



Karoo Readiness Action Plan for the Western Cape Government and relevant Western Cape municipalities in the Central Karoo, for potential large scale, or regional developments.

KAROO READINESS ACTION PLAN EXECUTIVE SUMMARY

Based on a **Ten-Years of Development** Scenario for the Karoo.



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Preface to the Karoo Readiness Action Plan

This initiative started in 2017 at a workshop coordinated by the Central Karoo District Municipality where the need was identified to investigate the readiness of government to deal with the potential increase in demand for municipal and government services that will arise from the implementation of large scale developments such as shale gas development, uranium-molybdenum mining and renewable energy developments in the Central Karoo. Since then, the development of the Karoo Readiness Action Plan has unfolded as a great example of an intergovernmental effort where all three spheres of government participated in extrapolatina future scenarios of large-scale development roll-out and proactively planning to improve intergovernmental readiness accordingly. This document captures these efforts.

The Karoo Readiness Action Plan is a consolidation of various actions/interventions that are needed to improve our state of readiness. It is a living document that should continuously be improved on through continued engagements between organs of state, communities, civil society, and the private sector. During all engagements in drafting the Karoo Readiness

Action Plan, all stakeholders emphasised that the implementation thereof requires not only a "whole-of-government" approach, but a "whole-of-society" approach. Although being drafted by the Western Cape Government, the interventions proposed in the Karoo Readiness Action Plan is applicable to other provinces and relevant to all spheres of government.

The readiness initiative was fortunate to have also had comprehensive review and input from an international team of subject specialists. During 2018 and 2019 the United States Department of State and the Department of the Interior appointed Deloitte to lead a team of international specialists to provide technical advice to the Western Cape Government in support of the development of an appropriate regulatory and policy framework that will contribute toward the initiative to improve intergovernmental readiness for large scale development in the Karoo. Apart from providing technical advice based on their global experience in dealing with oil and aas developments, they also reviewed the Karoo Readiness Action Plan. It is a great comfort to us that this team of international specialists supported the interventions contained in the

Karoo Readiness Action Plan, especially the proactiveness thereof and the "whole-of-society" approach taken. The peer review by international specialists enhances the credibility and relevance of the of the Karoo Readiness Action Plan as an effective approach to deal with the challenges related to large scale developments.

The COVID-19 pandemic has magnified many of the issues already faced by municipalities across South Africa in terms of service-delivery readiness including, skills shortages, funding scarcity and much more. A serious rethink is required regarding the revenue streams available to municipalities to address increased service delivery demands that will follow the implementation of large-scale developments.

Whilst the drafting of this Karoo Readiness Action Plan is a good start, it is vital that the private sector and general public engage and contribute to the initiative in order to meet muster in terms of a "whole-of-society" approach. However, the Western Cape Government will remain committed to intergovernmental cooperation in the implementation of this plan.

Paul Hardcastle

on behalf of the Project Task Team for the Karoo Readiness Action Plan

1. Purpose and Context

- 1.1. The Western Cape Government (WCG), in collaboration with other spheres of government, is in the process of evaluating government's readiness to respond to the foreseen increase in service delivery associated with large-scale, or regional, development proposals such as shale gas development (SGD), uranium-molybdenum mining and renewable energy developments in the Central Karoo (hereafter referred to as "large-scale developments"). There is concern that, in the absence of a well conceptualised framework for governmental readiness, such anticipated increases in demand for services may outstrip the ability of local, provincial and national government to supply such services.
- 1.2. The purpose of this whole-of-government initiative (hereafter referred to as the "Readiness Initiative") is to identify interventions/actions to be implemented within the short to medium term (i.e. the next 5 to 10 years), as well as the roles and responsibilities of municipalities, provincial and national government in readiness for these potential large-scale developments. Although the Readiness Initiative primarily focuses on the Western Cape Province, specifically the actions to be taken by the WCG and municipalities, it is acknowledged that the governance challenges that the above developments pose will require a whole of government approach including additional support from the private sector and the public. Also, it is likely that the actions proposed for the Western Cape Province and its municipalities, will be equally applicable to other provinces and municipalities. The municipalities referred to, are the Central Karoo District Municipality and the Beaufort West, Laingsburg and Prince Albert Local Municipalities.
- 1.3. It should be noted that the focus of this Readiness Initiative is not to draft a scientific baseline monitoring and research programme (to improve our scientific knowledge base), but rather to focus on actions and interventions related to the anticipated increase in service delivery demands, should these developments come to fruition.
- **1.4.** To understand the purpose and scope of the Readiness Initiative, it is important to note the following:
 - 1.4.1. The Readiness Initiative is not dependent on, or based on any specific developments. Recent large-scale development proposals such as shale gas development, uranium-molybdenum mining and renewable energy developments will be used to illustrate and identify typical impacts and aspects to be addressed.
 - 1.4.2. With reference the above-mentioned examples of potential large-scale developments, it is emphasised, that the Readiness Initiative does not argue the merits of these developments, but rather focusses on the likely service delivery demands over the next 5 10 years if such developments were to proceed.
 - 1.4.3. The decision to only focus on the next 5 to 10 year period is also based on the planning cycle of government and the fact that it is not possible to accurately determine the likely development scenario for the long term (beyond 10 years), or to plan for interventions within this uncertain future.
 - 1.4.4. The initiative to consider government's readiness does not mean that the WCG is supporting these developments or pre-empting the outcome of regulatory processes. Insofar as shale gas development is concerned, the WCG developed a Policy Statement on shale gas development that was adopted by the Western Cape Provincial Cabinet in May 2017. Since then, the status of shale gas development has not changed significantly, and the Policy Statement is still relevant.

1.4.5. The importance of partnerships within each sphere of government, across all spheres of government, provincial boundaries and sectors, as well as between the whole-of-government with the whole-of-society, is a prerequisite for achieving the goal of improved readiness.

2. Approach to drafting the Karoo Readiness Action Plan

- 2.1. The Western Cape Department of Environmental Affairs and Development Planning (WC: DEA&DP), on behalf of the WCG, is coordinating the investigation on the state of readiness of the WCG and relevant municipalities, in response to anticipated increases in the demand for various services associated with shale gas development and other major mining/industrial related developments.
- 2.2. As part of this initiative, the two workshops were held with multiple government stakeholders across all three spheres of government and included various organs of state.
- **2.3.** Based on the workshop proceedings, it was agreed that WC: DEA&DP will draft action plans for all the major issues that were discussed during this workshop. DEA&DP appointed coordinators for each issue (theme) to draft action plans that formed the basis of the Karoo Readiness Action Plan:
 - **Theme 1:** Cooperative governance dealing with overall governance or crosscutting concerns (Coordinator: Allan Rhodes WC: DEA&DP)
 - **Theme 2:** Planning, housing, heritage and biodiversity (Coordinator: Allan Rhodes WC: DEA&DP)
 - Theme 3: Water and Pollution Management (Coordinator: Wilna Kloppers WC: DEA&DP)
 - **Theme 4:** Waste Management (Coordinator: Eddie Hanekom WC: DEA&DP)
 - **Theme 5:** Roads, transport and construction material (Coordinator: Carl October WC: DTPW)
 - **Theme 6:** Emergency response services (Coordinator: Colin Deiner WC: DLG)
 - Theme 7: Noise light and air quality management (Coordinator: Joy Leaner WC: DEA&DP)
 - Theme 8: Economic opportunities, skills and social cohesion (Coordinators: Ajay Trikam and Chantell van Niekerk WC: DEDAT)
 - **Theme 9:** Stakeholder communication and awareness: (Coordinator: Rudolf van Jaarsveld WC: DEA&DP and Barbara Koopman Central Karoo District Municipality)

2.4. The various action plans contain the following information:

Action Step Description (i.e. What must be done): A description of the action to be taken to achieve a goal. The more strategic the action is the more complicated the other aspects become, such as lead authority, resources, implementation schedule etc.

Roles and Responsibilities (i.e. Who must do it or be involved): The identification of participating stakeholders from all spheres of government, as well as the private sector and citizens.

Implementation Schedule (i.e. when must it be done): Clarification of the priority of the action – e.g. short, medium of long term, or high, medium low priority.

Methodologies, Process or Procedures to be followed – if required or appropriate (i.e. How must it be done)

Resources Required (i.e. what is needed to do it): An explanation of the human and skills resources, funds and technical resources required to implement the action/intervention

Desired outcome and outputs: Outcomes refer to the impact to be achieved and Output refers to the deliverable to be produced

2.5. Consultation on the Karoo Readiness Action Plan:

Apart from the ongoing interaction of the Theme Coordinators with relevant state-stakeholders throughout the duration of the initiative as reflected above, the draft Karoo Readiness Action Plan was advertised for public comment from 25 February – 7 April 2020. In addition, relevant planning processes, including the IDP processes of the Municipalities as well as more recently the Joint District and Metro Approach- engagements informed the revision of the Karoo Readiness Action Plan.

3. Municipal and District Services Response Readiness in a Post-COVID South Africa

- 3.1. The COVID-19 pandemic has magnified many of the issues already faced by municipalities across South Africa in terms of service-delivery readiness including vulnerability to corruption, skills shortages, funding scarcity and much more. The pandemic has also provided opportunity to accelerate collaboration, e-learning, e-commerce, digital-inclusion and new levels of joined-up response to challenges. The pandemic has revealed what might be possible in future.
- 3.2. We live in a VUCA world (volatile uncertain complex and ambiguous). We have now also seen the VUCAII world more closely a world that is vulnerable, under-resourced, (and which increasingly shaped by) creative-destruction, activism, informality, and innovation. The VUCA-VUKAII reality.
- 3.3. A serious rethink is required regarding the revenue streams available to municipalities to address increased service delivery demands that will follow the implementation of large-scale developments. The COVID-19 pandemic illustrated how vulnerable many municipalities (especially rural municipalities) are to any economic downturn that results in the reduction of grants and other revenue streams.

- 3.4. The threat of the virus and possible similar pandemics in future may well affect where and how people live and work, the housing market, commercial real estate practices, even the way the we use and design buildings (living and work spaces) people are going to spend less social energies at their work environments and more at home and in their local communities. Also, there would be more cars and less mass transit- these all stemming from a need for de-densification and social distancing (the elevated importance of addressing the physical dimension of work); unless carefully thought, affordable and safer transport alternatives emerge. The experience of lockdown emphasised the need for well resourced, local amenities, where town and city residents are able to meet most of their needs within their immediate living environments
- 3.5. The nexus between development /infrastructure development and environmental goals has never been more imminent. The push for a low carbon future must become the norm rather than individual projects e.g. shifting to renewable energy generation, the use of market-based instruments to change behaviour towards more sustainable practices such as low carbon vehicles, hybrid, e-vehicles and clean fuels and the use the environmental taxes (such as the use of road consumption charges based on induced damage to infrastructure per vehicle category).
- 3.6. In response to this global outlook, which is further exacerbated by a need for shorter delivery timelines and a desperate need to foster citizen-trust, we will need to manage change and will need to transform our design-approach and the regulation of our built environment infrastructure. In a world that seeks a better future for all, there is a real possibility of breaking the cycle of intergenerational poverty through building an open opportunity society.
- 3.7. Sustainable, responsive, fast, pop-up and foldaway service delivery must be possible, scalable and affordable. Eco-systems services and incremental improvement towards sustainability should also inform design. These methods should also identify, recognize and value the cultural heritage and context- specific aspects at various locations. This challenges planning and environmental considerations. Logistics, data, information, research, connectivity, networking, innovation and connectedness become the currency of service delivery. Building a culture and enabling leadership for these objectives are also critical goals.
- 3.8. The Joint District Approach or JDA has emerged into a District Development Model (DDM). This Model holds great potential to enable the institutional capability, incentives, information, infrastructure and skills for a vibrant and prosperous Karoo for all through responsive service-delivery.

4. The way forward

- **4.1.** This Karoo Readiness Action Plan has been drafted in collaboration with various state-stakeholders, the inputs from international specialists, and the comments received from some non-state stakeholders.
- 4.2. The Karoo Readiness Action Plan will be presented to the MEC for Local Government, Environmental Affairs and Development Planning, and thereafter, the Western Cape Cabinet for noting, emphasising that the current version will be used to continue with broader non-state stakeholder engagements as well as further state stakeholders consultations. The Karoo Readiness Action Plan is a living document that should continuously be improved on through engagements and co-design sessions with organs of state, communities, civil society, and the private sector.
- **4.3.** This current version of the Readiness Action Plan will be distributed to all relevant state stakeholders for wider distribution to relevant state and non-state stakeholders to inform their respective strategic and operational planning mandates, as well as the monitoring thereof.

4.4. As agreed to by all stakeholders that participated in the drafting of the Karoo Readiness Action Plan, the implementation of the various actions/interventions contained in the Karoo Readiness Action Plan is the responsibility of all spheres of government (a whole-of-government approach), communities and other private sector stakeholders (a whole-of-society approach). This cooperation is even more important in a post-COVID-19 environment where the availability of resources will influence the ability of stakeholders to implement these interventions.

5. Theme 1: Cooperative governance (Western Cape)

Coordinator: Allan Rhodes - WC: DEA&DP

This theme focuses on overall governance concerns associated with governmental readiness to accommodate demands associated with potential large-scale development proposals.

Strategic Issue 1: Overall Governance in the Central Karoo area of the Western Cape:

- **Action 1.1:** Establishment of Intergovernmental Fora for the Central Karoo District area.
- Action 1.2: Establishment of a Shared Service Centre for the Central Karoo.
- Action 1.3: Data governance and warehousing
- **Action 1.4:** Creating a regulatory framework for (charging of) financial provisioning including development contributions and cost recovery associated with the development and maintenance of services and service infrastructure in support of the development in question.
- **Action 1.5:** Develop guidelines to provide clarity and consistency in the compilation and evaluation of all types of applications/authorisations by the relevant decision-making authorities, including best practices
- **Action 1.6:** Ongoing training and capacity building for all spheres of government, as well as creating awareness and empowering communities to engage with large scale developments.
- Action 1.7: Monitoring and auditing of environmental impacts during operation and post closure (i.e. legacy impacts)
- **Action 1.8:** Improvement in the policy and regulatory framework

6. Theme 2: Integrated planning, human settlements, heritage, and biodiversity management

Coordinator: Allan Rhodes - WC: DEA&DP

Strategic Issue 2: Integrated Planning:

- **Action 2.1:** Updating the Central Karoo District SDF or drafting a Regional Spatial Development Framework to ensure the maintenance of an ecologically functional landscape.
- Action 2.2: Council approval of an Integrated Land Use Management (Zoning) Scheme Bylaw for all municipalities within the Central Karoo (and ideally within the entire Karoo region) including the development of appropriate overlay zones for Biodiversity, Heritage, Scenic and Cultural Landscapes and 'go zones'
- **Action 2.3:** Put in place a municipal planning administrative measures and systems and consider the establishment of a District Municipal Planning Tribunal

Strategic Issue 3: Management of heritage resources:

Action 3.1: In association with the development of the Central Karoo SDF, identify areas with Heritage Significance (including special sense of place, archaeological, paleontological, architectural, socio-cultural or area of visual sensitivity and tourism value i.e. landscapes of natural or cultural importance-the inventory in terms of section 30(5) of the NHRA) to be avoided in the placement of infrastructure associated with large scale development in SDFs

Strategic Issue 4: Human Settlements:

Action 4.1: Update current Human Settlement Plan to better align with new emerging needs and potential future demands and to provide detailed housing related input into the SDF (as well as conducting a socio -economic survey to determine exact current housing need)

Strategic Issue 5: Biodiversity management:

Action 5.1: Identification of areas to be protected, based on the improved information (e.g. the SGD SEA data) that is available

7. Theme 3: Water and Pollution Management

Coordinator: Wilna Kloppers – WC: DEA&DP

Strategic Issue 6: Water supply:

- Action 6.1: Establish a Water Management Strategy for the Karoo region
- **Action 6.2:** In association with actions 2.2 and 2.3, identify sensitive areas to be avoided when identifying water resources for large scale developments such as SGD and mining operational use (including the re-use of process water)

Strategic Issue 7: Wastewater and sewage management:

- Action 7.1: The promotion of best practice in terms of waste water management, including the evaluation of waste water management plans (developed by applicants) for large scale developments, especially for flow back and produced water in potential SGD and uranium mining operations (including the re-use and final disposal of waste water)
- **Action 7.2:** Compliance monitoring of on-site management of wastewater for large scale developments, for example, flow back and produced water in SGD and uranium mining operations
- Action 7.3: Sewage and waste water treatment: Determine available capacity for the treatment of sewage and waste water (i.e. determine the baseline) and determine the need and timeframes for when additional treatment capacity will be required for the predicted additional demand for waste water treatment due to large scale developments.
- **Action 7.4:** Upgrade of sewage and wastewater infrastructure
- Action 7.5: Stormwater management on operational sites / construction sites or mining area
- Action 7.6: Pollution Management: Chemicals Management at operation site, mining areas, drill sites and working areas.
- **Action 7.7:** Development of a monitoring and pollution response protocol (and maintenance thereof) related to potential pollution sources from large scale developments, such as decommissioned wells in SGD
- Action 7.8: Assessment and development of human resource capacity (skills) related to the management of water resources.
- **Action 7.9:** Improvement in the water, wastewater and sewage regulatory environment through the development of guidelines, bylaws and agreements between government and proponents

8. Theme 4: Waste Management

Coordinator: Eddie Hanekom – WC: DEA&DP

Strategic issue 8: Solid Waste Management:

- Action 8.1: Establishment of District Waste Management Forum (DWMF) to facilitate a regional approach to waste management
- Action 8.2: Update Integrated Waste Management Plans to include provision for large scale developments
- Action 8.3: Review and update of bylaws to align with waste legislation
- **Action 8.4:** Implementing a regional approach to waste management
- **Action 8.5:** Improve levels of compliance, and performance at waste management facilities

9. Theme 5: Roads, transport, and construction material

Coordinator: Carl October - WC: DPWT

Strategic Issue 9: Upgrading and maintenance of proclaimed public roads:

- **Action 9.1:** Route Identification- determination of roads and municipal streets to be avoided and the posting of roads for maintenance purposes, the upgrade of public roads, the use and future-/end-use thereof.
- **Action 9.2:** Identification and protecting/securing existing and future sources of construction material.
- Action 9.3: In association with Action 1.4, investigate the methodology (supported by legal mechanisms as identified through Action 1.4) for charging of development (maintenance) levies/contributions or weight-distance charge or similar from proponents for large scale developments for road maintenance and the implementation thereof.
- **Action 9.4:** Planning for a Beaufort West and Laingsburg road Bypass
- Action 9.5: Investigate the possible role of increased rail transport and inclusion thereof in an integrated transport plan

10. Theme 6: Emergency response services

Coordinator: Colin Deiner – WC: DLG

Strategic Issue 10: Addressing the increased demand for traffic services:

- **Action 10.1:** Appointment of additional competent staff to deal with traffic control, enforcement, roadworthiness inspections, staffing of weighbridges, etc.
- **Action 10.2:** Various agreements between the municipalities, WC: DTPW, SANRAL and proponents of large-scale developments to address the management of traffic impacts

Strategic Issue 11: Emergency response services:

- **Action 11.1:** Evaluation of status quo to deal with existing demand, as well as to deal with future increased demand for response to spillages due to increased traffic, storage and transportation of hazardous materials
- **Action 11.2:** Evaluation of status quo to deal with existing demand, as well as to deal with increased vehicle rescue capability requirements due to higher vehicle accident rates expected associated with an increase of vehicles, especially heavy vehicles, on the road
- Action 11.3: Risk and security assessment for existing and future land users within the region.
- **Action 11.4:** Mapping of authorisation process including monitoring and compliance. Regulatory reform required for activities, including the rationalisation of the various legislation related to disaster management.

11. Theme 7: Noise light and air quality management

Coordinator: Joy Leaner - WC: DEA&DP

Strategic issue 12: Effective air quality management:

- Action 12.1: Appoint and designate an AQO at the District and Local Municipality to focus on air quality management.
- Action 12.2: The appointment of Emissions Control Officers at industries
- Action 12.3: Train and designate Environmental Management Inspectors (EMI), via the National EMI Programme, at the District and Local Municipalities.
- Action 12.4: Train and designate Noise Control Officers (NCO) at the Local Municipalities

- **Action 12.5:** Train Noise Control Officers
- Action 12.6: Development of an Air Quality Management Strategy
- **Action 12.7:** Implement appropriate administrative systems to process Atmospheric Emissions License applications received by the District Municipality, WC: DEA&DP, DEFF or the shared service centre, depending on the type of AEL application.
- Action 12.8: Engage with donor agencies to fund specialised training and projects via donor-funded programmes.
- Action 12.9: Improve the Air Quality Compliance and Enforcement Programme and the implementation there of.
- **Action 12.10:** Establish a sharing of best practice and good practice recognition programme in the area of air pollution prevention in mining operations and industries.
- Action 12.11: Develop and implement By-laws and guidelines to manage air quality (including noise, odour and dust).
- Action 12.12: Establish and operate vehicle emission (diesel or selected pollutants) testing programmes for testing at roadsides and weighbridges.

12. Theme 8: Economic opportunities, skills, and social cohesion

Coordinators: Ajay Trikam and Chantell van Niekerk – WC DEDAT

Strategic Issue 13: Capacity and Skills Development:

- **Action 13.1:** Undertaking a wide Knowledge, Skills and Capacity gap analysis across the district and the municipalities with respect to for readiness for SGD, Uranium mining and other major developments.
- **Action 13.2:** Development of a skills development programme in conjunction with local and international providers to ensure upstream, transferable and available skills are targeted and developed
- **Action 13.3:** Determine the viability of establishing a shared Skills Development Centre aimed at focussing requirements for readiness for large scale development such as SGD, Uranium mining and other major developments.

Strategic Issue 15: Socially inclusive development:

- Action 14.1: Establishment a shared service specifically on Local enterprise development and innovation and supply chain development
- **Action 14.2:** Development and roll out a guideline (or code of best practice) to assist Municipalities in optimising opportunities for corporate social investment (in local communities) by development companies.
- **Action 14.3:** Promotion and Identification of a pipeline of social investment opportunities per Municipality to inform interactions between municipalities and development companies.
- Action 14.4: Protocols and agreements to deal with increased risks of health and other social challenges associated with large scale developments.

13. Theme 9: Stakeholder communication and awareness

Coordinators: Rudolf van Jaarsveld – WC: DEA&DP and Barbara Koopman – Central Karoo District Municipality

Strategic Issue 15: Stakeholder communication and awareness:

- **Action 15.1:** Facilitate a workshop with external stakeholders about the Karoo Readiness Action Plan to explore opportunities for cooperation, information sharing and establishment of a communication strategy.
- **Action 15.2:** Complete a comprehensive stakeholder mapping exercise in 3 categories, namely, primary, secondary and key stakeholders influenced by large scale developments
- Action 15.3: Establish a Reference Group
- **Action 15.4:** Identify modalities and outlets for communication:
- **Action 15.5:** Implementation of communication strategy for large scale development in the Karoo region.

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