



## Cosmopolitan Karoo

*Where hopes for a sustainable future meet the reality of inequality and poverty*



### Cosmopolitan Karoo Special Issue

**South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment, and Sustainable Development at Stellenbosch University**

COSMOPOLITAN  
KAROO



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**Cover caption:** Housing in Williston, Northern Cape,  
against a backdrop of a De Aar solar landscape (2018).

**Photos:** Stephanie Paula Borchardt



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# Contents

– Issue 99



## Editorial

- 1 Karoo crossroads**  
The green frontier and the enduring fault line  
– By Guest Editor, Stephanie Paula Borchardt

- 14 Glossary**  
– By Stephanie Paula Borchardt

## Academic articles

- 17 Environmental entrepreneurialism**  
and the limits and possibilities of socio-economic transformation in the Karoo  
– By William Beinart and Steven Robins
- 38 Dust in the wind**  
Renewable energy and the limits of South Africa's developmental state  
– By Stephanie Paula Borchardt

- 63 Beyond the 'decarbonised minerals-energy complex'**  
Rethinking financialisation and state-capital relations in South Africa's green hydrogen transition  
– By Robert Nassen Smith

- 86 From bloom to bust**  
Understanding Namaqualand as a potential green sacrifice zone  
– By Shannah Marree

## Commentary

- 108 Youth development, vulnerability, and the unspoken costs of renewable energy in rural South Africa**  
– By Caitlin Rickerts

- 129 Silence as a room #1 of #5**  
Q and A with Ari Sitas  
– By Coral Anne Bijoux

## Dateline Africa

- 148 Karoo Diary**  
1 September to 30 November 2025  
– By New Agenda editorial collective and guest editor

## Book review

- 155 Contested Karoo:**  
Interdisciplinary perspectives on change and continuity in South Africa's drylands  
Cherryl Walker and M Timm Hoffman (Eds.)  
– Review by Lorato Mokwena





Editorial

# Karoo crossroads

The green frontier and the enduring fault line



Stellenbosch University's DSTI/NRF SARChI Research Programme in the Sociology of Land, Environment and Sustainable Development exposes a fundamental contradiction in the resource-rich Karoo; global scientific, environmental, and financial development initiatives collide with local realities of inequality, dispossession, and ecological fragility. In this editorial, STEPHANIE PAULA BORCHARDT asks if the impoverished communities who live there have reason to celebrate?

*Rieldans in Calvinia* Photo: Stephanie Paula Borchardt

## **The Karoo as frontier and fault line: rethinking development through sociological and anthropological inquiry**

**T**his special issue of *New Agenda: South African Journal of Social and Economic Policy* emerges from the work of the DSTI/NRF SARCHI Research Chair<sup>1</sup> in the Sociology of Land, Environment and Sustainable Development at Stellenbosch University, and reflects the Chair's central focus: to interrogate the meanings and practices of sustainable development in the Karoo, a region marked by environmental vulnerability, historical marginalisation, and speculative futures. The research looks beyond policy to examine how development is experienced, imagined, and contested on the ground. Drawing on sociological and anthropological approaches, the Chair seeks to build theory that is locally grounded, attentive to power and place, and responsive to the complexities of rural transformation.

Increasingly, the Karoo is cast as a frontier of green transformation. Yet this frontier is also a fault line, where promises of sustainability meet the realities of enduring inequality. The contributions gathered here, four research articles, two commentaries, and a book review, trace these tensions across multiple sites and scales, offering grounded, interdisciplinary perspectives on development, dispossession, and possibility.

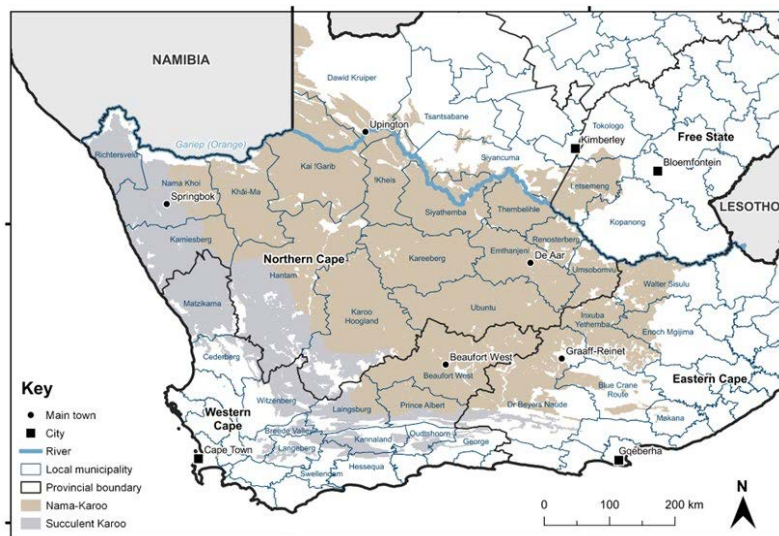
### **The Karoo as place, concept, and political terrain**

What is the Karoo? It is simultaneously a place, a speculative promise, and an entrenched problem. This vast, semi-arid interior, stretching across the heart of South Africa, has long been framed as *empty*, *remote* and *untouched*, waiting to be filled and exploited (Morris, 2018). Yet, this rhetoric of emptiness strategically obscures its layered and traumatic histories of ecological transformation, racialised dispossession, and quiet resistance (Walker & Hoffman, 2024). Today, the region is being aggressively reimagined: it is a testing ground for environmental entrepreneurialism and a site of intense speculative futures driven by green energy, critical minerals, and abstract hope.

Geographically, the Karoo spans four provinces, the Western Cape, Eastern Cape, Northern Cape, and Free State, and is defined by two distinct biomes: the Nama Karoo and the Succulent Karoo (see Figure 1). Though the landscape is climatically extreme, these biomes host a remarkable array of endemic species and fragile ecosystems (Palmer & Hoffman, 1997). Far from being peripheral, the Karoo is central to South Africa's environmental heritage and conservation imagination. Its unique socio-ecological identity shapes cultural and economic narratives, from

pastoral livelihoods to biodiversity stewardship (Beinart, 2003; Wisborg & Rohde, 2005; Samuels, 2013).

**Figure 1: Geographical extent of the Karoo biomes across South African provinces**



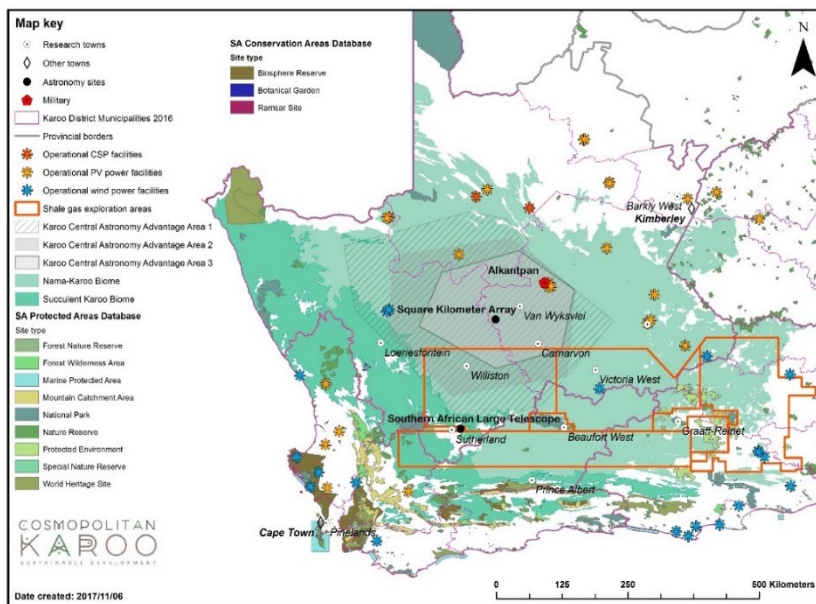
*Source: Walker and Hoffman. Contested Karoo: An introduction (2024, p. 12).*

Historically, the Karoo has always been a frontier: first for colonial conquest, then for agricultural expansion, and now for scientific and energy innovation. Its very soil bears the imprint of forced removals, genocides, and racialised land ownership (van Sittert, 2002; Penn, 2005; Legassick, 2016; Morris, 2018). Yet alongside these material legacies, it carries symbolic weight, romanticised as a place of timeless stillness and open horizons, often used to justify extractive or speculative interventions under the guise of progress.

Today, the Karoo hosts overlapping mega-projects: the Square Kilometre Array (SKA), wind and solar farms under the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), proposed shale gas extraction, and potentially green hydrogen infrastructure (see Figure 2). These initiatives promise national and global benefits, scientific prestige, energy security, and climate mitigation, but often bypass local needs. Development models tend to favour external actors and centralised planning, reproducing marginalisation and sidelining participatory, place-based approaches.



**Figure 2: Competing land uses in the Karoo, 2017**



Source: DSTI/NRF SARCHI chair in the Sociology of Land, Environment and Sustainable Development, Stellenbosch University (2017).

Beneath these grand visions lies a complex social fabric. Karoo towns – diverse, historically marginalised, and often overlooked – grapple with high unemployment, inadequate infrastructure, and deep social fragmentation. Too often, development interventions treat these communities as passive recipients or logistical hurdles, rather than political agents with histories, aspirations, and rights. In this sense, the Karoo reflects South Africa's broader struggles with rural inequality, land reform, and democratic inclusion, a place where the promises of transformation are tested, and where the politics of space, identity, and justice converge.

***... the Karoo is cast as a frontier of green transformation. Yet this frontier is also a fault line, where promises of sustainability meet the realities of enduring inequality.***



The Karoo is home to nearly three million people, roughly 4% of South Africa's population (CSIR, 2019). Government services dominate, acting as the primary source of employment and income in many towns. Agriculture, mining, and manufacturing remain important, but their reach is uneven and often fragile (DALRRD, 2021). In many municipalities, economic activity is concentrated in just one or two sectors, leaving communities vulnerable to shocks such as drought, commodity price fluctuations, or policy changes. According to the CSIR's *Socio-Economic Vulnerability Index*, most Karoo towns are geographically remote and far from major transport routes and regional centres, which contributes to the elevated vulnerability levels (CSIR, 2019; 2023).

These are not just statistics; they shape everyday life in the Karoo's interior, where resilience is tested daily and the promise of transformation remains unevenly distributed.



*Windpump in De Aar.*

*Photo: Stephanie Paula Borchardt*



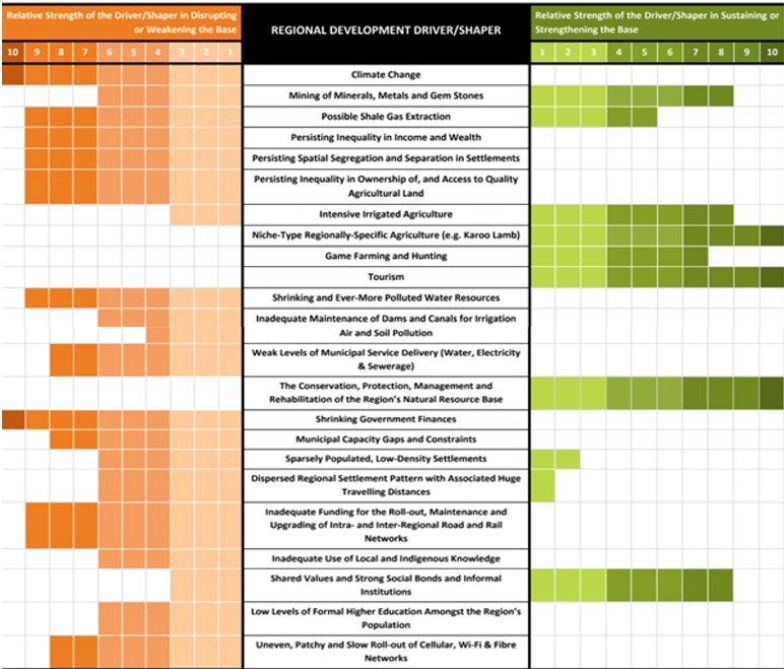
Politically and administratively, the Karoo is undergoing a process of redefinition. The *Karoo Regional Spatial Development Framework* (KRSDF)<sup>2</sup> is a landmark policy document that reflects this shift. It is the first Regional Spatial Development Framework (RSDF) to be prepared under Section 18 of the 2013 *Spatial Planning and Land Use Management Act* (SPLUMA), setting a precedent for future regional frameworks. Its legislative mandate is to serve as a strategic instrument guiding spatial planning, land development, and land use management within the newly demarcated Karoo region, an area marked by distinctive geographic and ecological features (DALRRD, 2021; 2023). In line with SPLUMA, it must align with national and provincial policies, reflect both current and aspirational land-use patterns, and, distinctively, include concrete proposals for implementation and funding.

As the first RSDF under SPLUMA, the KRSDF sets a precedent for regionally tailored planning, responding to the Karoo's geographic isolation and ecological specificity. Its emphasis on coordinated infrastructure investment, spatial transformation, and inclusive growth signals a move from fragmented municipal efforts to a more integrated, cross-boundary approach. The KRSDF is both a symbolic and practical turning point. It reflects a broader ambition to reimagine the Karoo as a region worthy of strategic investment and integrated planning. Yet, its success hinges on whether governance can overcome deep-rooted structural barriers and translate vision into action.

Despite its strategic promise, the Karoo's regional development remains hamstrung by persistent structural challenges. Communities continue to face limited local municipal capacity, deeply entrenched spatial inequalities, unequal land ownership, polluted water sources, and deteriorating infrastructure, all of which compromise service delivery and stall inclusive growth. The KRSDF spans 36 local municipalities, 13 district municipalities, and one metropolitan municipality. Figure 3 maps out the region's development drivers and shapers, revealing both strengths and vulnerabilities. These enduring disruptors cast doubt on the framework's ability to deliver on its ambitions, exposing the gap between policy vision and lived experience.



**Figure 3: Relative strength of identified development drivers and shapers in the Karoo (weaker vs. stronger base), 2021**



Source: DALRRD, 2021

*These large-scale interventions carry the promise of national and global transformation. Yet on the ground, they often unfold amid persistent local marginalisation, raising urgent questions about justice, who benefits, and what sustainability truly means.*



## **The South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development**

The South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development,<sup>3</sup> established in 2016 under Professor Cherryl Walker and now led by Professor Steven Robins, investigates the shifting dynamics of sustainable development in the Karoo. Framed as both a frontier of extraction and a fault line of inequality, the Karoo offers an exceptionally rich terrain for critical inquiry. This landscape is shaped by deep, complex histories of settlement and globally significant biodiversity, but is now subject to overwhelming pressure from mega-projects, including the SKA, speculative shale-gas and uranium exploration, and massive renewable energy and green hydrogen infrastructure.

These large-scale interventions carry the promise of national and global transformation. Yet on the ground, they often unfold amid persistent local marginalisation, raising urgent questions about justice, who benefits, and what sustainability truly means. The SARChI programme responds to this complexity by engaging the social-ecological interface through a lens of critical cosmopolitanism (see Figure 4). This framework recognises both global interconnectedness and enduring structural inequality, allowing us to approach development not as a one-size-fits-all solution, but as a dynamic, place-based process shaped by relationships, histories, and lived experience within an unequal world. It invites us to think beyond metrics and masterplans, and to centre the voices, vulnerabilities, and aspirations of those most affected.

In their opening contribution, *William Beinart* and *Steven Robins* explore the rise of environmental entrepreneurialism in the Karoo, where private conservation, wildlife economies, and renewable energy initiatives are reshaping land ownership and ecological governance. While these projects are often framed as sustainable and transformative, the authors show how they frequently reproduce long-standing patterns of exclusion, benefitting landowners while sidelining local communities. Yet the article also highlights more hopeful interventions, such as improved livestock management and efforts to restore degraded veld, which suggest alternative, grounded paths forward. Positioned as a testing ground for market-led development, the Karoo emerges as a landscape of contradiction and contested hope.



**Figure 4: SARChI in the Sociology of Land, Environment and Sustainable Development logo**



Source: DSTI/NRF SARChI, the Sociology of Land, Environment and Sustainable Development website: <https://cosmopolitankaroo.co.za/> (2025)

Stephanie Paula Borchardt's article critiques South Africa's renewable energy rollout through the lens of its developmental state ambitions in Sutherland. Despite the REIPPPP's promise of inclusive growth and socio-economic upliftment, its implementation tells a different story, one marked by mismatched skills and outsourced labour. Drawing on fieldwork and survey insights, the article reveals how fragmented governance and procedural participation obscure accountability, exposing a developmental state whose ambitions falter at the margins. The article challenges us to rethink what inclusive development truly means, and whether current models of the energy transition are equipped to deliver it.

Robert Nassen Smith explores the financial logics underpinning South Africa's green hydrogen strategy, revealing how risk is shifted onto communities while returns are privatised. In this framing, the Karoo becomes a speculative frontier, its futures monetised before they are lived. He reframes the state's embrace of de-risking not as a sign of capture, but as a symptom of crisis: an effort to secure development through financial abstraction. His article asks a pressing question: What forms of accountability are possible in landscapes shaped not by public deliberation, but by investment portfolios and policy instruments?

***While these projects are often framed as sustainable and transformative, the authors show how they frequently reproduce long-standing patterns of exclusion.***

*Wind farm outside Philipstown.  
Photo: Stephanie Paula Borchardt*





*Shannah Maree's* article traces the resurgence of copper mining in Concordia, Namaqualand, amid rising global demand for critical minerals. Through rich ethnographic research and the voices of local residents, she reveals how green extractivism threatens traditional farming, ancestral land, and fragile ecosystems, raising urgent questions about consultation, consent, and the struggle to sustain community life. As mining returns under the banner of sustainability, Maree introduces the concept of the 'green sacrifice zone', challenging celebratory narratives of green growth and linking directly to the Karoo's own vulnerability. Her central question lingers: Will Namaqualand's communities be recognised as stakeholders, or sacrificed for the green transition?

*Caitlin Rickerts'* fieldwork reflection exposes the often-overlooked social and ethical costs of South Africa's energy transition, focusing on young women and marginalised households in the Karoo. Through grounded research, she reveals the emotional toll of displacement, the absence of meaningful consent, and the uneven distribution of risk. Her work challenges the technocratic language of development, reminding us that progress is not only about infrastructure, but also about voice, recognition, and the right to shape one's future in landscapes marked by inequality.

Although not affiliated with the SARCHI Research Chair, artist *Coral Anne Bijoux* offers a poignant insight in a question-and-answer conversation about the destruction of her land art installation in Richmond. Her article becomes a meditation on micropolitics, gendered labour, and the violence of silence. Bijoux's work, embedded in the earth, shaped by hand, and open to all, was flattened by a grader. Her reflection reminds us that development is not only about what is built, but what is erased. It is about who is seen, who is silenced, and what forms of care and recognition are possible in contested landscapes.

This is followed by *Karoo Diary*, a compilation of recent news briefs, many of which may not have been aired in the mainstream media, to take the pulse of the region, and keep readers up to date.

Finally, we publish a book review by *Lorato Mokwena* of *Contested Karoo: Interdisciplinary perspectives on change and continuity in South Africa's drylands*, edited by Cherryl Walker and M. Timm Hoffman (2024). This volume situates the Karoo within broader scholarly and public debates, highlighting the tensions between romanticised, extractive, and resistant narratives of place. It asks: Who gets to define the Karoo and through what lenses? Mokwena's (2025) review highlights the



critical stakes of knowledge production and calls for interdisciplinary, historically grounded scholarship that foregrounds local voices and the nuanced realities they inhabit.

***... these contributions prompt deeper questions: Who defines development? Who benefits, and who bears its costs?***

**Conclusion: Toward a different kind of development conversation**

Together, the articles in this special issue invite us to rethink development not as a linear path toward progress, but as a contested and situated process shaped by history, power, and place. They foreground the Karoo as a region where global ambitions, whether scientific, environmental, or financial, collide with local realities of inequality, dispossession, and ecological fragility. Rather than treating development as a technical fix or investment opportunity, these contributions prompt deeper questions: Who defines development? Who benefits, and who bears its costs? What forms of participation, recognition, and repair are possible in landscapes marked by silence and sacrifice? By centring lived experience, micropolitics, and the social meanings of land and nature, this special issue of *New Agenda* opens space for a more grounded, interdisciplinary and justice-oriented conversation, one that listens differently, theorises from below, and imagines futures that are not only sustainable, but shared.

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## ENDNOTES

<sup>1</sup> The South African Department of Science and Innovation's (DSTI's) South African Research Chairs Initiative (SARChI), managed by the National Research Foundation (NRF).

<sup>2</sup> See project website at <https://www.karoorsdf.co.za/>

<sup>3</sup> The Research Chair is anchored in the Department of Sociology and Social Anthropology at Stellenbosch University.

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## GLOSSARY

Abbreviation	Full Term
AZEF	Arid Zone Ecology Forum
B-BBEE	Broad-Based Black Economic Empowerment
BW	Bid Window
CFM	Climate Fund Managers
COP	Conference of the Parties
CPA	Community Property Association
CSIR	Council for Scientific and Industrial Research
CSP	Corporate Social Responsibility
DALRRD	Department of Agriculture, Land Reform and Rural Development
DBSA	Development Bank of Southern Africa
DEE	Department of Electricity and Energy (from 2025)
DFI	Development Finance Institution
DMRE	Department of Mineral Resources and Energy (2020 – 2025)
DoE	Department of Energy (2010 – 2020)
DPME	Department of Planning, Monitoring and Evaluation
DSTI	Department of Science, Technology and Innovation
DTIC	Department of Trade Industry and Competition
ED	Enterprise Development
FASD	Foetal Alcohol Syndrome Disorder
FGD	Focus Group Discussions
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
GHCS	Green Hydrogen Commercialisation Strategy
GI	Geographical Indication



GIS	Geographic Information System
GW	Gigawatt, equivalent to 1,000 megawatts or one million kilowatts
HSRM	Hydrogen Society Roadmap
IASS	Institute for Advanced Sustainability Studies
IDC	Industrial Development Corporation
IEA	International Energy Agency
IEJ	Institute for Economic Justice
IPP/PPs	Independent Power Producer/s
IPPO	IPP Office
JET	Just Energy Transition
KRSDF	Karoo Regional Spatial Development Framework
MEC	Minerals-Energy Complex
MECA	Minerals-Energy Complex Approach
NCDoe	The Northern Cape Department of Education
NCEDA	Northern Cape Economic Development, Trade and Investment Promotion Agency
NDC	Nationally Determined Contributions
NDP	National Development Plan
NGO	Non-Government Organisation
NRF	National Research Foundation
PCC	Presidential Climate Commission
PGM	Platinum-Group Metal
PIC	Public Investment Corporation
PPA	Power Purchase Agreement
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
PV	Photovoltaic
R&D	Research and Development
RDP	Reconstruction and Development Programme
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme



RSDF	Regional Spatial Development Framework
SADTU	South African Democratic Teachers' Union
SALGA	South African Local Government Association
SANBI	South African National Biodiversity Institute
SANParks	South African National Parks
SAPS	South African Police Service
SARAO	South African Radio Astronomy Organisation
SARChI	South African Research Chair Initiative
SARS	South African Revenue Service
SDG	Sustainable Development Goal
SED	Socio-Economic Development
SEZ	Special Economic Zone
SKA	Square Kilometre Array
SOEs	State-Owned Enterprises
SPLUMA	Spatial Planning and Land Use Management Act
STR	Small Town Regeneration
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VVVT	Vrywillige Vooraf en Voortdurende Ingeligde Toestemming <sup>1</sup>
WWF	World Wildlife Fund

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<sup>1</sup> Afrikaans abbreviation for free, prior and informed consent.



# Environmental entrepreneurialism and the limits and possibilities of socio-economic transformation in the Karoo

From wind farms to plant poaching and the SKA telescope's quiet zone, the Karoo emerges as a contested frontier of green development, where global imaginaries collide with local realities.

WILLIAM BEINART and STEVEN ROBINS chart the rise of environmental entrepreneurialism, a wave of private-sector investment reshaping landscapes, livelihoods, and power relations. The result is a provocative portrait of a region caught between ecological recovery and socio-economic exclusion.



Renewable energy wind turbines, Copperton, Northern Cape.  
Photo: Stephanie Borchardt



# Environmental entrepreneurialism and the limits and possibilities of socio-economic transformation in the Karoo

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**Abstract**

In recent decades, a new and multi-crested wave of investment has washed across the Karoo, much of it focused on aspects of what we are calling environmental entrepreneurialism, especially wildlife farming, conservancies, ecotourism, and renewable energy. 'Sustainable' copper mining, green hydrogen, and carbon credits are also promised. While driven by the private sector, this has not replaced the state, and it intersects with national and provincial projects that extend protected areas, facilitate conservancies, and regulate renewable energy infrastructure. The latter, with investment largely by private companies on privately-owned land, is probably the most significant area of investment. Renewable energy infrastructure is not directly aimed at benefitting the Karoo environment but at augmenting and decarbonising provincial and national electricity supplies. Other enterprises are similarly complex. While copper mining may enhance global environmental conservation, it is environmentally destructive locally.

In this article, we explore some of the dynamics of these environmental trends across different sectors. Generally, they are resulting in national environmental gains and enhancing local biodiversity. However, as we discuss briefly in each case, they are making little impact on socio-economic inequality. Landowners are benefitting and land ownership is increasingly concentrated. New networks of expertise have emerged between farm-owners, government agencies, universities, and private consultancies. We focus primarily on private sector environmental entrepreneurialism as a process of increasing significance and a shift away from the state as the key agent in conservation. Evidence suggests that redistributive processes are marginal, with the partial exception of those resulting from renewable energy licences.



## Introduction: Environmental entrepreneurialism

Our main focus is an overview of private sector, environmentally related enterprises in the Karoo and the shift away from the state as the key agent in conservation (Beinart, 2003). We argue that critical concepts such as neo-liberal conservation and green extractivism have limited capacity to address the specificity and rapidity of change. At the same time, we see evidence that long-standing social inequality is being reproduced. We explore a few possibilities for more equitable futures.

For reasons explained below, we use the term environmental entrepreneurialism to describe these processes of non-state investment and engagement in conservation and green enterprises. As the research has emerged largely out of the Cosmopolitan Karoo programme, initiated by Cherryl Walker in 2016 at the University of Stellenbosch, we draw in part on findings already published by that research group, especially in Hoffman and Walker (2024), as well as new research by postgraduate students. This has been presented and discussed at the Arid Zones Ecology Forum (AZEF) in Graaff-Reinet, 2023, and at seminars in Stellenbosch. The idea of this synthetic overview comes out of these meetings.

After a period between about the 1910s and the 1960s, in which Karoo environments were probably at their ecological nadir, the succeeding decades have seen slow improvements (Hoffman et al., 2018; Hoffman et al., 2019; Boardman et al., 2017). Initially, the state played a major role through legislation and policies to combat denudation, soil erosion, overstocking, and invasive plants as well as expanding areas reserved for wildlife. But increasingly, over recent decades, private landowners, companies, consultancies, and non-profit agencies, sometimes working with the state, have seen opportunities in environmental and conservation initiatives. These include wildlife farming, eco-tourism, conservancies, planting indigenous species, and renewable energy. The last, with investment very largely by private companies on privately-owned land, is probably the most significant in scale of expenditure.

Renewable energy is not directly aimed at benefitting the Karoo environment, but at augmenting and decarbonising provincial and national electricity supplies. Similarly, copper mining might enhance global environmental aims, yet it can have an environmentally destructive local impact. We also touch on the Square Kilometre Array (SKA) astronomy project that is not primarily driven by private capital but which has environmental implications. It has necessitated

appropriation of 135,000 ha. of farmland to create the Meerkat National Park.

Cosmopolitan Karoo publications have highlighted technoscientific developments such as renewable energy and the SKA radio telescope (Malope, 2022, 2023, 2024; Borchardt, 2023, 2024; Walker & Hoffman, 2024; Walker, Chinigò & Dubow, 2019; Chinigò & Walker, 2018; Chinigò, 2019; Chinigò & Walker, 2020; Walker, 2022). They have generally been critical of the socio-economic outcomes, and the limits to which such initiatives can address entrenched, racialised inequality. Walker and Hoffman (2024) also suggest that the Karoo can be regarded as a renewed resource frontier zone in a new extractivist era bringing unprecedented social-ecological change.

An examination of all these different developments in a single article is complicated by their diverse dynamics, as well as by their different spatial and temporal scales; nevertheless, they are all inter-related in reshaping the Karoo. We are also aware that the unfolding of these multidimensional processes – characterised by complex sets of forces, diverse actors, and unpredictable outcomes – is occurring in many parts of the Global South, not only in southern Africa and the Karoo (Mathews, 2011; Goldman et al., 2011).

## Wildlife



*Trek buck hunting in the Karoo.*

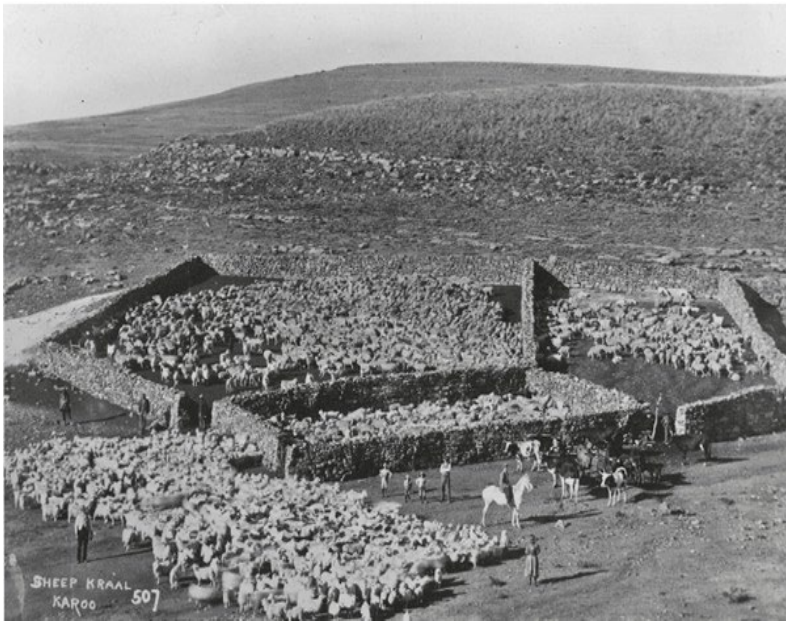
*Photo: National Library of South Africa, Cape Town, Jeffrys collection, J1364*





*Antelope remains on a Karoo hunting farm, 2023.*

*Photo: William Beinart*



*Sheep kraal, Karoo, late nineteenth century.*

*Photo: National Library of South Africa, Cape Town, Jeffrys Collection, J1335*



In this section we trace the initial destruction of wildlife by livestock farmers, the development of protected areas by the state from the 1920s and, in recent decades, the rediscovery of the value of wildlife by landowners in game farms and conservancies.

The Cosmopolitan Karoo research programme, and its name, recognised both the transformation of the environment, and the partial re-peopling of semi-arid and arid parts of South Africa following conquest and colonisation. These were not backwaters. Commercial pastoralism drove the nineteenth century Cape economy and, in many respects, the momentum continued into the 1950s (Beinart, 2003). Landscapes were transformed by dense livestock populations, water management, fencing, fodder production, exotic plants, and transport infrastructure. Private landowners were largely responsible for environmental degradation, but neither environmental knowledge nor environmental concern was monopolised by experts or the state. Many descendants of settler incomers and of indigenous people developed deep knowledge of the landscape and environment, and how to exploit it with new and hybrid technologies (Myburgh, 2025).

Landowners cleared their farms of wildlife because predators ate sheep, and antelope competed for grazing. As early twentieth century wildlife conservation gained support, the white-controlled state adopted a strategy of protected zones, formalised in the 1926 *National Parks Act* (Carruthers, 1995; Dlamini, 2020). This was followed by the demarcation of the Kruger National Park and reserves in the Cape Province that focused on threatened species: Addo elephants, mountain zebra, bontebok, and gemsbok. Expanded and new apartheid-era protected areas, including the Karoo National Park, developed increasingly diverse aims in conserving habitats and general biodiversity. From the 1950s, provincial nature conservation bureaucracies were established and wildlife tourism became a significant government-run, commercial element in the parks. These policies have been pursued post-apartheid, with extensions to Tankwa Karoo, Camdeboo, and Addo, and the state remains deeply engaged in Karoo conservation notwithstanding private sector developments (Walker & Hoffman, 2024).

Drought and a government destocking programme led sheep numbers to decline in the 1960s. Landowners began to expand wildlife holdings, prompted by both conservationist ideas and prospects of commercial hunting. Yet livestock, especially sheep farming, has remained the Karoo's major commercial activity, with wool exports, though fluctuating, fetching around R4-4.5 billion in the last few years (AgriOrbit, 2025).





Introduced over the last 50 years, the wildlife economy has diversified and created various entrepreneurial opportunities. These cater for the estimated 200,000 South Africans who largely aim to shoot for meat, for overseas hunters looking for trophies, and for wildlife viewing with upmarket accommodation. Wildlife breeding became an allied enterprise. Regular auctions saw top springbok ram prices rivalling those for the best merinos at around R250,000, and the best breeding buffaloes fetching over R1 million by 2018 (Rubidge interview).

Estimates of production in the national wildlife economy suggest that it rose from about R10 to R20 billion between 2014 and 2019 – one of the most rapid increases of any agricultural enterprise – and was employing 140,000 people (SA Jagters/Hunters 2024). The Eastern, Northern and Western Cape provinces account for about a third of that production, much of it from the Karoo and Eastern Cape. A recent estimate claimed the value of hunting and related tourism at R45 billion, though it uses a generous off-farm ‘multiplier’ for income generated in associated activities from accommodation to transport and taxidermy (Stoddard, 2025). Wildlife farming takes many different forms, sometimes mixed with livestock and often reinforcing processes of growth in farm sizes.

There are many strata of interests in wildlife, hunting, and eco-tourism, as well as environmentally linked enterprises. A globally attuned growth of expertise is rebranding the Karoo and surrounding areas and also emphasising their role in expanding employment. However, the process of consolidating large landholdings through purchases of multiple farms has resulted in the exclusion of Black farm-workers previously employed on livestock and mixed farms (Brandt & Spierenburg, 2014; Mkhize, 2014; Spierenburg & Brooks, 2014; Brandt, Josefsson & Spierenburg, 2018; Manyani, 2020). This is also evident in the expansion of state reserves, such as Addo (Connor, 2014). Moreover, researchers note that the perimeters of conservancies and wildlife farms are more thoroughly fenced, and their boundaries less porous than those of livestock farms. And the evidence suggests that few Black landowners can participate in wildlife initiatives. Overall, it seems that large wildlife farms and mega-conservancies are consolidating South Africa’s long histories of racialised dispossession and enclosure, histories that continue to shape the Karoo landscape. Such processes may also add to unemployment rates in some Karoo towns, where most Karoo residents now live (Walker & Vorster, 2024).



*Shepherd's hut on a Beaufort West farm.*

*Photo: National Library of South Africa, Cape Town, Jeffrys collection, J1651*

There has, however, been limited research on the wildlife economy's role in job creation directly and indirectly, whether in environmental management, tourism, and accommodation; in infrastructure such as fencing services; or in the limited revival of some small Karoo towns (Atkinson, 2016). Overarching employment figures for the wildlife economy, and for upmarket tourism, show sharp growth with generous predictions of expansion, although, as Covid-19 showed, they are unpredictable. The wildlife economy is a significant factor in the changing location and character of settlement and employment. Further research is needed on losses for those formerly employed on livestock farms and as yet uncertain gains elsewhere.

## **Renewable energy**

Renewable power, both wind and solar, is attracting investment shaped by South Africa's 2011 Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). Despite Eskom's monopoly of coal-fired power stations, REIPPPP was envisaged to diversify private power provision. It has, nevertheless, and unlike wildlife farming, included requirements for wider community development, employment opportunities, and community trust structures. That is because REIPPPP was initially framed in the context of the *Broad-Based Black Economic Empowerment Act* (2003) and the Mining Charter to facilitate Black ownership, employment, and some local development. Bids by renewable companies were judged not only in relation to



technical and financial capacity, but also in their ability to meet these requirements. The first four bid windows had quite high demands, though these diminished from the fifth (2021) as the urgency for electricity supply increased.

Although the energy transition at a national level in South Africa was delayed during the Zuma government, when Eskom's coal dependency was protected, some REIPPPP contracts were issued in the first four bidding windows (Borchardt, 2023, 2024; Bowman, 2020; Malope, 2022, 2024; Rogers, 2024). Electricity supply is still largely coal-based, but renewables have increased rapidly in recent years. Available figures are uneven but in 2021 suggest that about 8% of electricity was generated from renewables, 5% from wind. Wind generation capacity increased to about 7% in 2023 and recent figures suggest quickly growing capacities: 92 installations with 6,000 MW in 2024, which would be closer to 12% of national electricity requirements (Anekwe et al., 2024, Minnaar, 2024). In the Karoo, landownership seems crucial for gaining benefits from renewables. On the whole, companies rent rather than purchase land for investment and most land is controlled by large landowners. Location is thoroughly researched and depends largely on suitability for wind and solar power. Rental payments mentioned to us varied from R1 million to R2.5 million annually and landowners can sometimes continue livestock or wildlife farming.

Recent Cosmopolitan Karoo research (Borchardt, 2023, 2024; Malope, 2022, 2024) suggests uneven outcomes from employment and community-development requirements. Renewable energy construction creates most local jobs, but these are short term. A striking feature of REIPPPP is that companies, rather than the local state, must implement community development projects. This strategy may have been borrowed from the mining sector or resulted from government recognition of state incapacity (Rajak, 2011; Rogers, 2024). Local intermediaries and community liaison officers, employed by the companies, consult about and facilitate projects, mostly relating to education, scholarships, health, small-scale business opportunities, and limited contributions to local infrastructure.

Outcomes are uneven. In February 2024, the local Municipal Manager of Karoo Hoogland Municipality in Sutherland told us that Independent Power Producer (IPP) Red Rocket's contribution towards school mathematics and science teaching, bursaries, sports facilities, as well as shoes and clothing for learners, provided significant gains.



But Borchardt's (2023; 2024) and Malope's (2022) long-term research on community development projects, respectively in De Aar and Loeriesfontein, found a lack of co-ordination between local government, schools, and projects. Laptops, smart classrooms, and computer centres were supplied to local schools without adequate maintenance and support. Residents claimed that they and their impoverished communities received no tangible material benefits. Few jobs had materialised, and some were poorly paid maintenance work, or counting and collecting the birds killed by the wind turbine blades (Borchardt, 2023). During Covid-19, protective equipment and hand sanitisers were distributed when destitute households were in need of food parcels and soup kitchens. Despite the presence of seven large-scale renewable projects near De Aar, the majority of Coloured residents struggled with energy poverty, and could not afford to pay for basic household electricity needs (Borchardt, 2023).

An alternative strand of funding that offers another, potentially greater, benefit is community trusts established to accrue funds from community shares in profits from renewable energy installations. Malope (2022, pp. 241-2) estimates that R25 billion may be available nationally over 20 years from the installations made following the first four REIPPPP bid windows. Such trusts are difficult to establish, lack administrative backup from the IPP office, and have implemented little. But they may be a significant vehicle for redistribution. Malope has advocated using them for direct cash transfers to indigent households, while Borchardt has suggested improving and upgrading municipal infrastructure. Land purchase is another possibility, with an eye on initiating renewable energy schemes on transferred land that might bring in long-term rentals. Land that is poor for grazing in a district like Williston (see below) was for sale at not much more than R1,000 per ha. in 2024. Integrating land purchase, paid for by trust funds rather than the state, and renewable energy projects would, however, require complex, uncorrupt, and sustained administrative backup by non-state agencies.

Renewable energy is bringing layers of new capital into the Karoo – connecting international investment, South African companies, and to some degree local government funding. Moreover, networks of expertise are developing around green energy among companies, consultants, intermediaries such as community liaison officers, academics, and skilled workers. Installations have not resulted, as in wildlife conservancies, in farmworker removals, and some community development projects provide benefits in small Karoo towns where most people live.



While renewable energy generation is likely to be the most transformative new outcome of environmental entrepreneurialism in and around the Karoo, strategies for associated manufacturing, innovation, benefit-sharing, local enterprise, and redistribution are crucial if the region is to move beyond externally dominated energy 'extractivism'. Given their national significance in any just transition to renewable energy, community trusts established under REIPPPP provisions need systematic support. Their effectiveness in redistribution and local participation requires urgent research and debate.

### **New Karoo energy frontiers? Copper**

The reopening of Namaqualand's copper mines, when copper has become a vital ingredient for the green technological revolution, has also excited entrepreneurs (Maree, 2024). In 2021, Copper 360's Director, Jan Nelson, spoke enthusiastically of the company's environmentally sustainable plans to rehabilitate old mine dumps (Creamer, 2021). Although copper deposits are limited, demand seems to promise a bright future for old mining towns, including Springbok, Nababeep, O'Kiep, Concordia, and Carolusberg. For instance, in mid-2025, Orion Minerals secured a capital injection of R67 million to accelerate work on its flagship copper and zinc projects in O'Kiep and Prieska in the Northern Cape, suggesting investor confidence in the province's mining potential (*Diamond Fields Advertiser*, 2025).

But, during our week-long visit to Namaqualand in April 2024, we encountered an unenthusiastic response from Concordia activists and Coloured residents to these promises of a mining boom. Copper 360, which had recently begun carting off tonnes of left-over copper-ore tailings from Concordia's Jubilee mine dump to a processing plant in Nababeep, had not properly consulted with Concordia's residents. Local activists from a Namaqualand social movement, Vrywillige, Vooraf en Voordurende Ingeligte Toestemming (Free, Prior and Informed Consent) or VVVT Namakwaland, mobilised against these mining activities. They were especially aggrieved by trucks loaded with tailings speeding daily through their town, spewing clouds of contaminated dust and destroying their roads. As community leader Shereen Fortuin told a journalist when 29 Concordia residents were arrested while protesting outside Copper 360's Jubilee mine in July 2023: "The trucks are a big problem ... they are driving our town flat' (Human, 2024).



*Copper 360's processing plant in Nababeep where mine tailings are 'recycled'.  
Photo: Steven Robins*

People expressed their deep concern about the dust they had to ingest, and which covered their bodies and homes. They also railed against the use of contaminated water, extracted from the mine, used to douse the roads and trucks. They worried about the impact of revived mining activities on Concordia Communal Property Association's communally owned land (Maree, 2024). Some of the people we spoke to complained about collusion between the mining company and local state institutions which seemed reluctant to enforce health and environmental regulations. Despite promises of jobs in this desperately poor region, they saw that mechanised mining of old dumps created little local employment, and they consequently called for a moratorium on all new mining. It remains to be seen how local residents of Concordia will respond to persistent efforts by companies to resuscitate copper mining in their town.

### **Environment and development in the SKA's shadow**

While the purpose of the ambitious SKA radio astronomy project is not environmental, the outcome has been, following the designation of the Meerkat National Park in 2020. Managed by SANParks, comprising 135,245 ha., this is bigger than the Karoo National Park (Chinigò, 2025). At present, visits are highly restricted because they would disturb the workings of the radio telescope. Instead, Meerkat is being developed as a research platform for the South African Environmental Observation Network Arid Lands Node. Internal fencing and artificial water points are being removed and wildlife gradually returned in an attempt to study



ecological recovery and the effects of climate change at the landscape scale over the long term (Van der Merwe et al., 2021; Chinigò, 2025).

In this case, state-led astronomy and conservation projects have displaced the private sector – in the shape of farmers and an agricultural economy. The government and South African Radio Astronomy Organisation (SARAO) websites emphasise their socioeconomic contribution in the Karoo as well as their substantial national contribution to scholarships and postgraduate training (SARAO, 2020). They report contributions of R156 million spent on service providers and contractors by 2020, R222 million on salaries, teacher recruitment, and education, and 1,251 university bursaries, including 20 for students from local Karoo towns. The 80 people employed at the site in 2019 made it Carnarvon's largest employer. Moreover, local contractors were trained to apply for tenders and, as occurs with renewable energy enterprises, SARAO facilitated local enterprises, including a craft centre in Carnarvon, a medicinal plants project with San people, and a feedlot at Williston. Yet, as Arries (2023) records, many farmworkers lost their jobs when SKA bought up farms to create the 'quiet zone' for radio telescopes. Despite having consulted locally, as required by the *Astronomy Geographical Advantage Act*, neither the local state nor SARAO had much capacity to alleviate local unemployment.

In October 2023 we visited Williston, a small Karoo town close to the SKA. Although there is a new Community Development Centre, public buildings in the 'township', Amandelboom, were derelict and vandalised, and services had broken down. We heard that drugs (especially crystal methamphetamine, known locally as 'tik') and alcohol are severe problems. School teachers spoke of rising numbers of children suffering foetal alcohol spectrum disorder (FASD) dropping out of school as early as Grade 1.

While SKA has provided national educational benefits and some local development resources, these have a limited effect on local social problems, a disjuncture reflected in Coloured residents' experiences. As some in Williston said: "If they only treated us with honour." Neither affluent nor poor people in Williston believed that the Meerkat or SKA project had benefitted them. Some landowners said that the loss of farms undermined the area's pastoral economy and brought no renewable energy rental benefits. They complained about the SKA restricting their use of electronic devices – mobile phones, laptops, tablets, and switches for pumps and generators as well as electric fences which can also disturb the radio telescopes (Atkinson, 2019). Fences are particularly important because expanded wildlife zones (including the Meerkat National Park)





have increased the threat of sheep predators (Terblanche, 2020), especially black-backed jackals.

Chinigò and Walker (2018; 2020) observe that the SKA project resulted in difficult trade-offs between the promotion of state-of-the-art global science, and the many unmet local infrastructural, developmental, and social needs. They also describe a striking disjuncture between the positive framing of this scientific programme by the state and SARAO, and the experiences of local Coloured residents who had expected that their lives would improve.

### **Plant poaching and illegal entrepreneurs**

One of the most striking panels at the 2023 AZEF concerned widespread plant poaching in the Western and Northern Cape. Presenters spoke about threats to endemic dwarf succulents, especially *Conophytums*, which are protected species in great demand as indoor plants. While not exemplifying the kind of environmental entrepreneurialism discussed earlier, such poaching and export constitutes a profitable enterprise that must be understood in relation to the poverty in Karoo towns and the global market for South African species (Rahl-Botha, 2024). When the scale of export became apparent around 2020, law enforcement agencies became more involved. They recorded that 242,000 uprooted plants were confiscated in 2022 and the South African National Bioinformatics Institute (SANBI) estimates 1.5 million had been poached by 2023 (Smith et al., 2023).

AZEF presenters attributed this market spike to various factors. One is the internet (Ebay, Facebook, and Tiktok) which provides information on availability, GIS location, and prices (Rahl-Botha, 2024). Final retail prices can reach R100,000 for mature rare plants. A second is that Covid-19 may have increased interest in collecting and indoor gardening, with rarity being attractive. Another is that couriers can supply plants in a few days to buyers in countries as dispersed as China, Japan, the US, and France. The ecological requirements of these species make it unlikely that many survive for long.

Hoffman and Gillson (2024, p. 220) directly relate such plant poaching to poverty and insecurity in the Karoo. Urban-based criminal networks with international trade links provide some rural income, which is increasingly risky as law-enforcement is strengthened. Faye Rahl-Botha (2024) has drawn attention to the adverse consequences for conservation of the increasing criminalisation and harsh punitive measures directed at plant 'poachers' from chronically impoverished Northern Cape towns. At the same time, the crisis has mobilised agencies who prioritise biodiversity



conservation, from the World Wildlife Fund (WWF) and Leslie Hill Succulent Karoo Trust to Kew Royal Botanic Gardens in the UK and Trade Records Analysis of Flora and Fauna in Commerce (TRAFFIC), a global non-governmental organisation (NGO) fighting illegal wildlife trade. This is another route through which environmental research and knowledge is expanded, with its own unpredictable outcomes.

### **Conclusion: Environmental entrepreneurialism and redistribution**

Environmental entrepreneurialism in fields such as wildlife farming and conservancies, eco-tourism, and renewable energy has been private sector-driven, but it has not eclipsed the state and is linked to national and provincial policies and projects. Larger landowners tend to benefit and there has also been a continuing process of concentration of land, sometimes in the hands of wealthy individuals, both foreign and South African. New networks of expertise have emerged beyond the farm-owners – in government agencies, universities, and private consultancies. Enterprises are carried by ideological as well as material interests in conservation, which can cross boundaries of race and class. South Africa has been, and perhaps increasingly is becoming, a significant node for applied environmental knowledge. Southern African countries are articulate advocates, globally, of wildlife utilisation, and environmental management.

These processes have contributed to environmental recovery and biodiversity. They are less extractive than livestock farming, although that too has generally become more environmentally attuned in line with results from research and experimentation in pursuit of more sustainable veld management strategies (Myburgh, 2025). In 2023, Karoo Lamb was registered as a South African Geographical Indication (GI), recognising the uniqueness of its production. Scientific studies demonstrated that grazing plants in the typical Nama Karoo and Succulent Karoo biomes give Karoo Lamb meat specific aromatic and sensory attributes that warrant protection and recognition. Moreover, much Karoo-grown wool, mohair and meat are advertised as organic products.

Replacing livestock with wildlife generally leads to biodiversity recovery, although hunting, central to the wildlife economy, is intensely debated (Caygill, 2025). Protagonists argue that it has contributed to a massive increase in the number and diversity of wildlife so that there are now probably more in the Karoo than there have been for over 150 years. Yet these gains are somewhat offset by such animals being farmed, semi-domesticated, and killed.



The Karoo could host extensive renewable energy-generation facilities if transmission lines are extended. But this contributes little towards a just transition through creating jobs and infrastructure. It is essential to think further about redistributive possibilities and diversified ownership. The state, as the primary redistributive agent, has limits. REIPPPP probably provides the most effective current framework for private sector socio-economic initiatives, but community trusts require a great deal more support, perhaps with a specialist agency that includes community liaison officers, legal experts, and NGOs. The state, which does not provide the funds associated with renewable energy social development projects, could surely afford to fund this.

Should IPPs be incentivised to prioritise developments on land transferred to communities, which own extensive areas in the Northern Cape? Could land purchase by community trusts be the basis for installation of renewable generating capacity and hence a longer-term income from rentals? Perhaps conservancies, which appear to be narrowing ownership, could be legally obliged to include redistributive mechanisms of the kind that REIPPPP requires. There are some wildlife enterprises that suggest routes to more incorporative strategies. Conservation, and greening the environment, is increasingly attractive to environmental entrepreneurs, who are also innovating in different directions. Such developments also commodify elements of the natural world and are changing the Karoo's social geography. Once the motor of the Cape economy, the Karoo could become an important site of transformation and development, promoting biodiversity, ecological knowledge, and the green energy revolution. But it should include a far stronger socio-economic component aimed at addressing the historical legacies of racial inequality.

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## INTERVIEW

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# Dust in the wind



## Renewable energy and the limits of South Africa's developmental state

Premised on job creation, skills development, and community ownership and recognised for its commitment to green developmental policy, SA's Renewable Energy Independent Power Producer Procurement Programme has succeeded in attracting private investment into the renewable energy sector. However, in doing so, it has shifted responsibility for socio-economic transformation from the state to private corporations. STEPHANIE PAULA BORCHARDT cautions about the limits of market-driven development.


Towering turbine Photo: Stephanie Paula Borchardt



# Dust in the wind: Renewable energy and the limits of South Africa's developmental state

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**Abstract**

South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) is widely celebrated for attracting private investment into renewable energy while embedding socio-economic development goals. Positioned as a flagship initiative of the country's green developmental state, the programme promises inclusive growth through job creation, skills development, and community ownership. Yet this article critically examines the disjuncture between the programme's technocratic design and its uneven implementation in remote host towns. Drawing on ethnographic fieldwork and a 2024 household survey in Sutherland, Northern Cape, it explores how the REIPPPP's scorecard-driven framework struggles to engage with the layered social, institutional, and labour dynamics of marginalised rural towns in the Karoo. Despite substantial financial commitments to local development, implementation is undermined by skills shortages, substance abuse, fragmented governance, and limited community agency.

These challenges expose the limits of South Africa's developmental state, where technocratic procurement frameworks and rigid compliance metrics falter amid structural inequality and weak local capacity. By centring the construction phase and local experiences, the article argues that without more grounded, participatory, and justice-oriented approaches, the REIPPPP risks reproducing the very exclusions it seeks to redress. The findings call for a reimagined energy transition, one that moves beyond metrics to engage meaningfully with the social realities shaping project outcomes in South Africa's arid regions.



## Introduction

South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) was launched in 2011 as a flagship initiative to attract private investment into the energy sector while addressing the country's chronic electricity shortages and development challenges. Conceived in the context of rolling blackouts, economic stagnation, and mounting pressure to decarbonise, the REIPPPP was designed as a competitive bidding process in which independent power producers (IPPs) would supply electricity from wind, solar, and other renewable sources to the national grid. The Independent Power Producer Office (IPPO) runs the programme in partnership with the department responsible for energy, renamed the Department of Electricity and Energy (DEE) in 2025, National Treasury, and the Development Bank of Southern Africa (DBSA). Its primary objective is to guarantee transparency, fiscal efficiency, and affordability.

The REIPPPP can be theorised as a tool of a 'green developmental state,' a model that sets it apart from many other global renewable energy initiatives due to its explicit developmental mandate. In addition to producing green energy, the programme committed bidders to a range of socio-economic development (SED) and enterprise development (ED) obligations, including local job creation, skills training, ownership by historically disadvantaged South Africans, and contributions to community development through community trusts (IPPO, 2025; Eberhard & Naude, 2016). These criteria, initially accounting for 30% of the bid score, signal a commitment to an energy transition that centres justice alongside decarbonisation.

However, this developmental framing also reveals a deeper structural dynamic: the outsourcing of state-led transformation to private corporations. Rather than cultivating internal capacity to drive inclusive development, the state has delegated key responsibilities, such as job creation, skills development, and community upliftment, to IPPs. In doing so, it positions private actors as the primary vehicles for delivering on the promises of a developmental state. This raises critical questions about accountability, sustainability, and the limits of market-driven development.

Despite its progressive ambitions, the REIPPPP is facing mounting scrutiny over whether it truly delivers on its promises. Drawing on fieldwork conducted between 2023 and 2025, alongside a recent socio-economic household survey by the South African Research Chair Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development (Eigelaar-Meets & Groenewald, 2025), this



article examines the widening gap between national policy ambitions and the lived realities on the ground. Sutherland, a remote town in the Northern Cape province,<sup>1</sup> serves as a case study.

Sutherland has become a focal point for renewable energy investment, with multiple wind farms either operational or currently under construction. Yet rather than catalysing inclusive development, the REIPPPP often reproduces existing inequalities. In Sutherland, this disconnect between policy and experience is shaped by fragmented governance, precarious labour conditions, and weak institutional integration (Walker & Vorster, 2024; Eigelaar-Meets & Groenewald, 2025). These dynamics expose a deeper tension between the state's developmental aspirations and its limited capacity to enact meaningful transformation, rendering South Africa's energy transition more speculative than substantive.

### **South Africa as a developmental state**

The concept of a developmental state in South Africa emerges from the post-apartheid aspiration for a state that actively steers economic transformation, industrialisation, and inclusive growth. Drawing inspiration from East Asian examples, notably Japan, South Korea, and Taiwan, this model is defined by robust state capacity, strategic long-term planning, and a degree of embedded autonomy that insulates it from political interference (Johnson, 1982; Evans, 1995; Castells, 1992).

South Africa's National Development Plan (NDP) Chapter 13 defines a developmental state as one that:

*... brings about rapid and sustainable transformation in a country's economic and/or social conditions through active, intensive and effective intervention in the structural causes of economic or social underdevelopment. Developmental states are active. They do not simply produce regulations and legislation.*  
(National Planning Commission, 2013, p. 409)

In post-apartheid South Africa, the notion of a developmental state also serves as a rhetorical and programmatic tool to engage economically disempowered groups, particularly the poor and unemployed. It reflects the ANC's attempt to confront the deep structural inequalities inherited in 1994, positioning government initiatives as targeted interventions aimed at reducing poverty, driving socio-economic transformation, and expanding equitable participation in the economy (Qobo, 2014).



*In Sutherland this disconnect between policy and experience is shaped by fragmented governance, precarious labour conditions, and weak institutional integration.*

The Department of Planning, Monitoring and Evaluation (DPME) defines South Africa's developmental state as one driven by strategic vision, capable institutions, inclusive governance, and investment in human capital (DPME, 2017, pp. 9-14). Yet scholars argue that the country falls short of this ideal. Ukwandu (2019) highlights weak bureaucratic capacity, fragmented governance, and elite capture as key obstacles, while Lekorotsoana (2024) points to the lack of state-wide coordination, lack of leadership, poor resource deployment, and an inability to embed developmentalism across society.

Evans (2010) and Edigheji (2005) suggest that developmental states must adapt to new challenges, focusing less on manufacturing and more on knowledge economies, social equity, and democratic legitimacy. South Africa's decentralised governance and democratic commitments require a reimagined model that balances state intervention with participatory development.

Building on the conceptual foundations of South Africa's developmental state, the following section examines how these ambitions are operationalised through the REIPPPP. Positioned as a flagship initiative within the country's green transition, the REIPPPP offers a structured mechanism for attracting private-sector investment while embedding socio-economic development goals.

### **Understanding the REIPPPP scorecard and bidding windows**

South Africa's REIPPPP is globally recognised for its structured approach to scaling private-sector renewable energy investment. Through a competitive bidding process, it evaluates proposals from IPPs, corporate entities that develop, construct, and operate private power generation facilities, balancing least-cost electricity procurement with socio-economic development goals via a comprehensive scorecard system.





While the programme is comprehensive by criteria, as evidenced by its robust evaluation framework and alignment with policy objectives, it has been critiqued for lacking depth in addressing the broader systemic challenges it necessitates (Borchardt, 2025; Malope, 2024). Questions remain around the long-term sustainability of its socio-economic impact, the lived realities of communities involved, and the extent to which development outcomes are meaningfully integrated beyond compliance metrics.

### ***What is a bidding window?***

The REIPPPP facilitates renewable energy project development through bidding windows, each with specific targets for installed capacity across technologies like solar and wind. Since its 2011 launch, each bidding window has featured pre-defined evaluation criteria, fixed timelines, allocation caps, and mandated local content and SED obligations (IPPO, 2025).

The REIPPPP has conducted seven primary bidding windows since its establishment, operating under a unique two-envelope system. This system originally apportioned 70% of a bidder's evaluation to price and 30% to economic development criteria (see Table 1), thereby pursuing the dual objectives of cost-efficient electricity procurement and substantial local and national economic development. The economic development criteria largely mirror the Broad-Based Black Economic Empowerment (B-BBEE)<sup>2</sup> scorecard, a South African policy framework designed to advance economic inclusion for historically disadvantaged groups, issued by the Department of Trade, Industry and Competition (DTIC), though with minor adaptations (DMRE, 2024).

Bid Window 5, launched in 2021, introduced stricter conditions: a 90:10 evaluation ratio favouring tariffs over socio-economic commitments, reduced financial close (four months) and construction (two years) timelines, and more stringent technical and legal requirements. Economic development commitments shifted to qualification criteria, leading to lower reported commitments. South African shareholding increased to 49%, with a minimum 25% Black ownership and 5% Black women ownership, while specific local content targets were removed (Pinto, 2021).

From Bid Window 6, economic development evaluation was reinstated with greater emphasis on gender and disability inclusion. IPPs must report<sup>3</sup> quarterly on SED and ED outcomes, though these reports remain unpublished. Once appointed, successful bidders sign a 20-year power purchase agreement (PPA) with Eskom, the sole buyer of their electricity (Pinto, 2021).

**Table 1: The scorecard for Bid Window 1-4 includes the following economic development criteria**

Economic development category	Description
Job creation	Prioritises employment of South African citizens, focusing on youth, women, and rural communities.
Local content	Requires a minimum percentage of project value to be sourced locally, supporting industrialisation and skills development.
Ownership	Mandates at least 40% South African ownership, with a minimum of 2.5% equity allocated to local communities.
Management control	Aims to ensure diversity in leadership and decision-making roles within project entities.
Preferential procurement	Aims to source goods and services from historically disadvantaged suppliers, particularly Black-owned businesses, women-owned enterprises, and small to medium-sized enterprises (SMEs)
Enterprise and supplier development	Supports investment in Black-owned SMEs and related skills development programmes.
Socio-economic development	Involves direct contributions to education, healthcare, and broader community upliftment within host areas.

*Source: Independent Power Producers Procurement Programme: An Overview (IPPO, 2025)*

Based on Table 1, the REIPPPP programme has delivered significant economic outcomes. According to the IPPO report for June 2025 (IPPO, 2025), the programme created over 88,317 job years for South African citizens and contributed R3.4 billion to socio-economic development. Local content spending reached R74.8 billion, and B-BBEE procurement amounted to R111 billion by the end of June 2025.

The programme generated 130,278 gigawatt hours of electricity, enough to supply more than 39.3 million households (IPPO, 2025). Although Black South Africans hold 38.1% of equity in the programme, local community ownership remains limited. The socio-economic development component (see Table 1) of the economic development scorecard has generated over R40 billion in commitments to local communities, but implementation remains uneven (IPPO, 2025). Critics argue that communities often experience minimal benefit and lack agency in decision-making processes, raising questions about recognitional



justice and procedural inclusion (McDaid, 2016; McEwan et al., 2017; Nzo, 2021; Pressend, 2023).

The REIPPPP offers a compelling lens through which to assess South Africa's developmental state ambitions. While its design is steeped in the language of inclusive growth, promising job creation, skills development, and community ownership, it remains fundamentally anchored in competitive private-sector procurement. This structural reliance reveals a persistent tension between transformative intent and neoliberal practice. By examining how the programme operates, and where it falls short, we gain insight into the deeper limitations confronting state-led transformation in the post-apartheid era.

**Table 2: REIPPPP procurement process**

Step	Stage	Description
Step 1	Request for proposals (RFPs)	The government issues an RFP inviting the private sector to propose renewable energy projects.
Step 2	Bid preparation and submissions	Developers prepare and submit detailed technical and financial bids.
Step 3	Bid evaluation and preferred bidders approved	Bids are evaluated; preferred bidders are selected based on criteria.
Step 4	Financial close	Final agreements are signed; financing is secured to begin the project.
Step 5	Construction	Physical construction of the renewable energy facility begins.
Step 6	Commercial operation date	The project begins generating and delivering electricity to the grid.

*Source: Independent Power Producers Procurement Programme: An Overview (IPPO, 2025)*

This article focuses on the *Construction Phase* (See Table 2, Step 5) of renewable energy projects, investigating the on-the-ground challenges and their intersection with local realities. By centring this often-overlooked stage, it reveals the disconnect between national policy and local implementation, highlighting how ambitious targets can exacerbate inequalities in rural areas. The next section examines Sutherland's socio-economic landscape, where wind energy projects have introduced new complexities around employment, skills, and benefit distribution. Despite its strategic role in the energy transition, the town faces persistent poverty, limited capacity, and rising social challenges, exposing the

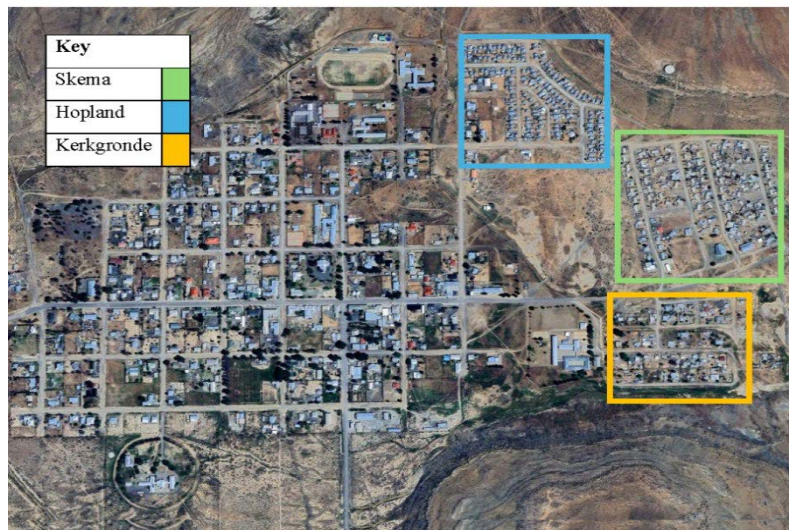
widening gap between national ambitions and local realities, and revealing a developmental state still more aspirational than achieved.

### **Sutherland: A socio-economic snapshot**

Sutherland offers a compelling lens on labour dynamics in South Africa's renewable energy sector. Known for astronomy<sup>4</sup> and astro-tourism, the town now hosts large-scale wind projects that expose tensions between job creation promises and local skill realities. Employment often peaks briefly during construction, creating boom-and-bust cycles that exclude many long-term residents. The influx of transient labour and the evolving economic landscape can fundamentally alter a town's character, potentially detrimentally affecting established sectors such as tourism.

Sutherland, a remote town with an estimated population of 2,767 residents across 724 households, presents a unique socio-economic landscape. A 2024 survey by the SARChI Chair in Land, Environment, and Development (Eigelaar-Meets & Groenewald, 2025) reveals that most residents (95%) identify as Coloured, with smaller proportions of White, Black, or other population groups. The survey also highlights a significant demographic trend: 68.4% of households are female-headed, with male-headed households making up less than a third (31.6%). The average household size is 3.8 members.

**Figure 1: Satellite image of Sutherland, Northern Cape, indicating the residential areas**



*Source: Google Earth, 2023*



Residents are predominantly concentrated in four areas: Skema (47%), Hopland (37%), Kerkgronde (5%) and the town centre (10%). The ‘town centre’ refers to the remaining area not mapped in Figure 1 above. Approximately 85% live in formal housing, while the remainder reside in backyard structures, which is particularly prevalent in Hopland. See Table 3 for demographic characteristics based on the 2024 survey.

**Table 3: Demographic characteristics of Sutherland population – 2024**

Indicator	Survey 2024
Total population range	0–89 yrs
Median (50th percentile)	29 yrs
Mean age	32.2 yrs
Legal age: children (0-17)	361 (31.1%)
Legal age: adults (18+)	799 (68.9%)
Child dependency age (0-14)	308 (26.6%)
Economically active age (15-59)	702 (60.5%)
Elderly dependency age (60+)	150 (12.9%)
Dependency ratio	65.2
Sex ratio (males per 100 females)	84.5
Total population count	1160 (100%)
Child-headed households (<18 yrs)	1 (0.3%)
Women-headed households (>19 yrs)	208 (68.4%)
Men-headed households (>19 yrs)	96 (31.6%)
Total households surveyed	304
Average household size	3.8

Source: *A socio economic survey of the Sutherland population 2024-2025* (Eigelaar-Meets & Groenewald, 2025).

### ***Education and migration***

In Sutherland, most children between seven and 18 are enrolled in school (92%), but many are not in the grade that matches their age (Eigelaar-Meets & Groenewald, 2025, p. 82). Although South Africa’s official school-starting age is seven, many children begin earlier, in Grade R at four or five, and Grade 1 at five or six, creating a standard where each grade should match a one-year age increase (Eigelaar-Meets & Groenewald, 2025). However, survey data show that by age 11 only 11.8% of learners are in the expected grade and by ages 16-18 more than 80% are behind. These delays tend to worsen over time, pointing to deeper problems in the education system that make it hard for learners to catch up. Learners who fall behind early in school often stay behind, reflecting systemic barriers in primary education that constrain long-term academic and vocational prospects.

Since 2000, Sutherland has witnessed a discernible increase in immigration, predominantly driven by perceptions of an appealing lifestyle,



characterised as ‘quiet and serene,’ and the availability of economic opportunities within the hospitality sector. The 2024 survey reveals that a substantial proportion of this demographic, constituting approximately 14% of the total population, finds employment within the tourism and hospitality sector, thereby contributing to the vitality of local enterprises. According to the 2024 survey, around 14% of the population now works in tourism-related roles, from guesthouses to restaurants, helping to enliven the local economy. These newcomers tend to be more highly educated<sup>5</sup> and more likely to find employment than long-term residents, a trend that highlights deeper inequalities. While their arrival brings economic vitality, it also sharpens the divide in skills and opportunities, revealing a town where prosperity is unevenly distributed and shaped by who arrives and who’s already there.

### ***Poverty and employment***

While most households have access to electricity (97.3%) and piped water either in the house (39.3%) or on the plot (59.1%), disparities in service provision remain. For sanitation, the majority of households (64.6%) rely on dry pit toilets (Eigelaar-Meets & Groenewald, 2025, p. 22). Poverty continues to be a pressing issue, with nearly half of households earning less than R2,000 per month.

Food loans topped the list of credit types in the 2024 survey (Eigelaar-Meets & Groenewald, 2025, p. 116), highlighting the severity of food insecurity for roughly a quarter of households. When households rely on credit not to invest or build, but simply to eat, it signals a level of financial distress that goes beyond poverty statistics. Many households reported going without food, some regularly or always, within the previous 12 months.<sup>6</sup> In these moments of crisis, people turned to institutions or individuals for help, though some said they had “no one to go to”. Few sought support from the church, reflecting a broader erosion of communal safety nets.

Employment in the town is mostly concentrated in general services and agriculture, but even these sectors offer limited stability.

*[In Sutherland] prosperity is  
unevenly distributed and shaped by  
who arrives and who’s already there.*



*Main road of Sutherland, Northern Cape province, South Africa.*

*Photo: Stephanie Paula Borchardt*

With an unemployment rate of 20.6%,<sup>7</sup> many residents remain excluded from formal work, caught in a cycle where survival takes precedence over opportunity (Eigelaar-Meets & Groenewald, 2025, p. 110)

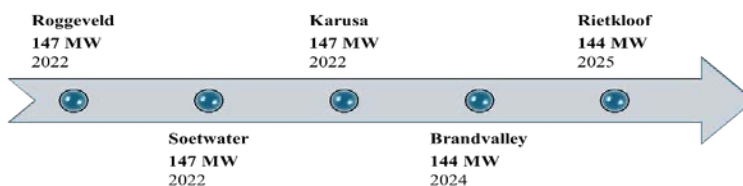
### **Renewable energy awareness and benefits**

Resident awareness of renewable energy developments outside their town demonstrates an almost even distribution, with 48.5% indicating familiarity and 51.5% expressing unfamiliarity with the concept (Eigelaar-Meets & Groenewald, 2025, p. 158). Despite the presence of a community liaison officer from one of the IPPs, accessible, community-oriented information seemed not to reach the residents. Fewer than one-third of respondents perceived direct household benefits accruing from the local renewable energy project. Among those who did, employment opportunities constituted the most frequently cited advantage, with over 40% referencing job creation (Eigelaar-Meets & Groenewald, 2025, p. 162), however, residents acknowledged that these roles were short-term and had low skill requirements. Concurrently, the hospitality industry experienced a substantial surge during the project's construction phase, with the economic benefits disproportionately accruing to white guesthouse owners in the area.

Sutherland is currently home to five wind farm IPPs (see details, including commercial operation dates and capacities, in Figure 2 below).

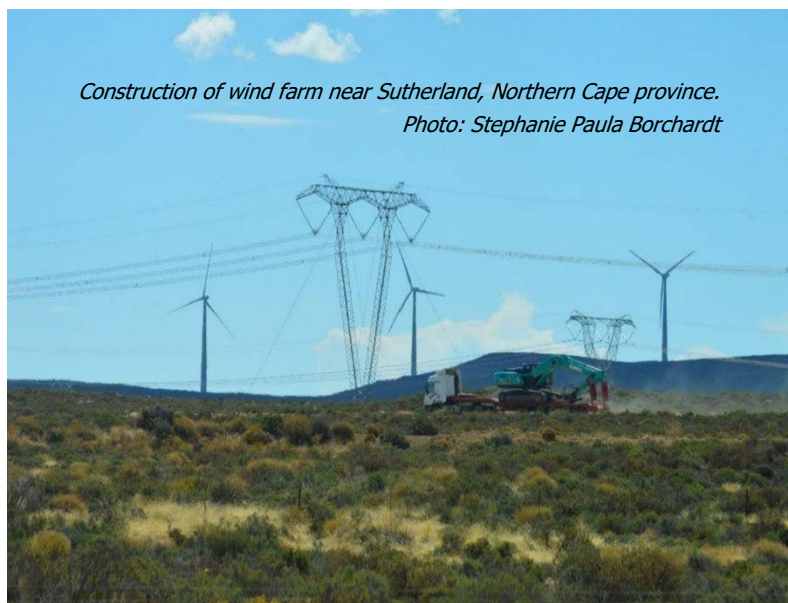


**Figure 2: Wind farms surrounding Sutherland with their commercial operation date and capacity in megawatts (MW)**



*Graph compiled by Stephanie Paula Borchardt, based on data from Enel Green Power (2025); Red Rocket Energy (2025).*

In addition to projects under the REIPPPP, several new energy developments are underway near Sutherland, reflecting the expanding and increasingly diversified infrastructure of South Africa's renewable energy transition. These include the Oya Energy Hybrid Project, one of the 11 preferred bidders under the Risk Mitigation Procurement



Programme. The Karreebosch Wind Farm supplies electricity exclusively to Northam Platinum Holdings Limited's mining operations in the Northern Cape (G7 Renewable Energies, 2025). Although not part of REIPPPP, these independent power producers are embedded within South Africa's broader energy procurement framework and will undoubtedly shape the socio-economic and spatial dynamics of Sutherland.



## **Beyond the blueprint: Skills gaps, substance abuse, and outsourced labour in renewable energy construction**

The rollout of utility-scale renewable energy projects in South Africa's remote Karoo region demands more than technical feasibility. It requires navigating entrenched socio-economic and logistical complexities. Developers routinely face challenges such as a shortage of skilled local labour, dependence on outsourced personnel, and pervasive social vulnerabilities, all of which generate tension and hinder progress. Although these projects are often framed as engines of local job creation, the reality reveals structural limitations that undermine such promises.

### **Local employment challenges and systemic gaps**

A significant disconnect exists between the REIPPPP's ambitious local employment quotas and the realities in South Africa's rural communities. Despite contractual obligations for local hiring, including women and youth, the "resource availability" of "physical human resources ... people!" is often "severely lacking" (Benjamin, IPP company representative, interview, August 2024). Benjamin played a central role during the construction phase, juggling a senior managerial position while remaining hands-on on site. He was responsible for reporting and tried to reconcile the company's promises around job creation with the actual employment figures during that period. Jobs created directly within the renewable energy project value chain are predominantly for skilled and highly skilled workers, with unskilled workers comprising less than 10% of the total (Hartley et al., 2019, p. 15). The highly specialised nature of utility-scale renewable energy projects makes it exceptionally difficult to source qualified local personnel, particularly in rural areas. This critique is echoed in the Institute for Economic Justice (IEJ) Policy Brief (2021), which notes that over 80% of employment in the IPP sector is concentrated in short-term construction roles, with limited pathways to long-term, decent work. Malope (2022) also critiques the use of "job years" as a metric, which inflates employment figures while masking the temporary and precarious nature of most positions.

This mismatch is compounded by high rates of failed medical screenings and substance abuse, which further limit the local labour pool (Benjamin, August 2024). This is starkly apparent when projects are launched, as initial employment projections often face a harsh reality:

*You can start with a big picture saying we [the company] are going to employ X number of people [in town], you get here, and then you see half of the people fail their medicals because they are not fit to work or have alcohol abuse challenges. (Benjamin, August 2024)*

*Sutherland landscape.*  
*Photo: Stephanie Paula Borchardt*





The REIPPPP mandates assume a ready labour pool, while rural realities reflect chronic underdevelopment, poor health, and limited skills. This mismatch reveals how technocratic frameworks often overlook the socio-material conditions necessary for their success.

Reliance on subcontracted labour externalises responsibility for worker welfare, making it difficult to address entrenched social challenges such as addiction, failed medical screenings due to ill health, and chronic unemployment. These issues are symptomatic of deeper systemic neglect, including inadequate healthcare and poor education. According to Benjamin (August 2024), the bureaucratic rigidity of the REIPPPP contracts and reporting compounds these challenges by enforcing standardised compliance metrics, such as job creation targets and ownership structures, that often clash with the socio-economic realities of marginalised regions like the Karoo. Developers are held to national benchmarks regardless of local capacity, limiting their ability to respond adaptively to community needs.

The emphasis on short-term deliverables undermines meaningful investment in human capital, while fragmented accountability and rigid procurement processes delay implementation and inflate costs. The IEJ (2021) argues that the current procurement model incentivises cost-cutting and localisation loopholes rather than meaningful community development. It calls for stronger alignment between trade policy, value chain localisation, and employment strategies centred on decent work, an approach that remains largely absent in current practice. Together, these factors constrain the transformative potential of renewable energy projects and weaken their contribution to sustainable, inclusive development. These accounts reveal not only logistical and social constraints but also temporal misalignments that render developmental promises largely symbolic.

The REIPPPP's rigid compliance metrics and fragmented governance structures thus risk reproducing exclusion rather than redressing it, highlighting the need for more adaptive, integrated, and context-sensitive approaches to rural development within South Africa's energy transition.

***Navigating substance abuse: A systemic challenge for project development***

This section explores how alcohol abuse among the renewable energy project workforce, especially in remote regions, poses a significant challenge. Current policies and the outsourcing of labour hinder effective employee support, while deficit-based narratives about local communities often justify prioritising external workers, undermining the REIPPPP's



local benefit and job creation mandates. This exacerbates existing vulnerabilities in small Karoo towns where alcohol abuse is already present.

One manager put it bluntly: “The people from Sutherland tend to have very bad habits of drinking ... so Monday morning, he is still intoxicated. Now, instead of employing people from Sutherland, we would rather take people from Laingsburg” (Dennis, IPP company representative, interview, August 2024).

Such framing shifts the blame away from structural neglect, poor healthcare, limited employment, and lack of social services, and instead pathologises local residents. It undermines the REIPPPP’s commitment to local benefit and job creation, turning developmental promises into exclusionary practices.

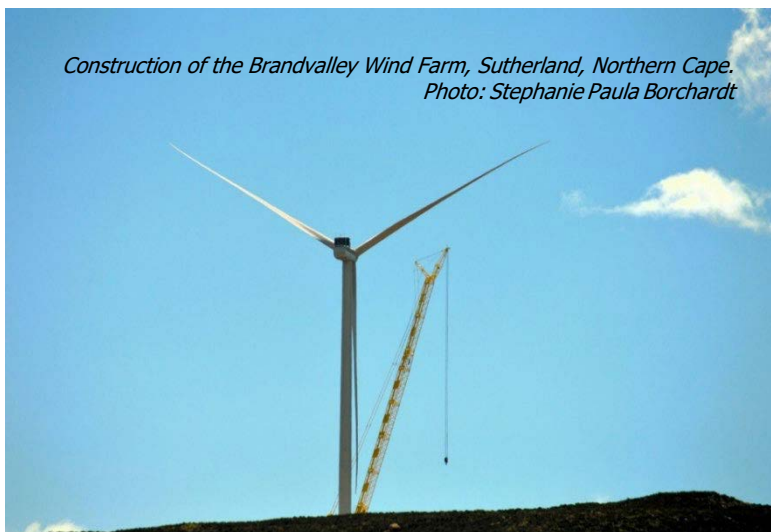
The hope that “one of these wind farms will invest back into the community [to address alcohol abuse]” (Dennis, August 2024) is often deferred, passed from one developer to the next. What emerges is a troubling pattern: a lack of collective responsibility, a reliance on short-term fixes, and a developmental model that leaves local residents in Sutherland carrying the weight of systemic failure.

### ***External labour and undermined development***

IPPs frequently rely on external labour during the construction phase of renewable energy projects, with the assumption that it is more cost-effective. In communities like Sutherland, this practice exacerbates social tensions. As one IPP manager explained, workers are brought in from provinces such as Mpumalanga or the Eastern Cape<sup>8</sup> to fill skill gaps, but subcontractors often fail to repatriate them once the work is complete: “That guy is in the community now, but he is not a part of it, and the community doesn’t want him there” (Dennis, August 2024).

This approach exposes a critical flaw in project-based infrastructure models, where short-term labour demands override long-term social integration. Without clear exit or inclusion strategies, external workers become socially displaced, facing resentment from residents and contributing to fractured cohesion. Police and tourism officials in Sutherland have noted that unrepatriated workers can and have disrupted the town’s social fabric, disregard local norms, and fuel issues such as drug abuse and public indecency (Liam, SAPS officer, interview, August 2024; Johnathan, tourism sector, interview, August 2024; Alex, SAPS officer, interview, November 2024). Outsourcing may appear





cheaper than dealing with the local labour challenges, but it merely shifts the burden, leaving host towns to absorb the social costs. Short-term savings come at the expense of long-term development, undermining both stability and the transformative potential of renewable energy investments.

The heavy reliance on external, rather than locally sourced, labour, without corresponding investment in local training and capacity-building, represents a significant missed opportunity for renewable energy projects. As a local municipal official, Carl, succinctly put it:

*The [IPP] construction phase is a grey area for us; our concern is that the jobs must be decent and sustainable ... we understand some are technical, but we have bright stars in the community. Make them part and parcel of the operation and maintenance. Train them!* (interview, October 2024)

Carl's concerns point to a broader governance gap in rural renewable energy rollouts: a mismatch between project labour practices and local realities. Addressing this gap requires more than technical fixes; it demands deliberate investment in local skills and clear strategies for managing external workforces, both of which are essential to project success and social cohesion.

Yet internal disconnects within IPP companies further complicate this picture. Dennis, an IPP company representative in a managerial role, had limited knowledge of the SED and ED initiatives related to skills development and training. "No, I know nothing about what happens [in town]. They don't tell us, and I don't ask" (interview,



August 2024), he said, acknowledging the disconnect. He was unaware of any training being offered by his company to locals. In contrast, Claire, who worked in the IPP company's SED and ED department, confirmed that training programmes were indeed rolled out, though regrettably, only after the wind farm's construction had ended (interview, August 2024). These misalignments, between policy, timing, and organisational roles, undermine the programme's developmental goals, revealing how rigid metrics and siloed operations can reproduce exclusion rather than redress it.

According to IPP company representative Benjamin, one of the most persistent challenges lies in the disconnect between what contractors are contractually obligated to deliver and what is realistically achievable when it comes to enterprise and supplier development. "Those challenges are evident in the way that construction sites get disrupted," he explained (August 2024). This gap between promise and practice is not just technical, it's political.

Indeed, during the construction phase, several protests erupted in response to unmet expectations around ED commitments. Communities, having been told to expect local procurement, training, or subcontracting opportunities, found themselves sidelined as subcontractors failed to follow through. These disruptions reflect more than poor communication, they reveal a structural flaw in the REIPPPP's delivery model, one that outsources developmental obligations without ensuring mechanisms for accountability or redress.

### **From procurement to precarity: accountability in post-construction energy landscapes**

Having examined the REIPPPP's design and bidding architecture, this section turns to the post-construction phase, where accountability often falters, and developmental promises begin to unravel. In remote areas, institutional fragmentation and weak oversight significantly undermine the long-term success of renewable energy projects. A diffuse leadership structure, coupled with the transient nature of contractors and limited post-project investment, frequently leads to infrastructural neglect and unfulfilled enterprise development commitments.

As IPP representative Dennis vividly articulated, the involvement of numerous companies and shareholders creates a confusing, opaque decision-making environment: "It's confusing sometimes. We once had a meeting ... company X people came, company Y people came, company Z people came, at the same time, and you're





kind of confused ... who is the boss ... they are all shareholders [laughs]" (Dennis, August 2024).

This diffuse leadership structure not only disorients on-site personnel but also fosters a broader issue of dispersed responsibility that persists well beyond the construction phase. Crucially, this fragmentation extends to community relationships, where local and municipal officials are left navigating a revolving door of contractors and consultants, often unsure which entity is the ultimate bearer of socio-economic development obligations (Simon, municipal official, interview, October 2025).

Adding to these challenges is a familiar breakdown in coordination and accountability between contractors, developers, and the communities who are meant to benefit. Poor follow-up on maintenance and the frequent absence of contractors after the project's completion point to deeper failures in long-term planning and oversight (Benjamin, August 2024). Too often, developers arrive with a short-term mindset, focused on meeting construction deadlines rather than building lasting relationships or ensuring the infrastructure they leave behind is properly supported.

This challenge is further compounded by the reluctance of contractors, often based in distant urban centres, to return to project sites for follow-up work or maintenance. As Dennis lamented, "people don't like this place, and they don't want to come back ... if you call them, they say, 'you fix it yourself and send me the bill'" (Dennis, August 2024). The site's physical distance from urban technical hubs compounds coordination issues, turning geographic isolation into a structural barrier. What appears to be poor coordination is a deeper structural detachment: contractors often have little connection to the communities they serve, operating within a delivery model that is decentralised, short-term, and driven by compliance rather than care. The result is a kind of infrastructural and institutional abandonment. Local management teams are left to deal with technical faults and system upkeep, often without the resources or institutional support they need, and crucially, without the necessary local technical skills, as training pipelines frequently terminate with the end of the construction contract.

## Conclusion: bridging the gap between green ambitions and developmental realities



*Wind turbine blade transport to construction site, Sutherland, Northern Cape.*

*Photo: Stephanie Paula Borchardt*

South Africa's developmental state, envisioned as a driver of industrialisation and inclusive growth, finds itself increasingly hollowed out by market logics. The REIPPPP, despite its green and developmental promises, operates through competitive procurement and compliance-driven scorecards that outsource transformation to private capital. In towns like Sutherland, this manifests as short-term construction jobs, external labour, and fragmented governance, a choreography of deferred responsibility.

Technological advancement alone cannot deliver socio-economic change. The state gestures toward development, but its interventions are limited, speculative, and often exaggerated. Initiatives are sold with urgency, then diluted in practice. Municipalities function as intermediaries, not engines of transformation, while communities are pathologised and excluded. The result is a renewable energy rollout that mirrors South Africa's broader contradictions rather than resolving them.

To reclaim the transformative potential of the energy transition, the developmental state must be reimagined, not as a facilitator of private investment, but as a strategic actor that embeds equity, industrial policy, and long-term inclusion into its core. This means taxing the initiative, not just the outcome; investing in regional capacity, not just infrastructure; and treating renewable energy as a social project, not a technical fix.

Without sustained public investment, community-led governance, and a commitment to human development, South Africa's green future will remain uneven, exclusionary, and ultimately unsustainable, swept away like dust in the wind.



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## INTERVIEWS

All interviewees have been assigned pseudonyms, and, in some instances, their positions have been intentionally obscured.

**Johnathan** – Tourism sector, Sutherland, Northern Cape (August 2024)

**Liam** – South African Police Service, Sutherland, Northern Cape (August 2024)

**Dennis** – IPP company representative, Northern Cape (August 2024)

**Claire** – IPP company representative, SED and ED position, Northern Cape (August 2024)

**Benjamin** – IPP company representative, managerial position, Northern Cape (August 2024)

**Carl** – Local municipal officer, Northern Cape (October 2024)

**Alex** – South African Police Service, Sutherland, Northern Cape (November 2024)

**Simon** – Local municipal officer, Northern Cape (October 2025)

## ENDNOTES

<sup>1</sup> The Northern Cape province is home to 51 renewable energy projects and of these 47 are operational (IPPO, 2025).

<sup>2</sup> Black under this policy refers to Black African, Coloured, Indian, Asian and second-generation Chinese citizens.

<sup>3</sup> This reporting is submitted to the IPP Office, rather than to local municipalities or host communities.

<sup>4</sup> Sutherland is home to the Southern African Large Telescope (SALT), the largest single optical telescope in the southern hemisphere (see <https://www.salt.ac.za>)

<sup>5</sup> Survey data indicate that most individuals who migrated to Sutherland identified as White or Coloured (Eigelaar-Meets & Groenewald, 2025).

<sup>6</sup> The previous 12 months were up to February 2024.

<sup>7</sup> These figures may now be even higher, as the 2024 Sutherland survey was conducted during the construction phase of one of the local wind farms, a period that likely influenced employment and economic activity.

<sup>8</sup> Gqeberha was specifically mentioned during several interviews.

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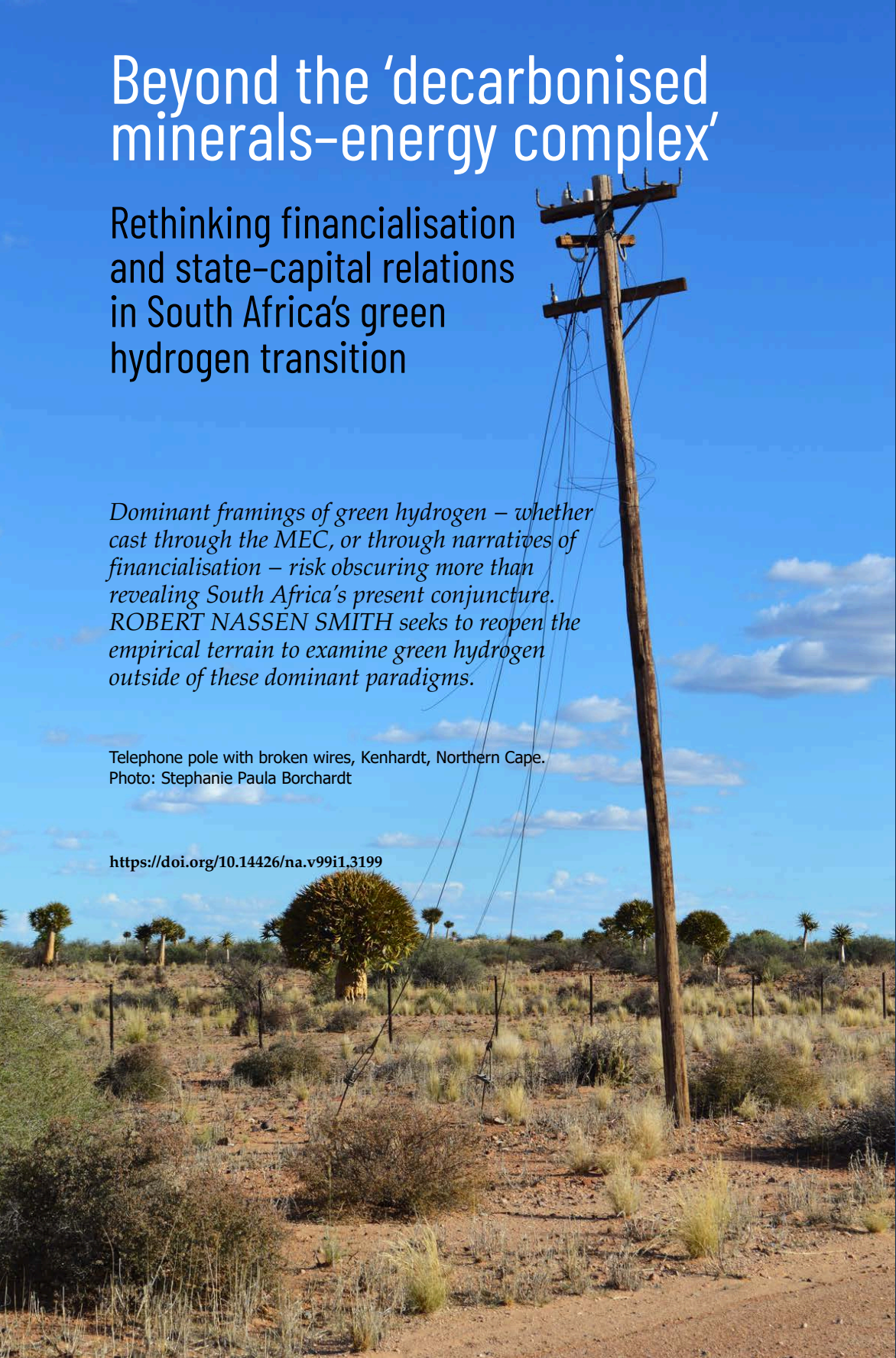
# Beyond the 'decarbonised minerals–energy complex'

## Rethinking financialisation and state–capital relations in South Africa's green hydrogen transition

*Dominant framings of green hydrogen – whether cast through the MEC, or through narratives of financialisation – risk obscuring more than revealing South Africa's present conjuncture. ROBERT NASSEN SMITH seeks to reopen the empirical terrain to examine green hydrogen outside of these dominant paradigms.*

Telephone pole with broken wires, Kenhardt, Northern Cape.  
Photo: Stephanie Paula Borchardt

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# **Beyond the 'decarbonised minerals-energy complex': Rethinking financialisation and state-capital relations in South Africa's green hydrogen transition**

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### **Abstract**

This article interrogates South Africa's green hydrogen ambitions as a key site of the financialisation of development. While hydrogen is increasingly framed through the lens of a 'decarbonised' or 'financialised' minerals-energy complex (MEC), such readings risk reproducing a power-bloc conception of finance that overstates its expansion while casting the state as a conduit for interests. Drawing on recent critical interventions by Reddy (2025) and Bernards (2025), in combination with initial fieldwork as part of ongoing PhD research, this article argues that these dominant frameworks obscure two central features of the current conjuncture: the persistent financing gap and significant institutional fragmentation within the state itself. Rather than demonstrating the consolidation of a 'decarbonised MEC' or the expanding dominance of finance capital, South Africa's hydrogen landscape reveals the absence of substantial financial participation, alongside a state labouring – often unsuccessfully – to construct conditions of investibility. The article, therefore, calls for rethinking the political economy of hydrogen beyond inherited paradigms and reopening empirical inquiry into how state–capital relations are being actively assembled in the emerging hydrogen economy.



## Introduction

In his foreword to the Hydrogen Society Roadmap (HSRM), Minister of Higher Education, Science and Innovation, Dr Blade Nzimande, articulates a vision of green developmentalism centred on green hydrogen:

*South Africa today is well placed and poised to leverage the hydrogen opportunity to be at the centre of our economic growth and development strategies, as well as part of our mitigation strategy for climate change through greening our economy and society. Transitioning through the hydrogen development trajectory must also form a strong platform to address the needs of the overwhelming majority of our people, especially blacks, women, youth and the poor, both urban and rural.*

(DSI, 2022, p. A)

However, this vision is being articulated in accordance with the developmental paradigm that Gabor (2021) has termed The Wall Street Consensus, an effort to reorganise development around partnerships with global finance. South Africa's Green Hydrogen Commercialisation Strategy (GHCS) rhetorically commits to utilising a suite of de-risking arrangements aimed at rendering projects 'bankable' through state guarantees, blended finance, and public-private partnerships (PPPs) (DTIC, 2023). A growing body of critical scholarship has rightly highlighted the dangers of this 'private turn': it empowers finance capital while exposing states and communities to new risks (Baker, 2015; Gabor & Sylla, 2023), and narrows policy space for redistributive or democratic alternatives (Baloyi & Krinsky, 2022) by "rendering technical" and de-politicising the sustainable development agenda (Taggart & Power, 2024; Tan, 2022).

South Africa's experience with the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) already illustrates how the private turn has structured renewable energy investment, with Power Purchase Agreements (PPAs) functioning as a key de-risking mechanism that underwrites private participation in renewable energy PPPs. This turn to private capital produces a central contradiction: the state's ambitions for green energy as both a means for energy security as well as a catalyst for a green developmentalism are increasingly tethered to the investment criteria of finance capital. That is, as Baker (2015) sharply captures it, "between short-term, bankability-driven, shareholder-maximising imperatives and the unique, progressive demands for community ownership and economic development required to legitimise renewable energy projects in South Africa" (p. 155).



*Photo: Stephanie Paula Borchardt*

Moreover, the encounter between the private turn and its interaction with extant state-capital formations and patterns of capital accumulation has become subject to critical attention. Baker (2015), for one, makes the case for framing the evolving role of finance in South Africa's renewable energy sector in terms of a (decarbonised) "financialized minerals energy complex (MEC)". She finds that under REIPPPP, a reconfiguration of long-standing MEC actors is underway, particularly in the realms of finance, as they merge with new sources of foreign capital. Financialisation is read by Baker as a state-mediated project of constructing new green energy asset classes.

It is therefore unsurprising that hydrogen is already being cast as part of a decarbonised, financialised MEC (see Baker & Burton, 2023). However, in light of Reddy's recent 'debunking' of the MEC (2025), there is reason to pause, or else risk prematurely inserting South Africa's green hydrogen ambitions into a paradigm that "rests on shaky foundations" (p. 25). Over and above the challenge Reddy makes to the empirical foundations of the MEC thesis, the true motivation of his intervention concerns how the dominance of the MEC framework (often) crowds out empirical inquiry, obscuring the actual dynamics of corporate power, interest-group formation, and state-business relations. The same risk applies to green hydrogen: by presuming it to be a continuation of the

MEC (decarbonised or otherwise), we may foreclose on the investigation needed to understand what is presently unfolding.

This article responds to that provocation. It seeks not to replace the (decarbonised, financialised) MEC with an alternative overarching framework – that is beyond its scope. Instead, it intends to clear conceptual space by interrogating the assumptions embedded in MEC and financialisation readings of green hydrogen. To do so, the article draws together two recent, parallel scholarly interventions: Reddy's critique of the MEC paradigm and Bernards' (2025) critique of financialisation. Both seek to intervene in these respective literatures in the same spirit; a spirit best captured by Bernards, where he laments the extent to which:

*financialization serves as a shortcut, a way of attributing disparate social phenomena to the growing power of finance capital... it offers up a ready-made way of critiquing myriad changes in the way that finance capital and the wider economy operate, allowing authors to more or less uncritically assimilate them as instances of a wider process* (2025, p. 9).

This article draws on a combination of initial fieldwork conducted in 2025, as part of my ongoing PhD research, including first-hand interviews with provincial officials and industry actors involved in the hydrogen sector, supplemented by analyses of policy documents, investment reports, and publicly available financing data. The empirical material is not intended to provide a comprehensive account of the emerging hydrogen economy; rather, it is used diagnostically to illustrate that MEC and financialisation framings rely on the assumed coherence of state and capital that does not reflect the present conjuncture.

The remainder of the article develops this argument in three steps. The first section revisits the MEC thesis and traces how it has been extended into 'financialised' and 'decarbonised' variants, showing, via Reddy's critique, how these extensions rely increasingly on the assumed coherence of capital and an instrumentalist understanding of the state. Section two examines why green hydrogen appears to fit both the MEC and financialisation frameworks, before turning to Bernards to argue that financialisation framings risk prematurely closing empirical inquiry. The penultimate section then turns to the empirical material and makes the case of why the persistent shortfall of green and sustainability-linked finance should be centred analytically, especially for what it implies about the role of the state in driving the push for private finance for its green hydrogen ambitions and development goals more broadly. The final section offers concluding reflections. Taken together, this article aims to demonstrate how the dominant framings of green hydrogen obscure



more than they reveal about the political economy of green hydrogen and seeks to open the conceptual space for further enquiry.

### **Wither MEC?**

The MEC thesis was developed by Fine and Rustomjee (1996) and argues that South Africa's economic development is organised around a historically entrenched and interconnected complex of mining, energy, and heavy industry, whose mutually reinforcing linkages structure patterns of capital accumulation and shape the form and functioning of the state.

It is beyond the scope of this article to rehearse the full MEC thesis. What matters for present purposes is the emphasis placed on the coherence and persistence of the MEC. Central is the claim that the MEC should be understood as a system of accumulation; a historically specific configuration through which patterns of production, finance, labour, and governance became closely aligned. In this sense, Fine and Rustomjee were not simply describing a sectoral cluster but a wider economic architecture through which particular industries commanded access to finance, determined the trajectory of industrial development, influenced regimes of labour, and facilitated the constitution of the state itself. Crucially, on this final point, the state is cast as internal to the MEC insofar as infrastructure investments reinforce MEC industries, major State Owned Enterprises (SOEs) (such as Eskom, Sasol, Iscor and the Industrial Development Corporation [IDC]) function as central nodes within MEC value chains, bureaucratic capacities are built around MEC-relevant functions, policy agendas are shaped by the lobbying power of MEC-linked capital, and its coercive instruments are deployed to secure the low-cost labour on which MEC profitability depends.

This conceptualisation of an interlocking system of internal linkages and logics continues to inform efforts to read more contemporary developments, including green hydrogen. For Ashman, Fine and Newman (2011), from the early 1980s, the liberalisation of the financial sector in conjunction with the financialisation and internationalisation of capital, had shifted South Africa to a "financialized MEC" (p. 182). The MEC's historic structure persists, yet is reorganised through liberalised finance, shareholder-value imperatives, and capital flight. Financialisation is therefore a modification and intensification of the MEC, not its replacement.

For Baker (2015), REIPPPP is not only located firmly inside the MEC system of accumulation, but is also further evidence that the MEC is becoming more financialised. The programme connects Eskom and the

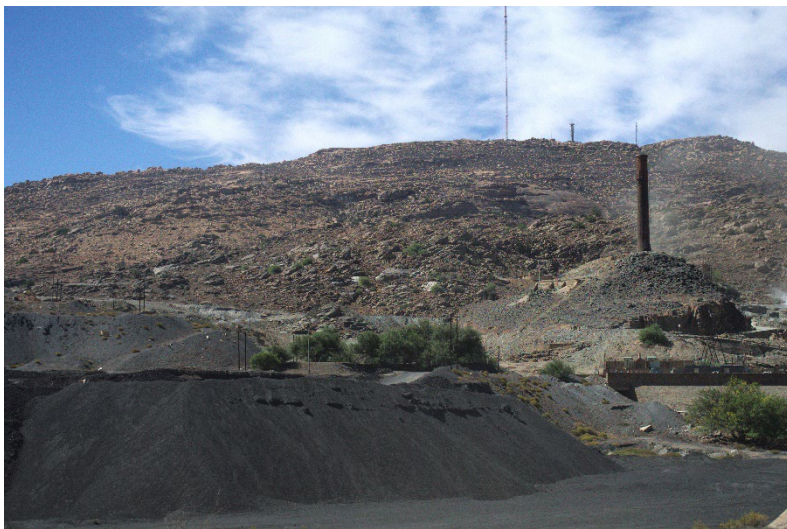


state to privately financed independent power producers and exemplifies a broader shift from an MEC centred on coal-fired heavy industry to one in which financial logics, instruments, and actors are increasingly central to how energy is produced, owned, and profited from.

Thus, REIPPPP and utility-scale renewables unfold within the MEC system of accumulation as new technologies and financial arrangements that are being threaded through its existing industrial and institutional architecture. Moreover, the state-capital alliances that defined the original MEC are here rearticulated through new 'green' modalities: Eskom's continued role as single buyer underwriting revenue streams via long-term PPAs; National Treasury's design and stewardship of the procurement framework; and the prominent roles of development finance institutions such as the IDC and the Development Bank of Southern Africa (DBSA) alongside the major commercial banks. Far from displacing these dense state-capital-finance linkages, utility-scale renewables reproduce and extend them under increasingly financialised forms.

But it is precisely these extensions of Fine and Rustonjee's original thesis that prompt Reddy (2025), in a recent critical work, to question the evidentiary basis on which such extensions rest. "The original work on the subject was indeed deeply historical," he writes, "...[but] as its popularity has increased, the boundaries of the concept have become blurred" (p. 6). His discontent with the MEC framework – "as a theory of post-apartheid capitalism ... the problems with the MEC [approach] are too large, in my view, for there to be any hope of resuscitation" (p. 26) – is matched by a scrupulous interrogation of empirical evidence. Under examination are both the structural dimensions of the original MEC thesis and the institutional narrative of MEC continuity, both of which exhibit notable deficiencies. Structurally, the apparent size, stability, and integration of MEC sectors are, for Reddy, statistical artefacts of an overly expansive, ad hoc definition: once benchmarked internationally, South Africa's industrial profile appears entirely ordinary.

*'...as a theory of post-apartheid capitalism...the problems with the MEC [approach] are too large, in my view, for there to be any hope of resuscitation.'*



*Mine in the Northern Cape.*

*Photo: Stephanie Paula Borchardt*

Institutionally, the post-apartheid corporate landscape bears little resemblance to the cohesive conglomerate bloc presumed by MEC theory. Conglomerates were dismantled, ownership dispersed, and by 2022, MEC-linked firms accounted for only a marginal share of major corporate assets. Moreover, following Sachs (2024), the MEC thesis is said to suffer from an instrumentalist framing of the state, which functions as a conduit for the interests of a dominant capitalist bloc. Such a conception, particularly in light of the fragmentation and internal contestations of the post-apartheid state, is untenable.

Space prohibits a more robust engagement with Reddy's argument besides the summary above. For the purposes of this article, Reddy's intervention usefully points to instances of analytic overreach on the part of post-apartheid MEC theorists, and as such is an invitation for more empirical work to be done to understand patterns of interest group formation, state-capital relations, and power. This paper is an attempt – albeit a limited one – to re-open the empirical terrain for the study of green hydrogen, so as not to foreclose inquiry before it has begun. What follows is a brief overview of current developments surrounding green hydrogen.

### **Green hydrogen: A decarbonised MEC?**

South Africa's green hydrogen ambitions have begun to take shape across a range of policy platforms, institutional arrangements, and early project proposals that together outline the contours of an emerging hydrogen economy. These early developments help explain why green





hydrogen so readily invites comparison with the MEC, as it draws together familiar actors within recognisable governance structures.

Take, for example, the Boegoebaai Port and Green Hydrogen Cluster – one of South Africa's flagship green hydrogen megaprojects – located in the Namakwa District of the Northern Cape province, approximately 60km north of Port Nolloth and 20km south of the Namibia-South Africa border. The site is being developed as a deep-water port and has been designated a Special Economic Zone (SEZ) for the production of green hydrogen and its derivatives (like green ammonia) and associated export infrastructure. The Northern Cape Green Hydrogen Strategy, launched at COP26, targets the development of 10GW of renewable energy capacity and 5GW of electrolyser capacity at Boegoebaai (NCEDA, 2021). Significantly, the priority of the strategy is not to service domestic demand but to position the Northern Cape as a global green hydrogen exporter to markets such as Europe and Japan.

The Northern Cape Economic Development Trade and Investment Agency's (NCEDA) business case of the Boegoebaai Port Project had estimated 0.07 Mtpa of green ammonia to be produced by 2027, with a planned increase to 2.15 Mtpa by 2038 (PRDW, 2022). Yet, the SEZ is still in early stages. Feasibility studies have been completed, the strategic environmental assessments led by the Council for Scientific and Industrial Research (CSIR) are presently being presented to concerned and affected communities, and infrastructure planning is still in progress. Nevertheless, the Boegoebaai project is an example of how the state (across provincial and national scales) is seemingly aligning its institutional power around dominant energy blocs and new green industrial projects.

Sasol, already a leading global hydrogen producer, has completed a pre-feasibility study at Boegoebaai that affirmed the technical and economic viability of this export-oriented ecosystem. Elsewhere, Sasol's involvement in the HySHiFT sustainable aviation fuel project at its Secunda facility demonstrates how the company is leveraging its existing Fischer-Tropsch (FT) conversion technology to repurpose existing industrial capacity for green hydrogen-derived fuels.

*... the priority of the strategy is not to service domestic demand but to position the Northern Cape as a global green hydrogen exporter to markets such as Europe and Japan.*

More significant still is that the SEZ is sited in a geography already defined by legacies of extractivism. A report by *GroundUp* documents how many members of the Richtersveld Communal Property Association have been sidelined in the consultations around the proposed port and hydrogen facility (Human, 2024). The community carries heavy memories of protracted land-rights battles (notably the landmark 2003 Constitutional Court decision) and anticipates that the proposed development may repeat patterns of dispossession and dysfunctional benefit-sharing that characterised past mining projects. In a fairly direct sense, green hydrogen is built on the very terrain of the old MEC.

Nor are these extractive geographies confined to Boegoebaai but will extend along the “Platinum Valley” (see DSI, 2020) infrastructural corridor linking Limpopo to major infrastructure hubs in Johannesburg and Durban, tying platinum-group metal (PGM) extraction to hydrogen value chains. As Baker and Burton (2023) rightly observe, PGMs play a central role in South Africa’s green hydrogen ambitions. The National Hydrogen and Fuel Cell Technologies Research, Development and Innovation strategy (Hydrogen South Africa, henceforth HySA) was launched by the Department of Science, Technology and Innovation (DSTI) in 2008 to link South Africa’s PGM endowment with a future hydrogen economy. HySA comprises three Centres of Competence, each focusing on part of the hydrogen/fuel-cell value chain:

1. HySA Infrastructure – Hosted at North-West University, and focuses on hydrogen production, storage, and delivery technologies.
2. HySA Catalyst – Hosted at the University of Cape Town and focused on catalyst materials (especially those using PGMs) and membrane electrode assemblies for fuel cells.
3. HySA Systems – Hosted at the University of the Western Cape, and focused on system integration, product development and prototyping of hydrogen fuel-cell systems.

Proton-exchange membrane electrolyzers are globally favoured for green hydrogen production because of their suitability for pairing with renewable energy, and rely heavily on PGMs (Quitow & Lentschig, 2025). By developing local catalyst technologies, membrane electrode assemblies and systems, HySA aims to capture value that traditionally goes abroad (rather than simply mining and exporting PGMs). The programme has a mandate to develop components, materials, and systems for hydrogen production, storage, delivery, and fuel cells locally, while generating South African intellectual property, advancing human capital (skills), and building an industrial base, hoping to position South



Africa in the global hydrogen value-chain not merely as supplier of metals but as a supplier of higher-value components and systems.

Taken together, there are certainly resemblances between these initiatives and what Baker and Burton (2023) describe as an emerging “decarbonised MEC” where the incumbent regime of elite interlinkages may be fragmenting but not altogether disappearing. They argue that opportunities in green energy, supported by critical mineral extraction, may lead to new value chains across industries and support the emergence of a “new MEC, this time undergirded by the transition to a low-carbon future” (Baker & Burton, 2023).

Finance also organises hydrogen’s insertion into a ‘decarbonised MEC’. The GHCS outlines a financing ecosystem in which the state strategically uses public funds, green bonds, fiscal incentives, and regulatory support to mobilise private investment, supported by substantial development finance institution (DFI) participation and concessional climate finance from developed countries. Key mechanisms include government on-balance-sheet funding, PPPs, export credit financing, green bonds, and blended finance structures, with the explicit aim of de-risking early projects to crowd in private actors and ensure the long-term bankability of South Africa’s green hydrogen economy (DTIC, 2023).

While the financing for green hydrogen is still in its early stages, in June 2023 the SA-H2 Fund was launched as a dedicated finance vehicle for green hydrogen in South Africa. It is structured as a public-private, blended-finance facility supported by actors including Climate Fund Managers (CFM) and Invest International B.V. (of the Netherlands), alongside domestic institutions such as the IDC and DBSA. The Fund’s target is US\$1 billion, to be raised either directly in South Africa or through alternative channels. In June 2025, the Fund made its first major investment, an up-to US\$20 million commitment to the Hive Hydrogen Green Ammonia Project in the Coega SEZ.

This financing architecture is far from uncontested. The Institute for Economic Justice has been critical of the state’s emphasis on blended finance, PPPs and other de-risking instruments, arguing that these mechanisms effectively embed South Africa within The Wall Street Consensus model that prioritises minimising private-sector risk and maximising profit opportunities while reallocating risk to public institutions (Baloyi & Krinsky, 2022). Baker’s (2015) study on the financing of REIPPPP also offers important lessons for thinking through South Africa’s emerging hydrogen finance architecture, not least because



it shows how project-finance logics and demands for bankability have significantly transformed the ownership structures, risk allocations, and development outcomes of South Africa's renewable energy sector. Her analysis turns on the question of the state – whether the state can meaningfully steer a sector increasingly structured around the interests of finance – that is equally relevant for hydrogen.

This question also sits within the broader shift noted at the beginning of the article concerning the financialisation of development under the private turn, in which states are reconfigured to 'escort' private finance into de-risked development asset classes, effectively reorganising the public good around the needs of global investors. Seen through this lens, South Africa's hydrogen development trajectory suggests a deepening of these dynamics rather than a departure from them.

### **Wither financialisation?**

Yet, it is necessary to acknowledge that the term 'financialisation' itself is contested. The most-cited definition, taken from Epstein, states: "financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein, 2005). Christophers (2015), however, contends that the concept's broad gesture to the contemporary importance of finance obscures as much as it explains. Bernards (2025) more emphatically suggests that "talking in terms of financialization is thus ultimately a dead-end if we want to understand the nature of contemporary capitalism" (Bernards, 2025).

Bernards' most recent book, *Fictions of Financialization* (2025), emerges from and builds on this dissatisfaction, and is written in the same spirit and seeking to make an analogous intervention to Reddy's critique of the MEC. As a means to move beyond the term's amorphous and inchoate definitional usage, Bernards – drawing on Lapavistas (2009) – extracts an "orientating metanarrative" from how financialisation is deployed to evoke a particular story about the major transformations of the global political economy over the past half-century. First, financialisation names a distinct phase of capitalism since the late 1970s; second, it denotes a structural shift in capital accumulation from production to finance; third, it describes an expansionary logic through which ever more domains of social and natural life are converted into financial assets.

It is pertinent to note that MEC authors have similarly mobilised this metanarrative to make sense of the country's trajectory. Baker's (2015) analysis of REIPPPP, for one, uses Epstein's definition and traces how the



*Port Nolloth, northwestern coast, Namaqualand.*

*Photo: Caitlin Rickerts*

expansion of financial logics into the renewable energy sector – the growing power of financial actors, the rise of project-finance norms, and the demands for ‘bankability’ – reshape social and environmental outcomes.

With this metanarrative at hand, Bernards – like Reddy – directly challenges its empirical and conceptual bases, insisting that financialisation narratives rely on an imagined coherence of finance that rarely materialises in practice. The empirical chapters of the book are extensive and can’t be reviewed substantially here; it is nevertheless worth drawing out the conceptual flaws Bernards lays against the way financialisation is often invoked across the literature he surveys. He does so by advancing a theoretical intervention that draws on Harvey’s (2018) distinction between a “power-bloc” view of finance and a “process” view. The power bloc view, for Bernards, tends to depict finance as a dominant force that bends the world to its will, and assumes that financial deregulation or policy decisions favouring finance must be evidence of its dominance. Thus, it also tends to cast the state as a passive transmitter of finance capital’s interests. Drawing on the work of Krippner (2011) and Copley (2022) – both of whom show that financialisation often arises unintentionally from crisis-management interventions, not from a unified



project of finance-capital – Bernards suggests reversing the arrows of causation and to “treat the actions of the state as an explanation for financial expansion” (2025, p. 162).

The full significance of this reversal will be taken up more substantially in the next section, particularly as it relates to the politics of the private turn and the state’s role in cultivating it. For now, it is worth emphasising the significance of the parallel interventions made by both Bernards and Reddy. For the former, the central concern is that financialisation has become a ready-made explanation that serves as a theoretical shortcut that obscures how finance actually operates and circulates. Thus, just as the MEC framework – whether in its financialised or decarbonised variants – is criticised for becoming a shorthand for structural dominance, so too do invocations of financialisation risk functioning as a shorthand for the power of finance. For this article, the risk is that green hydrogen will be prematurely interpreted through the convergence of MEC and financialisation before an investigation of how finance is actually behaving in this sector, and how it is enabled or constrained by the state. The next section turns to emerging empirical evidence that challenges the assumptions of financialisation directly.

### **Where is the finance?**

Much of the literature of the private turn in development finance – epitomised by what Gabor (2021) calls The Wall Street Consensus – tends to reproduce the very power bloc conception of finance that Bernards critiques. Across this literature, the expansion of private finance into arenas such as climate mitigation, biodiversity, infrastructure, and social provisioning is frequently read as the deliberate advance of a financial elite, with the state positioned largely as a conduit for the interests of global investors. However, as Bernards argues (2024; 2025), this reading is increasingly hard to sustain in light of finance capital’s repeated indifference to the very projects meant to attract it. Taggart and Power (2024) have similarly discussed how the private turn in development has failed to meet its stated goal of mobilising investment, particularly in low-income countries. Taken together, these accounts indicate the need to treat these shortfalls not merely as anomalies but as central analytic objects through which the dynamics of financialised development can be grasped. Significantly, it raises important questions about the expansionary power of finance capital in relation to the private turn, as well as the state’s embrace of de-risking strategies.

The *South African Climate Finance Landscape 2025* report (Meattle et al., 2025) provides empirical evidence to support this investigation. The report tracked an annual average of R188.3 billion in climate finance for



2022-2023, far below the requirements needed to meet the Nationally Determined Contribution (NDC) and net-zero targets, which will require at least “two to threefold increase in current climate finance, with estimated needs reaching up to ZAR 499 billion per year” (p. 9), demonstrating the limited mobilisation of finance toward these development projects. Energy accounts for the bulk of climate-related investment, averaging R139.5 billion per year (74.1%), largely directed toward renewable electricity generation (p. 9). Significantly, approximately 60% of total climate finance flows originated from domestic sources, while public sources (made up of bilateral and multilateral DFIs, foreign governments, and multilateral climate funds) account for 79.2% (p. 9).

On the hydrogen front, the *Hydrogen Insights 2024* report published by the Hydrogen Council (2024) notes that while announced investments in the hydrogen sector have grown to US\$680 billion, there remains a significant investment gap of US\$335 billion. In South Africa, available evidence indicates that the volume of committed hydrogen finance in South Africa remains both small and overwhelmingly public in origin. South Africa has made a substantial long-term commitment to its own Research and Development (R&D,) investing R1.4 billion into HySA since the programme launched in 2008 (PMG, 2025). The second major pool of committed finance is the SA-H2 Fund, whose raised capital presently comes almost entirely from public and development-finance sources: €50 million from the Dutch state-owned Invest International, €25 million from the European Union’s Global Gateway instrument, and R656 million from South Africa’s Public Investment Corporation (PIC), IDC and DBSA, totalling a committed fund of approximately R2.1-2.2 billion (IEA, 2025). International public funding beyond SA-H2 is most notably made up of Germany’s €15 million grant to the HySHiFT sustainable aviation fuel project at Secunda (*Engineering News*, 2022).

What this shows is that quantified private capital commitments remain minimal for both climate-linked finance more broadly and green hydrogen in particular. Although the nascent nature of the green hydrogen industry may partly explain the hydrogen investment gap, the broader patterns outlined above suggest that, at the most basic level, efforts to mobilise private climate finance have failed on their own terms. Private commitments are difficult to quantify and source. A 2025 report by Just Share (2025) finds that South African asset managers’ limited disclosure practices undermine their claims to responsible investment and hinder meaningful assessment of how they are performing. Nevertheless, the report also shows that South African asset managers significantly lag





behind global peers in responding to climate and biodiversity risks while also highlighting a sharp gap between managers' stated commitments to social development and a just transition, and the actual allocation of capital, which shows little evidence of such priorities. The crucial point, then, is that it is far from evident that finance capital is especially interested in 'maximising' opportunities to invest in development projects – hydrogen or otherwise. Thus, contrary to the dominant narrative of the private turn, the role of finance capital in driving shifts in development strategy is far less direct than some accounts may imply.

Sanlam – who jointly own Climate Fund Managers (CFM) with the Dutch Entrepreneurial Bank, FMO – has contributed R1.3 billion (approx. US\$70 million) since 2017 to each of CFM's prior two blended finance funds (Climate Investor One and Climate Investor Two), representing just 0.093% of its R1.4 trillion total assets under management (Sanlam, 2024). CFM's Climate Investor Three (CI3), the blended finance vehicle dedicated to hydrogen-themed investments in Namibia and South Africa, is a paradigmatic 'Wall Street Consensus' project, structured to use public and concessional capital to unlock institutional investment.

CI3 is organised so that its money flows through separate investment windows: one dedicated to early-stage project preparation and another to later-stage construction finance. The early-stage development tranche is funded entirely by European donor commitments of €150 million and is designed to absorb first-loss and early-stage risks, turning pre-feasibility concepts into investible projects (CFM, 2025).

CI3 then mobilises construction-phase finance through a set of "risk-tiered Equity Tranches" (CFM, 2025), which are explicitly structured to accommodate different classes of investors, such as DFIs and impact investors. Commercial institutional investors are only entering at the most senior and protected tier. The lower-ranking tranches, which are made up by donors and DFIs, absorb potential losses and protect the senior tranche, thus creating a risk-return profile acceptable to pension funds and insurance companies. The South African-specific fund, SA-H2, has received R656 million (approximately US\$37 million) in pledged commitments from the PIC, IDC, and DBSA, while no private institutional investors have yet been publicly disclosed (Creamer, 2025).

The tiered structure is designed to make investment palatable for private capital by absorbing risk. Nevertheless, even with these de-risking mechanisms in place, private participation in blended finance remains limited globally. The *State of Blended Finance* 2025 report (Convergence, 2025) reveals the limited mobilisation of blended finance to least-

developed countries, showing that private sector investment flows from developed to developing countries comprised only 2% of the financing needs for Sustainable Development Goals in 2024. The report further acknowledges that despite growing advocacy for blended finance, the issue of attracting genuine private investment persists. These findings provide clear evidence that even well-designed de-risking structures have not overcome the fundamental disinterest of private capital.

More importantly, this curious “presence-in-absence” (Bernards, 2024) of private finance necessitates a reframing of the role of the state in the private turn. In two interviews conducted earlier this year what becomes abundantly clear is that instead of a coherent ‘decarbonised, financialised MEC’ in which state institutions act as transmission belts for financial interests, the empirical picture is one of a fractured state labouring to coax a fundamentally disinterested financial sector, even as its own institutional fragmentation prevents it from assembling the conditions required for investment. Even amongst advocates for the role of private finance, far from facilitating an influx of green investment, national and provincial officials find themselves engaged in a continuous labour of making projects appear investible.



*Mining on the Northern Cape coastline.*

*Photo: Stephanie Paula Borchardt*



*Dominant framings of green  
hydrogen...risk obscuring more than  
revealing South Africa's present  
conjuncture.*

Yet, as a member of the Western Cape Provincial Treasury acknowledged, these architectures remain aspirational in the absence of investor appetite (provincial treasury official, Cape Town, interview, 20 June 2025). The problem, therefore, is not that finance is excessively powerful, but that it is fundamentally reluctant to engage, and the state has few other options than to try and steer private finance to projects that it either does not have a history of investing in or is reluctant to support. Significantly too, the state's turn to blended finance is explained not as a mechanism through which finance capital dominates development, but as a strategy of last resort: a response to fiscal exhaustion, institutional fragmentation, and the inability of the provincial or national state to fund long-term infrastructure directly.

But even the labour of rendering projects investible is itself carried out inconsistently, undermined by the state's own internal divisions and competing mandates. With respect to the spatial conditions of investibility that SEZs supposedly secure, it was explained that they play virtually no role in rendering hydrogen projects bankable (former SEZ investment officer, interview, 22 October 2025). SEZs are stranded between the Department of Trade, Industry and Competition (DTIC), National Treasury, South Africa Revenue Service (SARS), and provincial governments, each with competing mandates and limited coordination capacity. The tax incentives marketed by the DTIC can only be authorised by the National Treasury. Treasury's approval, however, is governed by criteria that privilege traditional manufacturing activities rather than hydrogen's technical needs.

Provinces, meanwhile, do not have the fiscal autonomy to mediate or resolve these misalignments. Even if these incentives can be formalised, the spatial parameters of SEZs render them largely irrelevant for hydrogen projects. Their geographic footprints are too small to accommodate the scale of renewable energy generation required for co-located electrolysis, and relying on wheeled electricity through the existing coal-dominated grid undermines claims of 'greenness,' jeopardising European Union certification and therefore offtake. Thus,



despite South Africa's widely cited 'comparative advantages' of solar resources, land availability, and the success of REIPPPP, green hydrogen cannot be converted into an investible proposition because neither binding offtake agreements nor credible state guarantees exist. The result is a spatial-industrial infrastructure that not only fails to de-risk investment but actively reproduces uncertainty.

These sentiments, in combination with the data presented above, provide an empirical counterweight to the assumptions embedded in both MEC and financialisation literatures. In neither case do we see a state captured by or aligned with a powerful bloc of finance capital. Instead, we find a state fragmented across jurisdictions, struggling to coordinate itself, and forced to undertake continuous labour to render projects 'bankable' for financiers who remain either ambivalent or actively disinterested. Private finance does not discipline the state; it eludes it.

## **Conclusion**

Dominant framings of green hydrogen – whether cast through the MEC, or through narratives of financialisation – risk obscuring more than revealing South Africa's present conjuncture. Rather than assuming coherent blocs of capital or unified state-finance alliances, I have sought to reopen the empirical terrain to examine green hydrogen outside of these dominant paradigms.

Both the MEC and financialisation literatures share, in different ways, a power bloc view that presumes the coherence of finance capital and positions the state as its conduit. This article has argued that such readings foreclose inquiry at precisely the moment inquiry is most needed. The empirical data presented points not to a resurgent MEC nor to an ascendent financialised green transition, but to persistent financing gaps and a state struggling to compensate for it. Treating this shortfall as analytically central, rather than peripheral, reveals the limits of power bloc thinking and the need to understand why finance fails to enter even strategically prioritised sectors. The very difficulty of securing investment illustrates how tenuous the assumed coherence of 'green finance' is. The state, too, faces its own internal fragmentation over overlapping mandates, misaligned incentives, and limited fiscal capacity that together undermine its ability to construct the conditions of investibility. The labour of de-risking – which is central to both MEC and financialisation narratives – is revealed here as institutionally fragile and not as a mechanism of financial domination, but as a response to structural constraint.



Moreover, the financing gap that has been centred here is not merely a sign of failure but should be taken as a generative analytic entry point for future research. Following Reddy, it signals the need for renewed empirical attention to how interest groups actually form, how state-business relations are negotiated, and how power is exercised across an emerging hydrogen economy. Ultimately, what green hydrogen reveals is not the emergence of a new green MEC nor the triumphant advance of financialised development, but the fragility of the institutional arrangements through which the continuities of these systems of accumulation are imagined.

South Africa's green transition cannot be adequately understood through inherited frameworks alone. This article has taken a first step toward that reorientation. The task ahead is to deepen empirical inquiry into the political economy of green hydrogen, not to confirm the outlines of familiar paradigms, but to open the space for what is actually unfolding.

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# **From bloom to bust**

## **Understanding Namaqualand as a potential green sacrifice zone**

**By Shannah Maree**

**With surging global demand for copper under the guise of 'sustainability,' traditional farming practices, ancestral land, fragile ecosystems, and communal livelihoods have come under growing threat. Drawing on ethnographic fieldwork and local perspectives, SHANNAH MAREE looks at the emergence of 'green sacrifice zones', using Concordia, Namaqualand, as a case study.**


**TwEEfontein mine in Concordia.  
Photo: Shannah Maree**



# From bloom to bust: Understanding Namaqualand as a potential green sacrifice zone

**Shannah Maree**

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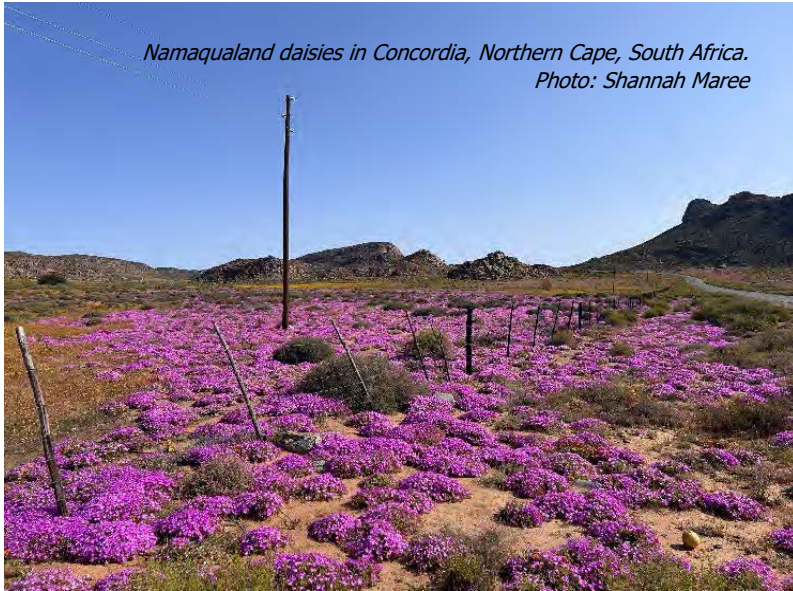
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## **Abstract**

As global demand for copper intensifies – driven by its essential role in renewable energy systems and technological advancement – previously-dormant mining regions such as Namaqualand in South Africa's Northern Cape are being reimagined as new extractive frontiers. This article examines Concordia, a quaint town in Namaqualand, as a case study to interrogate the socio-ecological implications of renewed copper extraction under the guise of the green transition. While framed as ushering in development, these renewed mining ventures risk reproducing historical patterns of capitalist extractivism, now reframed as 'green' or sustainable. Drawing on fieldwork, interviews, and historical context, this article employs the concept of 'green sacrifice zones' to analyse how residents and subsistence farmers in Concordia confront threats to land access, cultural heritage, water resources, and livelihoods. It argues that unless inclusive, participatory, and historically informed approaches are adopted, the green energy transition may deepen existing inequalities and lead to reimagined forms of socio-ecological dispossession.

Travelling through Namaqualand is a journey through a landscape that continuously changes, from rolling green hills to rugged quartzite *koppies* that seem to be lifted from a Pieterneef painting, and onward to vast, flat, semi-arid plains. Yet in spring, between August and October, travellers can appreciate Namaqualand's greatest treasure: a spectacular display of vibrant orange, yellow, pink, purple, and white daisies (*Dimorphotheca sinuate*) that paint the landscape.



*Namaqualand daisies in Concordia, Northern Cape, South Africa.  
Photo: Shannah Maree*

However, as many enjoy the spectacle, we often forget the histories of trauma that are interwoven into the very structures of this landscape. Namaqualand is a unique region plagued by an unforgiving mining history, remnants of which are evident in the present crumbling mining structures, the greyish-black mine heaps, and the rural towns dispersed across the region.

Considering these histories, Namaqualand is now confronted with a familiar problem of extractivism – this time under the guise of sustainability. As the global energy transition takes the world by storm, the region's copper reserves have once again drawn global and national interest. But the question of who and what will be sacrificed continues to hang in the foreground. With this in mind, this article draws on the voices of Concordia's community to reveal several emerging hallmarks of Namaqualand as a potential 'green sacrifice zone'.

Since the mid-1800s, large-scale copper mining has been a significant industry in Namaqualand, contributing substantially to the

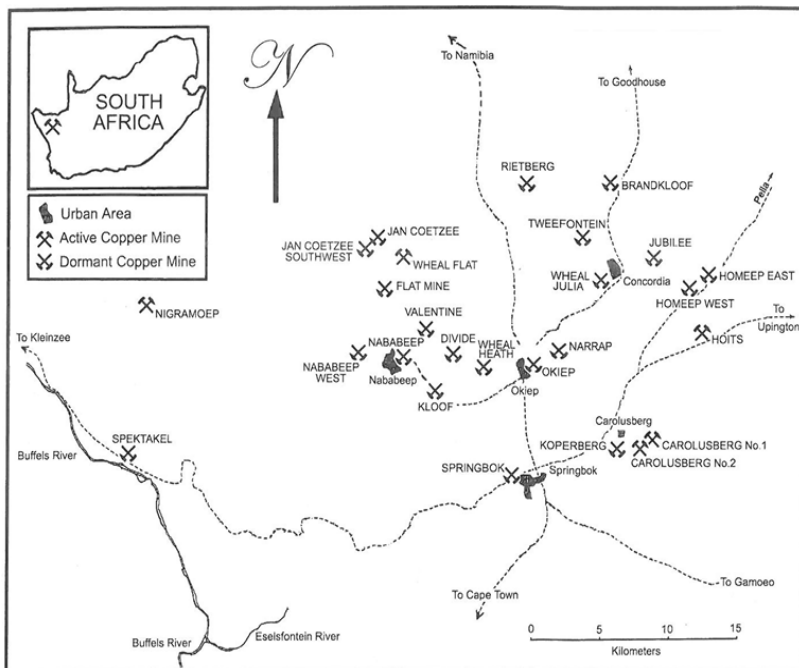




region's social, economic, and infrastructural expansion. According to John Smalberger (1969, p. 81), one of the leading historians on copper mining in Namaqualand, copper was first extracted and exported on a large scale in Springbokfontein<sup>1</sup> in 1852. Subsequently over the years, this industry has experienced renowned waves of 'boom' and 'bust' due to several factors, including transport difficulties (before the construction of the railway line), disappointing copper reserves, questionable foreign investments, competition between mining companies in the region, and conflicts, particularly the South African war (1899-1902) and World War I (1914-1918). During these periods of conflict, copper was in high demand due to its use in bullet jackets and shell casings (Jowell & Folb, 2004, p. 71) and communication equipment such as telegraphs and telephone wires (Brooks, 1918, p. 527).

However, these processes were only successful due to the advancements in technology – such as railway locomotives and diamond drills – which spurred the extraction and exportation of larger quantities of copper ore from an area known as the O'Kiep Copper District (Smalberger, 1969), shown in Figure 1 below, which includes the towns of O'Kiep, NababEEP, Springbok, and Concordia.

**Figure 1: Map of O'Kiep Copper District**



Source: Cairncross (2004, p. 290)



### **Concordia, a quaint town with a significant influence**

Concordia, a small town 15km from Springbok, was memorably described by Georgie<sup>2</sup> – a single mother who moved from Johannesburg about a year ago – as “perfectly preserved in time” (interview, Georgie, 4 April 2025). That said, beneath this idyllic surface lies a rich but traumatic history dating back to the early nineteenth century. Established in 1842 as a German Rhenish Missionary Station, Concordia received its name – meaning ‘peace’ or ‘harmony’ in Latin – to reflect the missionaries’ hope of developing a cooperative relationship between the Nama and San communities in the area. However, this vision of peace was short-lived due to the onset of the so-called ‘copper mania’ in 1852, which spurred intense copper extraction lasting well into the 1980s.

Concordia was a vital part of the O’Kiep Copper District, hosting four mines that produced significant quantities of copper over the years (Smalberger, 1969). Today, remnants of this mining legacy, as well as international influence – particularly from Cornwall and Swansea – are visible in the region’s distinct stone masonry, as shown in the photos below. However, after more than 150 years of production, Namaqualand’s copper industry ceased in 2003 due to a decline in demand paired with unstable global copper prices (Orion Minerals, 2021, p. 7).

During the colonial and apartheid periods in South Africa, Concordia – along with six other towns in Namaqualand<sup>3</sup> – was designated a “Coloured Reserve” under the *Native Trust and Land Act* (No. 18 of 1936), and the *Group Areas Act* (No. 41 of 1950). This legislation sought to control, manage, and contain individuals who were classified as ‘Coloured’ under the racial classification system. Today, Concordia is classified as a lower-middle-income ‘township’ comprising predominantly Afrikaans-speaking Coloured<sup>4</sup> individuals. The majority of the community falls within the working-age group of 15 to 64 years, but many of them remain without work, largely due to volatile employment opportunities within the mining, quarrying, and agricultural sectors – industries that constitute the primary source of livelihood in the region.

***Namaqualand is now confronted  
with a familiar problem of  
extractivism – this time under the  
guise of sustainability.***

Cornish-built ore shoots at the Tweefontein mine in Concordia.  
Photo: Shannah Maree





## **Green extractivism: A precursor to Namaqualand as a potential sacrifice zone**

Copper is at the forefront of sustainable technological innovation due to its high recyclability and exceptional conductive properties, making it an indispensable material for wiring, cabling, and heat transfer essential for electrification. Therefore, as the world moves toward renewable energy technologies – such as wind turbines, solar PV panels, and batteries – to meet decarbonisation commitments, the demand for high-grade copper is rising at an exponential rate.

These commitments include the European Union's Green Deal, aimed at minimising emissions by at least 50% by 2030 and 55% by 2050; China's pledge to achieve zero net emissions by 2060; and South Africa's Just Transition Investment Plan (JETIP), aimed at decarbonising the country's energy sector in a socio-economically equitable way. These climate strategies are inadvertently compelling geopolitical competition between major countries, thereby creating a new era of 'copper mania'. However, researchers from S&P Global (2022, p. 9) warn that at the current rate, copper demand will quickly outgrow the rate of supply, unless new or alternative sources are discovered.

This supply-demand gap has spurred mining companies, such as Johannesburg Stock Exchange-listed Copper 360 and Australian-owned Orion Minerals, to develop innovative copper extraction projects in Namaqualand. Copper 360 and its subsidiary, SHiP Copper Company, describe their approach as a "cluster mining model". There is a central ore processing facility that draws feed stocks from a widely spread and varying cluster of resource sites. The facility first focuses on reprocessing old mine tailings (the large heaps of mine waste left over from extraction) from several historical mines in Concordia – namely Rietberg, Twefontein, and Homeep East – that are believed to contain over 70,000 tonnes of copper (Copper 360, 2023). Secondly, it expects to obtain newly-mined ore from mines to be developed from new exploration sites across 19,000 hectare of Concordia's communal land (see Figure 2 below). This model, the developers hope, will mark the beginning of large-scale copper output on a scale the region has not seen in decades.

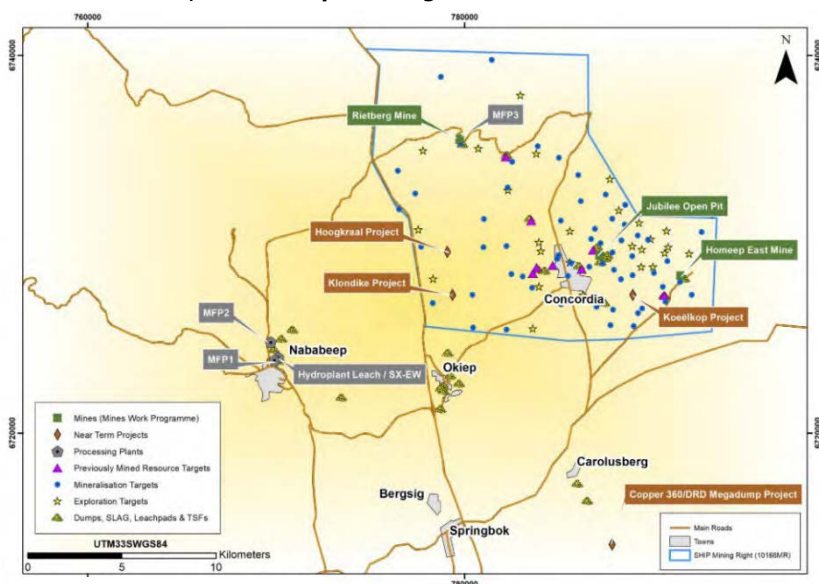
But what does this mean for Concordia's community which surrounds the nodes of the developing cluster of waste dumps and small mines? While the cluster mining model aims to boost the current precarious copper supply, it risks positioning Namaqualand as a site of 'green' extractivism and potentially transforming the region into a sacrifice zone by damaging the ecosystems and inevitably displacing surrounding communities. This impact reveals a vital flaw within the country's Just Energy Transition Framework that; while copper may be





'green' for consumers such as states, corporations, and even non-profit organisations (NGOs), it is not necessarily sustainable for the delicate landscape or the neighbouring communities residing in rural regions.

**Figure 2: The cluster mining model from Copper 360: Ore sourced from diverse sources, for central processing**



Source: Copper 360 (2025)

Acosta (2013, p. 62) defines extractivism as a practice embedded within the capitalist ideology that views nature as a commodifiable resource. This narrative allows corporations to remove and export natural resources – particularly from less-affluent, mineral-rich countries – on a large scale. Green extractivism, on the other hand, is a contemporary extension of Acosta's definition, maintaining that while large-scale mining claims to serve sustainability goals, the exploitation of natural resources continues under the guise of *sustainability* and *environmental responsibility*. Despite its emphasis on sustainability, this approach produces the same social and environmental challenges as traditional extractivism.

Green extractivism arises from what Dunlap and Brock (2021, p. 108) term "green-washing," a strategy whereby corporations label their actions as 'sustainable' to hide or distract from the fact that they continue to exploit natural resources to obtain a profit. A common example of green-washing is soft drink companies marketing their plastic bottles as 'eco-friendly' because they are made from recycled or 'organic' materials.



However, they are still largely composed of plastic and, therefore, continue to contribute to plastic pollution. Likewise, by labelling copper as a 'critical' or a 'transition' mineral, mining corporations can justify large-scale extraction at the expense of the environment and the displacement of the surrounding communities.

For Zografos and Robbins (2020, p. 543), these socio-environmental consequences are the hallmark of green sacrifice zones, which they explain in the following way:

*... the logic of sacrificing a certain space or ecology [which] can be expanded to include places and populations that will be affected by the sourcing, transportation, installation, and operation of solutions for powering low-carbon transitions, as well as end-of-life treatment of related material waste.*

In other words, green sacrifice zones are based on green-washed rationales that continue to drive large-scale mineral extraction for 'sustainable' causes, while surrounding communities and environments are inevitably overlooked in the process. In Namaqualand, we observe these trends, particularly in Concordia, as large-scale copper mining ventures – driven by national and international pressures – threaten traditional farming, ancestral land, fragile ecosystems, and inevitably, community livelihoods.

### **Indicators suggesting Namaqualand could be a potential green sacrifice zone**

Across Namaqualand, scars of the traumatic past continue to haunt contemporary realities, with the failing local economies and crumbling infrastructure in rural towns. Travelling to Concordia, these scars are evident in the heaps of mine waste that protrude from the otherwise serene landscape. Although I was at first taken aback by the size of these heaps of mine waste on the side of the road, I barely acknowledged their significance until I reflected on my interviews and ethnographic observation. I now recognise that these mine tailings stand as a clear reminder of the social and environmental impacts of past extractivism, while also foreshadowing what may lie ahead.

***While the cluster mining model aims to boost the current precarious copper supply, it risks...transforming the region into a sacrifice zone by damaging the ecosystems.***



During my fieldwork in Concordia, I conducted interviews with 19 residents, six local subsistence farmers, and a representative from Copper 360 and from Orion Minerals. Initially, I relied on snowball sampling,<sup>5</sup> which included referrals from previous interlocutors, but I observed that this approach skewed my initial research as participants often referred me to others who shared their opinions, thereby limiting the diversity of perceptions. To avoid this, I opted for a more random selection method, which included approaching residents in shops and on the streets. While this method initially proved challenging to some extent – as some were wary of speaking to me because I was an *inkomer* (outsider) – after spending time in the town and speaking to different individuals, more people were willing to speak to me.

Additionally, what I had not fully considered was the expectation that would accompany my position as a university student. I vividly recall moments when my participants – particularly those who opposed the renewed mining operations – expressed gratitude, believing that I was there to “help them push back” against the mining company. Despite my repeated insistence that I was not in any position to advocate for or represent any particular side, my academic presence was nonetheless perceived as support, which made navigating these perspectives particularly challenging.

Over the course of my research, I identified four main perspectives on the renewed copper mining: (1) full support, (2) total opposition, (3) conditional support, and (4) neutrality. I initially interpreted the absence of opinion as a lack of awareness of the mining activity in the town. While this assumption held for some, I later observed that many deliberately chose to withhold their opinions, fully aware of the community tensions arising from these conflicting perspectives.

Considering these diverse perspectives, my fieldwork in Concordia illuminated three questions that residents and farmers shared regarding the renewed interest in copper mining in the region: Will the community<sup>6</sup> finally be recognised as key stakeholders? What will become of the communal farmland? Lastly, what will happen to the residents, the farmers, and the town as more mining companies buy into the cluster mining model approach? Drawing on the data I have accumulated during my fieldwork in September 2024 and April 2025, I delve further into these concerns.

### ***The fight to recognise the local community as key stakeholders***

As the world continues to apply the capitalist mentality of ‘take all and leave nothing,’ indigenous and often rural communities across the globe are repeatedly overlooked as legal landowners and viable partners within extractive processes and today Concordia faces such a challenge.



In February 2023, Concordia's Community Property Association (CPA) received the title deeds to their communal land, which was held in Trust by the Minister of Agriculture, Land Reform and Rural Development since 1998, as per the *Transformation of Certain Rural Areas Act* (No. 94 of 1998). However, during this period, several mining rights were awarded, reportedly without the community's consent.



*In March 2024, communities across Namaqualand joined forces in Springbok to protest against improper community consultation.*

*Photo: Ashraf Hendricks, GroundUp.*

*The publishers thank GroundUp for making this photo freely available.*

As a result, members have reported that having already been issued prospecting or mining permits, these mining companies have evaded their social responsibility to consult with the community and obtain their consent. Despite the advocacy of Concordia's CPA and local activist group, Vrywillige, Vooraf en Voortdurende Volledige Ingeligte Toestemming (VVVT),<sup>7</sup> Namakwaland – who consistently demand proper consultation (see photo above) – both the state and the relevant mining companies have reportedly shown little willingness to comply. For residents and local subsistence farmers, this advocacy is not only about urging the state and the mining companies to acknowledge the communities of Namaqualand as key stakeholders. It is also about ensuring that the environment and the people who rely on the land endure alongside the renewed mining activities. As Sonya, a resident in Concordia, stated during an interview, “Waar is my regte as 'n mens?... hulle moet ons herken as inwooners van die dorp!” (Where are my rights as a person?... they [the mining companies and the government] must acknowledge us as residents of this town!) (interview, Sonya, 12 September 2024).



*Goat kids in a kraal on a family plot or 'saaiperseel' in Concordia, Northern Cape.*

*Photo: Shannah Maree*

Adequate consultation is not merely about the benefits that this renewed mining activity can provide to residents and local subsistence farmers, but how the community, along with the surrounding environment, can withstand both the current mining operations and the long-term impacts once mining operations cease. Nadia, a prominent CPA member in Concordia, explained that proper consultation with the mining companies would ensure that “the town survives, our people survive, [and] our *farmers* survive...” (Nadia, interview, 10 September 2024).

***Threat to traditional farming methods: Land, livelihoods and heritage in danger***

Another pressing fear that residents and local subsistence farmers in Concordia expressed is the potential impact that the copper mining expansion could have on their complex farming practices. Farming is not only essential for survival, but it is also a source of pride and kinship. During our discussion, Nadia explained that these traditional farming methods are passed down and honoured for generations and that this inherited knowledge is vital in the context of Namaqualand’s rough terrain and semi-arid desert climate, where farmers are not afforded a range of cultivation options. She explained that farmers in Concordia have “learnt how to farm in rhythm with nature”



(Nadia, interview, 10 September 2024), which is especially true on the *saaipersele*, which are often family-owned plots that have been passed down for more than five generations.

Subsequently, subsistence farming is described as “*die agterdeur*” (the backdoor) because it was a way to preserve the community’s survival through tough financial periods, especially when the mines closed in the past. Today, it offers similar reassurance given the scarce employment opportunities. However, with large-scale proposals, such as the cluster mining model, community members raised concerns about this expansion’s impact on traditional farming methods, such as pastoralism.<sup>8</sup> Finnley, a local subsistence farmer, explained that if the mining company moves forward with these extractive models:

*... that’s going to be barren land... and that is our grazing land. We are farmers and farming is our way of income ... if the mines are going to take over, where will I get the land to do that? ... We cannot eat copper dust!*  
(Finnley, interview, September 2024).

For farmers, the risk lies in the invasive mining techniques – such as blasting and digging – that threaten to disrupt the surrounding biodiversity and compromise both cultivation and grazing, which reportedly will undermine their ability to sustain themselves and the community.

In addition to these concerns, Nadia explained that Concordia “is not a rich community. It’s a community that *has to* survive on what’s available to them,” and this includes depending on the environment and the people around them (Nadia, interview, 10 September 2024).

Cindy, a resident of Concordia, illustrated the link between farming and kinship, explaining that growing vegetables – such as tomatoes, mielies, or cabbage – is not just for her family, but for the benefit of others in the town who may be in need. She emphasised that during challenging periods, members of Concordia’s community are forced to rely on one another. Cindy explained that when she could not provide for her family, she turned to her neighbours for support, and in turn she did the same for them (Cindy, interview, 11 September 2024). Consequently, farming has been a critical resource in Concordia that has both economic and symbolic value for the residents and farmers, which in turn shapes individual arguments that oppose the expansion of the copper industry.

***Concordia: a town at risk***

As proposals for large-scale copper extraction projects develop in Concordia, many residents and subsistence farmers expressed their concerns about the possibility that either the land will become uninhabitable or the community will be forcefully displaced. I witnessed this anxiety firsthand during an emotional but revealing interview with Sonya, whose family has lived in Concordia for more than three generations. When I asked her about the reason for her anxieties about the future renewed mining activity, Sonya explained:

*... dit gaan oor my kinders se toekoms. Gaan daar 'n dorp vir my kinders wees? Gaan daar 'n huisie wees waarnatoe my kinders kan terugkeer?... Ek is nie bereid om vir Concordia op te gee nie. Ek het 'n ma verloor, ek het 'n pa verloor... almal rus in Concordia se stof. As ek moet toelaat dat die mynbou-aktiviteit vir my verdryf uit my dorp uit, waarheen gaan ek terug?... Ek is nie bereid om geld te vat om iewers anders 'n lewe te skep nie. (... it is about my children's futures. Will there be a town for my children? Will there be a house that my children can return to?... I am not prepared to give up Concordia. I lost a mother, I lost a father ... everyone rests in Concordia's dust. If I have to allow the mining activity to push me out of my town, where will I go?... I am not prepared to take money [from the mining companies] to create a life somewhere else (Sonya, interview, 12 September 2024).*

For her, mining is not only a threat to her children's futures but also risks displacing her family from their ancestral land, thereby threatening their heritage. In September 2024, I caught a glimpse of Concordia's heritage when my key informant, Urwin, and I visited the town's oldest graveyard (see photo below), which had tombstones dating back to the early 1900s, including that of his great-great-grandfather. This risk emerged as a major driver behind the current opposition and ambivalence because of South African laws – such as *The Land Expropriation Act* – that allow the state to seize land without compensating owners.





*Concordia's oldest graveyard.*

*Source: Shannah Maree*

Sonya also voiced her concern about the town's ability to withstand the impact of invasive mining activities, particularly the historical underground tunnels from the Wheal Julia and Hester Maria mines that run beneath the town. During our discussion, she recalled moments from her childhood when her mother woke the family up in a panic during an earthquake that caused their home to shake, which was believed to have been a result of the collapse of one of these tunnels:

*... [E]k het nooit verstaan hoekom my ma in die nag ons wakker gemaak – “ons moet uitgaan, die myn val!” Dan kom ons uit en kyk ek mos reg op die myn, dan vra ek myself: “is my ma nou mal? Die myn staan! Nou hoekom maak sy vir ons wakker?” Maar nou is ek groot en beseft dat die myn het nie daar geval, die myn het onder mamma se huis geval. In daai area ... [b]laie mense het by ons gekla dat 'n sekere tyd in die nag hoor hulle hoe klippe val onder hulle se huise. Dit beteken dat daai hele area staan op 'n spelon ... (I never understood why my mother woke us up one night: “We need to leave, the mine is collapsing!”). Then we go outside and I am looking directly at the mine, and I'm asking myself: “Is my mother now crazy? The mine is still standing! Why did she wake us up?”. But now that I am older, I realise that the mine did not collapse *there* [points in the direction of the Hester Maria mine], the mine*



collapsed under my mother's house [points to the ground]. In that area ... Many people have complained to us that at a particular time in the night, they can hear stones falling under their houses. That means that that entire area is above an underground tunnel ... (Sonya, interview, 12 September 2024).

I observed that for Sonya, losing her home would not only mean losing a future for her children. It would also mean severing ties to her ancestral homeland. I argue that this concern reveals that place is a landscape that embodies memories and a sense of belonging, thereby connecting individual identities to the land, the community, and to the trauma of past injustices at the hands of mining companies.

### ***Natural resources under pressure***

As part of the Succulent Karoo biome, Namaqualand's environment is described as a biodiversity hotspot (Davis et al., 2016, p. 10), with unique animal and plant species. However, climate change is an increasing concern in Namaqualand. With increasing surface temperature, stronger winds, and changing weather patterns, this region is becoming increasingly vulnerable to processes such as desertification and land degradation. For communities in Namaqualand that depend on this land for survival, climate change threatens water availability, grazing pastures, and agriculture. I noted a recurring fear that invasive mining practices could further strain the region's already limited natural resources, with aquifers<sup>9</sup> ('*boorgate*' in Afrikaans) emerging as a central point of concern. Neil, a young farmer who recently inherited his family's plot or *saaiperseel*, expressed this fear, stating that:

*We don't depend on just rainfall in order to wet our fields and provide water to our livestock. We have underground waters, aquifers... So, [by] blasting and doing what [the mining companies] are currently doing, it's disrupting our lives in more than just one way.* (Neil, interview, 5 April 2025).

For him, invasive mining techniques would not only threaten the surface but could also disrupt and pollute these underground water reserves, which are crucial for livestock and crop cultivation, particularly during periods of low rainfall. In Concordia there is limited access to water pumps because these are costly and installation requires technical skills. Therefore, threatening the quality of the aquifers would also mean threatening the land's long-term water supply and the community's overall food security.



### **Concluding remarks**

Concordia, which is representative of the broader region, is a telling case that illustrates potential hallmarks of green sacrifice zones. As the global movement towards sustainable energy increases, mineral-rich regions like Namaqualand confront familiar challenges of extractivism reframed under the guise of 'sustainability' or 'green development'. While proposed mining models aim at tackling the copper supply-demand gap, it is important to recognise this movement's potential long-term implications. From this perspective, towns such as Concordia reveal the emerging hallmarks of 'green' sacrifice zones, where the pressures of renewed extraction threaten local communities.

Within this shifting landscape, collective communal action – although fragmented due to contrasting opinions – critically frames responses to the threat of renewed expansion as part of green extractivism in Namaqualand. These collective actions are shaped by social networks within the community, through stories passed down from generations, and by contemporary experiences. While members of Concordia's community have a common history, each person navigates this history differently, depending on their personal experiences. While some may have positive memories of benefits that copper expansion provided, such as employment and local development, others may share a collective memory of trauma embodied through dispossession, environmental degradation, and labour exploitation, thereby shaping perspectives of opposition and ambivalence.

***... there is more local collective action  
to oppose these copper ventures –  
driven by CPA members and other  
prominent actors within the  
community – thereby  
challenging celebratory  
narratives that portray this copper  
expansion as inherently 'sustainable'.***



*Mine tailings as a reminder of the past and a foreshadowing of the future,  
O'Kiep, Northern Cape.*

*Photo: Shannah Maree*

In Concordia, resistance and ambivalence towards the renewed copper interests are far more overt than perspectives that advocate for it, as people are more verbal about their anxieties or fears than they are about their support. Consequently, there is more local collective action to oppose these copper ventures – driven by CPA members and other prominent actors within the community – thereby challenging celebratory narratives that portray this copper expansion as inherently ‘sustainable’. Despite these contrasting perspectives, a shared theme emerges: a desire for change; change in the current socio-economic realities through opportunities that promise growth; change in the landscape and the imagined future of the town; and change in how mining on communal land is negotiated and governed. As the first site targeted within the broader cluster mining model in Namaqualand, Concordia represents a critical moment for rethinking extractive futures. If copper expansion in Namaqualand is to contribute meaningfully to a sustainable future, it must reimagine mining in a manner that avoids reproducing extractive landscapes and rather aim to cultivate futures that are socially just, environmentally responsible, and genuinely sustainable to all.



*An indication of acid mine drainage from Hester Maria,  
an abandoned mine on the periphery of Concordia.  
Photo: Shannah Maree*





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*View on top of Homeep West mine in Concordia with Apollis Cottage in the foreground*  
*Photo: Shannah Maree*





## INTERVIEWS

All interviewees have been assigned pseudonyms.

**Georgie** – New resident in Concordia (April 2025).

**Sonya** – Resident in Concordia (September 2024).

**Nadia** – Resident in Concordia (September 2024).

**Cindy** – Resident in Concordia (September 2024).

**Finnley** – Local subsistence farmer (September 2024).

**Urwin** – Resident in Concordia (September 2024).

**Neil** – Young subsistence farmer (April 2025).

## ENDNOTES

<sup>1</sup> Today, Springbokfontein is known as Springbok, and is the largest town in Namaqualand.

<sup>2</sup> All participants have been assigned pseudonyms

<sup>3</sup> The other five areas are Leliefontein, Pella, Komaggas, Steinkopf, and Richtersveld.

<sup>4</sup> This classification has become an official category to describe people of 'mixed' ancestry. However, many of the individuals I interviewed during my fieldwork prefer identities such as "Nama" or "Namaqualander," which they noted were more reflective of their cultural and regional heritage.

<sup>5</sup> According to Ungvarsky (2025), snowball sampling is "a research recruitment method that relies on existing participants to refer new subjects, allowing researchers to build a larger sample over time".

<sup>6</sup> I use the term community to collectively refer to the residents in the town and the local subsistence farmers who live on Concordia's commonage land.

<sup>7</sup> VVVT or "Vrywillige, Vooraf en Voortdurende Volledige Ingeligte Toestemming" in English translates to Free, Prior and Informed Consent.

<sup>8</sup> According to Samuels (2013, p. 1), pastoralism is a system based on livestock mobility that enables herders to adapt to resources, access clean water and grazing areas, avoid diseases, and encourage socio-economic benefits.

<sup>9</sup> Aquifers are underground water reserves found in bodies of rock or sediment. In Namaqualand, farmers use these aquifers as additional water reserves to feed their livestock and water their crops.

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*Throughout this article, grammar and spelling were reviewed and refined using Grammarly.*

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# Youth development, vulnerability, *and the unspoken costs of renewable energy in rural South Africa*



This commentary draws on fieldwork conducted in a small Karoo town to explore how large-scale national renewable energy projects, which are lauded for providing much-needed socio-economic resources, can have unexpected and disruptive outcomes in the context of poverty, limited access to services, and social inequalities. CAITLIN RICKERTS focuses on the impact on young women and girls who, despite their agency, encounter new forms of vulnerability.



### Introduction: 'The girls here are Gift of the Givers'

*Student: Miss, do you know we have Gift of the Givers here?*

*Ann: Oh, yes! It's an organisation that provides you with...*

*Student: No, Miss. The girls here they are [the] Gift of the Givers.*

*Ann: The girls here?" (Pauses, confused.)*

*Student: They are having sex with these men that they don't know. (Interview, Ann,<sup>1</sup> teacher, August 2024)*

This exchange during my fieldwork<sup>2</sup> highlights how young people in the Northern Cape, where many Karoo towns remain marginalised within the broader economy, experience development efforts. It points to the complex, often troubling ways in which global and national development agendas, such as South Africa's renewable energy programme, become entangled with local socio-economic realities. While statistics might convey a town strained by poverty, youth unemployment, and high dropout rates, as in many Karoo towns, they do not fully capture the layers of life lived under these conditions. The excerpt above offers a glimpse into the layered, emotional, and at times disorienting experience of doing fieldwork in a place where the consequences of development can ripple through the lives of learners in deeply personal and troubling ways. It illustrates how structural constraints restrict agency.

Gift of the Givers<sup>3</sup> is a well-known humanitarian organisation associated with aid and relief; here the phrase takes on a dark, ironic twist. Rather than receiving assistance as development typically implies, the girls are the ones being 'given' or giving themselves in transactional encounters shaped by vulnerability and limited options. Their agency, though present, is deeply constrained, exercised within a context of structural inequality and precarious survival.

This article examines how large-scale national renewable energy projects, while framed in terms of progress and sustainability, can produce uneven and sometimes disruptive effects in rural towns. It demonstrates that while women and young girls exercise agency, their decisions are influenced and often limited by structural factors such as poverty, unemployment, and entrenched gender inequalities (Farmer, 2009). Although quantitative data and structural analysis are important to understand broader structural issues, they should be supplemented with in-depth qualitative engagement, as lived experiences and contextual nuances are crucial for grasping the full complexity of social realities.



Firstly, the article points out the tension between structural constraints and agency, showing how choices are shaped within limiting socio-economic and gendered contexts. Secondly, it advocates for qualitative research that brings lived experiences to the fore, surfacing the textures, contradictions, and nuances that are often flattened or obscured by quantitative methods. This article draws on qualitative fieldwork conducted in a small town in the Karoo, where renewable energy development has accelerated in recent years. Using a case study approach that includes semi-structured interviews, focus group discussions, observation, and document analysis, I examined how the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), often regarded as one of South Africa's most successful green energy initiatives, unfolds in daily life in relation to learners' development within this small Karoo town.

*... persistent poverty,  
unemployment, and various social  
ills remain deeply entrenched  
despite all the development  
happening.*

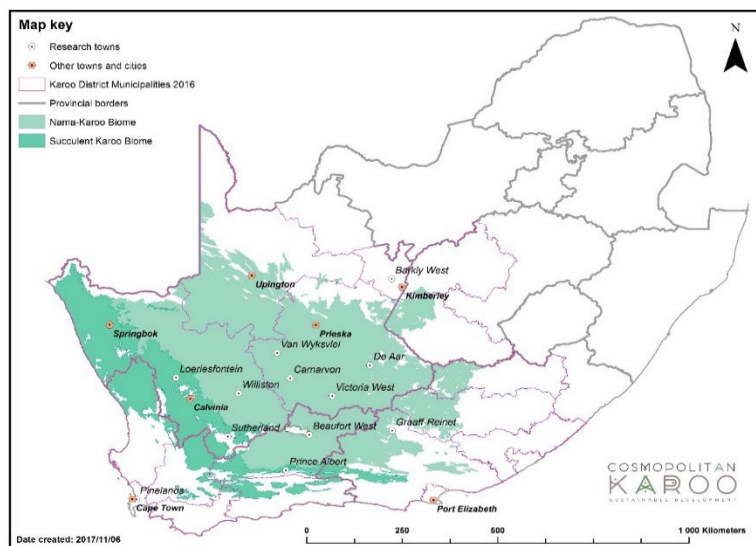
The town in question remains deliberately unnamed, signalling that the dynamics explored here are not isolated but emblematic of broader patterns across small towns in the Northern Cape province of South Africa. In these settings, the expansion of renewable energy infrastructure may promise national advancement, in terms of energy security and addressing climate change commitments, yet it also brings unexpected and under-acknowledged forms of social disruption, unsettling local rhythms and reshaping everyday life in ways that escape the dominant narratives of sustainability.

### **Karoo 'dorpies' and the Northern Cape**

Development can be broadly understood as improving the quality of life, reducing poverty, and fostering sustainable progress. However, in places like the Karoo (see Figure 1 below), rural, historically marginalised and shaped by the legacies of colonial exploitation and apartheid-era oppression, persistent poverty, unemployment, and various social ills remain deeply entrenched despite all the development happening around the towns (Walker & Vorster, 2024; Borchardt, 2023;

Malope, 2022). While this article draws on fieldwork from one town in the Karoo, many of its other small towns, which also host renewable energy companies, have similar characteristics, highlighting the realities in which these developmental dynamics are unfolding, often more quietly and mostly undocumented (Mabele et al., 2024).

**Figure 1: Situating the towns within the Karoo**



Source: DSTI/NRF-SARChI in *The Sociology of Land, Environment and Sustainable Development* (2017)

The following section offers a closer look at the structural and historical characteristics of small towns in the Northern Cape, foregrounding the socio-economic conditions that shape how development is experienced on the ground. This is illustrated in Walker and Vorster (2024), which explores the social conditions of Loeriesfontein in 2019, Sutherland in 2017, and Vanwyksvlei in 2016.<sup>4</sup> Like many towns in the Northern Cape, these settlements emerged as service hubs for the sheep farming industry, which by the late 1800s had become predominantly controlled by white owners (Walker & Vorster, 2024). These historical foundations continue to influence patterns of inequality, access, and opportunity in the present, making them critical sites for understanding the uneven impacts of contemporary development initiatives such as renewable energy expansion.

Households in these towns typically feature informal backyard structures and pit latrines, with limited access to piped water (Walker & Vorster, 2024). The average household size is 3.5 in Loeriesfontein, 4 in





Sutherland, and 5.7 in Vanwyksvlei, all of which are above the national average of 3.3 (Walker & Vorster, 2024).

Of the residents employed in these towns, 30% in Loeriesfontein, 37% in Sutherland, and 61% in Vanwyksvlei earn R1,000 per month or less (Walker & Vorster, 2024). While 64%, 78%, and 80% of households in these towns respectively have at least one government grant, this is the main source of income for 46% of households in Loeriesfontein and 37% in Sutherland (Walker & Vorster, 2024). Furthermore, 20% of households in Loeriesfontein, 15% in Sutherland, and 15% in Vanwyksvlei reported experiencing food insecurity<sup>5</sup> (Walker & Vorster, 2024). These statistics paint a sobering picture of rural vulnerability, raising critical questions about the adequacy of current development interventions and the long-term sustainability of livelihoods in these communities.

Less than half of the residents of these three towns have completed matric, while among those aged 15-18 years old, 33% in Loeriesfontein, 40% in Sutherland, and 30% in Vanwyksvlei are not attending school, indicating alarming dropout rates (Walker & Vorster, 2024).

But this does not come out of nowhere. The Northern Cape Department of Education has faced ongoing difficulties that have overshadowed its achievements, leading to significant interruptions in students' learning (Martin, 2016). The South African Democratic Teachers' Union (SADTU) noted that the Northern Cape Department of Education failed to deliver on promises made in December 2024, leaving schools unprepared for the start of the 2025 academic year (SADTU, 2025). While many schools did not receive essential funds, some received only 27%, which was still insufficient for basic supplies, leading schools to start the academic year without stationery or feeding schemes for learners and raising concerns about how utilities would be paid (Rahim, 2025).

The Democratic Alliance criticised the Northern Cape Department of Education for its poor financial management, pointing to R3.9 billion in unauthorised, irregular, fruitless, and wasteful expenditure (Van der Lith, 2025). While the Northern Cape Department of Education disputes these claims, operational challenges are clear. Delivering quality education and preventing learners from dropping out becomes especially difficult when the provincial department fails to fulfil its commitments.

Teenage pregnancy statistics are also concerning; 33% of women aged 20-29 years in Loeriesfontein, 46% in Sutherland, and 48% in Vanwyksvlei had their first pregnancy before the age of 20 (Walker & Vorster, 2024). South Africa has one of the highest teenage pregnancy



rates globally, driven by factors such as poverty, transactional relationships, limited reproductive services, lack of parental guidance, peer pressure, and misinformation (Mbongwa et al., 2024).

In the 2023/24 financial year, 122,000 teenagers, including 2,716 aged 10-14 and 119,587 aged 15-19, became parents (Abrahams, 2024). In the Northern Cape specifically, every quarter there were 900 pregnancies among 15 to 19-year-olds, of which 20 were girls from 10 to 14 years old (Sobuwa, 2023). Pregnancy in this age group has profound implications for both the young girl's future and their role in the broader economy, as it may perpetuate cycles of poverty (Van Niekerk et al., 2024).

These challenges are compounded by other health risks facing young people in the region. In a study by Louw et al. (2024) that screened 3,001 primary school children across eight study sites for Foetal Alcohol Syndrome Disorder (FASD) found that of the 395 participants diagnosed with FASD, the Northern Cape had the highest prevalence, ranging from 15.71% to 20.36%, compared to Free State, Western Cape, and Eastern Cape rates that ranged from 5.15% to 11.02% (Oliver et al., 2025).

While these small towns have attracted investment through renewable energy initiatives and associated local SED commitments (Walker & Vorster, 2024), residents often perceive these interventions as primarily advancing national agendas rather than addressing local needs, revealing a persistent disconnect between externally driven development efforts and community priorities (Walker & Vorster, 2024; Borchardt, 2023; Malope, 2022).

Beneath these broad development ideals lie fractured realities that expose the limits and sometimes the harm caused by top-down development. The Karoo is often imagined as a vast, empty landscape, a perception that has historically enabled the imposition of large-scale projects with little consultation. In reality, it is home to communities with long, complex histories shaped by colonial violence and dispossession, apartheid-era forced removals, racialised poverty, and uneven access to services. Today, renewable energy companies are among the most visible actors in these communities, contributing to local development in various ways.

### **From apartheid legacies to energy policy reforms**

South Africa's post-apartheid transformation programmes, which aimed to address broader development goals alongside local community development, have been marked by both optimism and complexity. Following the transition to democracy in 1994, the Reconstruction and Development Programme (RDP) set out to undo





centuries of racialised inequality by ensuring basic services, redistributing wealth, and alleviating poverty (Republic of South Africa, 1994). This was later abandoned in favour of the Growth, Employment and Redistribution (GEAR) strategy, which sought to stimulate economic growth and create jobs (ANC, 1997). The RDP and GEAR strategies targeted housing, sanitation, water, electricity, and education, as access to these had been primarily reserved for white urban and industrial centres, while rural and black communities remained severely underserved (Republic of South Africa, 1994; ANC, 1997).

The post-apartheid government introduced energy reforms to help redress these historical inequalities and promote inclusive development. The 1998 *White Paper on Energy* aligned with the RDP and GEAR strategies, underscoring the need to diversify the energy mix by investing in renewable sources (DME, 1998). This involved permitting independent power producers (IPPs), privately owned energy companies, to contribute to the national electricity grid (IPPO, 2025). The move to include private companies was designed to dismantle the monopoly of South Africa's state-owned electricity utility, Eskom, attract private capital, and accelerate a green energy transition in response to climate change agreements, while also enhancing the development outcomes for local communities (Borchardt, 2023; Malope, 2022). This means that development is no longer guided solely by government policy but now also involves private companies with contractual obligations to support the broader development initiatives.

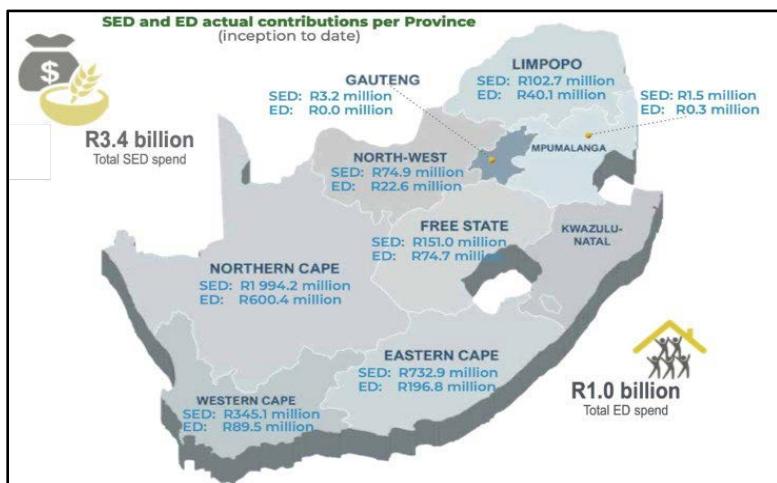
The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), launched in 2011 by what was then-called the Department of Mineral Resources and Energy, National Treasury, and the Development Bank of Southern Africa (DBSA), requires successful bidders to spend a portion of their revenue from electricity sales to Eskom on local socio-economic development (SED) and enterprise development (ED) within towns that host these IPPs (Montmasson-Clair & Ryan, 2014). The goal is to ensure that host towns, often rural, impoverished and historically marginalised, can benefit from hosting large-scale renewable energy infrastructure. However, a significant gap exists between developers and local communities or governments. There is no formal requirement for IPPs to collaborate on development initiatives, either with local municipalities or with one another, nor are they obligated to mitigate the negative impacts their presence may have on host towns (Mabele et al., 2024).



## SED and the geography of renewable energy

Rather than treating corporate social responsibility as a voluntary initiative, the South African national government integrated these contributions into a Broad-Based Black Economic Empowerment (B-BBEE) scorecard system administered by the government that assesses bidders for electricity generation projects across seven key development areas (IPPO, 2025; Eberhard & Naude, 2016). Projects score higher if their benefits are realised within a 50km radius of the project site,<sup>6</sup> typically within small, rural towns, where their SED and ED funds are required to be spent locally (see Figures 2 and 3 below).

**Figure 2: REIPPPP – independent power producers’ contributions to SED and ED by province, 2025**



Source: IPPO (2025, p. 24)

**Figure 3: Proportions of funds spent by REIPPPP companies on different activity categories of SED and ED projects from inception to June 2025 as a percentage of the total**

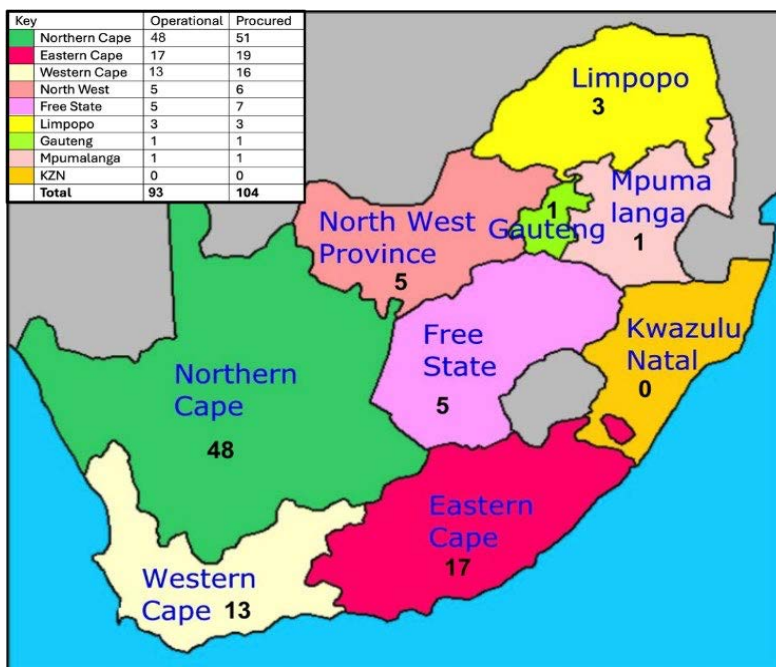


Source: IPPO (2025, p. 24)

This has brought large-scale investment into rural areas in provinces with long-standing inequalities, such as the Northern Cape, Western Cape, and Eastern Cape, in which solar and wind resources are abundant. By 2025, 104 IPPs had been procured across seven bidding windows, with the Northern Cape hosting the highest concentration of 48 operational projects, followed by the Eastern Cape with 17 and the Western Cape with 13 (see Figure 4 below) (IPPO, 2025).



**Figure 4: Renewable energy IPPs operational by province in South Africa, 2025**



Sources: numbers: IPPO (2025, p.16);

map: <https://www.southafrica.to/provinces/provinces.php>

The large open spaces, high solar radiation, and strong wind patterns in the three provinces make them particularly suitable locations for renewable energy projects (IPPO, 2020; 2021a; 2021b). However, the economic profile of the Northern Cape is less promising, given its stark socio-economic challenges. Its economy, historically centred on livestock farming and shaped by colonial land dispossession, has failed to deliver inclusive growth.

The intersection of these factors means that renewable energy development often arrives in towns shaped by a history of dispossession, economic precarity, and underdevelopment. In such settings, the large amounts of SED and ED funding, as seen in Figure 2 above, can have significant symbolic and material impacts.

But with its predefined key development areas – education; social welfare; health care; general administration; and ED – as shown in Figure 3 above, it risks reinforcing top-down, short-term, and politicised models of development (IPPO, 2025). Of the five categories, education has the highest percentage of spending (44.7%). However, the way private



corporations define, implement, and experience development on the ground depends on the existing structural challenges and specificities of these towns, highlighting the importance of aligning development with the local community context.

The following section will unpack how development projects funded by IPPs in terms of their REIPPPP bid commitments play out on the ground in my study site.

### **Development on the ground**



Classroom at the school located within the study site.

*Photo: Caitlin Rickerts*

Development projects funded by IPPs are most often channelled into donations or outsourced to consultants tasked with implementing pre-designed programmes. For learners, this takes the form of education-related donations such as stationery, books, school uniforms, bursaries for higher education, e-learning tablets, and smart whiteboards. This gave teachers some hope and a sense that development had finally arrived (Ann, Wade, Emily, teachers, interviews, August 2024; Peter, Jackie, teachers, interviews, April 2025). Technologies, such as e-learning tablets, could enable more engagement in the classroom. However, their maintenance and supply challenges highlight their ‘meantime’<sup>7</sup> nature,



suggesting that such development could be more impactful if better aligned with local needs and capacities (Fischer, 2018).

For local residents and parents, particularly those from low-income households or historically marginalised communities, the benefits of IPP-led development remain fleeting, short-term, or inaccessible (focus groups 1-5, November 2024). Although bursaries for higher education are available, many learners struggle to meet the academic requirements needed to access higher education, suggesting that although the opportunity exists, the chance to benefit from it remains out of reach, rendering the opportunity aspirational rather than attainable. Even when learners have access to the materials required for homework and classroom participation, practical challenges remain: they often arrive at school without having completed their homework or without bringing the donated stationery they need (focus group 7, April 2025). The benefits of these efforts may therefore be perceived as 'band-aids' due to their temporary, misaligned, and meantime nature (Redfield, 2018; Fischer, 2018). As Redfield (2018) notes, band-aid interventions are those that address visible problems with temporary solutions, while failing to tackle underlying structural issues.

Yet what is not so temporary is the transformation of the social fabric that occurs during the construction phase of renewable energy projects that are expected to contribute to SED locally. It is within this context that the phrase "*the girls here, they are Gift of the Givers*" must be understood.

This dynamic cannot be reduced to development policy alone, but it is undeniably shaped by the broader context of poverty, unemployment, gendered power imbalances, and the intensified precarity that accompanies the influx of single<sup>8</sup> male workers during renewable energy project construction. The few jobs provided by the IPPs are mostly low-skilled for the men in the town, while most of the construction work involves bringing in outside men, reshaping local social dynamics in subtle and uneven ways. These shifts can exacerbate existing inequalities, particularly for young women navigating constrained environments with limited access to resources, role models, or alternative opportunities. Within this context, some young women engage in transactional relationships not merely as passive victims, but as actors making strategic, if fraught, choices. For some, this period is framed as a temporary phase of low-skilled 'sex' work, through which they seek to assert influence and extract value from men's control over sexual economies (Leclerc-Madlala, 2003, p. 9).



# WARNING



NO WEAPONS OR  
DRUGS ALLOWED  
ON THIS SCHOOL

*Mural painted by an IPP on a school wall in the study site.*

*Photo: Caitlin Rickerts*



Bullying; FASD; poverty; neglect; substance abuse; school dropouts: These themes recurred in the conversations, but teenage pregnancy stood out, not always spoken about directly, but emerging indirectly, like a shadow that carried with it not only stigma, but history, where the shame of the pregnant teenager's mother, who herself gave birth as a teenager, lingered (Ann, teacher, interview, August 2024; focus group 6, April 2025). It revealed the generational disempowerment that women often carry into the fabric of the family, reinforcing the urgent need for both women and learners to be heard and given the space to forge their own lives.

Some participants showed little awareness regarding teenage pregnancy, suggesting that this issue is frequently concealed among peers and only acknowledged by adults when the pregnancy is at an advanced stage (Adam, school principal, interview, August 2024). Others tolerated it with resignation, claiming that sex amongst teenagers is normal (Peter, teacher, interview, April 2025). A few participants highlighted cases of learners who already have children, expressing concern that this trend could adversely impact their future educational and work opportunities (Ann, teacher, interview, August 2024).

The word “prostitution” surfaced in the conversation. Typically, the term refers to sexual exchange involving direct cash payment (De Zaldondo, as cited in Leclerc-Madlala, 2003). But in a small town where poverty is widespread and resources are scarce, the lines feel less clear. All I could ask, quietly and curiously, was “who? And how?”

“The young girls in high school,” almost every interviewee said when the topic arose (Ann, Emily, teachers, interviews, August 2024; Peter, teacher, interview, April 2025). Others noted that some of these girls may look like they are in high school but could be even younger (focus group 2, November 2024). Participants shared a difficult and layered account, beginning with observations about how the arrival of new men, brought in to work on nearby IPP construction sites, was compounding the challenges already faced by local learners.

While IPPs may intend to support local development, their presence has also introduced new vulnerabilities, particularly in relation to young people’s agency. Some girls now linger around shops and open spaces, seeking to draw the attention of these men. Participants spoke in hushed tones about how the allure of gifts, cell phones, attention, money, and alcohol pushed these young girls toward making uninformed decisions about their bodies, their health, and their future. This was conveyed with a blend of outrage, despair, and acceptance (Adam, Ann,





Susan, teachers, interviews, August 2024; Peter, Jackie, teachers, interviews, April 2025; focus groups 1-5, November 2024).

In the context of severe poverty, where parents themselves are often caught in cycles of unemployment and substance abuse, these girls are not only exposed to risk, but they are also, in some cases, described as 'working' and contributing financially to their households (focus groups 2-4, August 2024). Yet, one interviewee in her early twenties, in a quiet moment, told me:

*I was at the shop with my friends when this construction worker came up and asked me to come to his guesthouse. I told him no, but he wouldn't stop asking until I walked away. Eventually, he moved on to my friend. (Emma, university student, interview, November 2024)*

It became more difficult to think of this as straightforward prostitution. It is not always the case that girls simply avail themselves. Instead, these men exploit their limited agency. A mural painted on one of the school's walls by an IPP emphasises that no drugs or weapons are allowed on the school grounds. Yet, ironically, in the community, a much darker reality is unfolding, where transactional relationships are becoming the norm, as sex is exchanged not just for basic needs but also for consumption driven by modern allure (Leclerc-Madlala, 2003).

While many residents expressed concern about the deeply unsettling effect of IPPs on the town, these changes were often described as the *new* normal, something beyond their control (focus groups 2-4, November 2024). What began as an inquiry into the intersection of development and youth wellbeing gradually shifted into something more complex. I found myself in a space where the boundaries between opportunity and risk, between progress and exposure, blurred with ease, especially for those with the least protection and voice. In this town, the normalisation of these dynamics obscures the limited choices and structural constraints that shape young women's agency.

***Within this context, some young women engage in transactional relationships not merely as passive victims, but as actors making strategic, if fraught, choices.***



Vanwyksvlei 'donkey bar'.

Photo: Stephanie Paula Borchardt

Reports of rape also surfaced, alongside accounts of 'girls' falling pregnant by 'these men' who would soon return to their families elsewhere, some of whom were married, some significantly older. In one incident, a girl "took her small sister with ... and these guys raped the small child" (Ann, teacher, interview, August 2024). In a follow-up interview with Ann, she told me:

*... one of the children at our school, [a] 14-year-old, is pregnant, and she said she was raped by one of these people [construction men] ... a person she does not know. There are [a number of] people in [the town], everyone knows everyone. (Interview, April 2025)*

When residents shared these stories, I asked gently, "What is being done about it?" Their responses carried a tone of weariness, as if the weight of repetition had dulled the urgency. In some households, the boundary between protection and complicity was hard to trace, blurred by circumstance, silence, and the complexity of care in constrained settings.



In a focus group discussion with members of the South African Police Service (SAPS), officers reflected on encounters that deepened my understanding of the complexities involved (focus group 4, November 2024). One officer recalled seeing a girl of high school age leaving a guesthouse. The officer then took her home to tell her mother, only to be met with, “Leave her, she is working”. With encounters like these, officers expressed feeling helpless. While the common consensus is that these girls are selling their bodies, a more hopeful part of me considered an alternative; perhaps in some cases, the girls are doing ‘proper work’ – laundry, washing dishes, or cleaning the house. But we won’t know. The ambiguity, the silences, the denials – that is precisely the problem. In the case of the 14-year-old who was raped and is expecting the child of a man she does not know, residents pointed to her father’s position in the town as a reason why no charges have been made, hoping that the story would not spread and reflect badly on the parents (focus group 6, April 2025).

These narratives and perspectives came to me through people who clearly care. In their voices, I heard frustration, sadness, helplessness, the ‘what-if-this-was-my-child’ response. When I probed about the development efforts of the renewable energy companies during my interview with Ann, the high school teacher, her voice trembled: “Yes, they’ve made donations. They’re doing things for us. But that’s not the whole story” (interview, August 2024).

This led to the difficult conversation about transactional sex, pregnancy, and rape, a conversation that would repeatedly surface in my subsequent interviews and focus groups (Adam, Susan, Emily, Jennifer, interviews, August 2024; Emma, interview, November 2024; focus groups 1-2; 4, November 2024; focus group 6, April 2025).

Although I did not have direct conversations with these young women, every individual I engaged with casually mentioned transactional relationships. For these girls and their families, poverty and vulnerability are intrinsic aspects of their daily existence, and this was simply another means for them to navigate a life where they can engage in capitalist consumption.

**...poverty, limited access to services,  
and social inequalities influence how  
these resources are received and  
experienced....**



Development, especially when fast-moving, does more than provide infrastructure or material contributions. It reshapes the social fabric, introducing new forms of aspiration and risk. It brings people in and sends others out, unsettling established rhythms. In some cases, it creates conditions in which young girls, already navigating poverty, silence, shame, and constrained agency, find themselves increasingly exposed.

The arrival of men hired to construct nearby renewable energy sites left behind more than infrastructure. Their presence became entangled in stories of unintended consequence, babies who mark the passage of disruption, and accounts of trauma, sexually transmitted infections, betrayal, and abandonment. These experiences compound the already difficult realities faced by residents during the construction phase of IPP projects, a time that, in theory, should be filled with hope and promise. Instead, and perhaps unintentionally, these projects can usher in new forms of social disruption that remain under-acknowledged in dominant development narratives.

### **Reflection on current development approaches**

The accounts from my research may not always be statistically ‘verifiable’, but they are sociologically true. They illuminate patterns, meanings, and contradictions that statistics alone cannot capture. These narratives reveal how the social fabric of a town can be disrupted, and that this disruption, in fact, does not go unnoticed by its residents. They reveal the constrained choices young people are forced to make. They reflect a world in which the ability to make informed, empowered decisions about one’s future is unequally distributed. While tangible donations such as technologies, bursaries, and school clothing or supplies offer support, they are distributed within a constrained and deeply uneven environment. Structural issues such as poverty, limited access to services, and social inequalities influence how these resources are received and experienced. Consequently, their impact may fall short of expected outcomes, highlighting the necessity for more context-sensitive and sustained engagement.

Importantly, this is not something confined to one place. What has been found in this town is undoubtedly mirrored elsewhere, in other small and rural communities shaped by similar development pressures and challenges (Mabele et al., 2024; Malope, 2022; Borchardt, 2023). These are not isolated incidents, but part of a broader set of patterns, some of which are unintended, but none of which are unpredictable. When development interventions overlook the everyday realities of local communities, what emerges is not just an abundance of ‘band-aid’ and



‘meantime development’ resources, but a contribution to the various challenges communities are already confronted with.

These consequences are not always visible from a distance and often go unrecorded and under-reported, especially in places without consistent local reporting (Mabele et al., 2024). In many of these small communities, there is no local newspaper, no public platform, and no interest in listening to anyone. The stories I encountered, stories of transactional sex, of invisible pressures shaped by local conditions, of silence, are rarely documented. Not because they are rare, but because they unfold beyond the reach of conventional metrics and everyday visibility.

This is precisely why qualitative, on-the-ground research matters. It is through sustained, in-depth fieldwork that these hidden narratives begin to surface. These stories do not fit neatly into policy reports or development evaluations, yet they are real, and they carry weight. This is what I found: the unspoken, the undocumented, the uncomfortable truths of development as it is lived, not as it is imagined, designed, or reported.

This is not just about development efforts. It is about bodies, about voice, about power. It is about whether development deepens inequality or seeks to repair it, and whether the stories of local communities are valued enough to shape the answer.

Until development is measured not by promises or procurement targets but by the safety, agency, and dignity of those most exposed to its impacts, even the most well-intentioned interventions risk reinforcing the very inequalities they claim to address. These unspoken costs of development, alongside its band-aid solutions, demand a deeper interrogation: how is development conceptualised by these renewable energy companies, and whose realities are excluded from that vision?

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## INTERVIEWS

*All interviewees have been assigned pseudonyms*

**Adam** – Principal (August 2024)

**Susan** – Principal (August 2024)

**Wade** – Primary school teacher (August 2024)

**Emily** – Primary school teacher (August 2024)

**Ann** – High school teacher (August 2024; April 2025)

**Emma** – University student (November 2024)

**Jennifer** – Local resident (November 2024)



**Peter** – High school teacher (April 2025)  
**Jackie** – Primary school teacher (April 2025)

### **FOCUS GROUPS**

*All focus groups have been assigned numbers.*

**Focus group 1** – Local residents (November 2024)

**Focus group 2** – Parents (November 2024)

**Focus group 3** – Parents (November 2024)

**Focus group 4** – SAPS officers (November 2024)

**Focus group 5** – Local residents (April 2025)

**Focus group 6** – Parents (April 2025)

**Focus group 7** – Teachers (April 2025)

### **ENDNOTES**

<sup>1</sup> Ann, a high school teacher in the study area, shares a conversation between herself and a student at the school.

<sup>2</sup> This fieldwork reflection forms part of a broader research project on development initiatives funded by independent power producer (IPP) companies in the Karoo.

<sup>3</sup> The Gift of the Givers Foundation is the continent's largest African-founded non-governmental organisation dedicated to disaster response, widely recognised for its exceptional humanitarian work (see <https://giftofthegivers.org>). The example cited in the article highlights how the name "Gift of the Givers" has been appropriated in a local context, used in ways that diverge from the organisation's intended mission and identity. While the reference is intended to convey the shock experienced by the interviewee, it in no way reflects on the Foundation's extraordinary contributions.

<sup>4</sup> The surveys used by Walker and Vorster (2024) of Loeriesfontein, Sutherland, and Vanwyksvlei were conducted by the South African Research Chairs Initiative (SARChI) in the Sociology of Land, Environment and Sustainable Development.

<sup>5</sup> Food insecurity refers to no access to food or adequate food for consumption. The surveys framed this around households reporting hunger, where residents had to indicate whether and how often they had to go without food in the 12 months before the surveys.

<sup>6</sup> The project site is where the solar and wind farms are located.

<sup>7</sup> 'Meantime', in this sense, refers to how certain temporary interventions that provide hope can be replaced with more permanent solutions (Fischer, 2018).

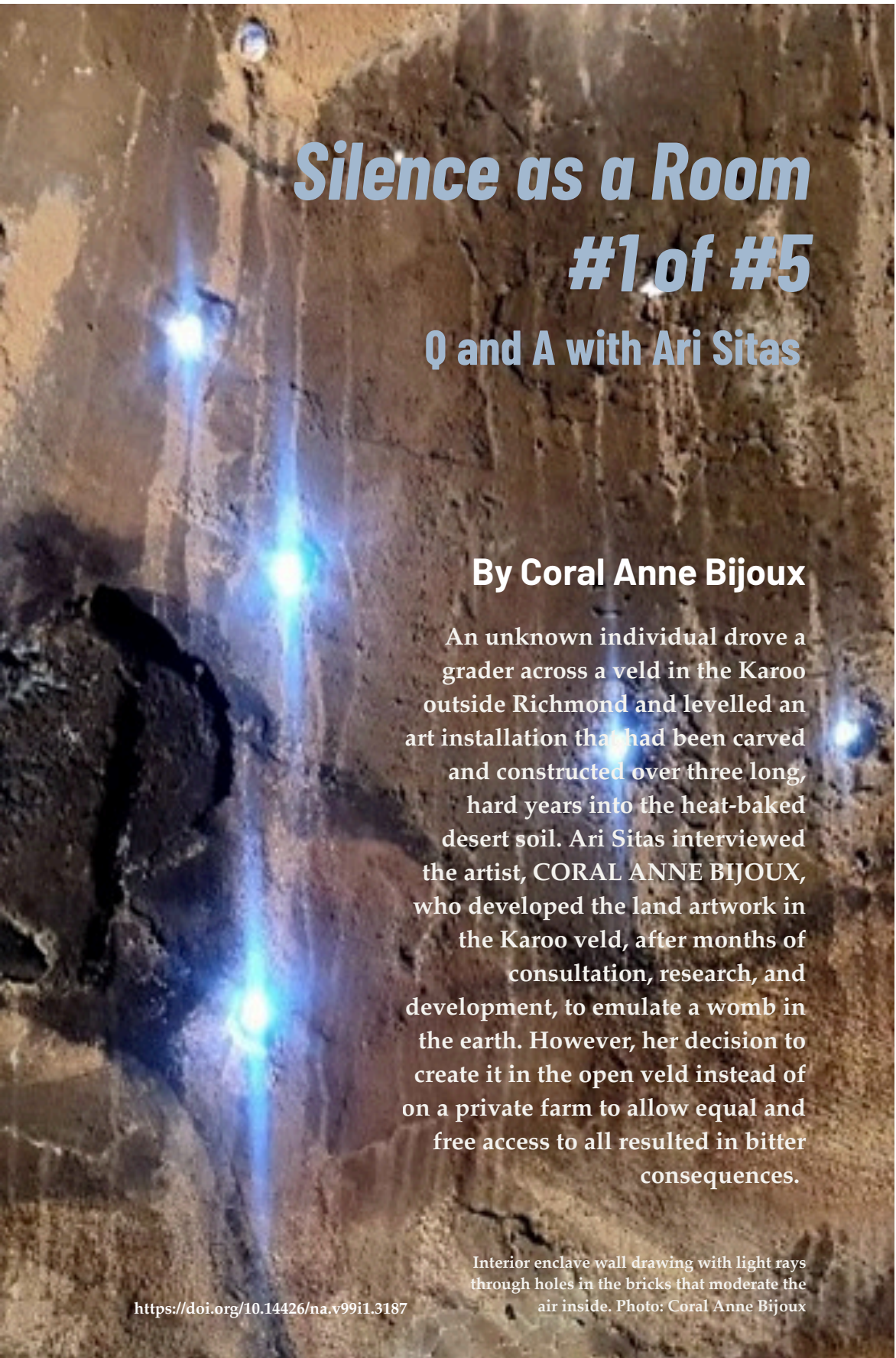
<sup>8</sup> 'Single' male workers refer to the men who are not accompanied by family members.

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### **BIOGRAPHY**

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# ***Silence as a Room***

## ***#1 of #5***

**Q and A with Ari Sitas**

**By Coral Anne Bijoux**

An unknown individual drove a grader across a veld in the Karoo outside Richmond and levelled an art installation that had been carved and constructed over three long, hard years into the heat-baked desert soil. Ari Sitas interviewed the artist, CORAL ANNE BIJOUX, who developed the land artwork in the Karoo veld, after months of consultation, research, and development, to emulate a womb in the earth. However, her decision to create it in the open veld instead of on a private farm to allow equal and free access to all resulted in bitter consequences.

Interior enclave wall drawing with light rays through holes in the bricks that moderate the air inside. Photo: Coral Anne Bijoux



A.S.: Tell the story about Mr Righteous who climbed onto a grader and flattened the work (*Silence as a Room*#1 of #5). Why do you think he did it?

C.B.: It's anyone's guess, Ari. I wrote a little on this during my 40-Day *Silence Meditations* (see my Facebook page<sup>1</sup>) after this incident took place. The meditations took the form of prose, visual prose, lamentations, raging, and questioning ... all the processes until acceptance ... forgiveness, recognising *Mr Grader's*<sup>2</sup> role in the eco-system of the arts and land art by a brown woman in South Africa, in particular. (I attempted to develop the work as far out [as possible] – but within walking distance to the town, not realising ... "*Jy veroorsaak 'n problem hier,*" *sê die man* [you are creating a problem, he said], after I had conducted an on-site workshop with a large group of children from the location.



**Coral Anne**

4d ·

Silence meditation...

Red earth

In Silence

Nourishes my very bones

The deep seat of my human-ness

The truth of my being

**#thesilencehasspoken**

Silence as a Room **#1of#5,**

Richmond, Karoo

*Excerpt 1 of 40-Day Silence Meditations at*

[https://web.facebook.com/coral.bijoux.5?\\_rdc=1&\\_rdr#](https://web.facebook.com/coral.bijoux.5?_rdc=1&_rdr#)



(There are those who poach the farmers' springbok and sheep, among other things, [who] could hide there. In a veld that is open and reasonably flat, there are few hiding places except the shallow caves under the cliff overhang.) "Should they hide in the *Silence Room* or *Stille Kamer*, (as it's known by some of the locals), you will know where to find them," I retorted. I do not condone 'poaching', however, if one considers that, should the local hunters have dollars, pounds, or euros, they will most likely not be considered poachers, but rather hunters. The difference is money, paid access. Hunting – pleasure (and ego) for *Some*, survival for *Others*.

At the time, I had consulted broadly – starting with the *Greys Palais mense*, the townspeople, in casual conversation, at the *biblioteek* [library], the local *Plaaskombuis*, staff, the wives/acquaintances who own/run the restaurant (one who planned to picnic at the *Silence Room*#1 site one evening with staff members after work with a basket full of goodies – at that stage the enclave had just been carved out – joining artist Mongezi Ncombe and I during Earth Hour. Unfortunately they became nervous, turned back, when they could not find our fire in the veld).

I spoke to members of the farming community. For example, the owners of *Stille Waters* farm, who had offered me a site (on their farm) to develop the *Silence as a Room*#1 of #5 land artwork. Had I accepted, the

**Silence meditation on...  
those who walked before...**

**On grounds of earth in red and  
ochre...**

**Tread Softly  
Leave a light  
Trail behind  
For those that follow  
Tread Softly...  
Leave a Silence  
Trail behind  
For those that  
Follow  
Tread Softly...**

**(Message for the patriarchy  
For the hater and the bigot  
For the rodent who cannot face the  
Silence Feminine in red earth and  
ochre)**

Excerpt 2 of *40-Day Silence Meditations* at  
[https://web.facebook.com/coral.bijoux.5?\\_rdc=1&\\_rdr#](https://web.facebook.com/coral.bijoux.5?_rdc=1&_rdr#)





work, it would have been safe from destruction, but not easily accessible to most. The owners, a South African-German couple, shared their farm's colourful history with me – how he came to own a sheep farm (he still designs textiles for Chanel's male range, and she had been a nurse in Iraq during the war years, where they first met). I did not accept his invitation at the time – protected, tempting, beautiful, and with assistance – because I preferred that visitors/travellers, passers-by, the townsfolk, and *die mense* from the 'lokasie' [the people from the location] would be able to access the work – freely, without asking for gate keys or having to pay an entrance fee. I preferred that shepherds, and 'hunters', would just happen upon it, or *Others* could find the *Silence#1* while wandering through, or passing by *en route* to 'somewhere else', stopping by, overnighting. Or those from afar who found out about the work may want to seek it out – *Some* did before the *Silence#1* roof's demolition.

While working on the piece, I made an effort to engage with local people as best I could. Some asked if they could join me – for a small fee. All were welcomed unless of course, they had other (questionable) intentions (*Some* did). I offered to mentor/train any of the young people who expressed an interest in being the site-guide for the work. They could earn from that – independently. In that case, they could just notify me so that I would not have any surprises. The only prerequisite was that they had to be responsible and knowledgeable about the work.

I created a video of a few young people who had expressed interest in this idea, which I agreed to upload on my website – as a contactable guide for travellers. Unfortunately, this did not work, as it required commitment and keen interest to hike the short distance (less than 5km) ... to tell stories of the veld, the town, the plants and animals ... and of course, *Silence as a Room#1 of #5*. At some stage, there was interference – who knows from whom – when all of a sudden the enthusiastic members became reluctant, afraid perhaps (?) and so I opted out from this intention. I assume it would have been for the benefit of the town with its high unemployment rate; drug and alcohol abuse just waiting to consume an unoccupied young person – this without the intention of oversimplifying solutions to something that is part of a greater travesty that has affected so many, particularly in low-income areas.

Some men who worked with me were less tolerant of a woman who wanted to do *manse werk* [men's work]. *Mansmense*, my mum used to say, shaking her head. She was not Afrikaans, though my dad was from an Afrikaans-speaking background. (The concept of the Feminine engages and encourages solutions beyond gender parities).





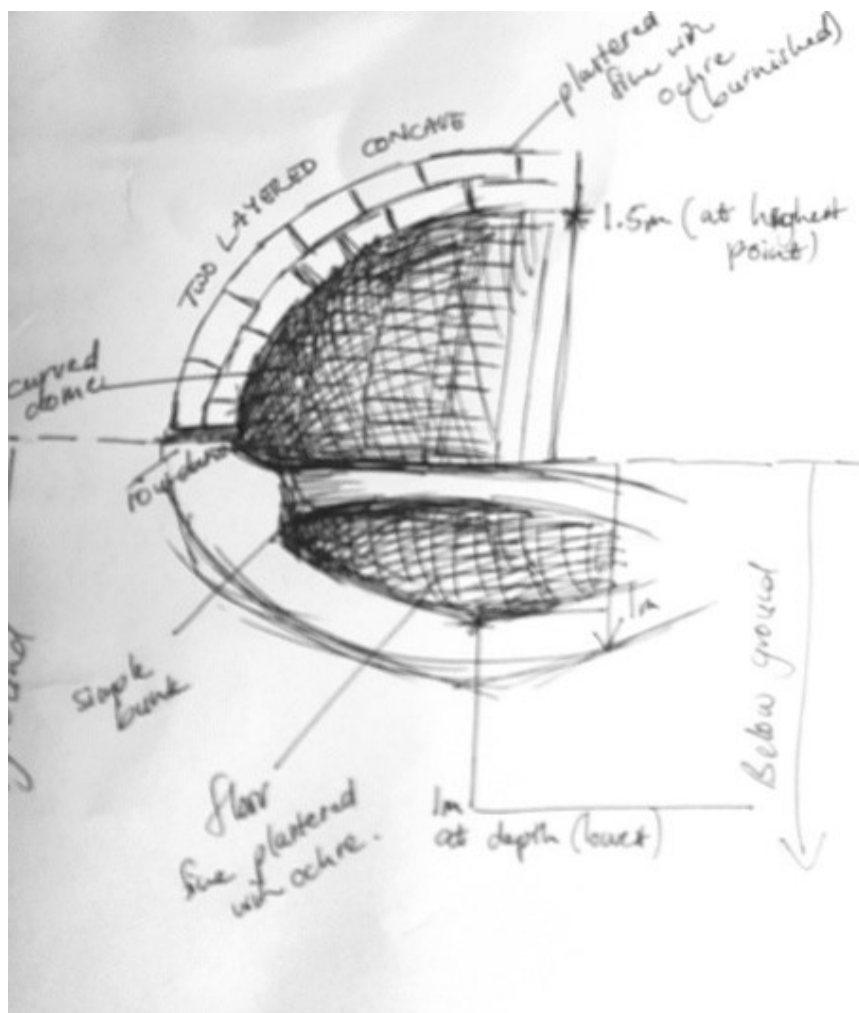
The bricklayer who assisted me in this phase, arrogant in his demeanour, was determined that he be identified as the artist though he did not design it, solve the problems, dig, or lay the foundation, nor did he build the steel structure with us, carve out the enclave for 60 days or more ... I remember that he said, "*Ek* (thumping his chest) *het die Stille Kamer gebou en Ek kan dit afbreek as Ek wil!*" [I built the Silent Room and I will break it down/demolish it if I want to]. This after spending time engaging anyone who came to work on the site about its intentions. I, however, understood the desire for recognition in a place that does not always 'see you'.

MAPSA [Modern Art Projects South Africa], a guesthouse and artist residency in the town, established with its own art collection of more than 1,000 pieces – a favourite artwork in black had accommodated me during the development phases 1 and 2 of *Silence as a Room#1 of #5*. A *buurman* [neighbour] and MAPSA 'overseer', as well as head of the family from whom most of the staff emanated – assisted where he could. He is a long-time resident in the town and was a repository of *Other* local histories that do not form part of the Richmond or Horse Museum historical narrative. He knew many of the people of long ago, and to some extent, much of the local politics of the town ... and its many churches. (I have an interview with him – still to upload.) He hankers after the 'old' Richmond.

During the last phase, I was 'interviewed' by a local woman at *Plaaskombuis* who indicated that her son was an architect who also makes art. She was curious ... interested in the *Silence as a Room#1 of #5* work. She seemed to know much about the work – though not from me.

Some passers-by who knew of the work also indicated that they asked locals where to find *Silence as a Room#1*, and being informed of it, were therefore able to locate it easily! Various individuals have sent me photographs they had taken at different times. Every so often, I would receive these photographs during and after the process of creating it. *Others* still planned to visit the work and experience it for themselves. Unfortunately, they will not get a chance to do so, other than as an 'interest' piece in 'archaeological finds'.

I was visited; photographs were taken by a local art gallery in Richmond during my planned long interview with a post-doc student, who was interested in the artwork's healing potential. The gallery group spent time there, asked about my process, my thinking about the work, and my intentions. Running hands on its interior textures, walking around, and inside of it. Documented. Photographed. I have since asked if



*Silence#1 draft design – embedding the work in the earth – much like the numerous heuweltjies [termite mounds] found in the veld, creating a visible cone or in the case of Silence#1, a domed roof.*

they could share these photographs with me. After promises, I still have not received any.

A local guesthouse and gallery sent a group of three men, who stayed at their accommodation, to the site while I worked there. They were involved in 'surveillance' projects. I was photographed without my permission while working. I allowed it – after the fact. I gave them 'the tour' while they were there. They were friendly. I invited them back early



the following morning to experience the *sonstrale* [rays] as they reflect the morning's sun. They did not arrive.

Some friends of a friend who were in the secret services during 'those years' visited the *Silence#1*, seeking it out as a place of healing. I would have liked to meet them at some point, but did not get a chance to.

A local architect in Durban recently asked me about what she refers to as "My little exercise in the Karoo" and "My little housie," she says with a snigger and a smile similar to that of a now late Richmond resident who taunted, "*vrouetjie maak 'n huisie*," [little woman builds a little house] as he visited the site, and whenever he saw me. In feminine solidarity, she laughed at the news of its demolition.

Any of these thoughts, this thinking ... the possibility, the people, and intentions has in some way contributed to the tale of *Silence as a Room#1 of #5* in Richmond. Anyone could have been or could have subcontracted *Mr Righteous – Mr Grader* – to demolish the work. The motives? It seems like an endless list from jealousy, arrogance, ignorance, indignation, ownership, politics, *politics* of race, gender, the land. Politics of the veld, and *who goes there*? These motives are written between the lines. It's a South African story, it's a local story particular to the Karoo veld and its many towns, its many historical narratives. It's also a global narrative that we may recognise. It's also how Silences are borne.

*Others* were appreciative and supportive of the work. Many engaged it physically or virtually. Many wanted to visit, spend time there, and some to conduct a retreat there ... but did not get a chance to do so, thanks to *Mr Grader* or *Mr Righteous* and his contractor.

A.S.: *What was so monstrous about it?*

C.B.: Well, firstly, anyone can justify their motives for almost anything these days, as they clearly did ... including perhaps (and I refer to news events of the past and recent past) the person who attacks a pre-school and shoots little children in a racist attack to prevent ... what (!); a man with HIV/Aids who rapes a baby ... as a cure (?); a missile that lands on people lining up for food ... 'by accident' (?); a grader that could level a domed sculpture roof that forms part of a land art womb in the earth – representing the Earth Mother – because it's annoying or ... (?)

Perhaps someone did not like that a woman was engaged in a structure perceived as *manse werk*, because women must do *vrouens werk* [women's work](?)



Someone with brown-ochre skin dares to challenge the status quo on land, and an amended land appropriation bill was approved on the eve ... so *Some* say, it must go ... (?)

What is monstrous about this? I can only speak as the artist ... it was monstrous because of the violence of the action. (Somehow it would have seemed more 'acceptable' to me had the shepherds taken picks and with these basic tools and hands, bashed the roof in – passionately, violence directed by and through the hand. Honest.) This machine – the grader – felt like a violent action against my body, my person, and the body of the womb, the earth. My time, my physical, psychical, and emotional effort, my endless sharing of the work to all, destroyed in one fell swoop by a man and his machine.

Most in the town, including *Mr Grader*, were aware of the artwork's reference to the womb, *die moederbar* ... and if so, to demolish the womb? What does that reveal about who we are? Monsters?

The work posed no apparent harm to anyone. No-one besides the farmers' representative/s spelt it out for ME at the tail end of the last phase before completion. "*Dit veroorsaak 'n probleem hier* [This will create a problem here] ..." And without consultation with the artist this was the only solution offered to solve *die problem*.

I spent more than three years carving, constructing, engraving clay heat-baked earth with a spade, replenishing where I could as I went along, aware of my actions, painstakingly so ... the earth (the site I had selected was quite eroded – images are available on my website) – the clay bricks were created from the clayey soil of the area.

***Who watched and waited for the  
work to be completed before  
they decided to demolish the  
artwork? A twisted mind,  
surely... ?***



I was aware of every action of mine and *Others* while there, and *Now*.

I asked after the property agent that I engaged with over the years about living spaces in Richmond. I wanted to live there, initially, though every property at some point was not available, unless at a sizeable price beyond my means or it was bought ... already.

Perhaps it would have been preferable for me to have left then? And for *Others* to have remained silent?

My intention in creating this work was to draw attention to earth, and its ecological framing as a Feminine concept – a womb: the incubator of our species, our nurturer, and our source. It was my intention to draw attention to the land and how we engage it – carefully, caringly, with the hand – or machine as ‘time is money’, they say, disassociated, disconnected. To mimic aspects of the natural world – in this case, how the Karoo harvesting termites<sup>3</sup> engage earth in the



*From this...early stages of development*



*...to this, with the domed roof in place ...*



development of their communal home, their technologies, and deeply-known intuition that serve to moderate heat, air, and moisture in its interior, how they employ 'eco-engineering' technologies that we can, and have, learnt from them. (I certainly have embraced this knowledge – I referred to the termites as my 'mentors' or 'teachers').

I also wanted to document an engagement with the land as a slow process, with hand tools speaking back to capitalism, big machines, extraction without care, without intentions, understanding, or knowledge of how to replenish what we extract. I wanted to draw attention to the historical Feminine severing from land (Bijoux, 2023; Federeci, 2004) and intentionally set it back towards a conceptual reconnection ... *feet first*.

If 'the farmer' or *Mr Grader* (who I assume did not act alone), or *Mr Righteous* as you describe him, felt the sculpture endangered his farm, there were ways I/we could have dealt with it, but it seemed that the intention was less a concern (for them) or they would have contacted me, made suggestions, opened discussion. I believe that it was much more about evisceration. Black, brown or white, woman or man, whatever the reason, the politics, the decision – because it was a decision and an act of deliberation – to drive across the veld with a grader was a 'monstrous act'. Deliberate. To have waited three years for me to complete the work was a deliberate act.

My regular returns and long stays in Richmond – most knew who I was. They recognised my vehicle and recognised me. I would greet those whom I got to know; visit, engage in local events, visit the *biblioteek* where I had conducted workshops, and a local *kerk* [church], where I engaged, and conducted an earth-oriented *Dream* workshop for the women there from the earth of the *Silence#1* site. (I was asked to 'testify' in one of the churches there as to my reasons for making the work. The pastor prayed on me, blessing me and the work ... Ha!) I engaged the local grocers and *BKB Retail* where I would buy hardware-type supplies, who knew me well, and had visited the *Silence#1* site.

Nasty. Mean. Monstrous.

And if the work represented Earth Mother, the womb even more monstrously so, but then, as a society, we allow monstrous acts on vulnerable men, women, and children, the earth. Why not a sculpture that represents the earth and the mother?

The town – as a whole – is silent about 'the monstrous act'. Some speak out, but behind closed doors, some avert their eyes, others know, shake their heads, give benign smiles and muffled apologies, and still





others suspect one or the other, but will not say it out loud. That is the nature of quaint towns, or big cities and even larger countries where monstrous acts take place. This act can be a mirror of who we are. We reveal ourselves in our engagement with the artwork (even from a distance), and we reveal ourselves in our engagement with its demolition.

A.S.: *Why did you choose the Karoo as an art space?*

C.B.: I don't think I chose this town in the Karoo as an art space. Rather, it chose me. In terms of the *Silence as a Room* sculptural designs and its series of five – I had completed three draft designs – this was one of the first three. I created these with different ecologies/typographies in mind, in southern Africa. The Karoo type ecology stretches across the interior of the country, across the Eastern, Northern, and Western Cape. Alternatively, there are forested swamps; natural and man-made forests, which formed around the mountainous and coastal regions; highveld regions with rocky outcrops, mountains with layered shale, igneous and other rock formations; towns and cities with their build-up of decaying buildings, sewers, bridges and people ... the list is long, but I intend focusing on five major areas – what for me is a biome or focus area that I want to feature in this body of work.

I wanted a Feminine reference to speak into the land in these diverse spaces and ecologies, its cultural aspect, its people and its people's people ... its legacy and contemporary reference to its land, the space: the ecological, socio-cultural, and political context. I wanted peoples – anyone – who could see themselves, their losses and gains, their connections or disconnect with the land through this body of work. *Silence as a phenomenon* becomes the conceptual conduit through which I engage this work. And after its making, it no longer belongs to me – the physical work that is. I left it there to be engaged with by nature, insects, birds, animals ... people. *And it has*. But it feels sore nonetheless.

I was invited to an arts residency by MAPSA, which piqued my interest in that particular space. I had for many years traversed the Karoo lands – just been drawn to these spaces – not for romantic notions of open empty lands *a la Pienneef*, but my own innate hankering after ... something. My ancestors, and so too most of our ancestors, walked the lands and while trying to find them and their marks on the land, I found routes, smells, dust – earth – and peoples that spoke to me quite intuitively. Others were suspicious of me. I opted to listen to these intuitive directives and not try to intellectualise them too much. In other words, I did not want it to be a strategic decision, yes, in the enactment or



development stages, but initially, my core, my gut, had to be the driver. I have felt this pull, this directive, equally with the design and research.

The Karoo, therefore, represents a certain typography, a biome, and a certain historical narrative that I had only scratched the surface of. I had intended to return annually, resources allowing, to maintain the work somewhat and to document its engagement with people and the elements of wind, heat, sun, rain, lightning, the animals that graze there, the hares, tortoises, reptiles, insects, and birds that live and occupy the space.

*A.S.: What was the piece about and describe the three-year process to do it?*

C.B.: There is far too much to speak about. I have a website page<sup>4</sup> and social media posts dedicated to this work – why this work, what it is, the process, stages or phases of completion, meanings. I have communicated these over a period of three to four years. I still am. Now, I speak about the return of *Silence AlterEgo* as I make my way back to Richmond to retrieve remnants of the sculpture for a permanent monument to the *Silence#1* installation at Nirox Sculpture Park for the current *Soil and Water* exhibition.



*Silence #1R–Membrane at Nirox Sculpture Park for Soil and Water exhibition.*

*Photo: Coral Anne Bijoux*



The presence of *AlterEgo* (my shadow) was my way of documenting 'the artist at work' as *the third person*. In my previous large-scale installation, *Dreams as R-evolution*, I engaged the *AlterEgo*, a Feminine reclining figure who languished in the *Room for AlterEgo*<sup>5</sup> – a four-walled space, created from polymer, awaiting moments of awakening. It was positioned central to the installation, with a sparkling roof as it caught the light from the midday sun.<sup>6</sup>

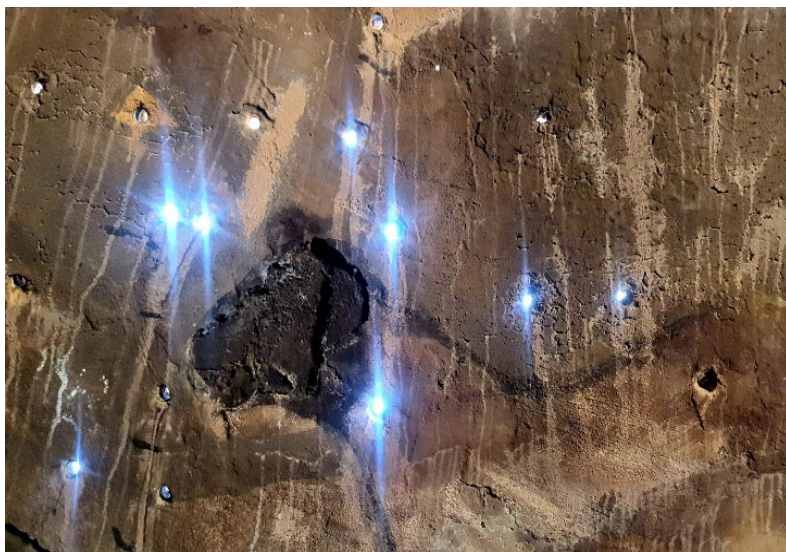
The *AlterEgo*<sup>7</sup> appeared in *this* work, in the stark Karoo light, as a shadow figure in various guises, engaging the space, the earth, engaging the work, and its process. As *she* says, "Much like *AlterEgo* in *Dreams as R-evolution*, the *Silence Shadow Diary* presents a witness to the making of *Silence as a Room*. At times, she's sacred, sometimes quirky, often playful, but always ... present."

This work falls within the ambit of land art. The genre, and one could say, virtually everything, our very way of being, our mobiles, our technologies, our cement-plastered homes and offices, our perfumes and our agriculture, our meat and our diamonds, incorporates some form of extractivism, which our art must draw attention to. The art poses the questions by its presence. In this work, I used the action of extracting, then replacing, replenishing the same back to the earth (for instance, clay earth and ash, into the clay bricks for the domed roof of the earth womb).

There are well-known examples such as *Spiral Jetty*, 1972,<sup>8</sup> created in the salt pans of Salt Lake City by Robert Smithson, who was interested in the notion of entropy and that things change ... the land changes. He was interested in changing the fixed nature of monuments. I, too, am interested in natural entropy in *Silence as a Room*#1 of #5<sup>9</sup> and the relationships people have to earth, and land, but of course, Mr Grader did not allow time to do that.

*A line made by Walking* by Richard Long, 1967, and more recently, a three-part series on waves, *Wave Field*, *Flutter*, and *Storm King Wavefield* by Maya Lin, 1995-2008, revealing her interest in science and nature. This art form was/is often associated with privilege and access. In South Africa, it also deals with access to spaces that were prohibited for many, just some 21 years ago.

The *Silence*#1 sculpture was created by digging into the earth, as the first phase during which I created the enclave (5m in diameter and 1m deep at its core). I carved into the hard-baked clay earth with a spade, in the heat of a Karoo summer for over 60 days, of which I had assistance on 12 half-days (or six full days).



*Interior enclave wall with light rays through air holes that moderate the air inside.*

*Photo: Coral Anne Bijoux*

The second phase, which took place in the winter of that year, was assisted by Aligned Consulting and a local bricklayer to create the domed roof, thereby completing the womb. None of us had created a domed roof before, but I had ideas about how I wanted to achieve this. I wanted to see these thoughts and intuitive ways with material and process become tangible, getting my hands into the brick-laying, and the technical and conceptual problem-solving. It was difficult because the men I worked with often had trouble taking instructions from me or working with me. *Dis nie werk vir vrouens nie* [This is not women's work]. I had to really convince them to try a few things *my way* – which eventually worked. Some steps I had to come back to, rather working on them alone.

This meant that I had to return for a third phase (plastering, re-working hundreds of holes, this time by drilling open the holes I had created in the brick design that had been deliberately sealed by the bricklayer), and the fourth phase that involved the installation of amulets, which I created from the same clay earth after a downpour, then baked in that veld oven. These amulets had formed part of the three-site exhibition by Nirox, curated by Sven Christian, titled *Layers: Rock Art through Time and Space*, finally concluding at the Wits Origins Centre in 2024.

Creating this womb in the earth – not sitting above, hovering over it, but within it – I intended to draw attention to the smells, the feel,



and texture of earth, allowing one to feel, experience, and not simply look at. The Gaze. I believe that we are often disconnected from the things that we should feel most connected to – like the earth that we rely on for our very existence. I felt that if we entered into the space, felt the earth around us, immersed [ourselves] in it, we might rethink our disconnect. We might appreciate and respect what gives us life – just a little more.

The work is 5m from within the interior walls and 1m at the core of the curved enclave, 1.5m from ground level at the centre of the curved dome. The sculpture is created predominantly from the same red clay I dug out, combined with ash this created the bricks I had designed specifically for *Silence#1*. The bricks were made by a local brick-making business, *Werk, Wrek of Trek*, and baked in their veld oven for two weeks, cooled for one week, before breaking down the oven and releasing the bricks.

Following the example of the Karoo harvesting termites or ‘eco-engineers,’ I designed the bricks with either one or two holes that would remain open, (yes, they also functioned as a fix for cement and clay mix) in order to allow air to enter and escape the inner sanctum, thereby creating a moderating effect in temperature for the structure within a harsh climate. The holes also formed a type of sundial, allowing the passage of daily time (and every full moon, a lunar time scale) to reflect on the interior walls and floor of the sculptural womb. This was also one of my attempts to ensure a measure of longevity for the work by allowing for air moderation, as it would easily crack under extreme conditions such as the heat in summer, the freezing cold conditions in winter.

As with many of my larger projects, I am focused on the participant's experience as much as I am on the making-creating of the work – designed for people, spaces, and creatures of nature (which we also are) to experience, be moved by, and be shifted by – in whatever way. It feels sore that the work was demolished – mostly by spite, jealousy, or a sense of righteousness (whose, I don't know), an attempt at eviscerating the truth that an unexpected somebody could create a work of this nature at this scale with minimal resources and just a dream, an idea, a vision and lots of determination. But it was/is what it is. I have a record of it. I have a memory of being mostly tired, the physical effort in its making; the determination despite the numerous obstacles. Often, when I wanted to give up, my daughters would encourage me and then those fleeting moments when I knew I could see why I created this work. I, too, was moved, shifted by it, and on some occasions, like my nights there in the full moon, completely transfixed as though the work was



created outside of me. The inner, its curved walls and floor became the sky with pin-pricks and blue-light spots of moonlight.

I knew that I did not create this work alone – and I'm not referring to the helpers, nor my brother (Aligned Consulting), who came to support me, and those that supported the work, but I had a sense that as I walked, and as I worked, I was supported by those who walked before me. I simply followed along an unknown path.

*A.S.: What does it tell us about Karoo micropolitics?*

C.B.: I think the micropolitics, as you refer to it, occur in all instances wherever groups gather – including in 'the workplace', where people live in community, where people engage with each other in intense spaces, small towns, vying for power, working together, working against each other, maintaining the status quo. I have worked in many places, from the energised spaces in Joburg and Newtown, the corporate environment, government departments, to deep rural areas – the micropolitics are not that different. I recognised it, have encountered it many times before – different, yet unsurprisingly, similar. Secrets kept. Silences are created around what is permitted, spoken about, and revealed and what is not. Who speaks and to whom. People also need to survive and live together, as such it's best that everything remains the same as much as possible. Often in close spaces, communities, workplaces, survival means looking the other way, whispering behind closed doors and behind each other's backs, though smiles are bright and people friendly if you're passing by.

On the other hand, there is also much kindness, where everyone knows the Other, and tolerance means we can survive another day. People connect with and rely on each other in ways that do not happen in larger towns and cities, and that's positive. I found Richmond to be such a place. I encountered people who were kind, and caring, while others were menacing. It's no different elsewhere. There are stories to be shared of yesteryear, and meals to enjoy together ... and when something like this happens, people whisper and everybody knows, but no-one knows as well. There are very many churches in this small town ... some say it's because people have different ideas about worship, while someone said that "it's a way to make money". I don't know. I had been invited to a few churches while there.

In Richmond, as small a community as it is, diverse interests abound; which church group you belong to, social group, race, are you based in the town or in the location, across the bridge or *langsaaan* [alongside], or on a farm, which farm (?) ... visitor or persons who have





hybrid living situations – here and elsewhere. Artists and writers, construction workers and labourers, *skaapwagters* [shepherds] and *skaapboere* [sheep farmers], each group with its own dynamic, each with its own sense of hierarchy. I was not there to research or record the town, but I had significant encounters with people in different scenarios there. I therefore developed a sense, a *knowing*, of the town through my work.

The *skaapwagters* were a group on their own. I sensed that they have their own ethics and engagement with the town. They know the veld. They know the earth and the animals in their care. They watch and they wait. They speak across open lands with whistles and sounds and signs ... in the tradition of people of the veld and the shepherds from long ago and today.

The bareback riders threw themselves elegantly onto their beasts who were wild, with fire in their eyes after running away, free ... heading to *Silence as a Room* ... stopping just short of 'the owner's' back gate. The riders, in a mad dash after them, tried everything to coax them back. Nearer, beckoning them to join them ... then punishing them, then whispering and placating. I watch, transfixed at the performance. *Ek praat so 'n bietjie met hulle ... Twee van hulle se vir my dat hy moet seker maak dat die eienaar die perde nou moes terug kry ... asook die skape. Hulle is nie die problem nie, maar die perde..?! Hulle hardloop weg elke keer hulle kans kry ... Hulle gee hul name ... ek se wie ek is...* [I chatted to them briefly ... two of them said they must make sure the horses are returned to the owner ... the sheep as well. They [the sheep] are not the problem, but the horses! They run away at every opportunity ... They told me their names ... I said who I was].

Shepherd life is aloneness, yet connected to the broader community, connected to the earth, and those in their care, I imagine. Individual, yet part of a whole, a way of life. A nuance, stretching back centuries through time from whence the first domesticated agricultural lifestyles appeared. A tradition that spans centuries, I quite understand – as artist, often apart, alone. Observant. Whole. Connected ... to my spaces, my materials, concepts, visions and *Others*. Some signs are left for me in *Silence as a Room* #1 of #5, and some ritual leftovers, I assume by shepherd/s or hunter-type-gatherers. I see it. Respond. Leave a sign for 'them' to find too. Some signs were to scare me, while others, well others, I embraced.

At some point I consider my role as the outsider-insider. Depending on 'the size of your purse,' which suggests the level of influence one has, and of course who you are – your profile – you could be 'in' or 'out'. The role of the outsider, I find upon some 'light'



investigation, is often determined by outsiders themselves – who have become insiders through the passage of time or the ‘size of the purse’. I conclude that at some point [we] were all first insiders – spaces where our feet had tread freely, then made to be outsiders (through laws, rules ... or the size of the purse), and now depending on who offers their insights, usually based on the size of the purse, this status is determined, and acted upon accordingly. Creating a public work *in this way* leaves all these questions in the sand for us to cogitate upon.

Communication in most instances is difficult: there isn't one story, one narrative, one way. To create a work in the midst of conflicting, multiple narratives was/is a challenge. It is dangerous. But that is what this work attempts – obliquely, and overtly. Engaging contemporary issues in the land, historical narratives, and memories obscured by time, influenced by people and politics.

The archives of the land lie beneath us while capital giants run roughshod over all without a care. Care is for people who care ... and there is no time for that. Time is money, don't they say? Money is power, and we all race to get it ... as much as we can. But change is afoot, we can feel it in earth; earth's shifts and the un-readiness and present dis-ease of our world ...

*Who goes there said the guard at the gate  
What is the news that you ride so late  
News most pressing that must be spoken to Caesar alone  
And this cannot wait...*  
Excerpt from 'The Rider at the Gate' by John Masefield, 1923.

This warning echoes to me from a long ago past – when I was made to recite it, not knowing why or what it really was about. The sands of time broadcast this past warning, vast and clear, and we are aware. I continue my work on *Silence as a Room* and speak into the silences of yesterday and today ... just in case someone wants to listen, hear, see and experience. #thesilencehasspoken



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## ENDNOTES

- <sup>1</sup> Coral Anne Bijoux's facebook link can be accessed via the coral4art website at <https://coral4art.co.za/> or [https://web.facebook.com/coral.bijoux.5?\\_rdc=1&\\_rdc#](https://web.facebook.com/coral.bijoux.5?_rdc=1&_rdc#)
- <sup>2</sup> See on Facebook – *40-Day Silence Meditations – Ode to Mr Grader* .
- <sup>3</sup> <https://www.sanbi.org/animal-of-the-week/african-harvester-termite/> or <https://coral4art.co.za/silence-as-a-room-flora-and-fauna/>
- <sup>4</sup> [coral4art.co.za/silence-as-a-room-process-and-people/](https://coral4art.co.za/silence-as-a-room-process-and-people/)
- <sup>5</sup> <https://coral4art.co.za/dreams-as-r-evolution-2/>
- <sup>6</sup> See <https://coral4art.co.za/dreams-as-r-evolution-2/>
- <sup>7</sup> For examples, see <https://coral4art.co.za/silence-as-a-room/>
- <sup>8</sup> [https://www.youtube.com/watch?v=xWd\\_YGHjWKM](https://www.youtube.com/watch?v=xWd_YGHjWKM)
- <sup>9</sup> <https://coral4art.co.za/silence-as-a-room/>

## BIOGRAPHY

Coral Bijoux is a curator and artist with a background in education, skills development, heritage and museology. Her collective career spans more than 27 years in development work; arts education; organisation practice; heritage and tourism; research and writing; archival development and museology.



Dateline Africa

# Karoo Diary

## 1 September to 30 November

### 2025

A selection of events about, and from across, the Karoo that are significant or interesting, or both. Compiled by the New Agenda Editorial Collective at the Institute for African Alternatives and the Guest Editor.

Photo: Stephanie Paula Borchardt

<https://doi.org/10.14426/na.v99i1.3201>



## November

**4 November:** An exhibit housed at Karoo Origins: The Fossil Centre, in Graaff-Reinet, won an international art/science award for a computer-generated graphic animation of life at a local waterhole 255 million years ago – before the age of dinosaurs. The John J. Lanzendorf-National Geographic PaleoArt Prize for Digital Modeling and Animation honours artists and studios whose work on the deep past bridges the gap between scientific accuracy and creative expression. Karoo Origins is a palaeontological research, exhibition and public outreach centre that presents the rich fossil record of the area.



*Pre-historic Karoo: The computer-generated animation depicting life at a waterhole in the Permian period, when mammal ancestors called therapsids dominated the land. This exhibit was produced by Fancy Horse Studios.*

*IFAA thanks Fancy Horse Studios for permission to use this photo.*

*Visit: <https://fossilcentre.co.za>*

## October

**31 October:** Police arrested seven men and three women suspected of involvement in an extortion syndicate. At a community meeting in Murraysburg hosted by a wind energy construction company organisers were confronted by a group threatening violence against company staff unless they were paid off. They also threatened to set trucks alight to prevent them transporting wind turbine components to the construction site.





**12 October:** The business website, *Currency News*, carried a detailed article promoting luxury conservation-driven tourism in the Karoo. Need to escape real life? “Off grid elegant simplicity” costs R25,290 per night in the least luxurious suite if you have no friends and go alone. If you really want to splash out and treat the family of four to a night dedicated to nature conservation, expect to pay R70,000. You can arrive in your private plane, or they will fetch you from Gqeberha in the Eastern Cape. Samara Karoo Reserve, sprawling over 67,000 acres, most of it reclaimed farmland, ensures that “guests actively contribute to the ongoing restoration and preservation of the Great Karoo’s unique biodiversity, ensuring its magic endures for future generations.”



*Luxury in the Karoo for the privileged few.*

*Source: <https://www.samara.co.za/>*

**9 October:** Students and protesters burned down buildings and destroyed research resources at the University of Fort Hare on the edge of the Karoo. Criminal syndicates have inserted themselves into the procurement chains to loot the state-funded institution. The corruption has affected local business owners (including taxis) and politically-protected criminals. Physical damage to the university – founded over a century ago as a college for Blacks – amounted to over US\$20 million. Alumni of Fort Hare include Kenneth Kaunda, Seretse Khama, Julius Nyerere, Robert Mugabe, Joshua Nkomo as well as many South Africans. Nelson Mandela and Oliver Tambo met at Fort Hare and the ANC Youth League was founded there.





## September

**25 September:** An entirely green and renewable-energy event on the motor calendar, the annual Philipstown Wire Car Grand Prix, was held in this small remote town in the Karoo. The drivers, local children, run behind their hand-made wire race vehicles, guiding them over rough dirt roads that are the race track. This is the 14<sup>th</sup> annual Grand Prix and competition was fierce, drawing a crowd of over 500 people on the day, which is extraordinary in a town of less than 1,000 residents. One champion driver has won the Grand Prix six times.



**24 September:** A “one-day only exhibition” was held at Losberg in the heart of the Karoo for 120 guests who were in South Africa for the third G20 Research and Innovation Ministerial Meeting. The venue was the site of the MeerKAT, the frontrunner to the much more powerful Square Kilometre Array (SKA) radio telescope, which is being built as part of a multi-billion-dollar international scientific project “to probe the very depths of the cosmos”. Four years into the ten-year construction period, South Africa – which won an international bid and donated the land for the telescope – has now established itself as a global leader in the world radio astronomy community. Government legislation enforces a huge ‘radio quiet area’ across the region where no modern electrical

sources are allowed in case they damage the powerful highly sensitive telescope.



**22 September:** Police arrested two foreign nationals, aged 36 and 42, on a dusty roadside near Port Nolloth, after they found a haul of illegal flora, destined for sale on the black market, carefully stashed away in their white Toyota Hilux. The *Diamond Fields Advertiser* said "...what these men were trying to steal wasn't just plants. It was part of the Northern Cape and South Africa's living heritage – and they were treating it like loot." The Succulent Karoo, the most biodiverse arid region on the planet, is home to more than 6,000 plant species, over 40% of which are found nowhere else. These plants have survived for centuries in one of the world's harshest environments, evolving into strange, beautiful, often tiny lifeforms – some shaped like pebbles, others like thumb tips or miniature stars. Ravaged by demand from overseas collectors, some species – like *Clivia Mirabilis*, *Conophytum* and others – are now classified as critically endangered. Between 2019 and 2024, more than 1.6 million illegally harvested succulents were seized by South African authorities. Most never survive long enough to be returned to the wild.



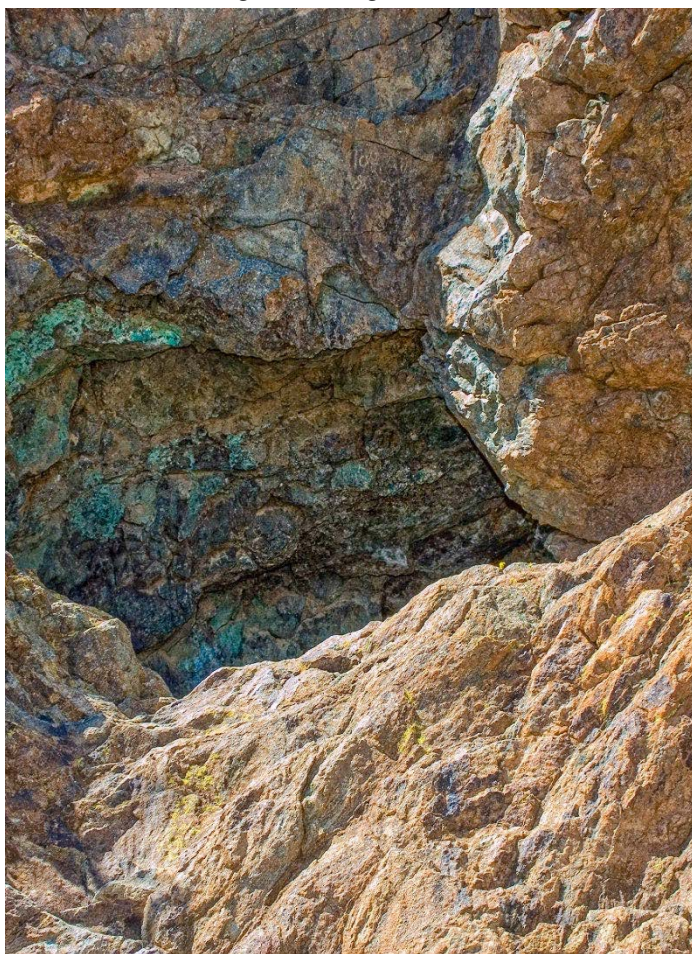
**17 September:** A copper-zinc mine near Prieska, closed since 1991, is likely to re-open after its new owners, Orion Minerals, an Australia-based junior mining company, announced a probable funding deal with Glencore. Calling it “a watershed moment,” the investment will start producing copper from December 2026. The project is 30% owned by historically disadvantaged South Africans in terms of the Black economic empowerment policy of the government. This includes a 5% share for the approximately 1,000 mine employees, and a 5% share for a community trust. The mining is planned to last for 13 years – based on present mineral price trends and known characteristics of the ore body.

**9 September:** International Fetal Alcohol Spectrum Disorder (FASD) Day provided an opportunity to reflect on the bleak statistic that risky drinking among pregnant women is ten times higher in the Northern Cape than in the rest of South Africa. Babies who are exposed to alcohol in the womb can experience severe learning disabilities as children. The Foundation for Alcohol Related Research (FARR), a non-profit agency that has long provided awareness information to discourage drinking during pregnancy, had to close down in the Karoo towns of Hanover, Petrusville and Philipstown in 2025 due to lack of funding.



**International FASD Awareness Day - 9 Sept**

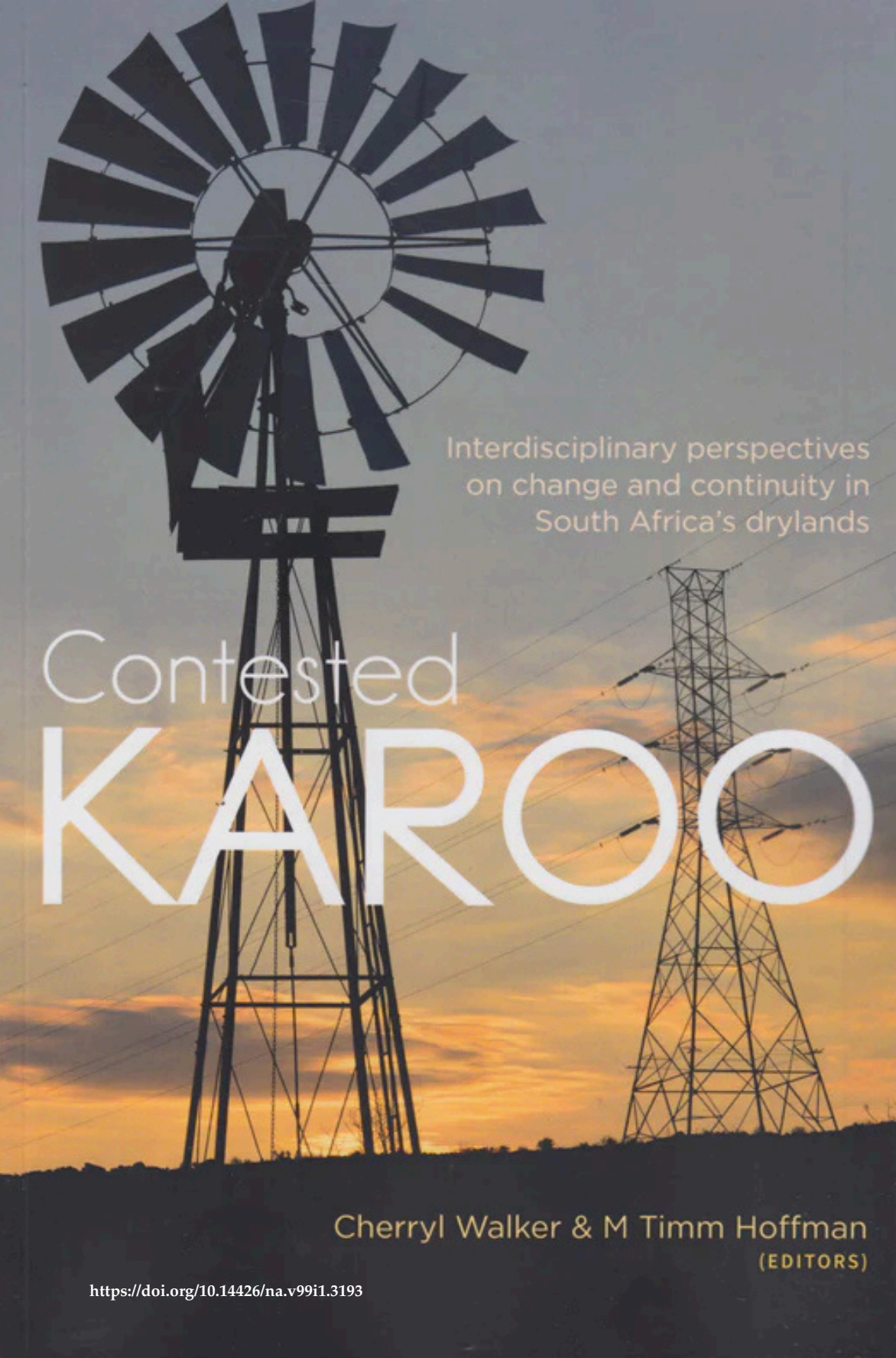
2 September: “Acceleration towards production” was the title of a presentation on two separate Karoo copper mining projects, which aimed to entice investors attending the Africa Down Under annual conference to put up their money. The mines in Prieska and Okiep were closed between 20 and 30 years ago when shallower reserves were depleted and weak mineral prices made it uneconomical to access the deeper ore bodies. Now growing demand for critical minerals and improved mining techniques have made the mines viable again. At what cost to the communities living there though?



*Entrance to Simon van der Stel copper mine, near Okiep, Namaqualand.*

*Photo: Grobler du Preez, Shutterstock*





Interdisciplinary perspectives  
on change and continuity in  
South Africa's drylands

# Contested KAROO

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(EDITORS)

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# Contested Karoo

## Interdisciplinary perspectives on change and continuity in South Africa's drylands

**Cherryl Walker and M. Timm Hoffman (Editors)**

***Review by Lorato Mokwena***

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As I was reading this book, various keywords ‘jumped out’ from its 12 chapters. Using these keywords, I strung together a sentence which (for me) encapsulates the take-home message of the book: *The Karoo is a resource frontier entangled in jackal management and grapples with sacrifice zones, unjust sustainable development and dispensable indispensability.*

The Karoo is home to various in-demand resources – minerals, shale-gas deposits, renewable energy (wind and solar power), clear skies for astronomy purposes, fauna and flora and people. Unfortunately, its resource-abundant environments have contributed to the Karoo being a resource frontier – “a territory in which selected resources are up for grabs as new social forces move in to exploit them and in the process disrupt and displace prior arrangements” (Walker and Hoffman in chapter 12).

The manner in which prior arrangements such as the predator management by the Kareeberg famers are dismissed in appeasement of logistics related to the Square Kilometer Array (SKA) brought to mind the ‘empty land theory’: When external stakeholders, government, or the highest bidder, rush in to extract their desired resource, the Karoo is approached as a place void of people, culture, knowledge, and systems. Hence the book is appropriately titled “Contested Karoo”. The Karoo is riddled with various stakeholders who all want a piece of the pie – however bite sizes, appetites, and motives differ yet converge and





***... The Karoo... is a contested space  
driven by misaligned priorities, distrust,  
unmet expectations and hidden  
agendas.***

contend in the Karoo, rendering it a site of struggle. No thanks to these contending interests, the Karoo has become a site of struggle entangled in jackal management (drawn from Terblanche's intriguing discussion of jackal management in chapter 7). The concept of jackal management is alluring as I perceive it to aptly describe the relationship between the various stakeholders in the Karoo. Given that external stakeholders have a long history of *extract and depart*, leaving behind a trail of destruction (as was the case with asbestos mining discussed by Marcatelli in chapter 3), and prioritising profit over communities' needs (as is the case with the energy-poor and electricity-strained communities in electricity-producing De Aar), low trust levels from Karoo communities is understandable. So, the jackals in the Karoo are not only wild animals – there are also jackals among external stakeholders, governments, and even within communities in the form of 'local elites'.

Caught between a rock and a hard place – between economic survival and protecting the environment – communities in the Karoo are forced to sacrifice either their livelihoods or the environment. Due to the extreme poverty levels in various Karoo communities, more often than not residents are forced to overlook harmful environmental practices and prioritise livelihoods. Ultimately, their communities end up being sacrifice zones – polluted and toxic spaces as a result of extractive industries that experienced temporary economic upliftment but now are neglected, impoverished, and disempowered (as explored by Xaba in chapter 11).

One of the major issues that the Karoo (and similar places) grapple with is unjust sustainable development. Sustainable development that only concerns economic and environmental concerns while disregarding broader societal concerns is unjust (as touched on by Manyani in chapter 6 and Malope in chapter 9). Such unjust sustainable developments ultimately result in impoverished and marginalised communities in the Karoo forming part of the 'indispensable dispensable' (Marcatelli in chapter 3) – they are indispensable as far as it concerns buy-in and approval of projects. They are definitely indispensable as a source of affordable, general labour but they are rendered dispensable and

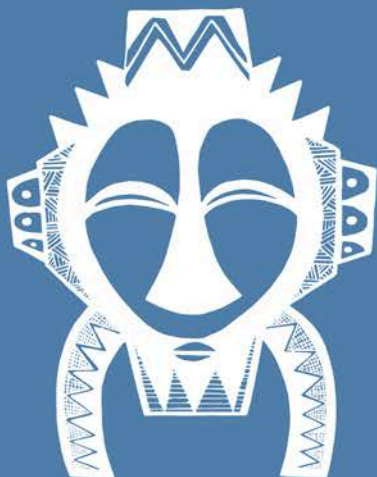


discardable when more professional, specialised labour is required or when needed after projects are complete. Without the eradication of poverty and the enhancement of human capabilities being part of the goals of sustainable development of the communities (Malope, chapter 9), residents of those communities will continue being forced to sacrifice their environment just to put bread on the table (albeit temporarily).

While the book predominantly explores the contestations in the Karoo, some chapters give us snippets about the sense of community among people in the Karoo. In chapter 4, Walker and Vorster mention that one of the positive elements that residents of Sutherland appreciate about their town is the social cohesion. In chapter 5, Cupido, Ellis and Samuels mention the *krymekaar* [get together] meetings during which herders gather at a water point to share information about matters such as weather predictions and the presence of predators.

The book has a beautiful cover that shows the beauty of the Karoo landscape while simultaneously illustrating some of the topics the book focuses on. I appreciate that the book includes linguistic expressions from the Karoo and is not sanitised from the identity markers of the people whom the book focuses on. Another delightful element about this book is how easy it is to read, and it identifies and nudges researchers towards possible research avenues such as exploring the reasons behind the lack of full-time female herders in Namaqualand (as mentioned by Cupido, Ellis and Samuels in chapter 5). Chapter 2 by Hoffman and Petersen provides a useful overview of 'Karoo studies' which allows one to situate the book and facilitates the identification of underexplored aspects of the Karoo which require scholarly attention.

Although the book focuses on the Karoo, in this book the Karoo is a microcosm of South Africa. The issues that are laid bare are evident in other South African communities too. Every day, people have to make decisions between 'morality' and the survival and prosperity of themselves and their loved ones. Many South Africans (particularly those who are impoverished) are treated as politically indispensable but economically dispensable. Similar to the Karoo, South Africa is a contested space driven by misaligned priorities, distrust, unmet expectations and hidden agendas.



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