

The Municipal Manager  
!Kheis Municipality  
PO Box 176  
Groblershoop  
8850

For attention: Mr van Eck

Dear Sir

## **Land development application: rezoning**

### **Development of the *Skeerhok* solar PV2 facility**

We submit this land development application in terms of section 67(b)(vii) of the !Kheis Municipality Land Use Management Scheme read together with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA).

We apply for:

- Rezoning of a land segment of Remainder of Portion 9 of Farm 120, Gemsbok Bult, from Agriculture Zone I to Utility Zone III to accommodate the *Skeerhok* solar PV2 facility.

The aim is to obtain the applicable land use rights to construct the *Skeerhok* solar PV2 facility. This facility forms part the *Skeerhok* solar photovoltaic renewable energy facility located on two contiguous farm properties between the towns of Groblershoop and Kenhardt in the jurisdiction area of the !Kheis Municipality.

If you have any questions or require clarity on any of the issues, please do not hesitate to contact me.



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**B P Rode Pr. Pln**

Director / Town and Regional Planner @ RODEPLAN (Pty) Ltd

**8 December 2020**

**Municipal Land Use**  
**Management Scheme**

**Land development application:  
rezoning**

**Skeerhok solar  
photovoltaic renewable  
energy facility**

**Location**

**On the following 2 contiguous properties in  
Registration Division Kenhardt, Northern Cape:**

**(1) Remainder of Portion 9 of Farm 120, Gemsbok Bult  
and (2) Farm 395, Smutshoek**

**Applicant**

**RODEPLAN (Pty) Ltd**

in association with

**juwi Renewable Energies (Pty) Ltd**

**Date:**

**December 2020**

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## Table of contents

### Executive summary

### Section I: Preamble

1. Introduction	5
2. Project proponent	5
3. Development proposal	7
4. Renewable energy rationale	8
5. Objectives	9
6. Preparatory work	10
7. Fees	11
8. Advertising process	11
9. Report structure	11
10. List of tables and maps	11

### Section II: Legislative and development framework

11. Land use legislation	
11.1 Municipal Land Use Planning Bylaw and Management Scheme	13
11.2 Other relevant legislation	14
12. Policy guidelines (development)	
12.1 National, provincial and district	15
13. Investment directives	18
14. <i>Project response</i>	19

### Section III: Spatial directives

15. Spatial rationale	20
16. Regional methodology for renewable energy site selection	22
17. Spatial Development Frameworks	22
18. <i>Project response: Site selection</i>	26

### Section IV: NEMA application

19. Environmental impact assessment	27
-------------------------------------	----

### Section V: Development context

20. Receiving environment	
20.1 Regional and local context	28
21. Development specifics	
21.1 Site information	28
21.2 Leasehold area information	31
21.3 Renewable energy facility layout	32
21.4 Infrastructure	34
21.5 Development impacts	35
21.6 Title deed	36
21.7 Benefits of the proposed development	36

## **Section VI: Development parameters**

22. Land-use parameters	38
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## **Section VII: Communication and participation**

23. Interested and Affected Parties	39
-------------------------------------	----

## **Section VIII: Conclusion**

24. Wording of land use change	39
25. Desirability	39

## **Section IX: Annexures**

Annexure 1:	Power of Attorney
Annexure 2:	Conveyancer's certificate, title deed and SG diagrams
Annexure 3:	Application form
Annexure 4:	Locality plan
Annexure 5:	Regional plan
Annexure 6:	Site Development Plans
Annexure 7:	Environmental Impact Assessment Reports
Annexure 8:	Environmental Authorisations
Annexure 9:	Letter regarding the use of municipal services
Annexure 10:	Copy of notice placed on-site and on public notice boards (not included)
Annexure 11:	Specialist studies
Annexure 12:	Zoning certificate (not included but zoning confirmed)
Annexure 13:	Proof of payment (not included)
Annexure 14:	Applications for water use licence
Annexure 15:	SACPLAN certificate
Annexure 16:	Email correspondence

## Executive summary

juwi Renewable Energies (Pty) Ltd proposes the establishment of the Skeerhok solar photovoltaic (PV) renewable energy facility and associated on-site infrastructure, on two contiguous farm properties known as (1) Remainder of Portion 9 of Farm 120, Gemsbok Bult and (2) Farm 395, Smutshoek.

RODEPLAN (Pty) Ltd was appointed to compile and submit this land development application(s) to the relevant authority to obtain the applicable land use rights.

### Application area and proposal

The aforementioned properties (or subject properties) are in the !Kheis municipal area in the Northern Cape. These properties are located in the western segment of the municipal area, between Groblershoop -to the east- and Kenhardt which lies closer and about 43 km to the south-west thereof. The subject properties are privately owned and together 6489 ha in extent.

Please note this application concerns the rezoning of a 300 ha land segment of Remainder of Portion 9 of Farm 120, Gemsbok Bult, from Agriculture Zone I to Utility Zone III to accommodate the Skeerhok solar PV2 facility. The (approximate) central coordinates of this *rezoning application area* are 29°04'09.72"S, 21°22'52.34"E, i.e. an area located in the north-western corner of Remainder of Portion 9 of Farm 120, Gemsbok Bult.

The Skeerhok solar photovoltaic renewable energy facility (of which Skeerhok solar PV2 facility forms part) will comprise three separately located solar fields of 300 ha each with a combined generation capacity of about 300 MW. The total and combined land take for renewable energy structures will be about 900 ha ( $\pm 14\%$ ) of the overall farming area of 6489 ha. Two of the solar fields (PV1 and PV3) are situated on Farm 395 while the remaining field (pv2) is to the south and in the northern segment of Remainder of Portion 9 of Farm 120.

The key components (or renewable energy structures) include solar voltaic apparatus, internal and external electric grid connections, roads and additional infrastructure (e.g. substation and for the storage of electricity). The facility will be connected to the Eskom Nieuwehoop Substation located about 17 km to the south-west thereof.

### Land use rights

The development proposal of a renewable energy facility implies a non-conforming land use on land zoned as Agriculture Zone I, i.e. the current zoning of Remainder of Portion 9 of Farm 120, Gemsbok Bult and Farm 395, Smutshoek. Hence, as provided for in the Land Use Management Scheme of the !Kheis Municipality, application is made to rezone a part of Remainder of Portion 9 of Farm 120 to Utility Zone III. This zoning category accommodates the land use of renewable energy generation and includes all on-site plant and equipment and other miscellaneous infrastructure associated with the generation, transmission and distribution of renewable energy. Agricultural activities are allowed in the rezoned area not utilised for the renewable energy plant.

The development rights we apply for under the new zoning, are described in the Environmental Authorisation issued for the Skeerhok solar PV2 facility.

Please note that long-term leases will be notarially executed and registered against the title deeds of both subject properties, for which ministerial approval in terms of the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) is required.

### **Land ownership**

The subject properties belong to one landowner. A Power of Attorney has been issued for the submission of this land development application.

### **Environmental impact assessment**

The *rezoning application area* was the subject of environmental impact assessments in terms of the 2014 Regulations under the National Environmental Management Act, 1998 (Act No. 107 of 1998, with amendments) done under the respective project names. An Environmental Authorisation (EA) was issued for each of the following three projects:

- 100 MW *Skeerhok* 1 Photovoltaic Solar Energy Facility on Farm 395, Smutshoek.
- 100 MW *Skeerhok* 2 Photovoltaic Solar Energy Facility on Remainder of Portion 9 of Farm 120 (applicable to this application).
- 100 MW *Skeerhok* 3 Photovoltaic Solar Energy Facility on Farm 395, Smutshoek.

Note that an Environmental Authorisation has also been issued for a high voltage distribution line associated with the REF's connection to the national grid. Registered Interested and Affected Parties were invited to review and provide comment on the Environmental Impact Assessment Reports as part of all the completed processes.

Amendment(s) to an EA is/are regularly sought by a project proponent because of advances in technology and new project-specific findings. If an amendment requires changes to the content of this land development application, such amendment will be communicated to the municipality as an amendment to this application in terms of section 100 of the Land Use Management Scheme, i.e. prior to the approval thereof.

### **Previous approvals**

In the context of a plethora of obligatory authorisations, permitting and licensing requirements for a renewable energy facility, we believe the issued environmental authorisations, paves the way for other decision-making milestones to be achieved.

### **Site selection**

The site selection process conducted by juwi Renewable Energies (Pty) Ltd that resulted in the siting of the *Skeerhok solar PV2 facility* as a potential energy project, included the identification of other 'suitable' sites for renewable energy facilities throughout the Northern Cape province. This process was informed by the issuing of the environmental authorisations and by the national intervention to identify preferred areas for establishing large-scale wind and solar PV energy facilities.<sup>1</sup>

<sup>1</sup> Department of Environmental Affairs, *Strategic environmental assessment for wind and solar photovoltaic energy in South Africa*, 2015.

The 'selection' of the site by juwi Renewable Energies (Pty) Ltd was based on a number of factors, including (but not limited to):

- Solar resources
- Site extent
- Grid access
- Land suitability (e.g. for construction) and proximity to aerodromes
- Nature reserves
- Local economic stimulation
- Current land use
- Landowner support.

We acknowledge the Renewable Energy Development Zones as the preferred areas for large-scale renewable energy development and the roll-out of supporting transmission and distribution infrastructure.<sup>2</sup> Please note that this designation does not preclude other areas from consideration and that a Phase 2 Strategic Environmental Assessment has been commissioned.<sup>3</sup>

The proposed Skeerhok solar PV2 facility falls entirely within such a zone, i.e. *providing certainty in decision making*. In this regard, the *rezoning application area* lends itself to renewable energy generation as also evidenced by the number of proposed solar PV facilities surrounding the near-by Eskom Nieuwehoop Substation.

### **Renewable energy facility layout**

Through the environmental impact assessment process, which includes various stakeholder and specialist inputs, a number of issues relating to the design, layout and placement of the facility were identified and considered. Several layout alternatives were considered in order to balance the technical and financial objectives of maximising the output of the proposed facility with the critical environmental, topographical and social constraints.

It is important to note that parts of the plans and layouts provided for the purposes of this application may be subject to amendment if required by changes to the environmental authorisations or by adhering to conditions. In this regard, an iteration process was and still is inevitably part of the land development application.

### **Benefits of the proposed development**

The Renewable Energy Independent Power Producer Procurement Programme promotes the use of renewable energy country wide. This programme is one of SA's most successful attractors of investment, with renewable energy investments worth R250 billion having been made, country-wide, since 2011.

The Government has also recently introduced the Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP), i.e. the procurement process for 2000 MW emergency power by mid-2022. As potential bidder in this programme, juwi Renewable Energies (Pty) Ltd will submit this project as a bid proposal by 22 December 2020.

<sup>2</sup> Government Gazette No.41445, 16 February 2018.

<sup>3</sup> Strategic Environmental Assessment for wind and solar photovoltaic in South Africa, 2105 as published in Government Gazette No.41445, 16 February 2018.



In addition to electricity-related benefits, the development of a renewable energy facility contributes to other benefits, e.g. income generation and (local) employment creation. It is estimated that "the programme would create 114 000 jobs over the 20-year generation period" as this kind of project is more labour intensive than the current forms of electricity generation.

### **Development parameters**

We believe this kind of renewable energy facility is complex in application and requires specialist knowledge and insight to best determine and adjudicate build and operational restrictions/parameters. In this regard, we propose a set of parameters to be(come) land use restrictions for the Skeerhok solar PV2 facility.

### **Desirability**

Even within the context of predetermined targets and associated time frames, the assessment of renewable energy generation initiatives demands of government a wider than normal perspective on long-term structural changes, e.g. climate change, energy security and other shifts. Planners must become aware of the need to take a broader look at spatial planning and land use management – evidenced by the designation of Renewable Energy Development Zones. Impacts are certain to happen. However, in the end, much will depend on the way authorities address the sometimes-conflicting goals of biodiversity conservation, infrastructure programmes, renewable energy generation, economic growth, poverty alleviation, land reform and food security.

In this context and when applying the principles of economies of scale and highest and best use of land, the rationale for solar energy in the *application area* becomes clear. The proposed development blends with the particular type of land(scape), promotes the (better) economic use of land and infrastructure and conforms to the outcome of socio-political interaction, as demonstrated by the issuing of the environmental authorisations and the inclusion of the *application area* in a Renewable Energy Development Zone.

Note that the proposed development will introduce a site-specific land use that is different to (but not incompatible with) the established land use of low intensity grazing. We believe the proposed land use is moderately compatible with the rural landscape and conforms to past land-use conversion initiatives in the area, e.g. high voltage power lines and substations. It is foreseen that the impact on on-site and adjacent land use as a result of the proposed Skeerhok solar PV2 facility will be very low if mitigating measures are applied.

It is also clear that the proposal conforms to the intention of the development principles listed in section 7 of the Spatial Planning and Land Use Management Act, 2016 (Act 16 of 2013) and the factors listed in sections 42(1)(c) and 42(2) in the same Act.

We also believe this motivation report includes sufficient information regarding the criteria (as general land use regulations) listed in the municipal land use management scheme whereby the need and desirability of land uses can be measured to guide decision making.

## Section I – Preamble

### 1. Introduction

Current national policy and implementation provides for an unprecedented optimism amongst investors and the public alike, concerning the government's commitment towards finding and supporting credible solutions in a transition to a low carbon economy. For example, the gazetted Integrated Resource Plan envisions the bulk of the increase in the country's total electricity-production capacity coming from renewable sources.

As part of this narrative, the target-setting for renewable energy output was supplemented by the mapping of a preferred geographical distribution for power-generating facilities and the (future) electricity grid.<sup>4</sup> Renewable Energy Development Zones (REDZ) were identified as areas of strategic importance where the development of large-scale wind and solar photovoltaic (PV) energy facilities can be 'fast-tracked'.<sup>5</sup> In this regard, certain procedural arrangements were promulgated to apply to developments within these areas. It is however, stated that suitable wind and solar PV development is still promoted across the country and any proposed development must be considered on its own merits.

The REDZs were 'demarcated' based on high level integrated spatial analysis of the best available environmental, technical and social data. However, and even if a proposed facility is sited within a REDZ, it is still up to each developer to source (local and site-specific) data and spatial directives through planning and environmental processes.

juwi Renewable Energies (Pty) Ltd, proposes the establishment of the Skeerhok solar photovoltaic (PV) renewable energy facility comprising three solar fields (of which Skeerhok solar PV2 facility forms part) and associated on-site infrastructure. The aim is to produce and generate about 300 MW electricity from solar resources in the Northern Cape.

### 2. Project proponent<sup>6</sup>

juwi Renewable Energies (Pty) Ltd is one of the world's leading specialists in renewable energies. The company offers project development, EPC and O&M services, as well as solutions to bring about the transition to 100% renewable energy. Our business activities are focused on Solar Energy (Utility-scale and Commercial & Industrial) and onshore Wind Energy. Today, more than 1,000 people worldwide work for the juwi group in the Wind and Solar energy sectors.

The company is geared to manage industrial renewable energy generation projects with a portfolio of developments in the Northern Cape. All projects are developed and managed through wholly-owned project companies or subsidiaries.

<sup>4</sup> Government Gazette No.41445, 16 February 2018.

<sup>5</sup> In 2018, the national Department of Environmental Affairs commissioned a Phase 2 Strategic Environmental Assessment for identifying more renewable energy development zones adding to the identified 8 (eight) areas.

<sup>6</sup> Source: <https://www.juwi.co.za/hybrid>, 000 viewed on 10 November 2020.

The project companies eventually hold all the permitting rights to the development of the project for commercial and legal reasons. Please note that we apply for land use rights by property and not by project name because naming tends to change.

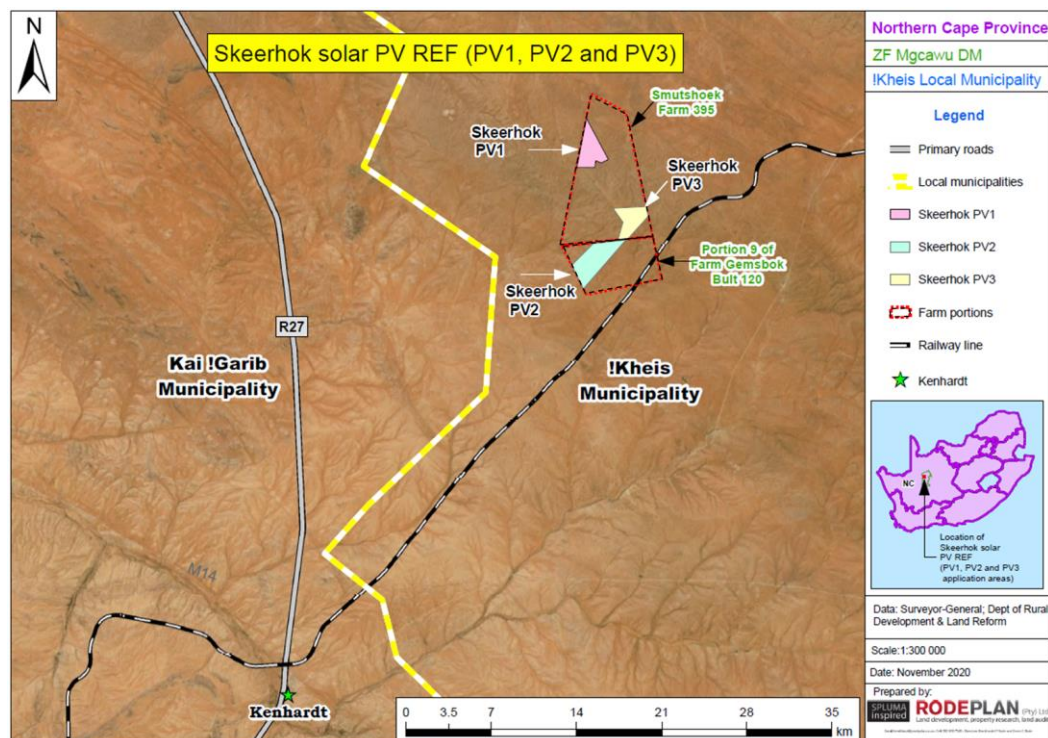
### 3. Development proposal

The preferred location of the Skeerhok solar photovoltaic renewable energy facility (Skeerhok REF) is on 2 (two) contiguous farm properties known as (1) Remainder of Portion 9 of Farm 120, Gemsbok Bult and (2) Farm 395, Smutshoek (or subject properties) (see **Map 1** and **Table 1**).

**Table 1**  
**Properties associated with the Skeerhok solar photovoltaic renewable energy facility**

Property description	Land extent (ha)	Zoning <sup>7</sup>
Farm 395	4332	Agriculture Zone 1
Remainder of Portion 9 of Farm 120	2157	Agriculture Zone 1
Total (cumulative)	6489	

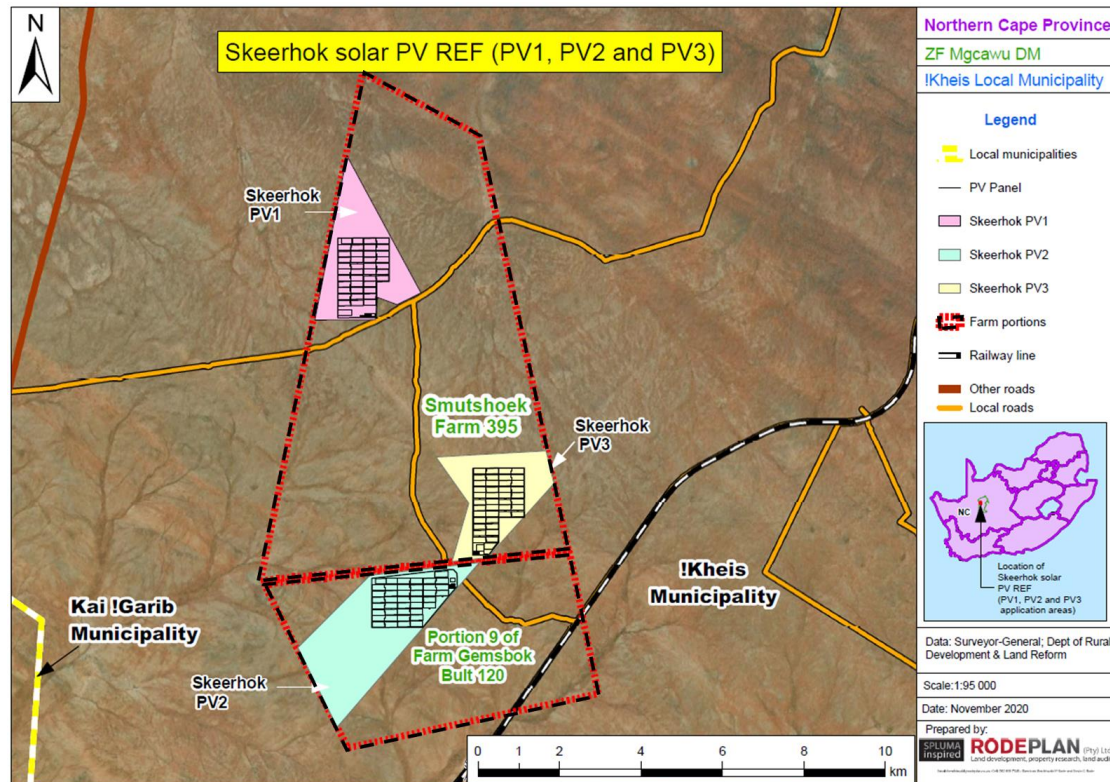
The subject properties are located in the jurisdiction of the !Kheis Municipality in the Northern Cape and privately owned. The properties are together 6489 ha in extent and located in the western segment of the municipal area, between Groblershoop -to the east- and Kenhardt, which lies closer and about 43 km to the south-west thereof (see **Map 1**).



**Map 1:** Regional map (also see **Annexure 5**)

<sup>7</sup> Zonings confirmed by Mr Galloway on 17.11.2020.

The Skeerhok REF will comprise three separately located solar fields, each about 300 ha in size with a combined generation capacity of about 300 MW. Hence, the total and combined land take for renewable energy structures will be about 900 ha of the overall farming area, i.e.  $\pm 14\%$  of 6489 ha. Two of the solar fields (PV1 and PV3) are situated on Farm 395 while the remaining field (pv2) is to the south and in the northern segment of Remainder of Portion 9 of Farm 120 (see **Map 2**).



The key components (or renewable energy structures) of the Skeerhok REF include solar voltaic apparatus, internal and external electric grid connections, roads and additional infrastructure (e.g. collector substation and facilities for the storage of electricity).

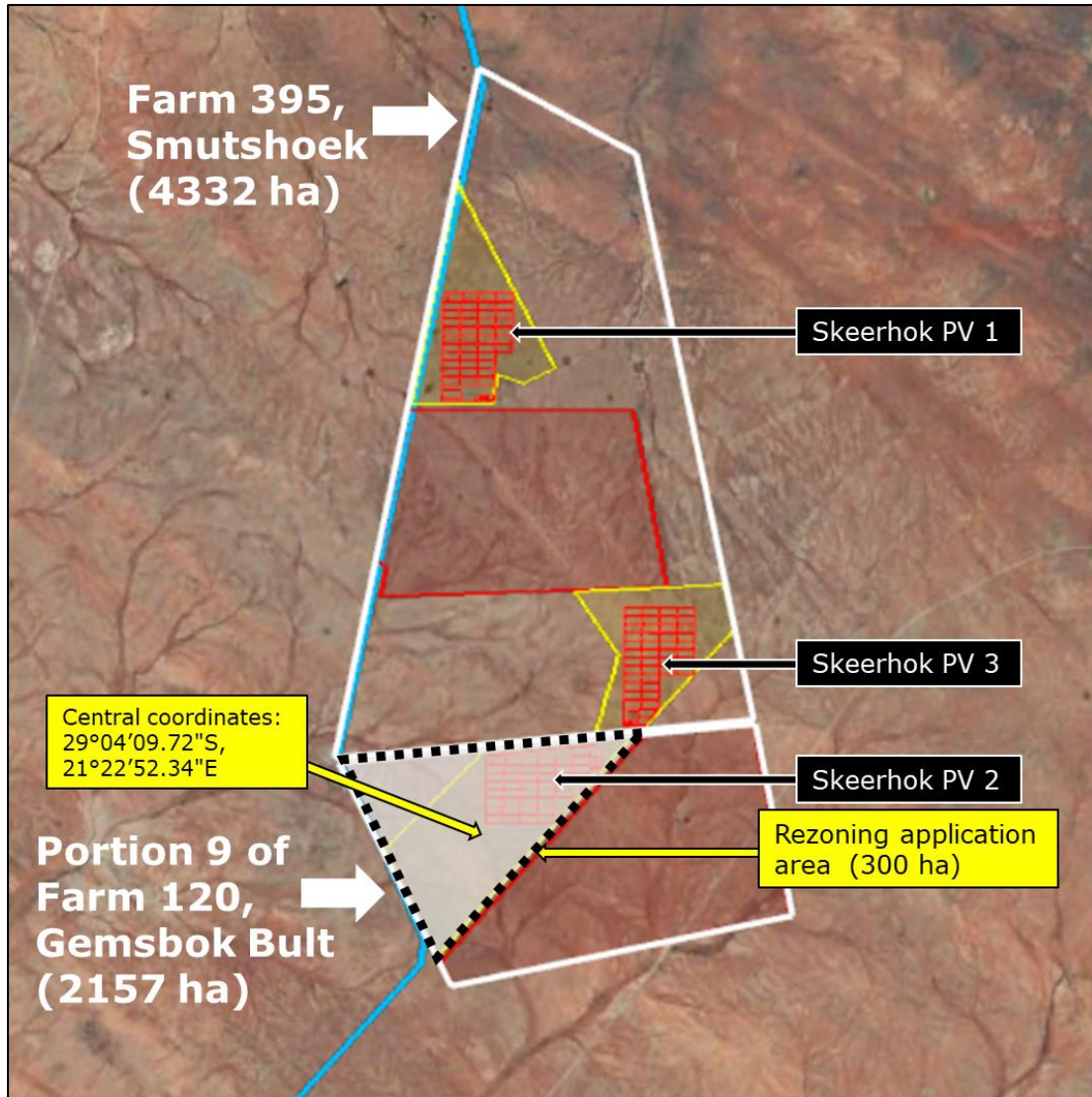
### ***Skeerhok solar PV2 facility***

The *rezoning application area* means the land utilised for Renewable Energy Structures, regardless of cadastral boundaries, and inclusive of all on-site plant and equipment and other miscellaneous infrastructure associated with the generation, transmission and distribution of renewable energy, as well as land used for agriculture. This application concerns a 300 ha *rezoning application area* as a land segment of Remainder of Portion 9 of Farm 120, with central coordinates of 29°04'09.72"S, 21°22'52.34"E, i.e. an area located in the north-western corner of Remainder of Portion 9 of Farm 120, Gemsbok Bult (see **Map 3**).

This preferred siting (or placement of the development footprint) was informed by site-specific selection criteria. In this regard, an area of 400 ha was assessed as buildable area for each project in order to ensure that any development constraints or environmental sensitivities can be avoided in the final siting and



location of the proposed facility.<sup>8</sup> It is stated that the implementation of a solar PV facility as proposed, will result in fewer risks in comparison to its implementation at an alternate site within the Northern Cape (i.e. regions with similar irradiation levels). The placement of the development footprint and associated setbacks from cadastral boundaries, critical and non-critical infrastructure adhere to normal practice for this kind of facility.



**Map 3:** Rezoning application area (PV2)

#### 4. Renewable energy rationale

We state that growth of the South African economy over the next five years will be below the 1% rate achieved in the previous six-year period (2014 to 2019). In 2020, the economy is expected to see a sharp contraction of 8%, before slowly recovering thereafter, i.e. the size of the real economy will only in 2025 be larger than that of 2019 due to the devastating impact of Covid-19.

<sup>8</sup> Final Environmental Impact Assessment Report, March 2018, p.2-2.

In addition, the South African economy — founded upon and maintained by the burning of fossil fuels — is confronted with, *inter alia*, (1) an ever-increasing unemployment rate, (2) extreme fiscal constraints, (3) continued reliance on fossil fuels, (4) energy shortages leading to load-shedding, (5) the need for social infrastructure, e.g. housing, and now (6) the devastation wrought by the Covid-19 pandemic. The ability of Government to meet these economic, environmental and social challenges is, at best, allaying imminent fears of non-delivery. This is, however, in the face of widening inequalities, increasing community protest action over service delivery, ever-increasing electricity tariffs, and the construction of more fossil-fuel power stations.

We take note that the National Development Plan identifies energy infrastructure as a critical component in facilitating economic growth and sustaining economic activities country-wide. The South African power system consists of the generation options, which are (1) 38GW installed capacity from coal, (2) 1.8GW from nuclear, (3) 2.7GW from pumped storage, (4) 1.7GW from hydro, (5) 3.8GW from diesel and (6) 3.7GW from renewable energy. In this regard, it is stated by many international stakeholders that by including a higher percentage of extensive renewable energy technologies in our power mix, great opportunities are offered for local job creation and for making the best use of our natural resource base. Government's response in the Integrated Resource Plan (IRP) — gazetted on 18 October 2019 — is appropriately focused and through its response, Government recommits to international commitments, ambitions and reporting initiatives, e.g. Millennium Development Goals. In addition, the demarcation of Renewable Energy Development Zones and the introduction of the RMIPPPP further solidifies this commitment.

#### Procurement of independent power producers

Government's Integrated Resource Plan, as long-term energy plan, states the scale and pace of new electricity generation capacity to be commissioned over the next decade. Solar will contribute within a 1000 MW yearly deployment cap from 2022 to 2030 (except in years 2024, 2026 and 2027). This significant contribution until 2030 is, however, less than the installed energy capacity by wind in the country. Note that this annual build limit will be reviewed to take into account demand and supply requirements. It is estimated that the deployment of solar PV and wind will contribute up to 110 000 jobs over the next decade.

After the first four bidding windows of South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), the total in renewable energy procured is 3366 MW — mobilising private investment of R168 bn, leaving a further 14 376MW to be procured until 2030. A fifth window, which was to have been introduced in 2016, is now introduced as the energy technology agnostic bid process (or RMIPPPP) with an uptake of 2000MW inclusive of all technologies.

Please note that allocated land use rights for a proposed renewable energy project is not a gate-keeping criterion for procurement. However, proof of submitting the land development application is a pre-requisite for bid submission and possession of the land use right a pre-requisite for financial close, once the project has been selected as Preferred Bidder. Time constraints are therefore of critical concern.

## 5. Objectives

This application is submitted in terms of section 67(b)(vii) of the !Kheis Municipality Land Use Management Scheme (LUMS) read together with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA).

The aim is to obtain the applicable land use rights to construct the Skeerhok solar PV2 facility on a 300 ha land segment of Remainder of Portion 9 of Farm 120, Gembok Bult. This facility forms part of the Skeerhok REF located on two contiguous farm properties known as Farm 395, Smutshoek and Remainder of Portion 9 of Farm 120, Gembok Bult. These properties are located between the towns of Groblershoop and Kenhardt in the jurisdiction area of the !Kheis Municipality.

We apply for:

- Rezoning of a 300 ha land segment of Remainder of Portion 9 of Farm 120, Gembok Bult, from Agriculture Zone I to Utility Zone III to accommodate the Skeerhok solar PV2 facility.

The **subdivision** of the land unit is not considered.

This document must also serve as **information document** for Interested and Affected Parties.

## 6. Preparatory work

RODEPLAN was appointed in October 2020, to compile and submit to the relevant authority a rezoning application in terms of the municipal Land Use Management Scheme read together with SPLUMA. A pre-application meeting was not considered but Mr Rode corresponded with Mr van Eck (!Kheis Municipality) and Mr Galloway (ZF Mgcawu District Municipality) regarding the drafting, submission and processing of this land development application.

In this regard, it was decided to submit the application:

- Complying with the procedures in the Scheme.
- In printed and electronic format and signed by the applicant.
- Including a completed Application Form and the following information:
  - A power of attorney authorising the applicant to make the application on behalf of the owner (see **Annexure 1**).
  - A trust resolution (not applicable).
  - The relevant bondholder's consent (not applicable).
  - A comprehensive written motivation as to why the development right applied for should be granted and which deals with the development principles contained in Chapter 2 of the Act, the applicable land use scheme, the Spatial Development Framework of the Municipality and the factors listed in sections 42(1)(c) and 42(2) of the Act.
  - Proof of payment of application fees (see **§7**).
  - A full, certified copy of the existing title deed indicating all existing title conditions (see **Annexure 2**).
  - A conveyancer's certificate indicating that no restrictive condition in respect of the application is contained in the title deeds or any other documents in which restrictive conditions may appear such as a deed of sale (see **Annexure 2**).

- Proof of compliance to any other legislation or authority require any other actions (addressed in the report).
- The required maps (see **Annexures 4, 5 and 6**).

Please note that it was agreed with Mr Galloway that comment from any identified Department or Interested and Affected Party whose rights may be affected, will be obtained after submission. In this regard, municipal requirements about the notification process will be set out in a section 85(a)(ii) letter to the applicant along with outstanding information, documentation, plans or additional fees that is required (if any).

## 7. Fees

The application fee is to be paid on receipt of the section 85(a)(ii) letter.

## 8. Advertising process

Mr Rode was informed that the required notification process will be set out in a section 85(a)(ii) letter. In this regard, we propose the following actions:

- Obtain comment from (per registered mail)
  - Adjacent property owners – Municipality to identify and provide contact details; these do not include the properties that form part of the REF.
  - Interested and Affected Parties (I&APs).
- Placement of notice on the site.
- Placement of notice in the Groblershoop Public Library.
- Placement in local newspaper (after receiving advert from the Municipality).
- Not required: Placement on municipal website and in the provincial gazette.

## 9. Report structure

This report is structured to firstly introduce the application process as well as the development proposal in the context of a rationale for renewable energy. Section II then describes the legal framework and Section III the spatial directives as parameters for the establishment of the solar PV energy facility. Section IV refers to the NEMA application. Sections V and VI interpret the receiving environment and provide detailed specifics of the development proposal.

Section VII provides information about the public participation process and we conclude, in Section VIII, by providing clarity on the wording of the land use change and desirability. Section IX includes reference to the annexures.

## 10. List of tables and maps

- Table 1: Properties associated with the Skeerhok solar photovoltaic renewable energy facility
- Table 2: A list of farm parcels and owners of the properties earmarked for the *Skeerhok* REF



Table 3: Overall ratings of impact: *Skeerhok* REF

Map 1:	Regional map
Map 2:	Locality map
Map 3:	Rezoning application area (PV2)
Map 4:	Renewable Energy Development Zones (REDZ)
Map 5:	Approximate location of <i>Skeerhok</i> REF in REDZ
Map 6:	Location of <i>Skeerhok</i> solar REF in REDZ transmission corridor
Map 7:	Combined image of <i>Skeerhok</i> REF
Map 8:	Proposed leasehold areas
Map 9:	Preferred layout of <i>Skeerhok</i> solar PV1 facility
Map 10:	Preferred layout of <i>Skeerhok</i> solar PV2 facility
Map 11:	Preferred layout of <i>Skeerhok</i> solar PV3 facility

## Section II – Legislative and development framework

### 11. Land use legislation

#### 11.1 Municipal Land Use Planning Bylaw and Management Scheme

The Spatial Planning and Land Use Planning Act, 2013 (Act 16 of 2013) is the governing framework for spatial planning and land use management in the province and municipal area. This Act is effective, countrywide, since 1 July 2015.

SPLUMA requires that the use of land must be in accordance with the zoning of such land, *irrespective of the user*. Complying with SPLUMA, it is stated in the LUMS that 'no person may commence, continue, or cause the commencement or continuation of land development without the approval of the Municipality'.

In accordance with this governing framework, the Municipality approved the !Kheis Local Municipality Land Use Planning Bylaw and Land Use Management Scheme (by way of council resolution CM 04/05/2020 on 9 May 2020) — being constitutionally empowered to make and adopt detailed laws pertaining to land use management. The general objective of these regulations and accompanying zoning scheme is to determine the land use rights of all land within the municipal area, and for control over the execution of these rights and the utilization of this land.

The development proposal of a renewable energy facility implies a non-conforming land use on land zoned as Agriculture Zone I, i.e. the current zoning of the two properties. Hence, as provided for in the Land Use Management Scheme of the !Kheis Municipality, application is made to rezone a part of Remainder of Portion 9 of Farm 120 to Utility Zone III. This zoning category accommodates the land use of renewable energy generation and includes all on-site plant and equipment and other miscellaneous infrastructure associated with the generation, transmission and distribution of renewable energy. Agricultural activities are allowed in the rezoned area not utilised for the renewable energy plant.

The development rights we apply for under the new zoning, are described in the Environmental Authorisation issued for the Skeerhok solar PV2 facility.

Note that there is no national directive regarding a land-use category to make possible the development of commercially-operated renewable energy generation facilities. Hence, this application has been structured according to what is possible in terms of the recently adopted Scheme to accommodate the land use of renewable energy (wind and solar with storage) as a new zoning category. We note that the Scheme does not include any land use restrictions pertaining to this zoning category. Hence, we refer to §19 in this report as possible restrictions to be considered to municipal satisfaction. We also believe this motivation report includes sufficient information regarding the criteria (as general land use regulations) whereby the need and desirability of land use can be measured to guide decision making.

Please note that long-term leases will be notarially executed and registered against the title deeds of both subject properties, for which ministerial approval in

terms of the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) is required.

## 11. Land use legislation (continued)

### 11.2 Other relevant legislation (in the context of this application)

#### **Spatial Planning and Land Use Management Act, 2013**

The Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) was enacted by the national Department of Rural Development and Land Reform on 5 August 2013 and came into effect on 1 July 2015.

SPLUMA aims to develop a new framework to govern planning permissions and approvals, sets parameters for new developments and provides for different lawful land uses in South Africa.<sup>9</sup> SPLUMA is a framework law, which means that the law provides broad principles for a set of provincial laws that will regulate planning and clarify on how planning law interacts with other laws and policies.

The Act emerged through the Green Paper and White Paper processes to replace (mainly) the DFA as the legislative instrument to regulate spatial planning and land use management in the country. As can be expected, the Act is all-encompassing and, amongst others, addresses the issue of putting in place a uniform, recognisable and comprehensive system of land use management to ensure economic unity and equal opportunity or equal access to government services. In this regard, the development principles as described in section 7 are a key outcome. However, SPLUMA nor any other legislation determine or translate the legislated development principles into quantifiable outcomes, e.g. setting targets to counter long-term structural changes in the context of land use management.

#### **National Environmental Management Act, 1998 (Act 107 of 1998)**

See **Section IV** (Environmental impact assessment) for the status of the NEMA application.

#### **National Heritage Resource Act, 1999 (Act 25 of 1999)**

Have been considered in the EIA processes.

#### **Astronomy Geographic Advantage Act (No. 21 of 2007)<sup>10</sup>**

The Astronomy Geographic Advantage Act (No. 21 of 2007) provides for the preservation and protection of areas within South Africa that are uniquely suited for optical and radio astronomy; for intergovernmental co-operation and public consultation on matters concerning nationally significant astronomy advantage areas and for matters connected thereto.

In line with this act, the Northern Cape, excluding Sol Plaatje Municipality, was declared an astronomy advantage area in Government Gazette No. 33462. The Karoo Core Astronomy Advantage Area will contain the MeerKAT radio telescope

<sup>9</sup> <http://www.customcontested.co.za/laws-and-policies/the-spatial-planning-and-land-use-management-act-spluma/>.

<sup>10</sup> Information obtained from Final Environmental Impact Assessment Report, March 2018.

and the Square Kilometre Array (SKA) radio telescope that will be used for the purposes of radio astronomy and related scientific endeavours.

The Skeerhok solar PV2 facility falls inside the Core Astronomy Advantage Areas and is subject to the various regulations and declarations protecting the SKA sites. In this regard, a Radio Frequency Interference (RFI) Survey Technical Study and a Electromagnetic Interference (EMI) study were commissioned as part of the NEMA process. The aim was to determine the impact of the proposed project on the SKA and to propose appropriate mitigation and management measures to reduce the risk of any detrimental impact.

The nearest SKA station to the Skeerhok solar (PV) facility has been identified as SKA Station ID 2362, at approximately 20 km from the proposed facility. In a letter of formal correspondence, SKA South Africa supports the view that the required attenuation regarding radio frequency emissions is achievable following appropriate design decisions and implementation of mitigation measures. However, the project is required to prepare and submit an Electromagnetic Compatibility Control Plan (EMC) to SKA South Africa for approval prior to any detailed design and construction activities associated with the proposed facilities.

In sum and assuming that the emissions from each Skeerhok PV plant is attenuated in accordance with an EMC Process Control Plan, such that the individual PV plants will not result in interference at the SKA, then the Skeerhok PV plants are expected to have minimal/ negligible contribution to the potential cumulative impact to the SKA.

## 12. Policy guidelines

### 12.1 National, provincial and district

#### **National**

##### **National Government's New Growth Path<sup>11</sup>**

The New Growth Path (NGP) reflects Government's commitment to prioritising employment creation in all economic policies and lays out strategies to enable South Africa to grow in a more equitable and inclusive manner in the future, fulfilling the promise of our democracy.

The centrepiece of the NGP is a massive investment in infrastructure and people through skills development, together with smart government and better coordination with the private sector and organised labour so that we can achieve our national goals. Infrastructure development is identified as a critical driver of jobs across the economy. The document identifies investments in five key physical and social infrastructure areas, namely energy, transport, communication, water and housing. The sustaining of high levels of public investment in these areas would create jobs in construction, operation and maintenance of infrastructure.

The green economy is one area for which the NGP sets out an ambitious programme to create jobs, through a series of partnerships between the state and the private sector. This includes expansions in construction and the production of technologies for solar, wind and biofuels.

<sup>11</sup> <http://www.politicsweb.co.za/politicsweb/view/politicsweb/en/page71654>

The document recognises the need for a coordinated set of actions across a broad front and identifies a "development package" consisting of macroeconomic strategies, microeconomic measures and stakeholder commitments to drive employment and economic growth.

These actions include, *inter alia*, the following:

- A broad pact between business, labour and the government aimed at fostering employment creation whilst enhancing competitiveness and social equity and development goals.
- Measures to strengthen the capacity of the state and enhance the performance of the private sector to achieve the employment and growth goals, e.g. slashing unnecessary red tape, improving competition in the economy and stepping up skills development.
- Enhancing rural employment through the finalisation of a spatial perspective that sets out the opportunities available and the choices that we must make to lay the basis for aligning government spending, infrastructure and housing investment and economic development initiatives.

### **National Development Plan<sup>12</sup>**

National Development Plan (NDP) is a wide-ranging document that sets the tone for government thinking over the next two decades. Electricity is identified as one of the core components of a decent standard of living.

In the context of renewable energy, the plan states that, 'by 2030, South Africa will have an energy sector that provides reliable and efficient energy service at competitive rates, is socially equitable through expanded access to energy at affordable tariffs and environmentally sustainable through reduced pollution'.<sup>13</sup> In this regard, the development of additional electricity capacity would be required, i.e. roll out of additional electricity infrastructure.

### **Integrated Resource Plan, 2019**

See §4.

### **Department of Agriculture, Forestry and Fisheries, Regulations for the evaluation and review of applications pertaining to wind and solar farming on agricultural land**

These guidelines direct the use of agricultural land for renewable energy generation. Amongst others, it states that the change of land use on *demarcated* agricultural land, for the establishment of a wind or solar farm, would be reviewed on merit and informed by the relevant planning legislation applicable to the area concerned. Such a change must be temporary and must depend on the lifespan of the project where after the land should revert automatically back to agriculture.

### **Provincial**

<sup>12</sup> South Africa has done (futures thinking) through the medium-term expenditure frameworks and the establishment of the National Planning Commission is an expert-driven vehicle to try and look at the future (Source: <https://www.dailymaverick.co.za/opinionista/2019-02-14-futures-thinking-is-here-to-stay/>, viewed on 14 February 2019).

<sup>13</sup> Integrated Resource Plan, August 2018.

## **Northern Cape Growth and Development Strategy<sup>14</sup>**

The Northern Cape Growth and Development Strategy (NCGDS) is a strategic and integrated provincial development plan providing direction and scope for province-wide development programmes and projects within the context of a long-term perspective and taking into consideration the resources and constraints. The NCGDS provides a spatially referenced framework for both public and private sector investment, indicating areas of opportunities and developmental priorities and enabling intergovernmental alignment. It guides the activities of all agencies and role-players by linking and deepening the application of the National Spatial Development Perspective and of the MTSF in areas of shared impact.

In response to the social and economic development imperatives yielded by an analysis of the socio-economic profile of the province, the following primary development objectives have been identified:

- Promoting the growth, diversification and transformation of the provincial economy.
- Poverty reduction through social development.

The achievement of these primary development objectives depends on the attainment of related objectives that, at a macro-level, describe necessary conditions for growth and development. These are:

- Developing requisite levels of human and social capital.
- Improving the efficiency and effectiveness of governance and other development institutions.
- Enhancing infrastructure for economic growth and social development.

The methodology to achieve the primary development objectives includes mention of, *inter alia*, the fact that strategies to ensure the availability of inexpensive energy through the development of new sources of energy via the promotion of the adoption of energy applications that display a synergy with the province's natural resource endowments, must be encouraged. The development of energy sources such as wind and solar energy, the natural gas fields, bio-fuels, etc, could be some of the means by which new economic opportunity and activity is generated in the Northern Cape.

### **District**

#### **ZF Mgcawu Integrated Development Plan, 2020-2021 (IDP)**

An IDP is regarded as a leading policy instrument (for all three tiers of government), but sadly, this IDP does not address renewable (solar) energy generation as a strategic priority. However, and in the context of this application, a key concern expressed in the document is the underestimation of the potential of renewable (solar) energy generation. A general statement in the IDP is to find ways to improve the relative position of the district in the spatial economy through targeted interventions.

### **Local**

<sup>14</sup> [http://www.northern-cape.gov.za/index.php?option=com\\_content&view=article&id=103&Itemid=27](http://www.northern-cape.gov.za/index.php?option=com_content&view=article&id=103&Itemid=27).

### **!Kheis Municipality Integrated Development Plan, 2017-2022 (IDP)**

The IDP is regarded as the leading policy instrument to align budgeting and project implementation with strategic priorities. In this regard, the vision statement of the municipality includes reference to a growing economy and local employment creation.

However, the IDP includes limited reference to how renewable energy generation should be addressed as an economic activity (or targeted intervention as identified in the District IDP). The plan does include green energy (renewable energy / solar power) as an economic thrust and strategic focus area with strong emphasis on policy making and the involvement of small, micro and medium enterprises in local development.

The need to optimise the strategic location of the municipality is recognised in the context of Government's Strategic Infrastructure Programme (SIP) and being part of the Special Economic Development Zone (solar corridor). It is stated that investment opportunities in solar facilities should be promoted to assist economic sustainability and to contribute to the provision of municipality-wide basic services.

### **13. Investment directives**

This application – submitted to a municipality as the authority of first instance – is guided by a suite of plans, ultimately informing decisions regarding land development. In this regard, the two most important municipality-driven plans are the Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of each of the relevant category-C and B municipalities, viz. ZF Mgcawu District Municipality and !Kheis Municipality. The IDPs (are supposed to) guide the municipality-wide and needs-based operations of all three tiers of government, whereas, an SDF is an issue-specific informant of the IDP which provides regulatory directives for land development investment (we discuss the SDFs in **§17**).

The following plans were considered but like most municipality-driven interventions, these plans do not qualify or quantify the available and/or required (local) investment offerings:

- ZF Mgcawu District Municipality Integrated Development Plan, 2020-2021.
- !Kheis Municipal Integrated Development Plan 2017 – 2022

### **Investment priorities**

The two aforementioned IDPs (not surprisingly) do recognize the economic benefits of renewable energy generation as a possible mainstream investment class. However, the plans do not provide any guidance on how to stimulate growth and diversification in this economic sub-sector. In sum, renewable energy (generation) is regarded as a development opportunity but unfortunately the documents do not provide any indication of making this possible.

### **Investment geography**

In the context of this application, spatial guidelines directing investment should be provided in the ZF Mgcawu District Spatial Development Framework and the

!Kheis Municipality's Spatial Development Framework. See **Section 17** for a more detailed discussion in this regard.

#### 14. Project response

We structure our response to the section on the regulatory environment by firstly addressing the national and provincial objectives regarding renewable energy generation and secondly the land use management issue. In **§18** we deal with the regional and local site selection criteria.

We believe that the Skeerhok solar PV2 facility promotes and supports all relevant legislative requirements, policy guidelines and development objectives/targets as formulated by the government in respect of renewable energy generation. As mentioned, there is a high level of support for these directives in local policy. This support has, however, not yet been transformed into guidelines to direct local investment, development and spatial preferences, notwithstanding the recent mapping of the region (including the *application area*) as a preferred geographical distribution area for power-generating facilities.

Land is a finite resource and the way it is used is one of the principal drivers of environmental change, with significant impacts on quality of life and ecosystems as well as on the management of infrastructure. The use of land is influenced by a number of important drivers, *inter alia*, demography, economic development, resource availability, environmental conditions, development costs, transport infrastructure and regional and local planning policies. In this regard, land users and/or owners, continually decide on the quantum, quality and location of space required to meet specific (economic) objectives. Government's goals and regulatory mechanisms also influence the incentive to develop or use land, i.e. target-setting for biodiversity conservation, land reform, renewable energy generation, economic growth and poverty alleviation.

Each one of the mentioned drivers (and targets) merits detailed research and analysis but in the interests of brevity, we discuss only some of them as well as the land-use denominator of highest and best use<sup>15</sup>. We have already referred to the need for regional and local (planning) policy as directives for the introduction of renewable energy (wind and solar) into the (rural) landscape. The proposed development will introduce a land use different to existing land uses on the site and on most of the surrounding land. However, the proposed land use is similar to other applications for solar PV facilities in the surrounding area close to the Eskom Nieuwehoop Substation.

We state that the current 'on-site' land use is a type of farming that, although structurally detached from renewable energy generation and any appurtenant infrastructure, can continue to function optimally – as provided for in the zoning of Utility Zone III.

The area between Groblershoop and Kenhardt, as a preferred distribution area for power-generating facilities and the (future) electricity grid, is already home to transmission networks and substations. Hence, we believe that the landscape has changed and are changing accordingly. It is foreseen that the impact on on-site and adjacent land use as a result of the proposed renewable energy facility,

<sup>15</sup> The most probable use of a property that is physically possible, appropriately justified, socially just, legally permissible, financially feasible and which results in the highest value of the property being valued.



would be very low if mitigating measures were to be applied. The introduction of renewable energy generation within the *application area* is furthermore complemented by, *inter alia*, the availability of a natural resource and landowner support.

It is also known that land uses generally conform to a regular, predictable pattern and that the conversion of land use reflects changing relations / configurations within, *inter alia*, a rural setting as described above. This locational condition ensures the highest and best use of land; now even more so with the mapping of the REDZ. The current highest and best use for large tracts of (rural) land in the area between Groblershoop and Kenhardt is low intensity grazing. It is notable that a negative change in one or more of the mentioned drivers, e.g. economic and environmental conditions, can put an end to farming; signifying a volatile (economic) situation. Hence, current economic (as well as environmental) conditions and investment priorities point to alternative investment opportunities as highest and best use of certain land areas in this region – evidenced by the mapping of the area as a REDZ and proposed renewable energy facilities.

Please note that the *application area* does not fall within a Critical Biodiversity Area or any expansion area in terms of a conservation strategy for the Northern Cape. We believe that the land use of renewable (solar) energy generation, considering its scale, form and operation, can be regarded as one of the investment priorities identified in district and local integrated development processes.

## Section III – Spatial directives

### 15. Spatial rationale

What determines the optimum location of a renewable energy facility?

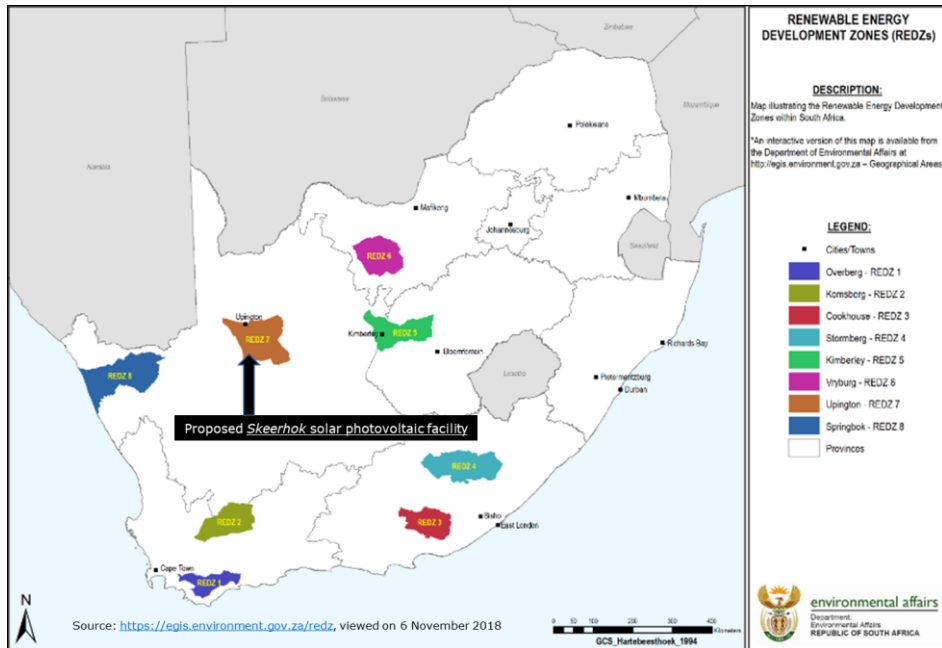
In this regard, DEFF commissioned a study to identify, country-wide, focus areas best suited for the roll-out of renewable energy projects and electricity grid infrastructure.<sup>16</sup> This study used the same methodology applied in a study by the Western Cape government, i.e. using positive and negative mapping based on composite overlays of all positive and negative criteria to filter out “exclusion” or “restricted” zones, or “inclusion” or “preferred” zones.<sup>17</sup>

Renewable Energy Development Zones were identified as the preferred areas for large scale renewable energy development and the roll out of supporting transmission and distribution infrastructure. Although grid investment would be prioritised in these areas, it is stated that such investment (by government) should not be limited to these areas. In this regard, ‘suitable wind and solar PV development is still promoted across the country and any proposed development must be considered on its own merits’.

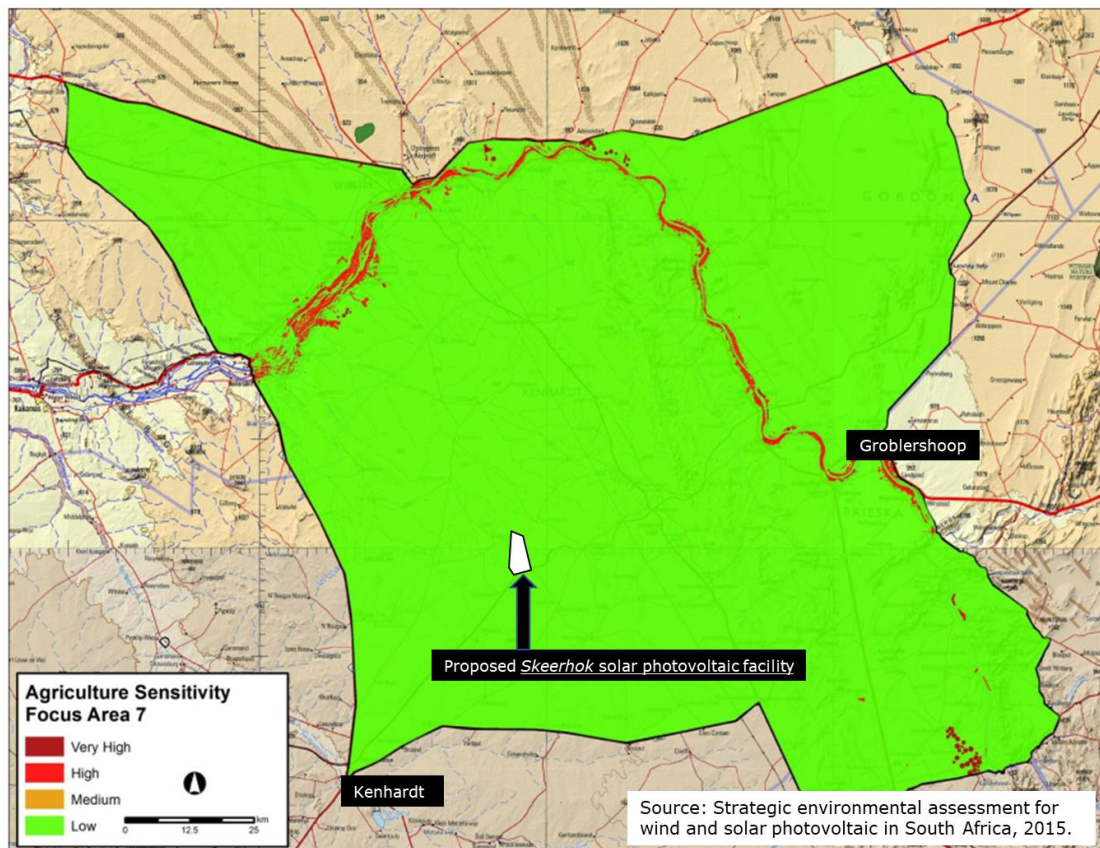
The proposed Skeerhok solar PV2 facility falls within the Upington REDZ, alongside several proposed solar PV energy facilities and within the central corridor of the proposed electricity grid infrastructure corridors (see map below).

<sup>16</sup> Government Gazette No.41445, 16 February 2018.

<sup>17</sup> Provincial Government Western Cape, Strategic Initiative to Introduce Commercial Land Based Wind Energy Development to the Western Cape, Towards a regional methodology for wind energy site selection, Report 6: Proposed project level methodology, May 2006.



**Map 4:** Renewable energy development zones



**Map 5:** Approximate location of Skeerhok REF in REDZ

Based on development density limits, the generating capacity within each REDZ was determined – largely based on the combined capacity of authorised and proposed facilities within each particular area. It is stated in the study that this estimated capacity is subject to change based on project level assessments that will further inform the site-specific sensitivities and development density limits,

and could thus be significantly greater or smaller than the calculated capacity. This and uncertainty regarding the contribution from outside the REDZ, complicates decisions on the placement and size of renewable energy plants — more so for investors than for Government as it tends to thwart attempts by private-sector developers to prepare feasibility studies for potential projects.

The CSIR study stated that the existing local spatial plans (of municipalities within the Upington REDZ) generally promote renewable energy developments in the area. Municipalities such as !Kheis, Siyacuma, and Siyathemba encourage solar PV development in their areas of jurisdiction, with the !Kheis Municipality particularly emphasising the need to provide support to enhance the trade, catering and accommodation industry during the stages of construction and operation of such projects.

The Upington REDZ is described to have a high renewable resource potential that can be exploited when grid infrastructure becomes available. The proximity to the existing grid is a key criterium for placement and a consideration in the procurement of independent power producer renewables capacity. Such proximity to the grid is important, because any extension of the transmission system, as well as the related environmental impact assessments (EIAs) for new transmission lines and substations, could take as long as five years to finalise. Hence, and owing to grid connection limitations, Eskom advocates a three-tiered approach for the connection of renewable energy into the transmission grid. The first level would be to connect projects that would not require power transmission reinforcement — the *Eskom Nieuwehoop substation is located close to the application area*. The second and third levels are described as the medium-term and longer-term outlooks, targeting larger projects and where transmission corridors could be created once variables had been proven (as was done with the aforementioned national study).

In this regard, commentators maintain (in support of the national study) that a geographical diversification of renewable energy connections are important. Although this (macro) geographical diversification of renewable energy grid connections has been finalised, the identification and evaluation of construction sites at district and local level still rely on local guidelines, preferences and processes to be gleaned on a project-by-project basis.

## 16. Regional methodology for renewable energy site selection

At the time of writing we were not aware of any regulatory directives and/or methodologies for renewable energy site selection applicable to the Northern Cape province besides the legislated procedure (i.t.o. NEMA) to be followed when applying for a renewable energy facility within a REDZ.

## 17. Spatial Development Frameworks

Legislation requires a spatial development framework to spatially (1) guide strategic developments and investment, (2) promote efficient, sustainable and planned investments by all sectors and (3) designate priority areas for investment

in land development.<sup>18</sup> Note that we provide interpretations of the previous and current Northern Cape Provincial Spatial Development Frameworks to assess changes (if any) in spatial planning policy.

### **Northern Cape Provincial Spatial Development Framework, March 2012<sup>19</sup>**

It is stated that the Northern Cape has a significant comparative economic advantage vested in its inherent resources (both renewable and non-renewable). The sustainable use of such resources holds the key to long-term sustainability and growing prosperity in the province. In this regard, it is proposed in the SDF that a provincial Renewable Energy Strategy be drafted.

As a guiding principle for sustainable development, it is stated that the benefits derived from the use of the Northern Cape's inherent resources depend upon (1) such resources being used within their renewal capacity (2) maintenance of the integrity of the natural systems which produce such resources (3) minimising, or avoiding, the risk or irreversible change induced by humans (4) adequate investments being made to ensure the conservation of resources, and (5) avoiding or minimising the adverse impacts of the use of non-renewable resources.

It is estimated that there are many investment opportunities in generating wind and solar energy. In this regard, the provincial government determined that renewable energy sources (wind, solar thermal, biomass, and domestic hydro-electricity generation) are to comprise 25% of the Province's energy generation capacity by 2020. However, the realisation of these opportunities requires large investments in transmission lines from the areas of high radiation to the main electricity consumer centers.

In the consultative draft, the following objectives and policy guidelines are identified under the theme 'Energy':

- Promoting the development of renewable energy supply schemes is identified as an objective. With an increasing demand in energy predicted and growing environmental concerns about fossil fuel-based energy systems, the development of large-scale renewable energy supply schemes is strategically important for increasing the diversity of domestic energy supplies and avoiding energy imports while minimizing the environmental impacts
- There is currently a national electricity supply shortage and the country is now in a position where it needs to commission additional plants urgently. As a result, renewable energy projects are considered to be high priority
- The implementation of sustainable renewable energy is to be promoted through appropriate financial and fiscal instruments
- An effective legislative system to promote the implementation of renewable energy is to be developed, implemented, and continuously improved
- Public awareness of the benefits and opportunities of renewable energy must be promoted
- The development of renewable energy systems is to be used for economic development throughout the Province, including the rural areas as part of the CRDP, and
- Renewable energy must, first, and foremost, be used to address the needs of the Province before being exported.

<sup>18</sup> Section 12(1)(k) of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).

<sup>19</sup> Office of the Premier of the Northern Cape, Northern Cape Spatial Development Framework, 1<sup>st</sup> Consultative Draft, March 2012.

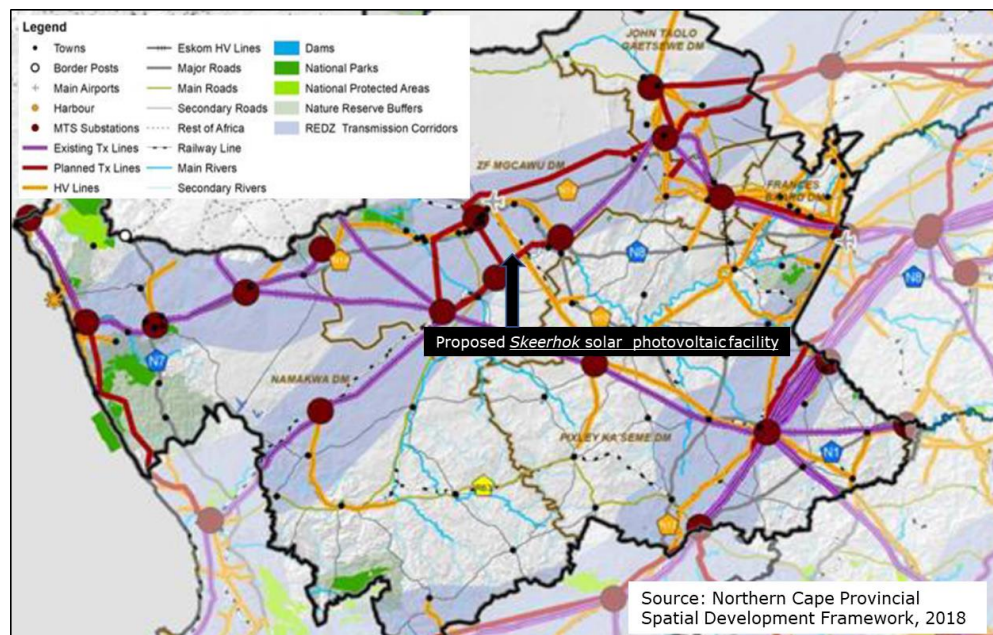


The SDF proposes to create Spatial Planning Categories (SPC) as part of a Provincial SPC plan to serve as a basis for detailed designation at the district and local level in accordance with defined sub-categories. In this regard, another category, viz. SPC F: Surface Infrastructure, has been added. There is however, limited geographic reference to the possibility of wind energy generation, only along a section of the coastline.

### Northern Cape Provincial Spatial Development Framework, 2018

This SDF does built on the previous framework. For example, It is stated that the SDF for the !Kheis Local Municipality includes renewable energy as a land use under the spatial category known as Surface Infrastructure.

Identified spatial challenges and opportunities include renewable energy production as a dominating infrastructure activity within the province, which requires clear guidance, management and maintenance, to ensure it does not negatively affect the aesthetics and tourism potential of the province. The limited coordination and spatial logic of renewable energy project locations and distribution is identified as a challenge. Attempting to address this challenge, it is stated that large scale renewable projects are to be concentrated along bulk electrical infrastructure or corridors – *please note that the application area is within a REDZ transmission corridor* (see map below). Importantly, the SDF supports collaboration between the private and public sectors to drive a single and well coordinate development drive in the province – emphasising the need for targeted investment as identified in the District IDP. Spatially, this investment is designated to a 'soft-edge development triangle' with the *application area* within the western segment of this development focus area.



**Map 6:** Location of Skeerhok REF in REDZ transmission corridor

One of the core values of the SDF is the optimum use of existing resources including renewable energy potential. In this regard, it is stated that renewable energy sources (e.g. wind, solar thermal, biomass, and domestic hydro-electricity generation) are to comprise 25% of the province's energy generation capacity by 2020 (a repeat of the policy directive in the previous SDF).

We are certain that as proposed in the previous SDF, a provincial Renewable Energy Strategy has not been drafted. To this, the current SDF adds the undertaking to conduct Strategic Environmental Assessments in areas suited for renewable energy generation, to incentivise and streamline the administrative and development processes. Another proposal is to develop a Master Infrastructure Plan to align and coordinate infrastructure investment (see reference above to bulk electrical infrastructure or corridors).

The current SDF does give effect to the creation of Spatial Planning Categories. In this regard, renewable energy generation is classified under the Surface Infrastructure and Buildings category. The description provided for this land use (and in the context of this application) includes the following:

- Promote the development of renewable energy supply schemes. Large-scale renewable energy supply schemes are strategically important for increasing the diversity of domestic energy supplies and avoiding energy imports while minimizing detrimental environmental impacts.
- In order to reinforce the existing transmission network and to ensure a reliable electricity supply in the Northern Cape, construct a 400kV transmission power line from Ferrum Substation (near Kathu/Sishen) to Garona Substation (near Groblershoop). There is a national electricity supply shortage and the country is now in a position where it needs to commission additional plants urgently. Consequently, renewable energy projects are a high priority.
- Develop and institute innovative new energy technologies to improve access to reliable, sustainable and affordable energy services with the objective to realize sustainable economic growth and development. The goals of securing supply, providing energy services, tackling climate change, avoiding air pollution and reaching sustainable development in the province offer both opportunities and synergies which require joint planning between local and provincial government as well as the private sector.

The SDF (and in the context of this application) includes the following policy directives regarding renewable energy generation:

- Renewable energy sources such as wind, solar thermal, biomass and domestic hydroelectricity are to constitute 25% of the province's energy generation capacity by 2020;
- The following key policy principles for renewable energy apply:
  - Full cost accounting: Pricing policies will be based on an assessment of the full economic, social and environmental costs and benefits of energy production and utilisation.
  - The implementation of sustainable renewable energy is to be promoted through appropriate financial and fiscal instruments.
  - An effective legislative system to promote the implementation of renewable energy is to be developed, implemented, and continuously improved.
  - Public awareness of the benefits and opportunities of renewable energy must be promoted.
  - The development of renewable energy systems is to be harnessed as a mechanism for economic development throughout the province in accordance with the Sustainable Development Initiative (SDI) approach or any comparable approach.
  - Renewable energy must, first, and foremost, be used to address the needs of the province before being exported.

## 18. Project response: Site selection

The site selection process conducted by juwi Renewable Energies (Pty) Ltd that resulted in the siting of the Skeerhok solar PV2 facility as a potential energy project, included the identification of other 'suitable' sites for renewable energy facilities throughout the Northern Cape province. This process was informed by the issuing of the environmental authorisations and by the national intervention to identify preferred areas for establishing large-scale wind and solar PV energy facilities.<sup>20</sup>

The 'selection' of the site by juwi Renewable Energies (Pty) Ltd was based on a number of factors, including (but not limited to):

- Solar resources
- Site extent
- Grid access
- Land suitability (e.g. for construction) and proximity to aerodromes
- Nature reserves
- Local economic stimulation
- Current land use
- Landowner support.

We acknowledge the Renewable Energy Development Zones as the preferred areas for large-scale renewable energy development and the roll-out of supporting transmission and distribution infrastructure.<sup>21</sup> Please note that this designation does not preclude other areas from consideration and that a Phase 2 Strategic Environmental Assessment has been commissioned.<sup>22</sup>

The proposed Skeerhok solar PV2 facility falls entirely within such a zone, i.e. *providing certainty in decision making*. In this regard, the *application area* lends itself to renewable energy generation as also evidenced by the number of proposed solar PV facilities surrounding the near-by Eskom Nieuwehoop Substation.

<sup>20</sup> Department of Environmental Affairs, *Strategic environmental assessment for wind and solar photovoltaic energy in South Africa*, 2015.

<sup>21</sup> Government Gazette No.41445, 16 February 2018.

<sup>22</sup> Strategic Environmental Assessment for wind and solar photovoltaic in South Africa, 2105 as published in Government Gazette No.41445, 16 February 2018.

## Section IV – NEMA application

### 19. Environmental impact assessment

The *rezoning application area* was the subject of environmental impact assessments in terms of the 2014 Regulations under the National Environmental Management Act, 1998 (Act No. 107 of 1998, with amendments) done under the respective project names. An Environmental Authorisation (EA) was issued for each of the following three projects:

- 100 MW *Skeerhok 1* Photovoltaic Solar Energy Facility on Farm 395, Smutshoek (DEA reference 14/12/16/3/3/2/1033).
- 100 MW *Skeerhok 2* Photovoltaic Solar Energy Facility on Remainder of Portion 9 of Farm 120, Gemsbok Bult (DEA reference 14/12/16/3/3/2/1034) (applicable to this application) (see **Annexure 8**).
- 100 MW *Skeerhok 3* Photovoltaic Solar Energy Facility on Farm 395, Smutshoek (DEA reference 14/12/16/3/3/2/1035).

Note that an Environmental Authorisation (DEA reference 14/12/16/3/3/1/1906) has also been issued for a high voltage distribution line associated with the REF's connection to the national grid (see **Annexure 8**). Registered Interested and Affected Parties were invited to review and provide comment on the Environmental Impact Assessment Reports as part of all the completed processes.

Amendment(s) to an EA is/are regularly sought by a project proponent because of advances in technology and new project-specific findings. If an amendment requires changes to the content of this land development application, such amendment will be communicated to the municipality as an amendment to this application in terms of section 100 of the Land Use Management Scheme, i.e. prior to the approval thereof.



## Section V – Development context

### 20. Receiving environment 20.1. Regional and local context

This land development application concerns 2 contiguous properties in the jurisdiction area of the !Kheis Municipality and the ZF Mgcau District Municipality as the category-C municipality. These municipalities are in the Northern Cape which is spatially the largest province in the country, but by contrast, the population is also the lowest and least dense of any province.

!Kheis Municipality is one of five local municipalities falling under the ZF Mgcau District Municipality. The *application area* is located in the western segment of the municipal area, between Groblershoop -to the east- and Kenhardt which lies closer and about 43 km to the south-west thereof. It is a relatively large municipality in geographic terms, which is typical of municipalities in the province. The Municipality lags most other regions, given the lack of resources and minimal investment – a situation now rapidly changing given the technological advances in renewable energy generation. In summary, the economy in the !Kheis Municipality is characterised by the following:

- It is a small-town sub-region with low levels of development despite the strategic location in terms of the road corridor and now the REDZ transmission corridor.
- A mix of sparsely and densely populated towns/settlements with Groblershoop serving as the “main service centre”.
- High rate of unemployment, poverty and social grant dependence.
- Prone to significant environmental changes/shifts owing to long-term structural changes (such as climate change – less rainfall, more droughts and an increase in extreme weather events – energy crises and other shifts).
- Geographic similarity in economic sectors, growth factors and settlement patterns.
- Economies of scale not easily achieved owing to the size of towns.
- A diverse road network with trunk, main and divisional roads of varying quality.
- Potential in renewable energy generation.
- Largely a primary-sector based economy with agriculture and mining as the main subsectors.

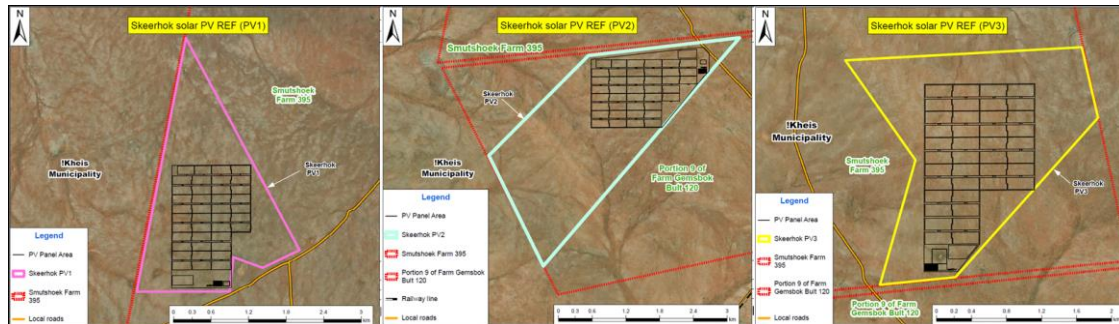
### 21. Development specifics 21.1. Site information<sup>23</sup>

The next paragraphs include extracts from some of the specialist studies prepared as part of the EIA processes. We describe, in brief, site-specific elements of all three *rezoning application areas* (also see §21.5).

The Skeerhok PV 1 solar field lies to the north of a low elevated ridge which serves to divide the watershed of the two southern PV fields from the more

<sup>23</sup> Final Environmental Impact Assessment Reports, March 2018, Ecological Report, p.11.

northerly field. The area can be described as a generally level area of land with its highest elevation lying at approximately 1040m above mean sea level (amsl) in the south of the proposed site. The Skeerhok PV 2 and PV 3 solar fields lie to the south of this low elevated ridge. Both these projects lie upon a level and topographically consistent portion of land.



**Map 7:** Combined image of Skeerhok REF

### Ecological characteristics

The *application areas* and surrounding region falls within the Bushmanland Arid Grassland veld type. In general, the *application areas* appear to have been subject to low levels of grazing and has maintained a good cover of grasses, typical of this veld type. There appears to be no significant variation in the distribution of the various vegetation associations across this area. Such results are indicative of the presence of uniform ecological drivers, such as soils, soil depth, elevation and geology, while livestock grazing has probably been maintained at a very low intensity across the area.

A large number of fossorial and burrowing species, including mammals and invertebrates, were identified. Such species included ground squirrel (*Xerus inauris*) and suricates (meerkat) (*Suricata suricata*). Also sporadically present within the site are aardvark (*Orycteropus afer*), as well as the porcupine (*Hystrix africaeaustralis*). Most larger mammals located within the *application areas* are not reliant upon the study area in particular and are likely to forage over extensive ranges that extend beyond the subject properties. The area is also home to several large terrestrial bird and raptor species but the effects of the proposed development are assessed as moderate to low significance on habitat destruction and disturbance of birds.

Surface drainage from Skeerhok PV 1 solar field occurs via two minor dendritic drainage features in the north of the area which can be described as shallow, geologically driven channels that may in turn be further excavated by the movement of livestock and in some cases, modification by the farmer. Surface drainage from the Skeerhok PV 2 and PV 3 fields are generally dispersive in the form of sheet flow with only minor seasonal dendritic drainage features ("waadhis") being evident in the extreme south. Drainage is in a southerly direction with the primary drainage system being the Rugseersrivier, a seasonal system that discharges into the Haartbees River, near the town of Kenhardt. The catchment of the Rugseerrivier is dissected by a number of roadways and in particular, the main Sishen- Saldanha railway line which effectively bisects the north eastern portion of the catchment from the southern extent of the catchment and the Rugseerrivier itself. Notably, such infrastructure indicates that the local hydrology of the region has been significantly altered.

### Heritage and palaeontology

The cultural and natural landscape were considered. The cultural landscape is very poorly developed in this area with fences, water troughs and wind pumps being the primary anthropogenic features. The primary sense of place is one of remoteness rather than of a farming landscape. This remoteness has already been impacted upon by the presence of the railway line, Nieuwehoop Substation and all associated power lines. The natural landscape lacks visually interesting and sensitive features. In addition, the *application areas* are a long distance from any important roads (it is 23 km from the R27) and is highly unlikely to be visible to anyone other than local residents making use of the gravel road along the railway line.

In terms of palaeontology, it is concluded that both the Precambrian bedrocks and the Late Caenozoic superficial sediments underlying the *application areas* are generally of very low palaeontological sensitivity, although isolated and largely unpredictable, pockets of high sensitivity (e.g. mammalian remains) may occur sporadically.

### Agriculture

As mentioned, the *application areas* are mainly level plains with some relief at an altitude of between 900 and 1000 meters. The underlying geology is migmatite, gneiss and granite of the Namaqualand Metamorphic Complex with abundant calcrete. There are no perennial drainage courses but temporary drainage courses, typical of arid environments, where surface run-off would accumulate and flow, but this would only occur very occasionally, immediately after high rainfall events.

Due to both the climate and soil limitations, the site is not suitable for any agricultural land use other than low intensity grazing. Renewable energy development is therefore a very suitable land use option for the site.

### Visual impact

The landscape is characterised as a semi-desert steppe that is sparsely vegetated by grassland with patchy occurrence of low shrubs. Based on the distances of the *application areas* from protected areas, tourist and major access routes, and the town of Kenhardt it is unlikely that the views of these potential visual receptors will be significantly adversely affected by the proposed Skeerhok solar (PV) projects. The greatest risk of visual impact would be to residents of farms in and around the *application areas*.

### Socio-economic

By far the most significant driver of change likely to result from the proposed project is the influx of job seekers into the region, and the corresponding increase in spending and employment. Such an influx of "strangers" into the receiving environment is likely to cause a disturbance in the order of the existing social structure and might also lead to increases in social deviance. Increased spending and employment (even though such employment might be short-term) generates positive impacts through the multiplier effect and by providing much needed financial relief. However, it also creates significant, and often unrealistic, expectations regarding potential employment.

## 21. Development specifics (continued)

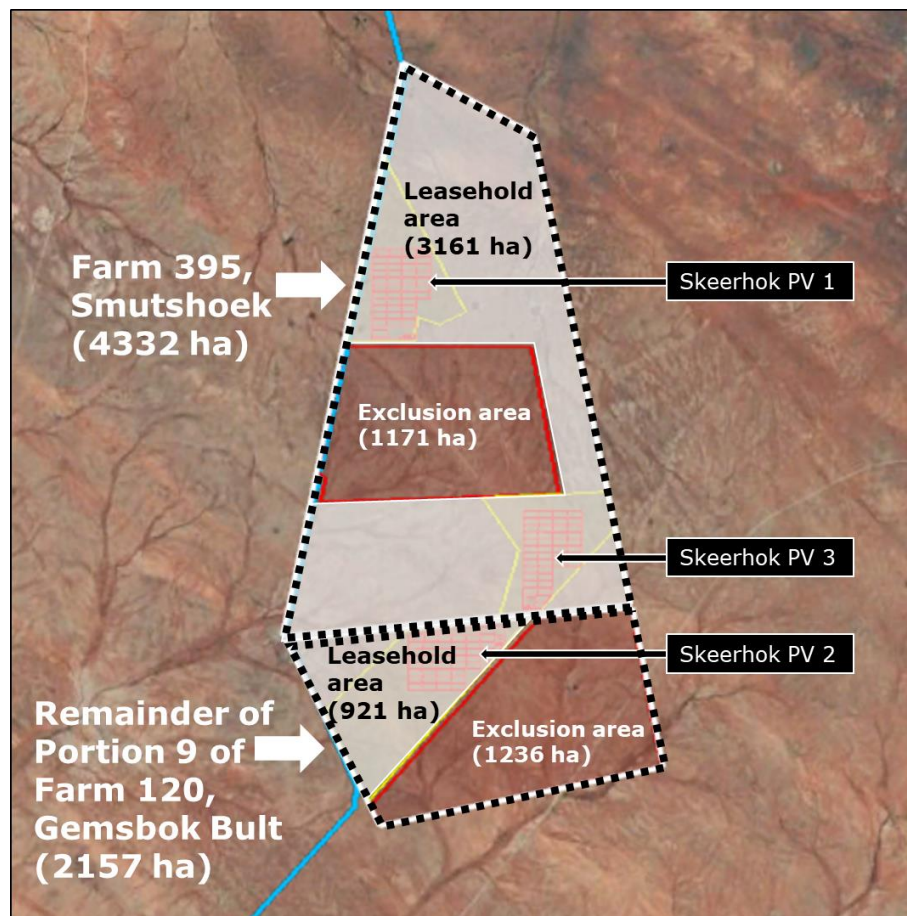
### 21.2. Leasehold area information

The prime location for the Skeerhok REF involves 2 (two) properties with Skeerhok solar PV2 facility located on Remainder of Portion 9 of Farm 120. The details of the land parcels, farm names and owners are tabled below.

**Table 2**  
**A list of farm parcels and owners of the properties earmarked for the *Skeerhok* REF**

Farm name	Portion	Size (ha)	Title deed	Landowner
Farm 395	-	4332	T69188/2016	Vanco Trust
Farm 120	Remainder of Portion 9	2157		

juwi Renewable Energies (Pty) Ltd has secured the use of the land through long-term leasehold agreements with the landowner. The company will obtain Act 70 of 1970 consent for leasehold areas (over the land concerned) to be registered with the lease agreements against the respective title deeds of the properties concerned. The proposed leasehold areas are 921 ha of Remainder of Portion 9 of Farm 120, Gemsbok Bult, and 3161 ha of Farm 395, Smutshoek (see **Map 8**). Note that the landowner requested an exclusion area on both properties to accommodate agriculture as primary land use (also see **Map 8**).



**Map 8:** Proposed leasehold areas

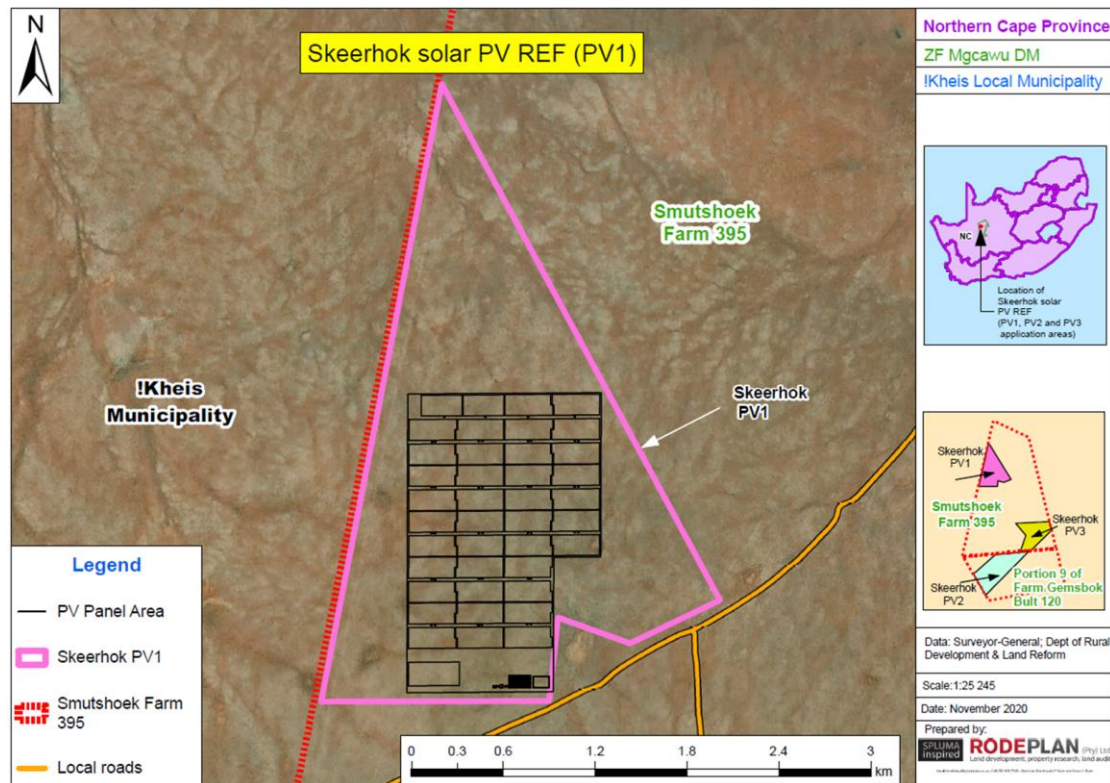


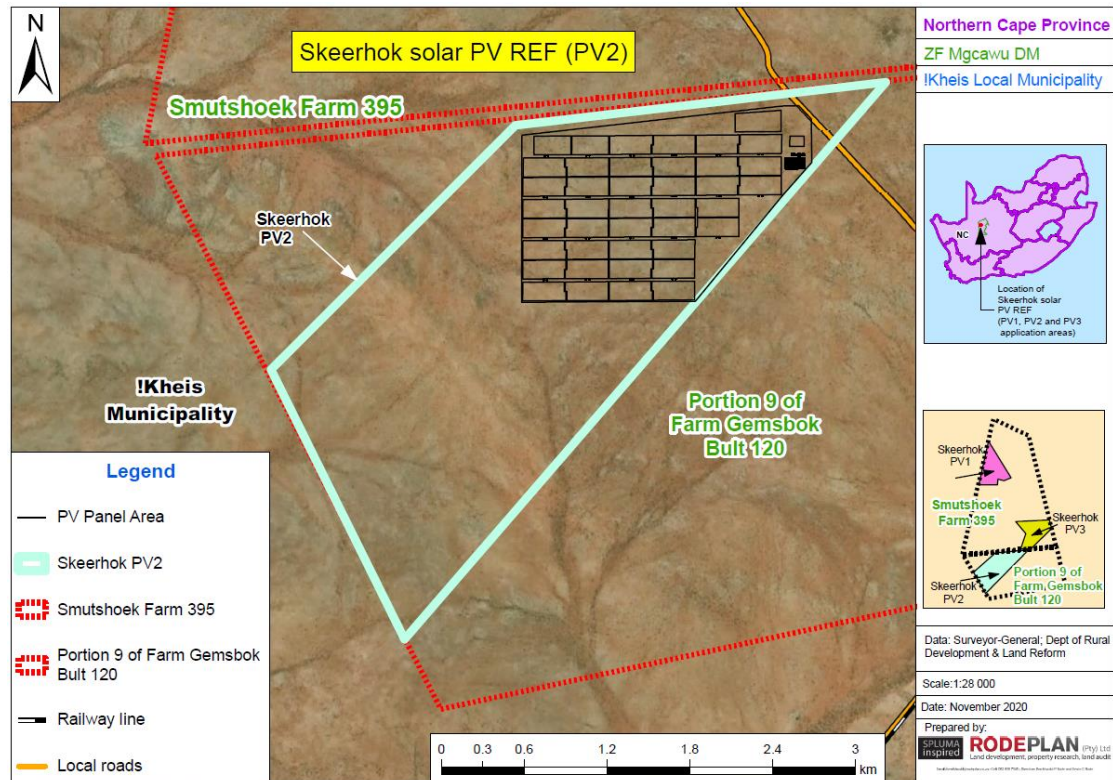
## 21. Development specifics (continued)

### 21.3 Renewable energy facility layout

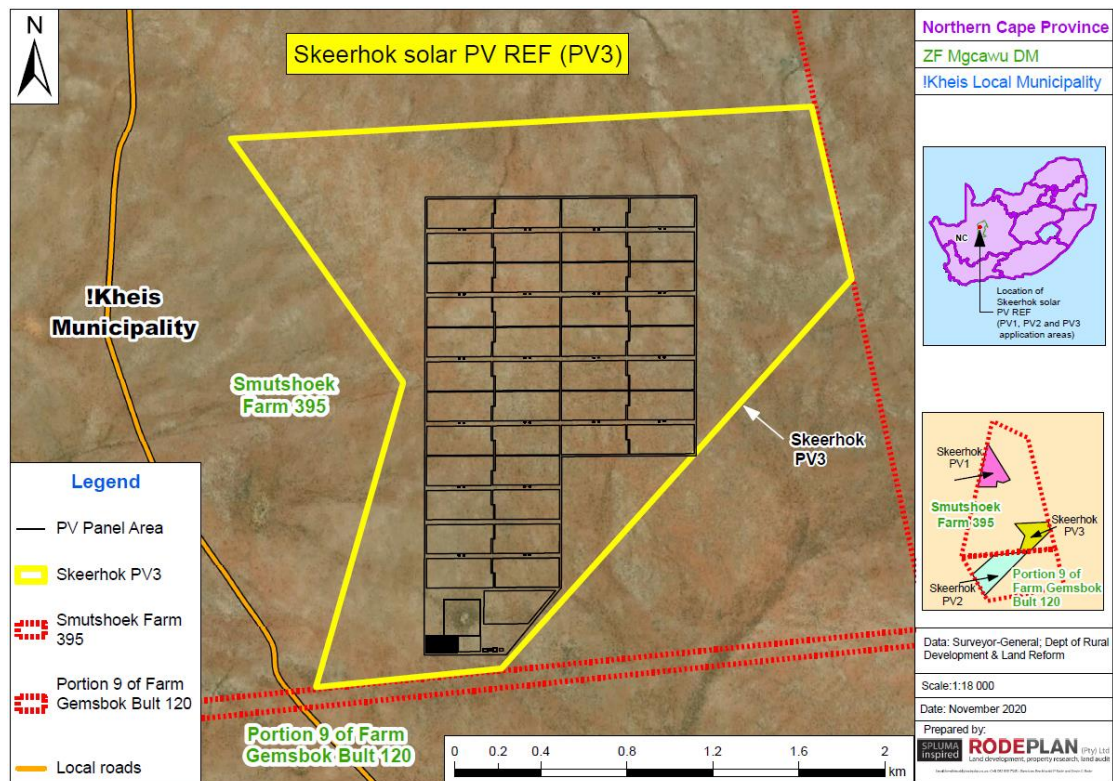
We state that the placement and design of a solar facility is sophisticated and operate at extremely high efficiencies — hence positioning being important and exacting. Please note that the design will be according to relevant national specifications and standards which are regarded as best practice in the renewable energy sector.

The number of inverters and the areas covered by inverters / transformer stations / substations, will be determined at detailed design phase based on the sizes of the inverters and transformer stations available at the time of construction. However, the development footprint of each solar field (including electrical infrastructure, the structure of the solar PV array and foundations) is estimated to be approximately 300 ha with the PV array to cover less than 250 ha thereof (see maps below).





**Map 10:** Preferred layout of Skeerhok solar PV 2 facility (also see **Annexure 6**)



**Map 11:** Preferred layout of Skeerhok solar PV 3 facility (also see **Annexure 6**)

It is important to note that parts of the layout provided for the purposes of this application may be subject to amendment. In this regard, an iteration process is inevitably part of the land development application. Amended layouts and plans

would be submitted once the recommendations and alternatives of amended EAs have been considered.

## 21. Development specifics (continued)

### 21.4. Infrastructure<sup>24</sup>

The key components of the proposed *Skeerhok REF* include the following (which are discussed in more detail in **Annexure 7**):

- Solar PV modules and mountings
- Collector substations
- O&M Buildings
- Battery storage modules
- Roads
- Other infrastructure
- Construction site office.

#### **Solar fields**

- ≤250 ha of photovoltaic (PV) modules mounted on free field single-axis trackers or fixed tilt PV solar module mounting structures comprised of galvanised steel and aluminium.
- Below ground electrical cables connecting the PV arrays to the inverter stations, O&M building and collector substation.
- Ring main units.
- Inverters and mini-sub.

#### **Collector substation**

- ≤1 ha 22/33 kV to 132 kV collector substation to receive, convert and step up electricity from the PV facility to the 132 kV grid suitable supply. The facility will house control rooms and grid control yards for both Eskom and the Independent Power Producer. A 32 m telecommunications tower (lattice or monopole type) will be established in the substation area.

#### **O&M Buildings**

- ≤1 ha hectare O&M laydown area (near / adjacent substation).
- ≤0.01 ha solar measuring station.
- Parking, reception area, offices, guest accommodations and ablution facilities for operational staff, security and visitors.
- Workshops, storage areas for materials and spare parts.
- Water storage tanks or lined ponds (~160 kl/day during first 3 months; ~90 kl/day for 21 months during rest of construction period; ~20 kl/day during operation).
- Septic tanks and sewer lines to service ablution facilities.
- Central Waste collection and storage area.

#### **Battery Storage Modules**

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<sup>24</sup> Final Environmental Impact Assessment Reports, March 2018, Ecological Report, p.11.



- 100 MW Battery Storage Facility with a maximum height of 8m and a maximum volume of 1,120 m<sup>3</sup> of batteries (dangerous goods) and associated operational, safety and control infrastructure.

### Electrical Connections

The facility will connect to the Eskom Nieuwehoop Substation via a 132 kV overhead transmission line.

### Roads

- ≤ 15 km long, ≤8 m wide gravel access road running from the Transnet service road to the site.
- ≤10 km of ≤4 m wide gravel internal service roads within the plant boundary.

### Other infrastructure

- Perimeter fencing and internal security fencing and gates as required.
- Access control gate and guard house on access road.
- ≤3.5 km length of water supply pipeline connecting existing boreholes to storage, alternatively water will be supplied by the local municipality. Also see **Annexure 14** for applications for water use licence.
- Stormwater drainage.

### Construction site office

- ≤1 ha site office area;
- ≤ 10 ha laydown area; and
- ≤1 ha concrete batching plant

## 21. Development specifics (continued)

### 21.5. Development impacts

See **Annexure 7** for the findings of the Environmental Impact Assessment Report and **Annexure 8** for the Environmental Authorisation associated with the Skeerhok solar PV2 facility. The Geotechnical Report is attached as **Annexure 11** and Appendix N in the Environmental Impact Assessment Reports, includes the Soil and Agricultural impact statement, Traffic impact statement and Social impact statement.

Based on the findings of the specialist studies, the proposed facility is considered to have no negative impacts of high significance provided certain management actions are implemented effectively. The overall ratings for the specialist studies are summarised below.

<b>Table 3</b> <b>Overall ratings of impact: Skeerhok REF</b>		
Specialist Study	Overall Impact Significance Before Mitigation or Enhancement	Overall Impact Significance After Mitigation or Enhancement
Ecological and Hydrological Impact	Negative: Very Low	Negative: Very Low



Assessment		
Palaeontology/Archaeology/Heritage Impact Assessment	Negative: Low	Negative: Very Low
Visual Impact Assessment	Negative: Moderate	Negative: Low
Avifauna Impact Assessment	Negative: Moderate	Negative: Low
Soils and Agricultural Potential Impact Statement	Negative: Very Low	Negative: Very Low
	<i>Positive: Very Low</i>	<i>Positive: Very Low</i>
Traffic Impact Statement	Negative: Low	Negative: Low
Social Impact Statement	Negative: Moderate	Negative: Low
	<i>Positive: Moderate</i>	<i>Positive: Moderate</i>

The cumulative impacts have been assessed by all the specialists on the project team. No cumulative impacts have been identified that were considered as fatal flaws.

## 21. Development specifics (continued)

### 21.6 Title deed

See **Annexure 2** for the title deed of the relevant property. A detailed deeds search was not completed as part of this land development application, but a conveyancer's certificate is attached (also as **Annexure 2**).

## 21. Development specifics (continued)

### 21.7 Benefits of the proposed development

The Renewable Energy Independent Power Producer Procurement Programme promotes the use of renewable energy country wide. This programme is one of SA's most successful attractors of investment, with renewable energy investments worth R250 billion having been made, country-wide, since 2011.

The Government has also recently introduced the Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP), i.e. the procurement process for 2000 MW emergency power by mid-2022. As potential bidder in this programme, juwi Renewable Energies (Pty) Ltd will submit this project as a bid proposal by 22 December 2020.

In addition to electricity-related benefits, the development of a renewable energy facility contributes to other benefits, e.g. income generation and (local) employment creation. It is estimated that "the programme would create 114 000 jobs over the 20-year generation period" as this kind of project is more labour intensive than the current forms of electricity generation.

This project can serve as an example of how renewable energy can be generated through economically viable means and fed into the national grid and would encourage investment in more such projects.

## Section VI – Development parameters

### 22. Land-use parameters

At the time of writing, the applicant was not aware of any existing and documented set of land use parameters, pertaining to the establishment of solar energy facilities in the Northern Cape. In this context, we believe this kind of renewable energy facility is straight-forward and almost inflexible in application, unlike, e.g. a wind energy facility or township development. Hence, the relative simplicity in setting land use restrictions regarding, *inter alia*, built infrastructure, fencing, height, density, accessibility, safety and building lines.

Note that the EAs do address most, if not all, possible development impacts. This notwithstanding, there is still a need to determine certain land use restrictions and general conditions for the proposed land use change. These can include identifying and setting of milestones for the submission of supplementary information, e.g. site development plans and building plans.

At submission of this application a final site development plan was not yet available owing to on-going on-site monitoring, design and micro-siting of panels. We propose the submission of a final site development plan to the relevant authority before any construction activities commence, as a condition of approval.

## Section VII – Communication and participation

### 23. Interested and Affected Parties

Mr Rode was informed that comment from any identified Department or Interested and Affected Party whose rights may be affected, will be obtained after submission. In this regard, municipal requirements about the notification process will be set out in a section 85(a)(ii) letter to the applicant along with outstanding information, documentation, plans or additional fees that is required (if any).

It is important to acknowledge the extensive public participation processes conducted as part of the NEMA processes.

## Section VIII – Conclusion

### 24. Wording of land use change

This application is submitted in terms of section 67(b)(vii) of the !Kheis Municipality Land Use Management Scheme (LUMS) read together with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA).

The aim is to obtain the applicable land use rights to construct the Skeerhok solar PV2 facility on a 300 ha land segment of Remainder of Portion 9 of Farm 120, Gembok Bult. This facility forms part of the Skeerhok REF located on two contiguous farm properties known as Farm 395, Smutshoek and Remainder of Portion 9 of Farm 120, Gembok Bult. These properties are located between the towns of Groblershoop and Kenhardt in the jurisdiction area of the !Kheis Municipality.

We apply for:

- Rezoning of a 300 ha land segment of Remainder of Portion 9 of Farm 120, Gembok Bult, from Agriculture Zone I to Utility Zone III to accommodate the Skeerhok solar PV2 facility.

### 25. Desirability

All over the world recent global events and a greater awareness of long-term structural changes (such as climate change, energy crises and other shifts) must make planners aware of the need to take a broader look at spatial planning and land use management. Naturally, this should also apply to developments in the ZF Mgcau district with the following of particular interest, viz. the current sideways movement of the world economy and the clear signs that climate change will affect central Southern Africa quite significantly, implying lower rainfall and some dampening of the current pattern of agricultural production. It is imperative that the efforts to better utilise natural resources must be

intensified, e.g. power generation and the utilisation of alternative energy sources. With respect to our response to long-term changes, much will depend on the way authorities address the sometimes-conflicting goals of biodiversity conservation, infrastructure programmes, renewable energy generation, economic growth, poverty alleviation, land reform and food security.

In this context and when applying the principles of economies of scale and highest and best use of land, the rationale for renewable energy in the *application area* becomes clear. The proposed development blends with the particular type of land(scape), promotes the (better) economic use of land and infrastructure and conforms to the outcome of socio-political interaction. The latter as demonstrated by the issuing of the environmental authorisations and the inclusion of the *application area* in a Renewable Energy Development Zone.

An imperative to reach aforementioned goals is for Government to seek willing and able partner(s). This sentiment is supported in all the policy documents mentioned in this report. Hence, owing to the rapidly growing industry of power generation through wind and solar energy, and given the scale and nature of location preferences, Government needs to embrace this kind of private initiative — especially in the context of the potentially sideways trend of economic growth in the !Kheis municipal area — but simultaneously ensure sustainable practice. Any decision-making process should be informed by local and regional dynamics with this land development application no different. In light of the local social, economic and environmental conditions, the proposed development can only benefit the region and local communities.

We believe that this document includes sufficient evidence that the proposal and beneficiary/beneficiaries conform to the intention of the development principles listed in section 7 of the Spatial Planning and Land Use Management Act, 2016 (Act 16 of 2013) and the factors listed in sections 42(1)(c) and 42(2) in the same Act.

We also believe this motivation report includes sufficient information regarding the criteria (as general land use regulations) whereby the need and desirability of land uses can be measured to guide decision making. Note that the Land Use Management Scheme does not list any land use regulations applicable to the land use right of Renewable Energy Structure. The next section includes some criteria to assess the completeness of this application and the need and desirability of the Skeerhok solar (PV) facility.

*(1) When the Municipality considers an application, it must have regard to the following:*

*(a) the application submitted in terms of this Bylaw*

- This application is submitted in terms of section 67(b)(vii) of the !Kheis Municipality Land Use Management Scheme (LUMS) read together with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA).

*(b) the procedure followed in processing the application*

- The !Kheis Municipality will inform the applicant of the requirements regarding the processing and notification of the application.

*(c) the comments in response to the notice of the application, including comments received from organs of state and municipal departments*

- The !Kheis Municipality will inform the applicant of the requirements regarding the processing and notification of the application.

*(d) the response by the applicant, if any, to the comments referred to in paragraph (c)*

- The applicant will respond to any comments received from any Interested and Affected Party.
- (e) *investigations carried out in terms of other laws that are relevant to the consideration of the application*
  - This report includes reference to investigations carried out in terms of 'other' laws.
- (f) *the impact of the proposed land development on municipal engineering services*
  - The Kai !Garib Municipality approved (in principle) the provision of certain municipal services and the use of municipal service infrastructure (see **Annexure 9**).
- (g) *the integrated development plan, including the municipal spatial development framework*
  - These plans have been assessed in this report to guide the desirability of the proposed facility.
- (h) *the integrated development plan and spatial development framework of the district municipality, where applicable*
  - These plans have been assessed in this report to guide the desirability of the proposed facility.
- (i) *the applicable policies of the Municipality that guide decision making*
  - These policies have been assessed in this report to guide the desirability of the proposed facility.
- (j) *the provincial spatial development framework*
  - This plan has been assessed in this report to guide the desirability of the proposed facility.
- (k) *the policies, principles and the planning and development norms and criteria set by the national and provincial government*
  - These guidelines (where applicable) have been assessed in this report to guide the desirability of the proposed facility.
- (l) *the matters referred to in section 42 of the Spatial Planning and Land Use Management Act*
  - We are confident that the aspects to be considered in decision making by the relevant entity have been addressed in this report.
- (m) *the applicable provisions of the land use management scheme*
  - Although the LUMS does not provide any land use restrictions, the specifications and standards which are regarded as best practice in the renewable energy sector have been adhered too, e.g. a 30-meter building line. Note that this restriction does not apply to the common boundary between the subject properties.

Finally, we believe this document contains all the necessary information to enable the relevant authority to process and evaluate this application.

## Section IX – Annexures

Annexure 1:	Power of Attorney
Annexure 2:	Conveyancer's certificate, title deed and SG diagrams
Annexure 3:	Application form
Annexure 4:	Locality plan
Annexure 5:	Regional plan
Annexure 6:	Site Development Plans
Annexure 7:	Environmental Impact Assessment Reports
Annexure 8:	Environmental Authorisations
Annexure 9:	Letter regarding the use of municipal services
Annexure 10:	Copy of notice placed on-site and on public notice boards (not included)
Annexure 11:	Specialist studies
Annexure 12:	Zoning certificate (not included but zoning confirmed)
Annexure 13:	Proof of payment (not included)
Annexure 14:	Applications for water use licence
Annexure 15:	SACPLAN certificate
Annexure 16:	Email correspondence