decisions taken on the basis of its financial statements.

Request for the retention of surplus

In terms of Section 53(3) of the PFMA, the CGS has to obtain approval from National Treasury to retain surpluses. Approval was obtained in the reporting period for the use of accumulated surpluses from 2022/23 for the maintenance of and investment in scientific equipment and infrastructure, and the implementation of the repositioning strategy. A new request will be made for the year under review.

Supply chain management

The Supply Chain Management unit is operational under the division of the Chief Financial Officer. This business unit provides an appropriate procurement and provisioning system which is fair, equitable, transparent, competitive and cost-effective, and is established in accordance with Section 54 of the PFMA. In terms of Section 13G (1) of the Broad-based Black Economic Empowerment (B-BBEE) Act (No. 46 of 2013) as amended, the CGS complied with management control and enterprise supplier development.

Audit report matters

The matters highlighted in the Auditor-General's report are meticulously addressed to maintain unqualified audit opinions. The CGS received an unqualified audit opinion for the year ended 31 March 2024 and will persist in strengthening its internal control environment.

Financial sustainability

In order to ensure financial sustainability, the CGS is deliberate in exploiting its vast geoscience information, knowledge and scientific prowess to develop apposite value propositions worthy of both fiscal and commercial investment.

2 Report of the Auditor-General to Parliament on the Council for Geoscience

Report on the audit of the financial statements

Opinion

1. I have audited the financial statements of the Council for Geoscience set out on pages 106 to 136, which comprise the statement of financial position as at 31 March 2024, statement of financial performance, statement of changes in net assets and cash flow statement and of statement of comparison of budget information with actual information for the year then ended, as well as notes to the financial statements, including a summary of significant accounting policies.

2. In my opinion, the financial statements present fairly, in all material respects, the financial position of the Council for Geoscience as at 31 March 2024 and its financial performance and cash flows for the year then ended in accordance with South African Standards of Generally Recognised Accounting Practise (SA Standards of GRAP) and the requirements of the Public Finance Management 1 of 1999 (PFMA).

Basis for opinion

3. I conducted my audit in accordance with the International Standards on Auditing (ISAs). My responsibilities under those standards are further described in the responsibilities of the auditor-general for the audit of the financial statements section of my report.

4. I am independent of the public entity in accordance with the International Ethics Standards Board for Accountants' *International code of ethics for professional accountants (including International Independence Standards)* (IESBA code) as well as other ethical requirements that are relevant to my audit in South Africa. I have fulfilled my other ethical responsibilities in accordance with these requirements and the IESBA code.

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

Responsibilities of the accounting authority for the financial statements

6. The accounting authority is responsible for the preparation and fair presentation of the financial statements in accordance with the SA Standards of GRAP and the requirements of the PFMA and for such internal control as the accounting authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

7. In preparing the financial statements, the accounting authority is responsible for assessing the public entity's ability to continue as a going concern; disclosing, as applicable, matters relating to going concern; and using the going concern basis of accounting unless the appropriate governance structure either intends to liquidate the public entity or to cease operations, or has no realistic alternative but to do so.

Responsibilities of the auditor-general for the audit of the financial statements

8. My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error; and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

9. A further description of my responsibilities for the audit of the financial statements is included in the annexure to this auditor's report.

Report on the annual performance report

10. In accordance with the Public Audit Act 25 of 2004 (PAA) and the general notice issued in terms thereof, I must audit and report on the usefulness and reliability of the reported performance information against predetermined objectives for the selected material performance indicators presented in the annual performance report. The accounting authority is responsible for the preparation of the annual performance report.

11. I selected the following material performance indicators related to Delivery of the Mandate presented in the annual performance report for the year ended 31 March 2024. I selected those indicators that

measure the public entity's performance on its primary mandated functions and that are of significant national, community or public interest.

- Onshore geoscience map coverage
- Offshore geoscience map coverage
- Applied geoscience outputs for minerals and energy
- Applied geoscience outputs for infrastructure, land use, groundwater and the environment.

12. I evaluated the reported performance information for the selected material performance indicators against the criteria developed from the performance management and reporting framework, as defined in the general notice. When an annual performance report is prepared using these criteria, it provides useful and reliable information and insights to users on the public entity's planning and delivery on its mandate and objectives.

13. I performed procedures to test whether:

- the indicators used for planning and reporting on performance can be linked directly to the public entity's mandate and the achievement of its planned objectives
- all the indicators relevant for measuring the public entity's performance against its primary mandated and prioritised functions and planned objectives are included
- the indicators are well defined to ensure that they are easy to understand and can be applied consistently, as well as verifiable so that I can confirm the methods and processes to be used for measuring achievements
- the targets can be linked directly to the achievement of the indicators and are specific, time bound and measurable to ensure that it is easy to understand what should be delivered and by when, the required level of performance as well as how performance will be evaluated
- the indicators and targets reported on in the annual performance report are the same as those committed to in the approved initial or revised planning documents
- the reported performance information presented in the annual performance report in the prescribed manner
- there is adequate supporting evidence for the achievements reported and for the reasons provided for any over- or underachievement of targets/ measures taken to improve performance.

14. I performed the procedures to report material findings only; and not to express an assurance opinion or conclusion.

15. I did not identify any material findings on the reported performance information for the selected indicators.

Other matter

16. I draw attention to the matter below.

Achievement of planned targets

17. The annual performance report includes information on reported achievements against planned targets and provides explanations for over-achievements.

Report on compliance with legislation

18. In accordance with the PAA and the general notice issued in terms thereof, I must audit and report on compliance with applicable legislation relating to financial matters, financial management and other related matters. The accounting authority is responsible for the public entity's compliance with legislation.

19. I performed procedures to test compliance with selected requirements in key legislation in accordance with the findings engagement methodology of the Auditor-General of South Africa (AGSA). This engagement is not an assurance engagement. Accordingly, I do not express an assurance opinion or conclusion.

20. Through an established AGSA process, I selected requirements in key legislation for compliance testing that are relevant to the financial and performance management of the public entity, clear to allow consistent measurement and evaluation, while also sufficiently detailed and readily available to report in an understandable manner. The selected legislative requirements are included in the annexure to this auditor's report.

21. The material finding on compliance with the selected legislative requirements, presented per compliance theme, is as follows:

Annual financial statements

22. The financial statements submitted for auditing were not fully prepared in accordance with the prescribed financial reporting framework, as required by section 55(1) (a) and (b) of the PFMA.

    Material misstatements of current assets, liabilities and disclosure items identified by the auditors in the submitted financial statement were corrected, resulting in the financial statements receiving an unqualified audit opinion.

Other information in the annual report

23. The accounting authority is responsible for the other information included in the annual report, which includes the audit committee's report and CEO's report. The other information referred to does not include the financial statements, the auditor's report and those selected material indicators in the scoped-in

programme presented in the annual performance report that have been specifically reported on in this auditor's report.

24. My opinion on the financial statements, the report on the audit of the annual performance report and the report on compliance with legislation do not cover the other information included in the annual report and I do not express an audit opinion or any form of assurance conclusion on it.

25. My responsibility is to read this other information and, in doing so, consider whether it is materially inconsistent with the financial statements and the selected material indicators in the scoped-in programme presented in the annual performance report, or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

26. I did not receive the other information prior to the date of this auditor's report. When I do receive and read this information, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and request that the other information be corrected. If the other information is not corrected, I may have to retract this auditor's report and re-issue an amended report as appropriate. However, if it is corrected this will not be necessary.

Internal control deficiencies

27. I considered internal control relevant to my audit of the financial statements, annual performance report and compliance with applicable legislation; however, my objective was not to express any form of assurance on it.

28. The matters reported below are limited to the significant internal control deficiencies that resulted in the basis for the opinion, and the material findings on compliance with legislation included in this report.

29. Management did not adequately prepare accurate and complete financial reports that are supported and evidenced by reliable information. As a result, there were material misstatements identified during the audit, which were caused by inadequate reviews.

Other reports

30. I draw attention to the following engagements conducted by various parties. These reports did not form part of my opinion on the financial statements or my findings on the reported performance information or compliance with legislation.

31. Various investigations were initiated by the public entity into allegations of possible unethical behaviour and allegations of procurement and contract management irregularities. These investigations were in progress at the date of this auditor's report.

Auditor-General

Pretoria

31 July 2024

AUDITOR-GENERAL
SOUTH AFRICA

Auditing to build public confidence

Annexure to the Auditor's Report

The annexure includes the following:

- The auditor-general's responsibility for the audit
- The selected legislative requirements for compliance testing.

Auditor-general's responsibility for the audit

Professional judgement and professional scepticism

As part of an audit in accordance with the ISAs, I exercise professional judgement and maintain professional scepticism throughout my audit of the financial statements and the procedures performed on reported performance information for selected material performance indicators and on the public entity's compliance with selected requirements in key legislation.

Financial statements

In addition to my responsibility for the audit of the financial statements as described in this auditor's report, I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the public entity's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made
- conclude on the appropriateness of the use of the going concern basis of accounting in the preparation of the financial statements. I also conclude, based on the audit evidence obtained, whether a material uncertainty exists relating to events or conditions that may cast significant doubt on the ability of the public entity to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements about the material uncertainty or, if such disclosures are inadequate, to modify my opinion on the financial statements. My conclusions are based on the information available to me at the date of this auditor's report. However, future events or conditions may cause a public entity to cease operating as a going concern
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and determine whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Communication with those charged with governance

I communicate with the accounting authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the accounting authority with a statement that I have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on my independence and, where applicable, actions taken to eliminate threats or safeguards applied.

Compliance with legislation – selected legislative requirements

The selected legislative requirements are as follows:

Legislation	Sections or regulations
PFMA	Section 1 (definition of irregular expenditure) Section 38(1)(a)(iv) Section 38(1)(b) Section 38(1)(c)(i) Section 38(1)(c)(ii) Section 38(1)(d) Section 38(1)(h)(iii) Section 39(1)(a) Section 39(2)(a) Section 40(1)(a) Section 40(1)(b) Section 40(1)(c)(i) Section 43(4) Section 44 Section 45(b) Section 51(1)(a)(iv) Section 57(b)
Treasury Regulations	Regulation 4.1.1 Regulation 4.1.3 Regulation 5.1.1 Regulation 5.2.1 Regulation 5.2.3(a) Regulation 5.2.3(d) Regulation 5.3.1 Regulation 6.3.1(a) Regulation 6.3.1(b) Regulation 6.3.1(c) Regulation 6.3.1(d) Regulation 6.4.1(b) Regulation 7.2.1 Regulation 8.1.1 Regulation 8.2.1 Regulation 8.2 .2 Regulation 8.2.3 Regulation 8.4.1 Regulation 9.1.1 Regulation 9.1.4 Regulation 10.1.1(a) Regulation 10.1.2 Regulation 11.4.1 Regulation 11.4.2 Regulation 11.5.1 Regulation 12.5.1 Regulation 15.10.1.2(c) Regulation 16A3.2 (fairness) Regulation 16A3.2(a) Regulation 16A6.1 Regulation 16A6.2(a) Regulation 16A6.2(b) Regulation 16A6.3(a) Regulation 16A6.3(b) Regulation 16A6.3(c) Regulation 16A6.3(e) Regulation 16A6.4 Regulation 16A6.5 Regulation 16A6.6 Regulation 16A7.1 Regulation 16A.7.3 Regulation 16A7.6 Regulation 16A.7.7 Regulation 16A8.3 Regulation 16A8.4 Regulation 16A9.1(d) Regulation 16A9.1(e) Regulation 16A9.1(f) Regulation 16A9.2(a)(ii) Regulation 17.1.1 Regulation 18.2 Regulation 19.8.4
Construction Industry Development Board (CIDB) Act 38 of 2000	Section 18(1)

Legislation	Sections or regulations
CIDB Regulations	Regulations 17 Regulation 25(7A)
Preferential Procurement Policy Framework Act 5 of 2000	Section 1(i) Section 2.1(a) Section 2.1(b) Section 2.1(f)
Preferential Procurement Regulations of 2011	Regulation 4.1 Regulation 4.3 Regulation 5.5 Regulation 6.1 Regulation 6.5 Regulation 7.1 Regulation 9.1 Regulation 9.5 Regulation 11.2 Regulation 11.5
Preferential Procurement Regulations of 2017	Regulation 4.1 Regulation 4.2 Regulation 5.1 Regulation 5.3 Regulation 5.6 Regulation 5.7 Regulation 6.1 Regulation 6.2 Regulation 6.3 Regulation 6.5 Regulation 6.6 Regulation 6.8 Regulation 7.1 Regulation 7.2 Regulation 7.3 Regulation 7.5 Regulation 7.6 Regulation 7.8 Regulation 8.2 Regulation 8.5 Regulation 9.1 Regulation 10.1 Regulation 10.2 Regulation 11.1 Regulation 11.2
Prevention and Combating of Corrupt Activities Act 12 of 2004	Section 34(1)
Public Service Regulations of 2016	Regulation 18(1) Regulation 18(2) Regulation 25(1)(e)(i) Regulation 25(1)(e)(iii)
State Information Technology Agency Act 88 of 1998	Section 7(3)
NT SCM Instruction Note 05 of 2009/10	Paragraph 3.3
NT SCM Instruction Note 04 of 2015/16	Paragraph 3.4
NT SCM Instruction Note 03 of 2016/17	Paragraph 8.1 Paragraph 8.2 Paragraph 8.3 Paragraph 8.5
NT SCM Instruction Note 4A of 2016/17	Paragraph 6
NT SCM Instruction Note 07 of 2017 /18	Paragraph 4.3
NT SCM Instruction note 03 of 2019/20 [Annexure A - FIPDM]	Paragraphs 5.5.1(vi) Paragraph 5.5.1(x)
NT SCM Instruction Note 08 of 2019/20	Paragraph 3.1.1 Paragraph 3.6 Paragraph 3.7.2 Paragraph 3.7.6(i) Paragraph 3.7.6(ii) Paragraph 3.7.6(iii)
NT SCM Instruction Note 03 of 2020/21	Paragraph 3.6 Paragraph 3.7 Paragraph 5.1(i) Paragraph 6.1 Paragraph 6.3

3 Annual Financial Statements for the Year Ended 31 March 2024

Statement of Financial Position

as at 31 March 2024

	Notes	2024 R'000	2023 (Restated) R'000
Assets			
Non-current assets		373 079	381 181
Property and equipment	4	353 085	359 579
Intangible assets	5	2 432	4 039
Heritage assets	26	17 562	17 562
Current assets		245 727	230 268
Inventories	6	5	5
Trade and other receivables from exchange transactions	8	104 824	60 077
Cash and cash equivalents	9	140 898	170 186
Total assets		**618 806**	**611 450**
Net assets and liabilities			
Accumulated surplus		382 793	331 502
Non-current liabilities		15 218	5 979
Post-employment benefit liabilities	7	8 539	5 979
Trade and other payables	10	6 679	-
Current liabilities		220 794	273 970
Trade and other payables	10	108 410	72 419
Deferred income	11	77 952	168 869
Accruals	12	34 432	32 682
Total net assets and liabilities		**618 806**	**611 450**

Statement of Financial Performance

for the period ended 31 March 2024

	Notes	2024 R'000	2023 (Restated) R'000
Total revenue		860 479	570 975
Revenue from exchange transactions	13	237 079	171 459
Revenue from non-exchange transactions	13	623 400	399 516
Total cost of projects		**(387 721)**	**(259 744)**
Cost of commercial projects	13	(219 830)	(117 139)
Cost of statutory projects	13	(167 891)	(142 605)
Gross surplus		**472 758**	**311 231**
Administrative expenses	13	(419 896)	(399 094)
Other operating expenses	13	(1 535)	(1 624)
Surplus/(Deficit) from operations		**51 327**	**(89 487)**
Finance cost	14	(36)	(29)
Net surplus/(deficit) for the year		**51 291**	**(89 517)**

Statement of Changes in Net Assets

for the period ended 31 March 2024

	Notes	Accumulated surplus R'000	Total R'000
Opening balance at 31 March 2021		**436 115**	**436 115**
Net loss for the period		(15 096)	(15 096)
Closing balance at 31 March 2022		**421 019**	**421 019**
Net loss for the period		(87 770)	(87 770)
Correction of prior period error	24	(1 747)	(1 747)
Restated net loss for the period		(89 517)	(89 517)
Restated balance at 31 March 2023		**331 502**	**331 502**
Net surplus for the period		51 291	51 291
Balance at 31 March 2024		**382 793**	**382 793**

Cash Flow Statement

for the period ended 31 March 2024

	Notes	2024 R'000	2023 (Restated) R'000
Cash outflow from operating activities		**7 557**	**(64 348)**
Cash receipts from customers		789 251	561 403
Cash paid to suppliers and employees		(798 161)	(634 553)
Cash generated from operations	15	(8 910)	(73 150)
Interest received	13	16 503	8 831
Finance cost	14	(36)	(29)
Cash outflow from investing activities		**(36 844)**	**(58 464)**
Acquisition of:			
Property and equipment	16.1	(37 434)	(59 397)
Intangible assets	16.2	-	(183)
Proceeds from sale of asset	13	155	-
Insurance proceeds for property and equipment	4.1	435	1 116
Net increase/(decrease) in cash and cash equivalents		**(29 288)**	**(122 811)**
Cash and cash equivalents at beginning of period	9	**170 186**	**292 997**
Cash and cash equivalents at end of period	9	**140 898**	**170 186**

Notes to the Annual Financial Statements

for the year ended 31 March 2024

1 Accounting policies

1.1 Basis of preparation

Statement of compliance

1. The financial statements have been prepared in accordance with the Standards of Generally Recognised Accounting Practices (GRAP) including any interpretations, guidelines and directives issued by the Accounting Standards Board.

   The financial statements have been prepared on a historic cost basis and accounting policies are consistent with prior years.

   These Annual Financial Statements have been prepared on a going concern basis, i.e. the assumption that the Council for Geoscience will continue to operate as a going concern for at least the next 12 months.

2. The cash flow statement has been prepared in accordance with the direct method.

3. Specific information is presented separately on the Statement of Financial Position such as:

   a) receivables from non-exchange transactions, including taxes and transfers;
   b) taxes and transfers payable; and
   c) trade and other payables from non-exchange transactions.

The budget reporting standard does not apply to the Council for Geoscience as our budget is tabled as part of the Department of Mineral Resources and Energy (now the Department of Mineral and Petroleum Resources) budget.

1.2 Revenue recognition

Revenue comprises the revenue from non-exchange transactions recognised as income in the current year, contract income and sales of publications.

The Council for Geoscience measures revenue at the fair value of the consideration received or receivable. Revenue is recognised only when it is probable that the economic benefits associated with a transaction will flow to the Council for Geoscience, and the amount of revenue and associated costs incurred or to be incurred, can be measured reliably.

1.2.1 Revenue from non-exchange transactions

The Council for Geoscience receives grants in the form of a baseline allocation from the Department of Mineral Resources and Energy.

Revenue from non-exchange transactions is recorded as deferred income when it is received. It is then recognised as income proportionate to the costs incurred or to the extent that CGS has complied with any of the criteria, conditions or obligations embodied with the grant.

Other baseline allocation funds are recognised as revenue upon receipt.

1.2.2 Revenue from exchange transactions

Revenue from exchange transactions comprises sales and contract revenue as follows:

Sales revenue

Sales revenue represents the invoiced value of goods and services supplied by the Council for Geoscience. This revenue is recognised when the revenue recognition criteria are met.

Contract revenue

Revenue from contracts is recognised by means of progress payments over the duration of the contracts. Revenue from contracts in progress is recognised when the revenue criteria are met. When the outcome of a contract can be estimated reliably, revenue is recognised by referring to the stage of completion of the contract outcome.

1.3 Interest received

Interest is recognised on a time proportionate basis with reference to the principal amount receivable and the effective interest rate applicable.

1.4 Property and equipment

Property and equipment are tangible non-current assets that are held for use in the production or supply of goods or services, or for administrative purposes, and are expected to be used during more than one period.

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

- it is probable that future economic benefits associated with the item will flow to the Council for Geoscience; and
- the cost of the item can be measured reliably.

Land and buildings were valued at initial recognition and subsequently only the building is depreciated using the straight-line method.

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

Property and equipment are carried at cost less accumulated depreciation and any impairment losses.

Day to day expenses incurred on property and equipment are expensed directly to surplus or deficit for the period.

Where an asset is acquired at no cost, or at a nominal cost, its cost is its fair value as at the date of acquisition.

Major refurbishment that meets the recognition criteria of an asset is capitalised.

Depreciation is provided on all property and equipment other than freehold land, to write down the cost, less residual value, on a straight-line basis over their average useful lives, as follows:

Asset	Useful lives
Land	Not depreciable
Buildings	30 years
Motor vehicles	5 to 14 years
Equipment	5 to 16 years
Aircraft and Helicopter – Body	15 to 18 years
Aircraft and Helicopter – Components	Useful hours as per Civil Aviation Authority
Boat	10 years
Office furniture	20 to 29 years
Computer equipment*	3 to 17 years

* All existing computer equipment continue to depreciate for 6 years from date of purchase. New computer equipment procured on or later than 1 April 2022 will adopt the new useful life of 3 years.

Asset	Useful lives
Specialised equipment	15 years
Electronic devices	2 years

The depreciation charges for each period are recognised in the Statement of Financial Performance, unless it is included in the carrying amount of another asset.

The average useful lives and residual values are reviewed on an annual basis and changes are reflected as a change in accounting estimates on a prospective basis.

The residual value of motor vehicles is 10% of cost. The residual value of land and buildings is the market value at the end of the useful life. The residual value of aircraft body is 10%. The residual value of boats is 10%.

1.5 Intangible assets

An intangible asset is recognised when:

- it is probable that the expected future economic benefits that are attributable to the asset will flow to the Council for Geoscience; and
- the cost of the asset can be measured reliably.

Capitalised computer software is carried at cost less accumulated amortisation and less accumulated impairment losses. Computer software is tested annually for impairment or changes in estimated future benefits. Amortisation is provided to write down the intangible assets to their residual value, on a straight-line basis, being two to eleven years.

Research and development

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally generated intangible asset arising from research and development is recognised as part of intangible assets only if all of the following conditions are met:

- an asset is created that can be identified;
- it is probable that the asset created will generate future economic benefits;
- the development cost of the asset can be measured reliably.

Where no internally generated intangible asset can be recognised, development expenditure is recognised as an expense in the period in which it is incurred. Internally generated assets are amortised on a straight-line basis over their useful lives.

1.6 Heritage assets

Heritage assets are assets held for their cultural, environmental or historical significance. Heritage assets are initially recognised at deemed cost which has been determined, due to the nature of heritage assets, by specialist valuators. Heritage assets are reflected at deemed cost and are not depreciated. At each reporting date heritage assets are assessed for indications of impairment. If any such indication exists, an estimate of the recoverable amount or the recoverable service amount of the heritage assets will be determined and tested against the carrying amount.

1.7 Inventories

The Council for Geoscience is a custodian of scientific information that produces publications in the form of books, maps and map explanations etc. These publications are distributed to the public for free or at a nominal charge.

Inventories are initially measured at deemed costs (fair value) and subsequently measured at the lower of cost and net realisable value.

1.8 Translation of foreign currencies

Foreign currency transactions

A foreign currency transaction is recorded, on initial recognition in Rand, by applying to the foreign currency amount the spot exchange rate between the Rand and the foreign currency at the date of the transaction.

At each Statement of Financial Position date:

- foreign currency monetary items are translated using the closing rate.

Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous Annual Financial Statements are recognised in the Statement of Financial Performance in the period in which they arise.

Cash flows arising from transactions in a foreign currency are recorded in Rand by applying to the foreign currency amount the exchange rate between the Rand and the foreign currency at the date of the cash flow.

1.9 Deferred income

Deferred income is accounted for in the Statement of Financial Position. The related revenue is recognised on an accrual basis in the Statement of Financial Performance in the period in which it satisfies the revenue recognition criteria.

1.10 Retirement benefit costs

Short-term employee benefits

The cost of short-term employee benefits (those payable within 12 months after the service is rendered, such as bonuses, paid vacation leave and sick leave) is recognised in the period in which the service is rendered and is not discounted.

The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non-accumulating absences, when the absence occurs.

Defined contribution and defined benefit plans

The Council for Geoscience operates both a defined contribution pension and provident fund and a defined benefit plan in respect of post-retirement medical aid contributions. For the defined benefit plan, the defined benefit obligation and the related current service cost, is determined by using the projected unit credit method. The defined benefit plan is subject to an annual actuarial valuation. The qualifying plan asset of this scheme is held and administered by Momentum Group Limited.

The actuarial gains or losses are further limited to the extent that the net cumulative unrecognised actuarial gains or losses (before recognition of that actuarial gain or loss) exceed the unrecognised part of the transactional liability. Payments to defined contribution retirement benefit plans are charged to the Statement of Financial Performance in the year to which they relate.

1.11 Provisions and contingent liabilities

Provisions are recognised when:

- the entity has a present obligation as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- a reliable estimate can be made of the obligation.

The amount of a provision is the present value of the expenditure expected to be required to settle the obligation.

Commitments

The Council for Geoscience classifies commitments as contracted future transactions that are non-cancellable or only cancellable at significant cost, and that will normally result in the outflow of cash.

This excludes steady routine transactions such as salary commitments relating to employment contracts or social security benefits.

Disclosure is made of the aggregate amount of capital expenditure contracted for at the reporting date, to the extent that the amount has not been recorded in the financial statements in line with GRAP 17 and 13.

If a commitment is for a period longer than a year, it is stated in the note to the commitments.

1.12 Financial instruments

Initial recognition

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

Financial assets and liabilities are recognised on the entity's Statement of Financial Position when the Council for Geoscience becomes party to the contractual provisions of the instrument.

Financial assets and liabilities are recognised initially at fair value.

Derecognition of financial instruments

The entity derecognises a financial asset only when the

contractual rights to the cash flows from the asset expire, or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

The entity derecognises financial liabilities when the entity's obligations are discharged, cancelled or they expire.

Impairment of loans and receivables

Financial assets are assessed for indicators of impairment at each Statement of Financial Position date. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been impacted.

The carrying amount of trade receivables is reduced through the use of an allowance account (bad debt provision). When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognised in surplus or deficit.

The fair value of trade and other payables is determined at a price charged at transaction date and impaired when indicators of impairment are present. At year end there were no differences between the book value and the fair values of trade and other payables.

Fair value of trade and other receivables

The fair value of trade and other receivables is determined at a price charged at transaction date and impaired when indicators of impairment are present. At year end there were no differences between the book value and the fair values of trade and other receivables because of the short-term maturity.

Financial assets carried at amortised cost

Loans and receivables are measured at amortised cost less any impairment losses recognised to reflect irrecoverable amounts. Impairment is determined on a specific basis, whereby each asset is individually evaluated for impairment indicators. Write-offs of these assets are expensed in surplus or deficit.

Cash and cash equivalents

Cash and cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash. Cash and cash equivalents are measured at fair value.

Financial liabilities carried at amortised cost

Trade and other payables are initially measured at fair value and are subsequently measured at amortised cost.

1.13 Operating leases

Leases of assets under which all the risks and rewards of ownership are effectively retained by the lessor are classified as operating leases. Lease payments under an operating lease are recognised as an expense on a straight-line basis over the lease term.

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

1.14 Impairment

The Council for Geoscience identifies cash-generating assets as assets that are managed with the objective of generating a commercial return, and non-cash-generating assets as assets that do not generate market related cash flows from that asset.

The entity assesses at each Statement of Financial Position date whether there is any indication that an asset may be impaired. If there is any indication that an asset may be impaired, the recoverable amount is estimated for the individual asset. The recoverable amount of an asset is the higher of fair value less assumed costs to sell and its value in use.

If the recoverable amount of an asset is less than its carrying value, the carrying value of the asset is reduced to its recoverable amount. That reduction is an impairment loss recognised immediately in surplus or deficit.

At each reporting date the entity assesses impairment losses recognised in prior years for continued existence or decreases. If such indication exists, the recoverable amounts of those assets are estimated. The increase in the carrying amount of an asset attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods. A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortisation is recognised immediately in surplus or deficit.

1.15 Critical accounting estimates and judgements

Provision for bad debts

Past experience indicates a reduced prospect of collecting debtors over the age of four months. Debtor balances are regularly assessed by management and provided for in line with the policy.

Provisions

Provisions were raised and management determined an estimate based on the information available and in line with the policy.

Property and equipment

Management has made certain estimations with regard to the determination of estimated useful lives and residual values of items of property and equipment.

Leases

Management has applied its judgement to classify all lease agreements that the entity is party to as operating leases, as they do not transfer substantially all risks and ownership to the entity. Furthermore, as the operating lease in respect of premises is only for a relatively short period of time, management has made a judgement that it would not be meaningful to classify the lease into separate components for the land and for the buildings for the Polokwane office current lease, and the agreement will be classified in its entirety as an operating lease.

1.16 Sources of estimation uncertainty

There are no key assumptions concerning the future and other key sources of estimation uncertainty at the Statement of Financial Position date that could have a significant risk of causing material adjustment to the carrying amounts of assets and liabilities within the next financial year.

1.17 Irregular expenditure

Irregular expenditure is recorded in the notes to the financial statements when confirmed. The amount recorded is equal to the value of the irregular expenditure incurred, unless it is impractical to determine, in which case reasons therefore must be provided in the notes. Irregular expenditure receivables are measured at the amount that is expected to be recovered and are de-recognised when settled or written off as irrecoverable.

Irregular expenditure must be removed from the balance of the irregular expenditure notes when it is either:

a) condoned by the relevant authority if no official was found to be liable in law;
b) recovered from an official liable in law;
c) written off if it is irrecoverable from an official liable in law; or
d) written off if it is not condoned and not recoverable.

1.18 Fruitless and wasteful expenditure

Fruitless and wasteful expenditure is expenditure that was made in vain and would have been avoided had reasonable care been exercised. Fruitless and wasteful expenditure, where identified, is accounted for in the related year. The expenditure is accordingly classified with its nature, and where subsequently recovered or written off, it is accounted for accordingly in surplus or deficit.

1.19 Post-reporting date events

Events after the reporting date are those events, both favourable and unfavourable, that occur between the reporting date and the date when the financial statements are authorised for issue. Two types of events can be identified:

- Those that provide evidence of conditions that existed at the reporting date (adjusting events after the reporting date)
- Those that are indicative of conditions that arose after the reporting date (non-adjusting events after the reporting date).

The Council for Geoscience will adjust the amounts recognised in the financial statements to reflect adjusting events after the reporting date once the event occurs.

The Council for Geoscience will disclose the nature of the event and estimate its financial effect or a statement that such estimate cannot be made in respect of all material non-adjusting events, where non-disclosure could influence the economic decisions of users taken on the basis of the financial statements.

1.20 Related party transactions

Individuals as well as their close family members, and/or entities are related parties if one party has the ability, directly or indirectly, to control or jointly control the other party or exercise significant influence over the other party in making financial and/or operating decisions. Management is regarded as a related party and comprises the Board Members and Senior management. Related party transfers/payments of appropriated funds, specific-purpose allocations, etc. would generally fall under the disclosure exemption in GRAP 20, and such transfers and allocations are therefore part of the normal supplier and/or client/recipient relationships and are therefore not disclosed.

1.21 Principal-agent relationships

The CGS engages in principal-agent relationships where we act as the principal. In these arrangements, agents are appointed to act on our behalf for specific tasks, such as the collection of funds due. The agents are authorised to act on our behalf, and the transactions carried out by the agents are recognised in our financial statements.

2 New standards and interpretations

2.1 Standards and interpretations issued, but not yet effective

The Council for Geoscience has not applied the following standards and interpretations, which have been approved but are not yet effective for the accounting period 2023/24:

GRAP statement	Description	Impact	Effective date
GRAP 1	Presentation of Financial Statements	None	To be determined
GRAP 103	Heritage Assets	None	To be determined
GRAP 104	Financial Instruments (revised)	None	1 April 2025
GRAP 105	Transfer of Functions between Entities under Common Control	None	To be determined
GRAP 106	Transfer of Functions between Entities not under Common Control	None	To be determined
GRAP 107	Mergers	None	To be determined
IGRAP 7	Limit on a Defined Benefit Asset Min Fund Requirement and Interact	None	To be determined

3 Going concern assessment

Management has considered the following matters relating to the going concern.

In the current year under review the CGS had recognised a surplus of R51.3 million, and negative cash outflow of R29.2 million. In the current year there has been no change in any legislation to suggest that the entity's objectives are threatened and as a result, its ability to continue as a going concern. The CGS has also received a significant grant allocation over the current MTEF period. There are no legal or court claims or litigation against the Council which would threaten the entity's ability to operate as a going concern. There are no material uncertainties related to events or conditions that may cast significant doubt about the CGS's ability to continue as a going concern.

Under the going concern assumption, CGS is viewed as continuing operations for the foreseeable future and therefore accounts for its assets and liabilities on the basis that it will be able to realise and discharge them in the normal course of operations. Taking the aforementioned into account, management has prepared the Annual Financial Statements on the going concern basis.

4 Property and equipment

2024	Land R'000	Buildings and fixtures R'000	Equipment* R'000	Office furniture R'000	Aircraft and boat R'000	Motor vehicles R'000	Computer equipment R'000	Total R'000
Gross carrying amount	18 231	281 810	224 640	14 645	24 792	31 446	77 602	673 166
Accumulated depreciation at the beginning of the period	(1 600)	(88 624)	(156 843)	(9 283)	(10 965)	(20 092)	(26 181)	(313 589)
Opening net carrying amount at 31 March 2023	**16 631**	**193 186**	**67 797**	**5 361**	**13 827**	**11 355**	**51 421**	**359 579**
Movements during the period:								
Work in progress (refer to note 4.2)	-	2 402	4 836	-	-	-	5 887	13 125
Acquisitions	-	-	16 383	706	-	2 239	4 981	24 309
Disposals	-	-	(30)	(47)	-	(1 037)	(118)	(1 232)
Disposals – Cost	-	-	(5 050)	(418)	-	(4 907)	(2 211)	(12 586)
Disposals – Depreciation	-	-	5 020	371	-	3 870	2 093	11 354
Depreciation	-	(10 074)	(19 546)	(489)	(526)	(2 797)	(9 264)	(42 697)
Closing net carrying amount at 31 March 2024	**16 631**	**185 515**	**69 440**	**5 531**	**13 301**	**9 760**	**52 906**	**353 085**
Gross carrying amount	18 231	284 212	240 809	14 932	24 792	28 778	86 258	698 013
Accumulated depreciation/ impairment	(1 600)	(98 697)	(171 369)	(9 401)	(11 491)	(19 018)	(33 352)	(344 928)

* Equipment in the table includes the following categories of equipment: Specialised Equipment, Audio and Visual, Technical Equipment, Office Equipment and Scientific Equipment.

4 Property and equipment (continued)

2023	Land R'000	Buildings and fixtures R'000	Equipment* R'000	Office furniture R'000	Aircraft and boat R'000	Motor vehicles R'000	Computer equipment R'000	Total R'000
Gross carrying amount	18 231	254 227	209 552	14 134	24 792	30 713	68 497	620 146
Accumulated depreciation at the beginning of the period	(1 600)	(81 015)	(138 609)	(9 098)	(10 439)	(17 576)	(20 345)	(278 682)
Opening net carrying amount at 31 March 2022	**16 631**	**173 212**	**70 942**	**5 036**	**14 353**	**13 137**	**48 152**	**341 463**
Movements during the period:								-
Work in progress (refer to note 4.2)	-	(83 295)	(141)	-	-	-	2 599	(80 837)
Reversal of impairment	-	-	-	-	-	-	-	-
Acquisitions	-	110 878	18 895	836	-	790	8 835	140 235
Disposals	-	-	(226)	(18)	-	(27)	(396)	(666)
Disposals – Cost	-	-	(3 665)	(325)	-	(57)	(2 329)	(6 376)
Disposals – Depreciation	-	-	3 439	308	-	30	1 933	5 710
Depreciation	-	(7 610)	(21 673)	(493)	(526)	(2 546)	(7 769)	(40 618)
Closing net carrying amount at 31 March 2023	**16 631**	**193 186**	**67 797**	**5 362**	**13 827**	**11 355**	**51 421**	**359 579**
Gross carrying amount	18 231	281 810	224 640	14 645	24 792	31 446	77 602	673 166
Accumulated depreciation/ impairment	(1 600)	(88 624)	(156 843)	(9 283)	(10 965)	(20 092)	(26 181)	(313 589)

* Equipment in the table includes the following categories of equipment: Specialised Equipment, Audio and Visual, Technical Equipment, Office Equipment and Scientific Equipment.

4 Property and equipment (continued)

The transfer of the following land and buildings as stipulated under Section 26 of the Geoscience Act (Act No. 100 of 1993) has not yet been completed.

Location	Fair value at date of transfer R'000
474 Carl Street, Town Lands 351JR, Pretoria West	2 800
280 Pretoria Street, Silverton, Pretoria	94 000

The value of these properties has been included in the carrying amount of land and buildings and was determined by an independent valuator.

Details regarding land and buildings are kept at the Council for Geoscience head office and will be supplied upon written request.

4.1 Compensation from third parties for property and equipment lost

Location	2024 R'000	2023 R'000
Proceeds from insurance	435	1 116

4.2 Property and equipment in the process of being constructed

Cumulative expenditure recognised in the carrying value of property and equipment being developed/constructed

	Buildings and fixtures R'000	Equipment* R'000	Aircraft and boat R'000	Total R'000
Gross carrying amount	7 428	23 208	1 040	31 676
Opening net carrying amount at 31 March 2023	**7 428**	**23 208**	**1 040**	**31 676**
Movement	2 402	10 724	-	13 126
Closing net carrying amount at 31 March 2024	**9 830**	**33 932**	**1 040**	**44 802**

* Equipment in the table includes the following categories of equipment: Specialised Equipment, Audio and Visual, Technical Equipment, Office Equipment and Scientific Equipment.

Repairs and maintenance

Repairs and maintenance expenditure incurred for the year to repair and maintain property and equipment.

	2024 R'000	2023 R'000
Land and buildings	5 080	8 966
Office equipment and furniture	818	39
Technical and scientific equipment	5 568	2 669
Computer equipment	3 637	158
Aircraft	336	2 260
	15 440	**14 092**

5 Intangible assets

	2024 R'000	2023 R'000
Computer software		
Gross carrying amount	13 132	16 752
Accumulated amortisation	(9 093)	(11 110)
Opening net carrying amount at 31 March 2023	**4 039**	**5 641**
Movements during the period:		
Acquisitions	-	183
Disposals	-	(72)
Disposals – Cost	(206)	(3 803)
Disposals – Amortisation	206	3 731
Amortisation	(1 607)	(1 714)
Closing net carrying amount at 31 March 2024	**2 432**	**4 039**
Gross carrying amount	12 926	13 132
Accumulated amortisation	(10 494)	(9 093)

6 Inventories

	2024 R'000	2023 R'000
Publication inventories	5	5

7 Retirement benefit

7.1 Post-retirement medical aid fund

The Council for Geoscience has made provision for the medical aid fund covering all its qualifying employees. All eligible employees are members of the defined benefit scheme. To improve management of this defined benefit scheme the Council for Geoscience established a qualifying plan asset in October 2010, which is held and administered by Momentum Group Limited and evaluated annually as at 31 March.

The amount recognised in the Statement of Financial Performance is determined as follows:

	2024 R'000	2023 R'000
Current service costs	37	54
Interest charge	2 281	2 471
Expected return on planned assets	(1 638)	(1 513)
Actuarial (gain)/loss recognised	1 880	(2 607)
Recognition of loss on asset realisation	-	(3 956)
	2 560	**(5 551)**

7 Retirement benefit (continued)

The amount included in the Statement of Financial Position arising from Council for Geoscience obligation in respect of the post-retirement medical aid fund is as follows:

	2024 R'000	2023 R'000	2022 R'000	2021 R'000	2020 R'000
Present value of fund obligations	23 542	22 210	25 894	26 070	24 348
Fair value of planned assets	(15 003)	(16 231)	(14 364)	(14 810)	(15 094)
Liability recognised in the Statement of Financial Position	**8 539**	**5 979**	**11 530**	**11 260**	**9 254**

Movement in net liability during the period is as follows:

	2024			2023		
	Liability R'000	Planned asset R'000	Net R'000	Liability R'000	Planned asset R'000	Net R'000
Liability at beginning of period	22 210	-	22 210	25 894	-	25 894
Value of planned assets at beginning of period	-	(16 231)	(16 231)	-	(14 364)	(14 364)
	22 210	**(16 231)**	**5 979**	**25 894**	**(14 364)**	**11 530**
Interest charge/expected return of planned asset	2 281	(1 638)	643	2 471	(1 513)	958
Contributions received	-	-	-	-	(3 956)	(3 956)
Current service costs	37	-	37	54	-	54
Benefits paid	(2 481)	2 481	-	(2 360)	2 360	-
Actuarial (gain)/loss	1 495	385	1 880	(3 849)	1 242	(2 607)
Closing balance	**23 542**	**(15 003)**	**8 539**	**22 210**	**(16 231)**	**5 979**

Contributions expected to be paid

Top up payments are expected to be made during the 2024/25 financial year.

Expected rate of return on assets	12.11%
Assumptions	
Discount rates	12.11%
Basis of discount rates: JSE zero coupon bond yield after the market closed on 31 March 2024	
Return on assets	12.11%
Expected salary increases	5.00%
Healthcare cost inflation rate	8.43%

7 Retirement benefit (continued)

Sensitivity analysis on accrued liability (R millions) for the year ending 31 March 2024

Assumption	Change	In service	Continuation	Total	Change
Central assumptions	-	1 138	22 404	23 542	-
Healthcare inflation	1%	1 370	23 831	25 201	7%
	-1%	950	21 110	22 060	-6%
Discount rate	1%	956	21 123	22 079	-6%
	-1%	1 367	23 838	25 205	7%
Post-retirement mortality	-1 year	1 165	23 355	24 520	4%
Average retirement date	-1 year	1 240	22 404	23 644	0%
Continuation of membership at retirement	-10%	1 032	22 404	23 436	0%

The table above indicates, for example that if medical inflation is 1% greater than the long-term assumptions made, the liability will be 7% higher than that shown.

Sensitivity analysis for current service and interest cost (R millions) for the year ending 31 March 2024

Assumption	Change	In service	Continuation	Total	Change
Central assumptions	-	36 767	2 281 468	2 318 235	-
Healthcare inflation	1%	44 906	2 462 951	2 507 857	8%
	-1%	30 247	2 120 333	2 150 580	-7%
Discount rate	1%	30 689	2 316 941	2 347 630	1%
	-1%	44 397	2 237 456	2 281 853	-2%
Post-retirement mortality	-1 year	37 689	2 381 122	2 418 811	4%
Average retirement date	-1 year	40 463	2 290 680	2 331 143	1%
Continuation of membership at retirement	-10%	33 091	2 265 418	2 298 509	-1%

The table above indicates, for example, that if medical inflation is 1% greater than the long-term assumptions made, the liability will be 8% higher than that shown.

7.2 Pension and provident fund benefits

The Council for Geoscience and its employees contribute to a defined contribution plan. The assets of the scheme are held separately from the Council for Geoscience in funds under the control of trustees. The total cost charged to income of R17.240 million (2023: R16.274 million) represent equal contributions of 7.5% by the employer and employee.

8 Trade and other receivables

	2024 R'000	2023 R'000
Trade and other receivables from exchange transactions		
Trade receivables	24 931	27 670
Contract customers	40 970	30 082
Other receivables	10 537	8 161
	76 438	65 913
Less – Provision for bad debts	(2 252)	(5 836)
	74 186	**60 077**
Trade and other receivables from non-exchange transactions		
Trade receivables	8 638	-
Other receivables	22 000	-
	30 638	**-**
Total trade and other receivables	**104 824**	**60 077**
Provision for bad debts		
Opening balance	5 836	2 252
Movement	(3 584)	3 584
Closing balance	**2 252**	**5 836**
Analysis of impairment		
Long overdue debtors considered impaired	2 252	5 836
	2 252	**5 836**

There is no difference between the fair value of trade and other receivables and their book value.

9 Cash and cash equivalents

Cash and cash equivalents at the end of the period are represented by the following balances:

	2024 R'000	2023 R'000
Cash at bank	59 514	143 566
Call accounts	81 384	26 620
	140 898	**170 186**

There is no difference between the fair value of cash and cash equivalents and their book value.

10 Trade and other payables

	2024 R'000	2023 R'000
Current		
Trade payables	49 434	29 304
Other payables	58 976	43 115
	108 410	**72 419**
Non-current		
Other payables	6 679	-
	6 679	**-**
Total trade and other payables	**115 089**	**72 419**

There is no difference between the fair value of trade payables and their book value.

11 Deferred income

Exchange revenue

	2024 R'000	2023 R'000
11.1 Deferred income arising as a result of an agreement entered into with the Department of Science and Innovation to develop an intellectual property management office (Geoscience Act Par 5(1)(g))		
Carrying amount at the beginning of period	2 607	2 607
Amounts used during the period	-	-
Carrying amount at the end of period	2 607	2 607
11.2 Deferred income arising as a result of an agreement with the Organisation of African Geological Surveys		
Carrying amount at the beginning of period	1 371	335
Amounts received	1 115	1 036
Carrying amount at the end of period	2 486	1 371
11.3 Deferred income arising as a result of an agreement entered into with the Department of Mineral Resources and Energy to develop and implement various measures to mitigate the effect of mining-induced contamination and integrated research into mine closure.		
Carrying amount at the beginning of period	32 479	52 271
Amounts used during the period	(8 786)	(19 792)
Carrying amount at the end of period	23 693	32 479
11.4 Deferred income arising as a result of an agreement entered into with the National Research Foundation		
Carrying amount at the beginning of period	110	110
Amounts received	-	-
Amounts used during the period	-	-
Carrying amount at the end of period	110	110

11 Deferred income (continued)

	2024 R'000	2023 R'000
11.5 Deferred income arising as a result of Carbon Capture, Storage and Utilisation Project		
Carrying amount at the beginning of period	19 466	57 441
Amounts receivable*	22 000	-
Amounts used during the period	(15 881)	(37 975)
Carrying amount at the end of period	25 585	19 466
* Refer to Note 27		
11.6 Deferred income arising as a result of Carbon Capture, Storage and Utilisation Project funded by the World Bank		
Amounts received	95 708	101 000
Amounts used during the period	(84 398)	(5 292)
Carrying amount at the end of period	11 310	95 708
11.7 Deferred income arising as a result of an agreement with the Department of Mineral Resources and Energy		
Carrying amount at the beginning of period	17 128	43 690
Amounts used during the period	(4 968)	(26 562)
Carrying amount at the end of period	12 160	17 128
Total deferred income	**77 952**	**168 869**

12 Accruals

	2024 R'000	2023 R'000
Accruals for leave pay		
Carrying amount at the beginning of period	26 954	28 698
Provision current period	5 138	1 795
Amounts used during the current period	(3 740)	(3 540)
Carrying amount at the end of period	**28 352**	**26 953**
The leave pay provision relates to the estimated liabilities as a result of leave days due to employees.		
Accruals for 13th cheque		
Carrying amount at the beginning of period	5 729	6 094
Provision current period	352	(365)
Carrying amount at the end of period	**6 081**	**5 729**
The 13th cheque accrual relates to the structuring of the employee costs to company and is paid out on employees' birthdays.		
Total accruals	**34 432**	**32 682**

13 Surplus/Deficit from operations

Operating surplus/deficit is arrived at after taking the following items into account:

	2024 R'000	2023 R'000
Revenue	**860 479**	**570 975**
Non-exchange revenue		
Total grant received	559 458	355 761
Project related revenue	4 968	-
Contracting revenue	58 974	43 755
Total non-exchange revenue	**623 400**	**399 516**
Exchange revenue		
Department of Mineral Resources and Energy project related revenue	-	2 599
Contracting revenue	191 166	110 494
Publication revenue	3 551	2 868
Carbon, capture, storage and utilisation	15 881	37 975
	210 598	**153 936**
Other exchange revenue		
Foreign currency gains	627	881
Proceeds from sale of asset	155	-
Property, plant and equipment received by donation*	3 618	-
Recovery of asset losses	435	1 116
Reversal of provision for bad debts	3 584	-
Sundry income	1 559	6 694
	9 978	**8 692**
Interest received		
- Interest income on call accounts	11 265	4 214
- Interest income on current accounts	5 238	4 618
	16 503	8 831
Total exchange revenue	**237 079**	**171 459**
Total cost of contracts	**387 721**	**259 744**

* The Council for Geoscience (CGS) and the Petroleum Agency of South Africa (PASA) have entered into a service level agreement (SLA) for the Karoo Baseline Seismic Monitoring project and the agreement stipulates the transfer or donation of assets to CGS upon completion of the project.

* South Africa is designated to host four waveform stations operated and maintained by the Council for Geoscience (CGS). The Comprehensive Test Ban Treaty (CTBO) established an international body called the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) who donated equipment to CGS to assist in establishing South Africa's National Data Centre, utilising the international data products. The donation is a part of the Preparatory Commission's ongoing technical assistance to Signatory States of the Comprehensive Nuclear-Test-Ban Treaty.

13 Surplus/Deficit from operations (continued)

	2024 R'000	2023 R'000
Cost of commercial projects		
Direct cost	176 815	80 979
Personnel expenditure	43 015	36 160
	219 830	**117 139**
Cost of statutory projects		
Direct cost	59 803	30 668
Personnel expenditure	108 088	111 937
	167 891	**142 605**
Administrative expenses include:		
Audit fees	5 169	3 117
- Current period	3 780	2 448
- Internal audit	682	591
- Fee for other services	707	78
Provision for bad debts	-	3 584
Depreciation – On owned assets	42 696	40 617
- Buildings	10 074	7 610
- Equipment	19 546	21 673
- Office furniture	489	493
- Motor vehicles	2 797	2 546
- Aircraft	299	299
- Boat	227	227
- Computer equipment	9 264	7 769
Reversal of impairment	-	-
Amortisation – Intangible assets		
- Computer software	1 607	1 714
Rentals in respect of operating leases		
- Land and buildings	1 478	1 400
- Multifunctional printers	5 549	1 695
Other operating expenses		
Net loss on disposal of equipment	30	226
Net loss on disposal of vehicles	1 037	27
Net loss on disposal of intangible assets	-	72
Net loss on disposal of computer equipment	118	396
Net loss on disposal of office furniture	47	18
Foreign currency losses	303	886
	1 535	1 624
Staff costs	**362 662**	**345 924**

13 Surplus/Deficit from operations (continued)

	2024 R'000	2023 R'000
Included in staff costs are:		
Defined benefit plan expense for the post-retirement medical aid fund	2 560	(5 551)
- Current service cost	37	54
- Interest cost	2 281	2 471
- Expected return on plan assets	(1 638)	(1 513)
- Recognised actuarial (gain)/loss	1 880	(2 607)
- Recognition of loss on asset realisation	-	(3 956)
Defined contribution plan expenses for the pension and provident fund	17 240	16 274

Emoluments

	2023/24					
Senior management	**Pensionable salary R'000**	**Performance bonus R'000**	**Provident/ Pension fund contributions R'000**	**Other contributions* R'000**	**Termination/ Resignation benefits R'000**	**Total R'000**
Mr Mabuza M	4 058	247	468	152	-	**4 925**
Mr Matsepe LD	2 435	147	176	128	2 346	**5 231**
Ms Monoko PR	359	23	-	19	378	**779**
Mr Molikoe LT	2 197	88	137	101	-	**2 523**
Mr Meintjes JWP	2 168	117	147	106	-	**2 538**
Dr Khoza TD	503	33	-	30	239	**805**
Ms Mbatha ZB	2 135	160	-	89	-	**2 384**
Dr Khumalo TN	2 507	159	-	96	-	**2 762**

	2022/23					
Senior management	**Pensionable salary R'000**	**Performance bonus R'000**	**Provident/ Pension fund contributions R'000**	**Other contributions* R'000**	**Termination/ Resignation benefits R'000**	**Total R'000**
Mr Mabuza M	3 811	368	232	147	-	**4 557**
Mr Matsepe LD	2 686	256	163	579	-	**3 685**
Ms Monoko PR	2 023	183	132	115	-	**2 453**
Dr Tshipa J	796	-	48	558	2 273	**3 675**
Dr Khoza TD	2 032	177	124	115	-	**2 447**
Ms Mbatha ZB	240	-	18	11	-	**269**
Dr Khumalo TN	242	-	18	11	-	**271**

* Other contributions relate to employer contributions towards statutory deductions and leave.

13 Surplus/Deficit from operations (continued)

Board emoluments

Non-executive Board Members	2024 R'000	2023 R'000
Mr Dintwe K	145	-
Dr Mathe H	37	147
Mr Mvinjelwa X	195	189
Adv. Maake N	150	181
Ms Chowan A	80	89
Dr Sing M	131	-
Ms Njozela T	165	-
Ms Nxumalo N	130	-
Dr Mngadi S	224	-
Dr Matlala M	-	-
Dr Mirembe J	-	-
Mr Malaza S	-	-
Mr Malindisa M	-	-
Dr Muofhe M	-	-
Mr Nel P	-	-
Ms Mdubeki R	-	-
Ms Mochothli D	-	-
Ms Tsotetsi P	-	-
Ms Madiba L	-	-
Mr Moatshe A	-	-
Mr Gerryts B	-	-
Dr Gwaze P	-	-
	1 257	**606**

14 Finance cost

	2024 R'000	2023 R'000
Finance cost on motor vehicle fleet cards	**36**	**29**

15 Reconciliation of net surplus/(loss) for the period to cash generated from operations

	2024 R'000	2023 R'000
Net surplus for the period	51 291	(89 517)
Interest	36	29
Depreciation on property and equipment	42 696	40 617
Amortisation – Intangible assets	1 608	1 714
Proceeds from sale of assets	(155)	-
Compensation from third parties for property and equipment lost	(435)	(1 116)
Net loss on disposal of fixed assets	1 232	738
Interest earned	(16 503)	(8 831)
Provision for post-retirement medical aid benefits	2 560	(5 551)
Operating cash flows before working capital changes	82 330	(61 917)
Working capital changes:		
Increase in provision for accumulated leave pay and 13th cheque	1 751	(2 109)
(Increase)/Decrease in trade and other receivables	(44 747)	7 109
Increase/(Decrease) in trade and other payables	42 671	20 085
Increase/(Decrease) in deferred income	(90 916)	(36 314)
Cash generated from operations (including finance costs)	**(8 910)**	**(73 150)**

16 Acquisition of:

	2024 R'000	2023 R'000
16.1 Property and equipment		
Land and buildings	-	110 878
Equipment	16 383	18 895
Office furniture	706	836
Aircraft and boat	-	-
Motor vehicles	2 239	790
Computer equipment	4 981	8 835
	24 309	140 235
Work in progress – Acquisitions		
Land and buildings	2 402	(83 295)
Computer equipment	5 887	2 599
Equipment	4 836	(141)
Aircraft and boat	-	-
	13 125	(80 837)
Total acquisitions	**37 434**	**59 397**
16.2 Intangible assets		
Computer software	-	183
	-	**183**

17 Contingent liability

	2024 R'000	2023 R'000
17.1 Pending legal action		
The Council for Geoscience has an estimated legal liability due to pending labour cases	-	529
	-	**529**

18 Taxation

No provision for income tax was made as the Council for Geoscience is exempted in terms of Section 10(1)(Ca)(i) of the Income Tax Act.

19 Operating lease commitments

	2024 R'000	2023 R'000
19.1 Lease of office space		
The operating lease between a supplier and the Council for Geoscience entered into from 1 December 2023 to 30 November 2024.		
At reporting date, the outstanding commitments under non-cancellable operating leases, which fall due are as follows:		
Up to one year	408	493
Two to five years	-	-
Total lease commitments	**408**	**493**
19.2 Lease of office printing equipment		
The operating lease contracts with suppliers from 1 May 2021 to 30 January 2025.		
At the reporting date, the outstanding commitments under non-cancellable operating leases, which fall due are as follows:		
Up to one year	1 225	2 631
Two to five years	-	749
Total lease commitments	**1 225**	**3 380**
19.3 Lease of office generators		
The operating lease between AGP Electrical and Instrumentation and the Council for Geoscience entered into on 30 January 2023 to 31 January 2024.		
At reporting date, the outstanding commitments under non-cancellable operating leases, which fall due are as follows:		
Up to one year	-	1 778
Two to five years	-	-
Total lease commitments	**-**	**1 778**

19 Operating lease commitments (continued)

	2024 R'000	2023 R'000
19.4 Commitments*		
Operating expenditure		
Approved and contracted	-	110 137
Approved but not yet contracted	-	3 030
Capital expenditure		
Approved and contracted: Property and equipment	124 924	51 000
Approved but not yet contracted: Property and equipment	-	5 997
Total commitments	**124 924**	**170 164**
Commitments		
Up to one year	6 187	41 548
Two to five years	118 736	128 616
Total commitments	**124 924**	**170 164**

The Council for Geoscience has usage based contracts for the provision of the following services:

- Sampling Services Geophysics
- Accommodation and travel
- Courier services

* In the current financial year the CGS opted to not disclose operating commitments as well as approved but not contracted commitments in line with GRAP.

20 Financial instruments

Financial instruments consist of cash and cash equivalents, investments with financial institutions, trade and other receivables and trade and other payables.

20.1 Credit risk

Financial assets, which potentially subject the Council for Geoscience to concentrations of credit risk, consist principally of cash, short-term deposits and trade receivables. The Council for Geoscience's cash equivalents and short-term deposits are placed with high credit quality financial institutions. Trade receivables are presented net of the allowance for doubtful debts. Credit risk with respect to trade receivables is limited due to the large number of customers being dispersed across different industries and geographical areas. Accordingly the Council for Geoscience has no significant concentration of credit risk.

The carrying amounts of financial assets included in the Statement of Financial Position represent the Council for Geoscience's exposure to credit risk in relation to those assets.

Trade and other receivables are controlled by well-established policies and procedures which are reviewed and updated on an on-going basis. The Council for Geoscience does not have any significant exposure to any individual customer or counterparty.

Trade receivables and other payables are carried at amortised costs. Refer to notes 7 and 9.

20 Financial instruments (continued)

20.2 Interest rate risk

The entity's exposure to interest rate risk and the effective interest rates on the financial instruments at reporting date are:

	Weighted average effective interest rate %	Weighted average effective interest rate %
Assets		
Cash	1.20%	1.00%
Call accounts	6.96%	4.88%

Short-term deposits

The risk is perceived to be low due to the following factors:

- Funds are only invested with approved financial institutions according to the policy of the Council for Geoscience.
- Short-term deposits are only reinvested or invested with Management approval.

20.3 Foreign currency risk

The Council for Geoscience undertakes certain transactions denominated in foreign currencies, hence exposures to exchange rate fluctuations arise. It is not the policy for the Council for Geoscience to take out cover on these outstanding foreign currency transactions due to the fact that these transactions take place on an ad-hoc basis. The Council for Geoscience's exposure at 31 March 2024 is disclosed in note 21.

20.4 Airborne operations risk

It is the policy of the Council for Geoscience to transfer risk in respect of airborne operations to third parties, namely insurance and an external operator.

21 Foreign currency exposure

	2024			2023		
	Exchange rate	Foreign amount '000	R-value R'000	Exchange rate	Foreign amount '000	R-value R'000
21.1 Trade receivables						
Foreign currency						
US Dollar	R18.72690	$28	524	R17.52660	$41	726
21.2 Banks						
Foreign funds						
Euro	R20.07360	€241	4 840	R18.96690	€240	4 552

22 Related party transactions

During the period, the following related party transactions took place between the Council for Geoscience and the Department of Mineral Resources and Energy:

	2024 R'000	2023 R'000
Total grant received	**559 458**	**355 761**

Relationships:

Parent National Department: Department of Mineral Resources and Energy

Refer to note 11 for further details regarding transactions with the Department of Mineral Resources and Energy.

Income received from related parties

During the year funds were received and revenue recognised, for services rendered by the CGS, from the following related parties that are related to the entity as indicated below. The balances at year-end as contained in deferred income and debtors is disclosed. Amounts receivable from these entities are subject to the same terms and conditions as normal trade receivables.

	2024 R'000	2023 R'000
Debtors balances		
Department of Mineral Resources and Energy	8 638	-
Department of Defence	-	3 376
Petroleum Agency SA	2 299	-
Eskom	4 033	19 892
Housing Development Agency*	-	3 584

* A provision for bad debt for an equal amount has been recognised due to the amount outstanding for longer than 60 days.

Deferred income balance		
Department of Science and Innovation	2 607	2 607

Relationship: National sphere of government

Services rendered by related parties

During the year expenses were incurred and recognised, for services rendered to the CGS, to the following related parties that are related to the entity as indicated below. The balances at year-end as contained in trade payables is disclosed. Amounts due to these entities are subject to the same terms and conditions as normal trade payables.

	2024 R'000	2023 R'000
Creditors balances		
Department of Public Works and Infrastructure	5 232	-
Council for Scientific and Industrial Research	30	-

Relationship: National sphere of government

All related-party transactions were concluded at arm's length.

23 Events after reporting date

Non-adjusting events

Eminent acquisition of services

Acquisition of printing services in support of the Council for Geoscience head office building. The estimated cost for this acquisition is R9.8 million.

24 Correction of prior year error

		2024 R'000	2023 R'000
Correction of prior year error			
Nature	**Period**		
A correction was made to the financial statements to receivables for the prior period.	31 March 2023	-	1 273
A correction was made to expenditure that was not recognised in the correct period.	31 March 2023	-	474
		-	1 747
Effect			
Statement of Financial Performance as at 31 March 2023			
Administrative expenses		-	474
Revenue from exchange transactions		-	1 273
		-	1 747
Effect			
Statement of Financial Position as at 31 March 2023			
Trade and other receivables from exchange transactions		-	(1 317)
Trade and other payables		-	(430)
Accruals		-	-
Property and equipment		-	-
Statement of Net Assets for the period ended 31 March 2023			
Accumulated surpluses		-	(1 747)
Correction of prior year error disclosure			
Nature			
Disclosure as at 31 March 2023			
Restatement of closing balances of cumulative expenditure recognised in the carrying value of commitments.			
Restatement of closing balances of commitments			
Approved and contracted		-	(6 679)

Effect

None (only disclosure item)

25 Change in accounting estimate

The useful lives of property and equipment was reassessed. This resulted in change of estimated remaining lives of certain assets in the categories listed below:

Useful lives

	Old	New
Equipment	5–7 years	5–16 years
Office furniture	20 years	20–29 years
Motor vehicles	5–8 years	5–12 years
Computer equipment	6 years	6–17 years
Computer software	2–5 years	2–11 years
Aircraft	15 years	18 years

The effect of the change in accounting estimate has resulted in depreciation amounting to R1 114 611 in 2023/24.

The change of R2 229 222 will be reflected in future periods.

	2024 R'000	2023 R'000
Due to the change in accounting estimate regarding the useful life and residual values of assets, the depreciation expense is reported at:	1 114	34 493
Equipment	979	21 673
Office furniture	35	493
Motor vehicles	-	2 546
Computer equipment	85	7 769
Computer software	15	1 714
Aircraft	-	299
Depreciation expense using the previous rates would have been reported at:	3 344	35 360
Equipment	2 938	22 130
Office furniture	106	497
Motor vehicles	-	2 720
Computer equipment	254	7 852
Computer software	46	1 719
Aircraft	-	443
Difference in useful lives	2 230	867
Equipment	1 959	457
Office furniture	71	4
Motor vehicles	-	174
Computer equipment	169	83
Computer software	31	5
Aircraft	-	144

26 Heritage assets disclosure

GRAP 103 defines heritage assets as assets which have a cultural, environmental, historical, natural, scientific, technological or artistic significance and are held indefinitely for the benefit of present and future generations.

Certain heritage assets are described as inalienable items thus assets which are retained indefinitely and cannot be disposed of without consent as required by law or otherwise.

	2024 R'000	2023 R'000
Nature		
The Council for Geoscience has the following different classes of heritage:		
- Gemstone collections	1 445	1 445
- Meteorite collections	2 804	2 804
- Mineral collections	13 313	13 313
	17 562	**17 562**

The heritage assets were at initial recognition valued at fair value using valuators with the following credentials:

- Fossils – Professor for Paleontological Research, University of the Witwatersrand
- Mineral collections – MSc Geology and Professor and Chairman of the Department of Geology, University of the Witwatersrand
- Meteorite collections – Author of "Meteorites", private collector of meteorites
- Gemstones – MSc Geology

Various valuation methods were used taking into account the different types of heritage assets held by the Council for Geoscience.

The valuations reports are held at the Council for Geoscience offices and are available for inspection.

The Palaeontological (fossil) assets have no monetary value as legislation does not permit the purchase or sale of fossils. (National Heritage Resources Act 1999 Par 35(4)(c).

The Council for Geoscience is in possession of old scientific equipment only for display purposes. This equipment does not carry any value.

27 Principal-agent relationship

Nature of the principal-agent relationship

The CGS engaged Goitseona Pilane (the agent) to investigate and collect payments from SANEDI on its behalf. Goitse Pilane is authorised to collect funds which are then remitted to us.

Significant judgments and assumptions

In determining the existence of a principal-agent relationship, we considered the following:

- Goitse Pilane has the authority to act on CGS's behalf in collecting funds.
- The funds collected are for our benefit.
- The CGS retains control over which clients are pursued and the methods used for collection.

Amounts recognised

During the financial year, Goitseona Pilane collected R22 million on behalf of the CGS (refer to note 11). This amount is recognised as deferred revenue in the financial statements.

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