Annual Performance Plan 2021/22

Presentation to the Portfolio Committee on Mineral Resources and Energy: 07 May 2021 Venue: Virtual Meeting





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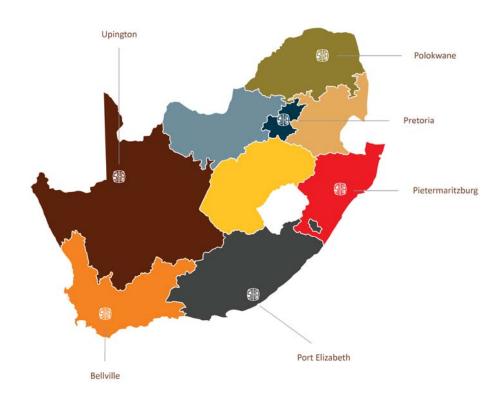
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Outline

- 1. Introduction
- 2. Governance Structure
- 3. Response to the Covid-19 Pandemic
- 4. Strategic Focus and alignment to the MTSF 2019-2024
- 5. Geoscience Technical Programme 2021/22
- 6. Annual Performance Plan 2021/22
 - a) Balanced Scorecard
 - b) Finances
 - c) Human Resources
- 7. Stakeholder Engagement Programme
- 8. Scientific Prowess
- 9. Concluding Remarks

About the Council for Geoscience

- The Council for Geoscience (CGS) is one of the National Science Councils of South Africa.
- The CGS is the legal successor of the Geological Survey of South Africa, which was formed in 1912 by the amalgamation of 3 former Surveys, the oldest of which the Geological Commission of the Cape of Good Hope was founded in 1895.
- The Geoscience Act, Act 100 of 1993, as amended, established the CGS in its present form.
- The CGS is listed as a Schedule 3A Public Entity in terms of the Public Finance Management Act (PFMA) (Act No. 1 of 1999).



Location of the six CGS regional offices

CGS Vision, Mission and Values



 A prosperous and transformed society enabled by geoscience solutions



Mission

- 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;
- Support infrastructure development.
- Discharging the mandate in a manner that supports transformation and national developmental imperatives.



Values

- Innovation
- Diversity
- Excellence
- Accountability
- Learning
- Safety, Health, and Environment
- Transparency

Governance Structure



Governance Structure of the CGS



Minister of Mineral Resources and Energy: Mr Samson Gwede Mantashe





Accounting Authority

Chairperson of the Board: Dr Humphrey Mathe



Chief Executive Officer: Mr Mosa Mabuza



Ms Refilwe Shelembe



Dr David Khoza



Mr Leonard Matsepe



CGS Executive Team

The CGS Board (01 May 2020 - 30 April 2023)































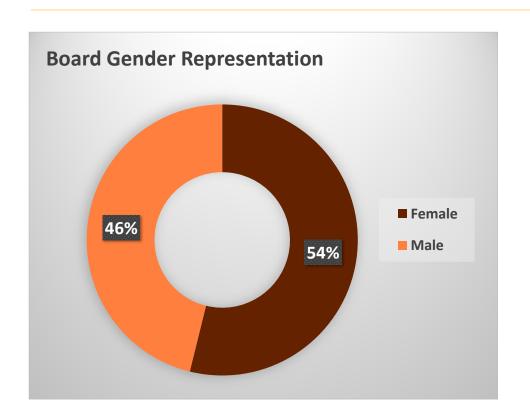
_13 Board Members

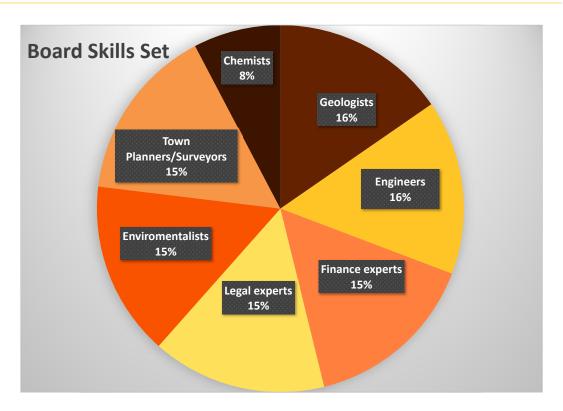


4 Alternate Board Members

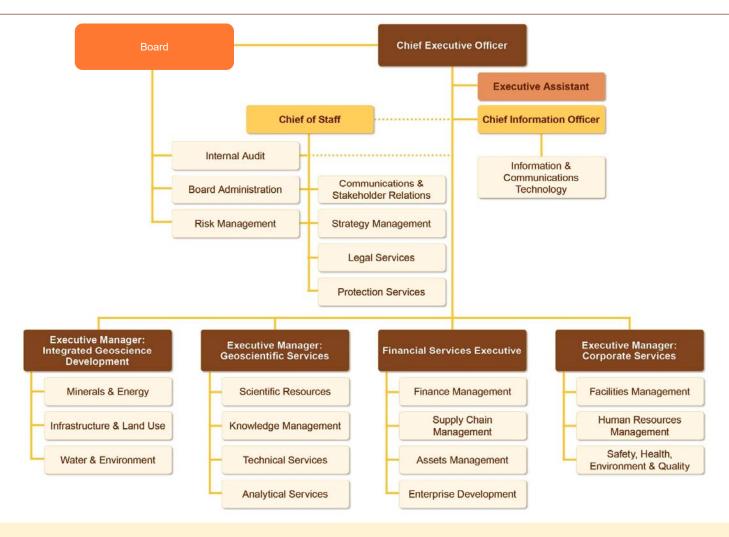


CGS Board Composition (Gender Representation and Skill Set)



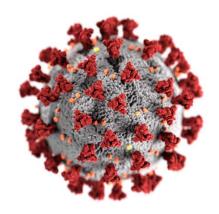


Organisational Structure



Covid-19 Pandemic updates

Covid-19 statistics since March 2020 to date				
Number of known employees who tested for Covid-19	105			
Number of employees who tested positive	53			
% Recoveries	100%			



CGS Management interventions to provide a safe environment where all employees are able to perform to the best of their abilities

- Compliance with the National disaster Management Act Regulation
- Established a Covid-19 Committee to guide the organisation
- Continuous screening of the employees in all CGS offices
- The practise of safe social distancing and all other health and safety measures such as wearing of masks and frequent sanitising are being observed during this period.

Strategic Outlook



CGS Strategic Programmes, Outcomes and Alignment to the NDP 2030 & MTSF 2019-2024

	CGS Strategic Objectives/Programmes	CGS Outcomes	CGS Strategic response to National outcomes	CGS Strategic response to the MTSF priorities
1	Financial Sustainability	Effective and efficient financial resources management	Build capacity in respect of geoscientific,	
2	Organisational Effectiveness and Efficiency	2. Compliance with governance protocols/regulations	administrative and managerial/leadership skills while also developing innovative products, systems and services	1. A capable, ethical and developmental stat
3	An Empowered, Transformed, Motivated and Capacitated Workforce	3. Capable human capital		3. Education, skills and health
4	Delivery of the Mandate	4. Enhanced applications of geoscience information and knowledge and to secure a minimum of 5% share of the global exploration expenditure	Delivering spatial geoscience information and services that attract local and international investment to develop mineral and upstream petroleum resources	
		5. Enhanced geoscience diplomacy		2. Economic transformation and job creation
5	Advisory, Stakeholder Engagement and Knowledge Management	6. Improved awareness of the CGS brand, services and products	Geoscience information and services input to infrastructure development in support of South Africa's	5. Spatial integration, human settlements ar local government
		7. Improved geoscientific domain through	economic development of mineral, upstream petroleum (such as oil and gas) and water resources. Conducting research regarding Acid Mine Drainage	6. Social cohesion and safe communities7. A better Africa and World
		effective knowledge management	(AMD) and Carbon Capture and Storage (CCS) technologies and establishing environmental baselines for possible future shale gas development.	
			The provision of geoscientific information that enables agricultural development and groundwater exploration.	

CGS Strategic focus, Desired Outcomes and Impact (MTSF 2019-2024)

CGS Strategy

Government, Private
Sector, Junior
Explorers and other
sectors

Exploration and Mining Sectors

Socio-economic benefits

<u>CGS Immediate</u> <u>Interventions (FY2020/21 – FY2022/23)</u>

- Implementation of the integrated and multidisciplinary geoscience mapping programme (IMMP).
- Prioritisation of mineral assessment and drilling mineral targets.
- Publication of Geoscience Act Regulations for public comments.

<u>Immediate Outcomes</u> (FY2020/21 – FY2022/23)

- Improved geoscience applications by increasing coverage and availability of highquality fundamental geoscience data and information on
 - mineral & energy resources
 - land use & infrastructure development
 - groundwater & environment

<u>Intermediate Outcomes (3 – 5 years)</u>

 Capture 5% global share exploration expenditure (\$10billion).

Areas of impact (by 2025 and 2030)

- Economic growth
- Job creation
- Energy security
- Transition to low carbon economy
- Access to clean water
- Food security
- Infrastructure development and landuse
- Improved collaborations with Africa and the world

CGS Strategy: The Integrated Multidisciplinary Geoscience Mapping Programme (IMMP)

INTEGRATED AND MULTIDISCIPLINARY GEOSCIENCE MAPPING PROGRAMME: 2018-2021 MATRIX

ND imperative: Economic growth ND imperative: Environment and health ND imperative: Innovation ND imperative: International relations

1. Geoscience for mineral and energy resources 2. Geoscience for infrastructure and land use 3. Geoscience for health, groundwater and the environment 4. Geoscience innovation

5.Geoscience diplomacy

CUSTODIANSHIP OF ALL GEOSCIENTIFIC INFORMATION IN SOUTH AFRICA

Onshore and offshore geoscience research and mapping for current and future generations Modelling geological environments and mineralising systems for mineral and energy resources

Geotechnical mapping and vulnerability investigations (sinkholes, mine subsidence, coastal erosion and landslides

Seismic susceptibility investigations (mine seismic hazard assessment)

Optimisation of land use (food security, geoheritage and geotourism, physical infrastructure) Environmental geoscience research (monitoring and mitigating the impact of geology and mining activities on health and the environment

Hydrogeological research and modelling

Application of artificial intelligence in geoscience

Cultivating geoscientific innovation and novelty Geoscience collaboration and global standards

International geoscience policy and governance

OAGS Secretariat







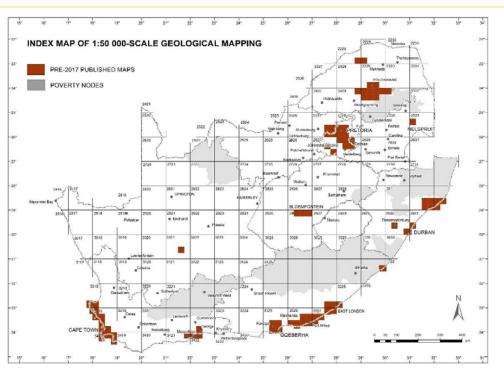


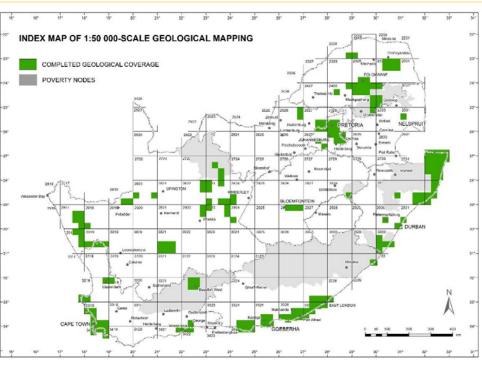
Geoscience Technical Programme (FY2021/22)

Priority projects to ignite economic growth



Onshore Geoscience Map Coverage

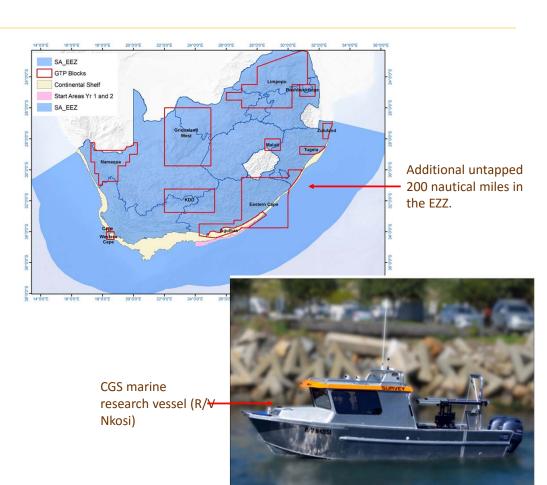




- The coverage of national mapping (onshore) at a scale of 1:50 000 has increased from **below 5%** to **9.03%** at the end of FY2020/21.
- The CGS plans to improve the onshore mapping coverage to 9.5% in the 2021/2021 FY (with the aim of 16% at the end of the 2019-2024 MTSF cycle

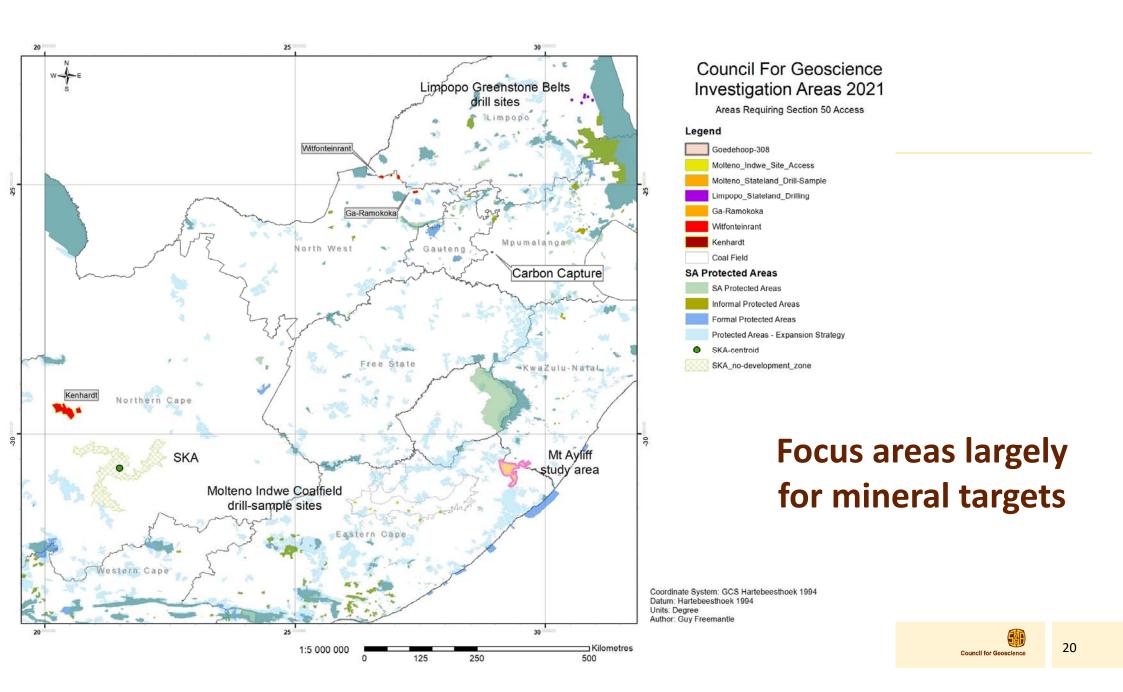
Off-shore Geoscience Map Coverage

- To boost the Blue Economy, the CGS is conducting a marine mapping programme in the Economic Exclusion Zone (EZZ).
- This work aims to gain a clear understanding of marine geoscientific processes on the continental shelf (in selected deep seabed strategic areas) as they relate to;
 - energy
 - Minerals
 - climate change initiatives
 - ocean governance.
- 0.3% mapping coverage is planned for 2021/2022.



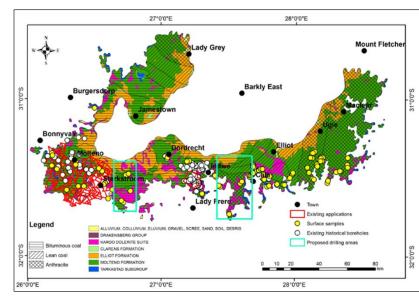
High priority mineral assessments targeted for drilling

- Renewable energy minerals (e.g. REEs, etc.) to support the Just Energy Transition (IRP 2019).
- Base and precious metals (e.g. copper, lead, nickel, zinc, gold, etc.) commercial and industrial applications, such as construction and manufacturing.
 - Several mineral targets have been identified and investigations at various stages.
- Fluorspar deposits for the pharmaceutical industry.
 - Areas of mineral interest in the Western Cape and North West Provinces.
- Phosphates production of fertilisers needed in the agricultural purposes.
- The CGS plans to continue the investigations which largely include drilling campaigns in the 2021/2022 FY



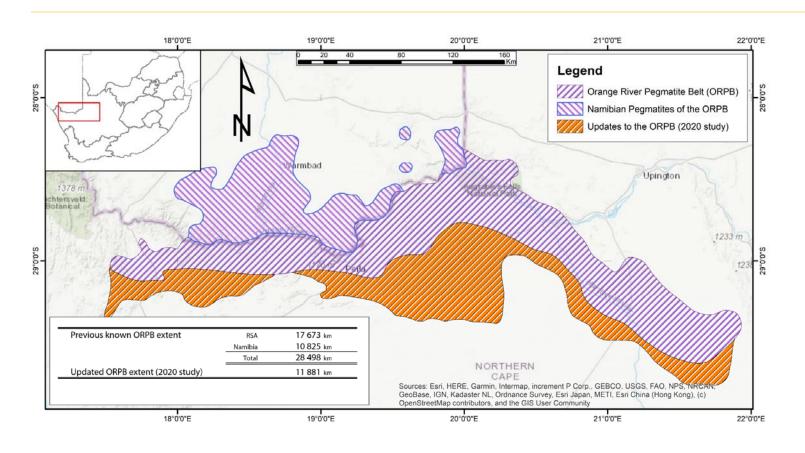
Assessment of the Molteno-Indwe Coalfields

- Project is assessing the quality and quantify the coal resources in the Molteno-Indwe Coalfields (Eastern Cape Province).
- Consideration of a customised modular power station with clean coal technology applications. Furthermore, it may be possible to target the geothermal energy production to offset the energy demand of running the Carbon Capture Utilisation and Storage (CCUS) plant.
- Initial assessments indicated
 - a possible direct value of R122 billion (@ R350 per tonne) from the development of the coal deposit.
 - Indications of REE in the coal deposits
- Planned activities include drilling of targeted sites, basin analyses and further coal assessments.



The Proposed drilling sites for Molteno Indwe areas to fill gaps of geoscientific information.

Expansion of the pegmatite belt in the Northern Cape Province



- 1:50,000 geoscience mapping has shown an estimated increase of 67% of the Orange River Pegmatite Belt, which may host significant Li and REE deposits
- Much needed intervention for the battery industry

Geoscience Technical Programme (FY2021/22)

Priority Projects for Groundwater Resources, Environmental Stewardship and Innovation



Karoo Deep Drilling (KDD) and Environmental Baseline Project

- The KDD project aims to develop a geo-environmental baseline model to inform regulations for possible shale gas exploration and exploitation in the southern Karoo
- The project has achieved a significant milestone and reached depth of 2412.06 m as at 31 March 2021 (safety incidence-free)
- The borehole emitted methane gas (CH₄) and other gases (in the shale-gas bearing geological units
- The CGS plans to drill the remaining ~1080 m in 2021/2022 FY and continue groundwater, seismic and geotechnical surveys
- Through the KDD project, the CGS is collaborating with Petroleum Agency of South Africa and also assisting the organisation with groundwater monitoring and seismic network design



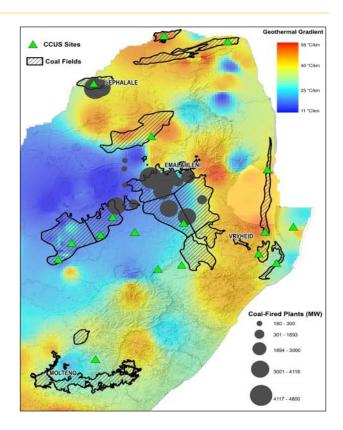
Established birds-eye view of the drilling-site of the 3 500m ultra-deep, vertical, stratigraphic research borehole.

Carbon Capture, Utilisation and Storage (CCUS)



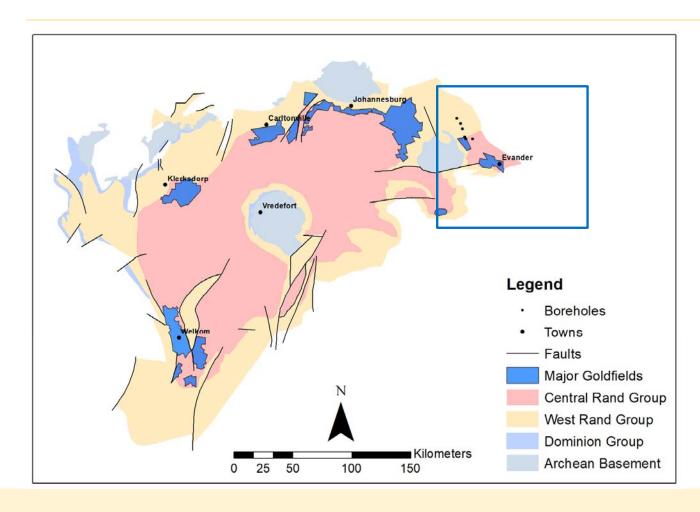
Schematic illustration of a proposed CCUS plant near the town of Leandra, Mpumalanga Province.

- This is a priority project to test the carbon capture and utilisation in South Africa to reaffirm the commitment to clean energy.
- The CGS identified several new sites in Mpumalanga Province as majority of coal mines and large point-source carbon dioxide emitters are in the province
 - The sites include deep saline aquifers, post-gasification deep coal seams and basalt storage.
 - Planned investigations will enable the development of cleaner coal technologies



South Africa's coalfields, ${\rm CO_2}$ emission hot spots relative to geothermal potential sites and possible CCUS implementation sites.

Gold prospects in Mpumalanga Province (from the CCUS project)



- Subsurface interpretation of Witwatersrand Basin architecture using data from the CGS National Core Library has shown extension of goldfields within the Mpumalanga Province
- An opportunity to characterise unexplored gold deposits – thereby enriching the local economy

Mine Water and Legacy Mines Projects

- The CGS is continuing to support the DMRE in developing mitigation strategies that will lead to the sustainable management of mine water and legacy mines in South Africa.
- Mitigation strategies include (but not limited to);
 - 1. Water ingress control measures
 - 2. Exploration of coexistence between biodiversity and mining
 - 3. Passive treatment of mine water
 - Ocean and coastal mining
 - 5. Testing of geopolymers
 - 6. Integrated monitoring (including air quality studies)
 - 7. Ground stability and land degradation assessments
 - 8. Development of the implementation of the National Mine Closure Strategy

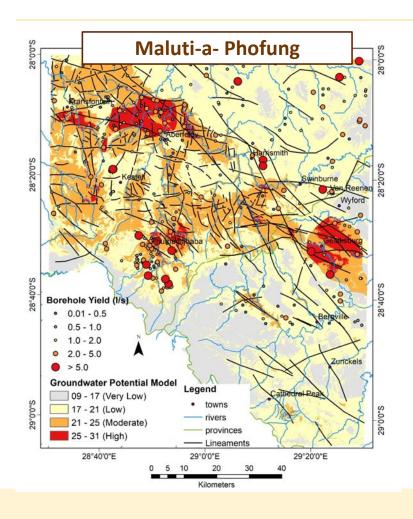


Completed Van Ryn Canal in East Rand (Gauteng Province) for ingress control



Passive treatment pilot plant in Carolina (Mpumalanga Province) for acid mine drainage remediation

Artificial Intelligence for groundwater resources



- Artificial intelligence techniques and hydrogeological modelling has been used to locate additional water sources in the Free State and Eastern Cape Provinces.
- In 2021/22 FY, the CGS aims to continue with iting and drilling of borehole for exploration and production purposes.





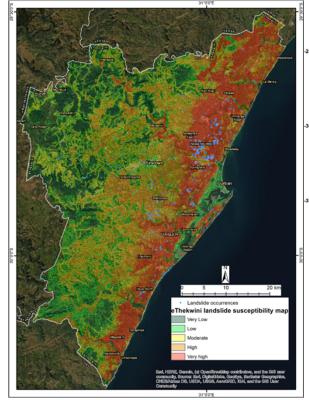
Infrastructure and land-use projects

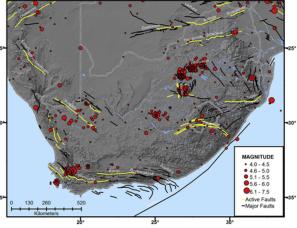
Infrastructure and land-use project are aimed to:

- support safe and judicious development of land by assessing ground stability
- evaluating appropriate land-use in line with development suitability prior to development
- community safety, and
- pro-active distaste management and response readiness
- Assessment of **building materials** to support infrastructure development

National Geohazards Mapping Programme

- Mapping of geohazards across South Africa at various scales to support investment decision making, infrastructure and land use planning and construction, and community safety, focussing on:
 - Seismic hazard and risk (Seismic risk-studies of Johannesburg, effects of blasting from opencast mines, microzonation of various cities in KZN, active fault studies and palaeo-seismic studies of KZN Tugela-Fault)
 - Dolomitic land and sinkhole formation (including updated integration of dolomite hazard class zonation maps)
 - Landslide susceptibility mapping (in KZN, development of methodology for landslide hazard assessment n RSA)
 - Geotechnical mapping to support development planning (Giyani region)



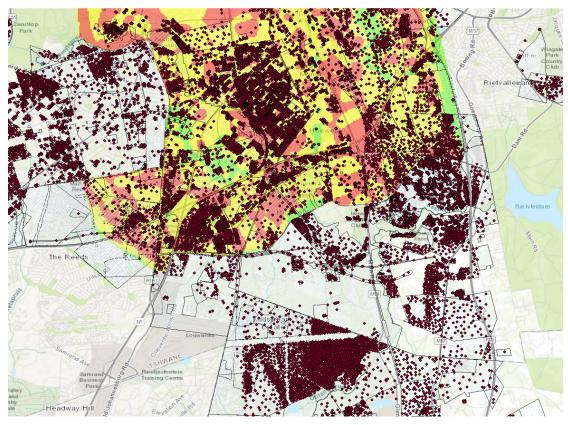


Top: earthquake occurrence and earthquake source generating structures across South Africa

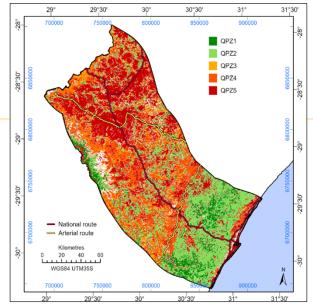
Left: Municipal-scale landslide susceptibility map for the eThekwini Metropolitan Municipality,

National Dolomite Report Reviews

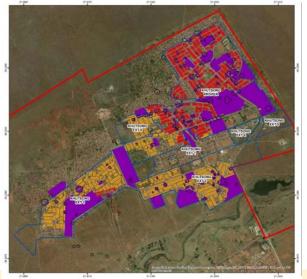
- Mandatory statutory function of the CGS to support judicious land use and development on dolomitic land
- The CGS will continue to review submitted technical reports, Site Development Plans (i.e. town planning layouts), and co-signing of NHBRC B4 certificates in support of enrolment



Extract of the National Dolomite Database and extent of dolomitic land across the Pretoria region



Ouarry potential zones maps across southern KZN



Other Infrastructure and Land-Use Projects

1. Aggregate potential mapping – Kwa-Zulu Natal Province

• In 2021/22 geotechnical laboratory analysis will be integrated between the two areas to indicate potential aggregate resource areas and geotechnical properties of each major lithology

2. Free State Department of Human Settlements – Housing development geotechnical Investigations

 Geotechnical investigations of 51 towns across the Free State Province for housing development on behalf of the Free State Department of Human Settlements

3. Housing Development Agency – Khutsong ground stability risk assessments

 Currently, the CGS is implementing dolomite risk assessments across the Khutsong Area (near Carletonville, Gauteng), in support of resettling ~21 000 households on high risk dolomitic ground.

Probabilistic Seismic Hazard Analyses

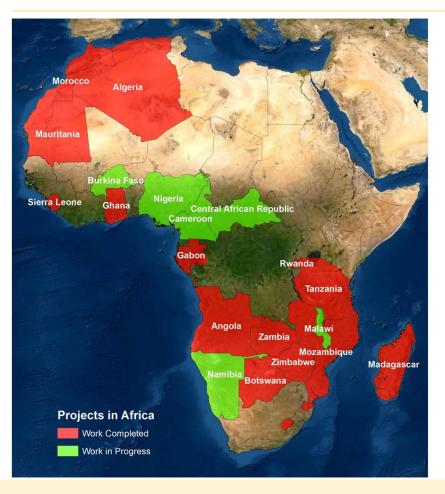


Conducting the Probabilistic Seismic Hazard Analysis (update of seismic hazard model) and Tsunami Hazard Analysis as part of the critical requirements for renewal of the Operating License renewal due in 2024 **Geoscience Technical Programme (FY2021/22)**

Priority Projects for Geoscience Diplomacy



African footprint of the CGS and current work



Footprint over 19 African Countries

- **Geoscience Mapping** (e.g. geochemical, geological, geophysical, seismological, metallogenic, hydrological and mineral resource assessment)
- Institutional Reform
- Map Compilation and Production (GIS, Cartography)
- Supervision of World Bank Projects

In 2021/2022, the CGS will be;

- Finalising the geological mapping project in Malawi
- Expanding the geological mapping in Namibia (until 2022)
- Engaging with Central African Republic and the Democratic Republic of Congo as part geoscientific collaborations

Legislative Matters

- The Geoscience Act Regulations have been published in a Government gazette for public comments
- Extensive stakeholder engagements are planned to complete the public comments process

REPUBLIC OF SOUTH AFRICA

GEOSCIENCE
AMENDMENT ACT

REPUBLIEK VAN SUID-AFRIKA

WYSIGINGSWET OP
GEOWETENSKAP

No 16, 2010



Annual Performance Plan 2021/22 (Balance Scorecard)



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.

Outcome	MTSF Priorities	Outputs	Output indicators	Estimated performance	MTEF period	period	
				2020/21	2021/22	2022/23	2023/24
		Audited financial reports	1. Percentage of overhead costs to total costs	≤66%	≤66%	≤66%	≤66%
Effective and efficient financial	1. A Capable, ethical and	Audited financial reports	2. Percentage of personnel costs to total costs	≤70%	≤70%	≤70%	≤70%
resources	developmental state	Audited financial reports	3. Revenue from collaborative activities/partnerships	R30m	R33m	R36m	R39m
		Audited financial reports	4. Grant revenue	R502.2m	R373.2m	R408.1m	R409.6m

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, adhere to best practice to achieve sustainable governance as well as to provide and operate flexible, expandable and secure ICT solutions.

Outcome		Outputs	Output indicators	Estimated performance	MTEF period			
				2020/21	2021/22	2022/23	2023/24	
Effective and efficient		Audited annual report	5. Number of audit qualifications	0	0	0	0	
financial resources management and Compliance with governance protocols/regulations	1. A Capable, ethical and developmental state	Audited annual report	6. Percentage of total Procurement spend on goods and services from Small, Medium and Micro Enterprises (QSE and EME's) in terms of PPPFA of 2017	≥30%	≥30%	≥30%	≥30%	
		Availability report	7. Availability of key enterprise services	≥99%	≥99%	≥99%	≥99%	

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, To promote and invest in human resources transformation and diversity.

Outcome		Outputs	Output indicators	Estimated performance	MTEF period		
				2020/21	2021/22	2022/23	2023/24
	1. A Capable, ethical and developmental state	Human Resources Reports	8. Percentage of scientific staff with Masters or Doctoral degrees	≥35%	≥35%	≥35%	≥35%
		Human Resources Reports	9. Percentage of training expenditure to leviable amount of payroll	≥1%	≥1%	≥1%	≥1%
Capable human capital		Human Resources Reports	10. Staff turnover rate	≤10%	≤10%	≤10%	≤10%
3. Education, skills and health	Human Resources Reports	11. Percentage of staff living with disability	≥1.5%	≥1.5%	≥1.5%	≥1.5%	
		Human Resources Reports	12. EE Stats, Scientific cohort (Female representation)	≤49:≥51	44%	46%	48%
		Human Resources Reports	13. EE Stats, EXCO (Female representation)	≤20:≥80	20%	40%	40%

Market (Stakeholder/Customer) Perspective

Programme 4: Delivery of the mandate

Programme 4 Purpose: Execute the integrated and multidisciplinary geoscience mapping programme

Outcome	MTSF Priorities	Outputs	Output indicators	Estimated performance	MTEF period		
				2020/21	2021/2	2022/23	2023/24
Enhanced applications of	2. Economic transformation and job	Onshore geoscience maps	14. Onshore geoscience map coverage	9%	9.5%	11%	12%
geoscience information and knowledge and to secure a minimum of 5%	5. Spatial integration,	Offshore geoscience maps	15. Offshore geoscience map coverage	0.1%	0.3%	0.4%	0.5%
share of the global exploration expenditure	human settlements and local government	Value-added geoscience outputs such as integrated reports, 3D models, innovative	16. Applied geoscience outputs for minerals and energy	6	4	4	4
and	6. Social cohesion and safe communities	solutions, mineral systems and emplacement models.					
Enhanced geoscience diplomacy	7. A better Africa and World	Value-added geoscience outputs such as integrated reports and 3D models, innovative solutions.	17. Applied geoscience outputs for infrastructure, land use, health, groundwater and the environment	6	5	5	5

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.

Outcome	MTSF Priorities	Outputs Output indicators		Estimated performance	MTEF perio	iod	
				2020/21	2021/22	2022/23	2023/24
	2. Economic transformation and job	Media articles	18. Number of articles published on media platforms	24	24	24	24
Enhanced applications of geoscience information and knowledge and to	creation	Stakeholder survey report	19. Stakeholder satisfaction level	≥70%	≥70%	≥70%	≥70%
secure a minimum of 5% share of the global exploration expenditure	secure a minimum of 5% human settlements and local government	Peer-reviewed articles published in scientific journals, book chapters and edited volumes.	20. Number of peer-reviewed articles published	30	30	32	34
and Enhanced geoscience	6. Social cohesion and safe communities	Examples: memoirs, bulletins, books and atlases.	21. Number of CGS publications	7	8	8	10
Enhanced geoscience diplomacy	7. A better Africa and World	Examples: Conference Abstracts, extended abstracts, papers and keynotes.	22. Number of conference proceedings published	40	25	80	40

Finances (Budgets for 2021/22)



Budget FY2020/21 - FY2023/24

Income/Funding Model				
Income (Rands)	2020/21 Budget x 1000	2021/22 Budget x 1000	2022/23 Budget x 1000	2023/24 Budget x 1000
Government grant - Baseline	202 388	212 800	228 209	238 478
Government grant – Baseline Increase Geological Mapping	70 000	128 000	147 815	154 468
National Treasury 2020 AENE and 2021 MTEF Budget Reductions	(18 695)	(16 696)	(22 930)	(40 757)
Government grant - MTEF	354 515	52 958	54 984	57 458
**CCUS Project	90 000	_		
Sales and contracts	29 282	32 210	35 431	38 974
Sundry income	4 072	4 276	4 490	4 714
TOTAL INCOME - A	731 562	413 548	447 999	453 335

Budget FY2020/21 - FY2023/24

2020/21 Budget x 1000	2021/22 Budget x 1000	2022/23 Budget x 1000	2023/24 Budget x 1000
336 594	316 946	342 117	367 773
4 074	4 481	4 930	5 423
13 177	14 495	15 944	17 538
305 921	62 126	69 508	47 101
659 766	398 048	432 499	437 835
-	-	-	-
71 796	15 500	15 500	15 500
731 562	413 548	447 999	453 335
	Budget x 1000 336 594 4 074 13 177 305 921 659 766	Budget x 1000 Budget x 1000 336 594 316 946 4 074 4 481 13 177 14 495 305 921 62 126 659 766 398 048 - - 71 796 15 500	Budget x 1000 Budget x 1000 Budget x 1000 336 594 316 946 342 117 4 074 4 481 4 930 13 177 14 495 15 944 305 921 62 126 69 508 659 766 398 048 432 499 - - - 71 796 15 500 15 500

^{*}Balance Sheet

Analysis of Government Grant Allocations from FY2020/21 to FY2023/24

ITEM	2020/21	2021/22	2022/23	2023/24
Baseline allocation	R202.5m	R212.8m	R228.2m	R238.4m
Water Ingress Project	R29.0m	R30.7m	R31.8m	R33.2m
Rehabilitation of D&O Mines (Research Portion)	R21.1m	R22.3m	R23.2m	R24.2m
**CCUS Project	R90.0m			
Economic Competitiveness and Support Package (ECSP)	R198.3m			<u> </u>
Analytical and Research work for the Geoscience Laboratory	R198.3m	_		
Baseline Increase : Geological Mapping for Exploration of Mining	R70.0m	R128.0m	R147.8m	R154.5m
Baseline Reduction : Current Transfers (Operational)	(R18.7m)	(R14.6m)	(R20.2m)	(R33.5m)
Baseline Reduction : Rehabilitation of D&O Mines		(R2.1m)	(R2.7m)	(R3.6m)
Baseline Reduction : Water Ingress Project	_	_	_	(R3.6m)
Total Government Grant (* 2021 MTEF DMR Final Allocation letter 5 February 2021)	R592.2m	R377.1m	R408.1m	R409.6m
*The Shale gas is no longer funded				

^{*}The Shale gas is no longer funded.

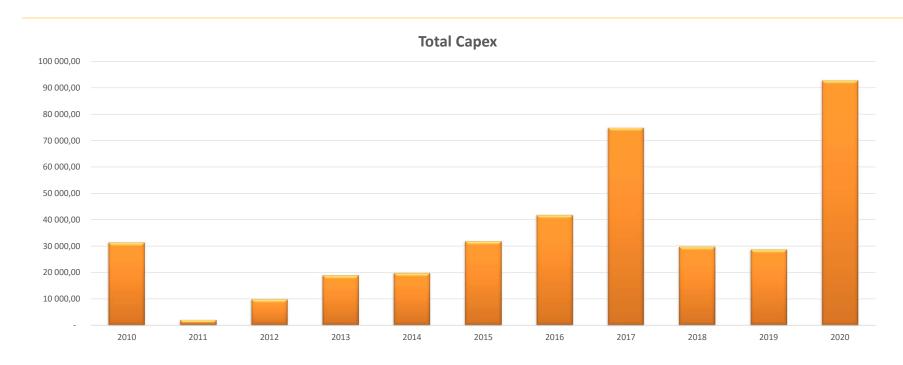
^{**} Transfers from SANEDI were received as follows, R60m 28Aug20 and R30m 04Sep20.

Financial Sustainability



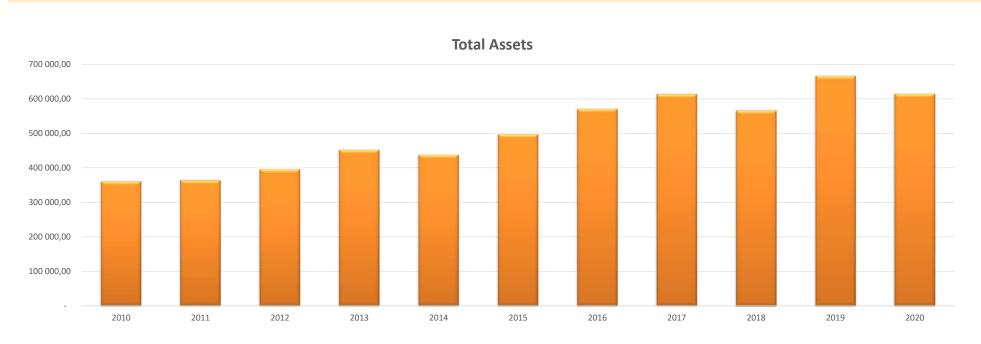
- There has been no real growth in the baseline grant over the period. The marginal increase in the grant is meant to address inflation. Baseline revenue has increased with an average of 4 % over the period.
- An additional Baseline grant funding of R430.3m has been allocated for Geological mapping for exploration of mining over the MTEF.
- An amount of R66.6m has been reallocated for the D&O research portion over the MTEF.
- R18.7m budget reduction in the 2020 AENE and R80.3m budget reductions in the 2021 MTEF
- CGS is implementing the Development of Carbon Capture Storage Project with the World Bank.

Financial Sustainability, continued



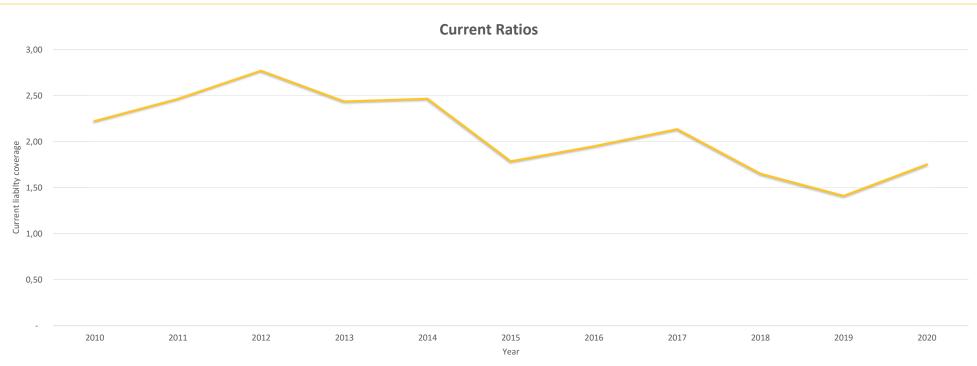
- A capital renewal plan is developed annually to address the infrastructure requirements.
- In 2020, additional funding was spent in respect of Laboratory and ICT infrastructure.
- The aging research infrastructure of the CGS is of great concern to the organization and attention is given to the replacement of infrastructure.

Financial Sustainability, continued



• A steady balance sheet position has been maintained over the last 11 years and total assets have increased by an average of 7% over the period.

Financial Sustainability, continued



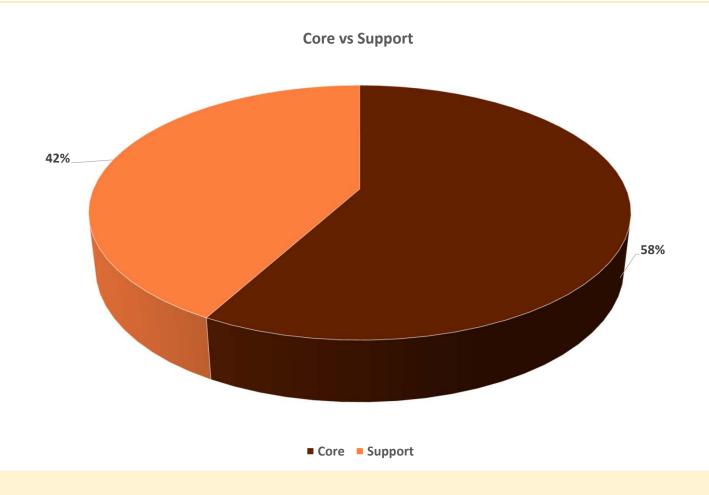
- The current ratio was at 1.7:1
- The CGS is in good financial standing over the next MTEF. This means that the CGS will meet its current financial obligations as they become due.

Thank you PPC for the support of the Geological Mapping for Exploration of Mining programme

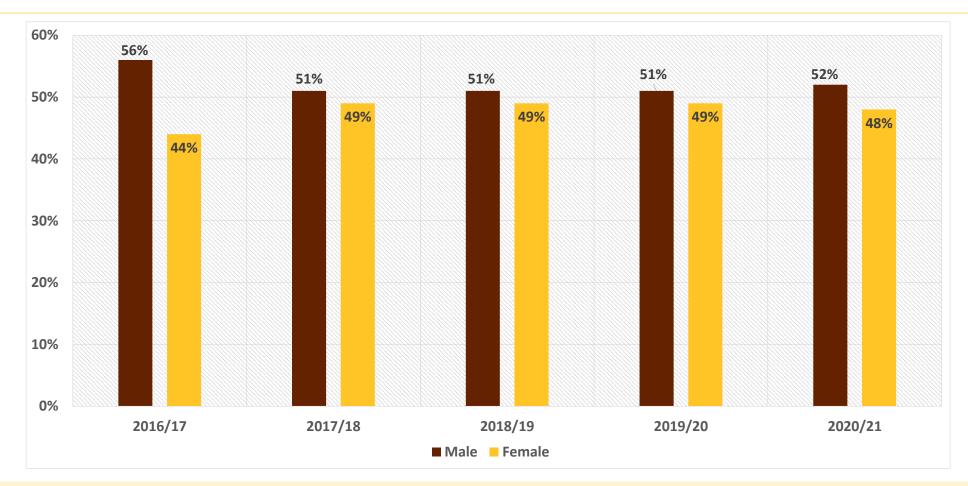
Human Resources



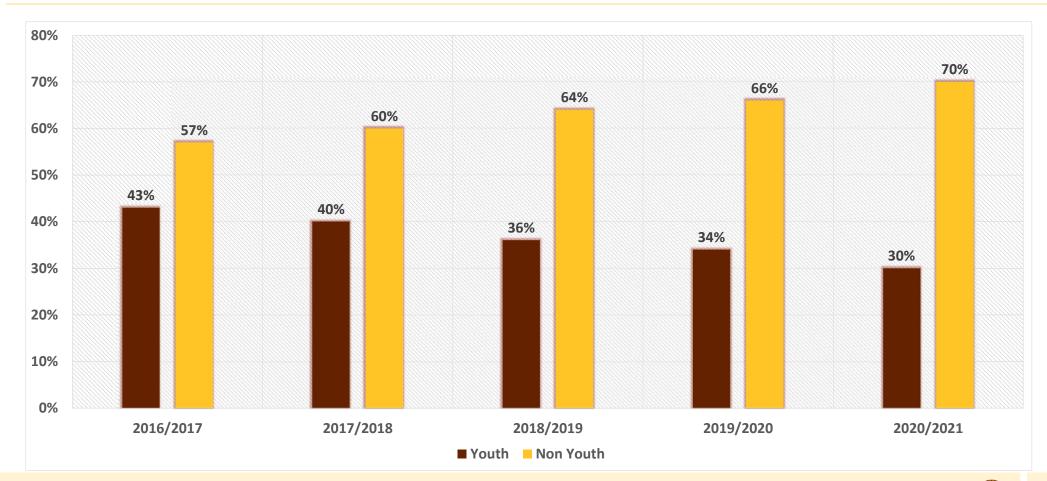
Ratio of Core Staff vs Support Staff



6 Year Gender Breakdown - Female versus Male



5 Year Staff Headcount Distribution: Youth versus Non-Youth



Full-Time Bursary Programme

Race &	Gender	PhD	MSc	BSc Hons	BSc	Totals
A fui a a u	Female	3	7	9	0	19
African	Male	2	8	3	0	13
Calarmad	Female	0	7	0	0	7
Coloured	Male	0	0	1	0	1
las alta sa	Female	0	0	1	0	1
Indian	Male	0	1	0	1	2
VA/I 0:40	Female	2	1	0	1	4
White	Male	0	2	0	2	4
То	tals	7	26	14	4	51

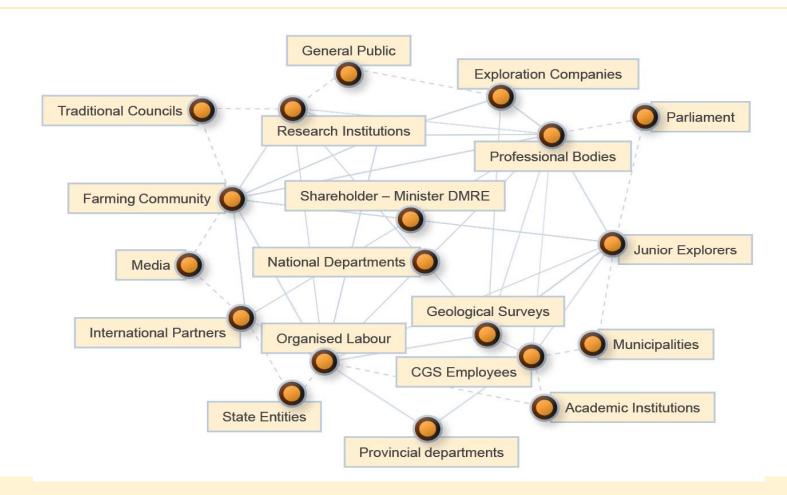
Staff Living with Disabilities



Stakeholder Engagement Programme



Our Stakeholders



Stakeholder Engagement Programme

 Stakeholder engagement sessions have continued with communities and other stakeholders during the Covid-19 Pandemic (delivering science to the people).





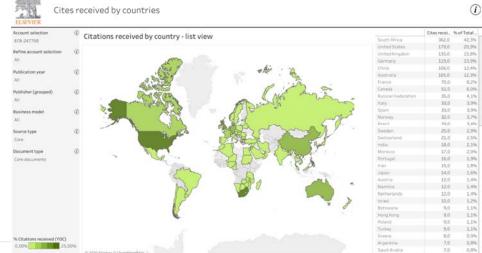


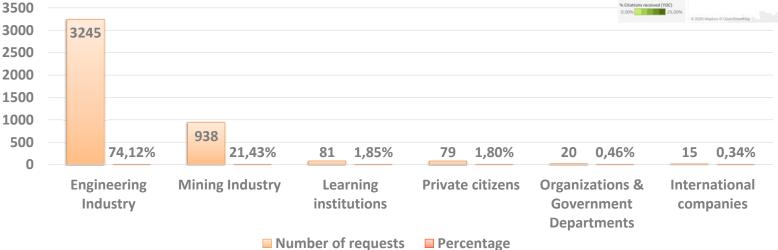


Scientific Prowess

Scientific Prowess (Publications such as):

- Peer-Reviewed Articles
- Scientific Abstracts, Bulletins, Books
- Geoscience Maps and Explanations
- Integrated Reports





For all information and data requests, the Public Information Officer can be contacted on data@geoscience.org.za for data related queries or library@geoscience.org.za for information from the National Geoscience Library.

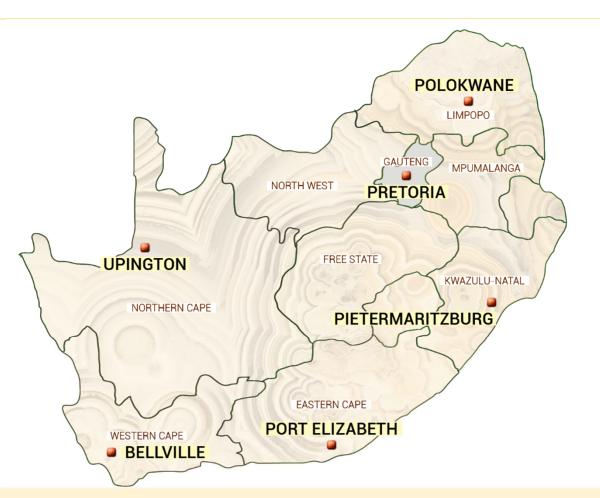
General enquiries **info@geoscience.org.za** or +27 12 841 1025.

Concluding Remarks

"CGS Vision and Impact Statement: A prosperous and transformed society enabled by geoscience solutions"

- Systematic expansion of the geoscience mapping programme is beginning to yield desirable results, enabling identification of mineral targets that are being prioritised to optimise the contribution of geosciences to the "South Africa's Economic Reconstruction and Recovery Plan"
- The APP of the current year has been aligned with the appropriated budget
- Alternative commercial activities are being explored to augment the financial sustainability of the organisation in a medium to long term using the "first mover principle" advantage in developing and applying innovative geoscience products for both commercial and knowledge purposes
- Continue implementation of a purposeful programme to invest in creating a critical mass of young, diversified and
 World Class geoscientists
- Continue collaborations with strategic partners and stakeholders

THANK YOU



CONTACT US AT:

HEAD OFFICE

- 280 Pretoria Street, Silverton, Pretoria, South Africa, 0184 Private Bag X112, Pretoria, South Africa, 0001
- **L** Tel: +27 (0)12 841 1911 Fax: +27 (0)12 841 1221
- Email: info@geoscience.org.za
- Web: http://www.geoscience.org.za







