

**SOCIAL IMPACT ASSESSMENT
SCOPING REPORT**

**PROPOSED NOUPOORT CONCENTRATED
SOLAR POWER (CSP) PROJECT AND
ASSOCIATED INFRASTRUCTURE NEAR
NOUPOORT, NORTHERN CAPE PROVINCE**

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Executive Summary

Savannah Environmental (Pty) Ltd has been appointed by CRESCO Energy (Pty) Ltd, to undertake an Environmental Impact Assessment (EIA) for the construction of a Concentrated Solar Power (CSP) trough facility (known as the Noupoot CSP Project) as well as all associated infrastructure. The proposed Nourpoort CSP project will have capacity of up to 150MW and is proposed to be located on the Remaining Extent of the Farm 207, Portion 1 and Portion 4 of Farm Carolus Poort 167, situated approximately 4km north west of Noupoot (refer to Locality Map in Figure 1). The proposed site falls within the Umsobomvu Local Municipality (ULM) that falls within the jurisdiction of the Pixley ka Seme District Municipality (PKSDM) in the Northern Cape Province.

The purpose of the proposed project will be to evacuate the generated power into the Eskom electricity grid. The project is proposed to be bid into the Department of Energy's (DoE) Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). Ultimately, the project will be a part of the renewable energy projects portfolio in South Africa. This report contains the findings of the scoping Social Impact Assessment (SIA) for the Environmental Impact Assessment (EIA) process for the Noupoot CSP Project. The scoping level SIA was undertaken by Candice Hunter of Savannah Environmental as part of the EIA process.

The main aim of the social scoping assessment is to identify and describe social impacts that may arise from the proposed project. The purpose of the study is to:

- » Provide a description of the environment that may be affected by the proposed activity and also provide a description of the manner in which the environment may be affected by the proposed project.
- » Provide a description of the potential social issues associated with the proposed project (in terms of the construction, operational and decommissioning phases of the project).
- » Provide a description of the approach proposed for assessing the potentially significant issues that will be addressed by the SIA in the EIA phase.

Secondary data sources were utilised for the desktop study where secondary data was gathered and analysed for the purpose of the social scoping report.

Legislation and Guidelines

The review of the relevant planning and policy documents was undertaken as a part of the SIA process. The key documents reviewed included:

National Policies:

- » The Constitution of the Republic of South Africa (Act 108 of 1996)
- » The National Environmental Management Act (107 of 1998) (NEMA)

- » The National Energy Act (34 of 2008)
- » National Development Plan 2030
- » National Climate Change Response Green Paper (DEA, 2010)
- » White Paper on Energy Policy of the Republic of South Africa (1998)
- » White Paper on Renewable Energy of the Republic of South Africa (2003)
- » National Integrated Resource Plan South Africa (2010-2030)
- » Strategic Infrastructure Projects (SIPs)

Provincial Policies:

- » Northern Cape Provincial Development and Resource Management Plan / Provincial Spatial Development Framework (PSDF) (2012)
- » Northern Cape Provincial Growth and Development Strategy (PGDS) (2011)
- » Northern Cape Provincial Local Economic Development (LED) Strategy (2009)

Local and District Policies:

- » Pixley ka Seme District Municipality Integrated Development Plan (IDP) (2012-2016)
- » Umsobomvu Local Municipality IDP (2012-2017) (2015-2016 review)

Solar Energy Policies:

- » Solar Energy Technology Roadmap (2013)

Summary of the socio-economic profile of the study area

Regional Context:

The proposed study area for the Noupoort CSP Project falls under the jurisdiction of the greater jurisdiction of the PKSDM in the Northern Cape Province.

- » Northern Cape Province:
 - Northern Cape is the largest province with the smallest population in South Africa.
 - At a Provincial level, the Northern Cape has been identified as the area with the highest potential for solar renewable energy generation, with high solar irradiation levels and the availability of vast tracts of land. There are already a number of solar facilities (PV and CSP projects) planned in the region.
- » Pixley ka Seme District Municipality:
 - PKSDM lies in the south-east of the Northern Cape Province and shares its borders with three other provinces, namely the Free State province to the east, the Eastern Cape Province to the south-east and the Western Cape Province to the south-west.
 - The PKSDM is declared as a Renewable Energy Hub seeking to attract foreign direct investments into solar, wind, hydro and Biomass projects.
 - PKSDM and its eight local municipalities are currently promoting a green economy in the district that seeks to promote generated economic activities that preserve and enhance environmental quality while using natural resources more efficiently.
 - Renewable energy projects in the different local municipalities are key projects for the PKSDM.

Local Context

» Umsobomvu Local Municipality:

- ULM is situated within the PKSDM in the Northern Cape Province. The ULM economic activities are dominated largely by agriculture, financial services, trade, hospitality industry, tourism and transport.
- The major cities/towns in the ULM include Colesberg, Norvalspont and Noupoot.
- Noupoot is a town in the eastern Karoo region that principally revolved around the railways and is still used as a traction change-over facility from diesel to electric locomotives on the Noupoot-Bloemfontein line.
- After a long period of increasingly less demand on the rail network, the town suffered from a drastic decline in local business leading to increasingly dire socio-economic conditions for the local population. Poverty increased concomitantly with the decline in rail activity.
- Census 2011 indicates that the ULM has the highest rate of unemployment (33%, which is attributed to the decline in the railway industry). Upliftment of the local economy has therefore been a key area of focus for the Municipality.
- The greatest social problems in the ULM are illiteracy, poverty and lack of basic service infrastructure. The income distribution is distorted in the ULM to the disadvantage of the less economically secured people, who also represents the majority of the municipal area. Poor households are a result of a lack of wage income, either due to unemployment or low-paying jobs. Access to basic services such as electricity, toilets and piped water is also closely correlated with poverty.

» Direct area of influence:

- The Department of Energy (DoE) indicates that the Renewable Energy Independent Power Producer Procurement (REIPPP) Programme offers great potential for positive socio economic outcomes- listed as job creation, local ownership, socio-economic development and enterprise development. All of which has to happen within 50 km of the project site. The settlements within the project's direct area of influence (within a 50km radius) include Noupoot and Middleburg.
- The development of the proposed project will be associated with economic benefits including economic growth and development (economic opportunities such as jobs and expenditure in the local area). Negative dimensions of impacts such as influx of jobseekers and pressure on the provision of basic services will be assessed in the social impact assessment during the EIA phase.

» Indirect areas of influence:

- The indirect areas of influence extend to all areas that will be indirectly affected by the proposed project. These include road users that use the R389 on a frequent basis as part of their daily or weekly movement patterns.

- Construction vehicles and trucks may utilise these roads during the construction phase which will increase the traffic and may increase the wear and tear on these roads.
- The proposed project will also have an indirect effect on the town's local residents; with a possible influx of in-migrants and possible growth in the local economy.

Immediate area of influence:

The study area for the proposed project is located on Portion 1 of Farm Carlous Poort 167, near Noupoot. Majority of the land surrounding the study area comprises large open spaces / agricultural areas. Prominent features within or surrounding the study area include:

- » Possible agricultural activities may take place on impacted and adjacent farms, it is anticipated that primarily livestock farming takes place in the local area (this will be confirmed during the EIA phase).
- » There are also a few dwellings/buildings located in the study area. During the EIA phase a survey will be undertaken to determine what these buildings are utilised for and if there are any residents (farmers, tenants, farm workers) living in the proposed study area.
- » There are agricultural farmlands surrounding the study area.
- » The surrounding area is sparsely populated. Figure 7 indicates the position of buildings/dwellings located within the adjacent farm properties.
- » Noupoot town is located 4km south east of the proposed study area.
- » R389 regional road runs along a portion of the southern boundary of the proposed study area.
- » Overhead power lines traverse the eastern and northern sections of the proposed study area.
- » A railway line is located along the north eastern boundary of the proposed study area.

Identification of key potential social impacts

Construction Phase:

The potential issues and impacts for the construction phase of the proposed project have been identified as follows:

- » Positive-
 - Employment opportunities
 - Training and skills development
 - Economic multiplier effects
- » Negative-
 - Pressure on economic and social infrastructure impacts from an in-migration of people (pressure on municipal services)
 - Impacts on daily living and movement patterns (intrusion impacts)
 - Safety and security risks

- Nuisance impacts (noise and dust impacts)

Operation Phase:

The potential issues and impacts for the operation phase of the proposed project have been identified as follows:

- » Positive-
 - Employment opportunities
 - Capacity building and skills development
 - Local procurement for general goods and services
 - Socio-Economic Development (SED), Enterprise Development (ED) and share ownership in the project company with local communities
 - Providing a clean, renewable energy supply
- » Negative-
 - Visual impact
 - Sense of place impact
 - Impacts associated with the loss of agricultural land

Cumulative Impacts:

Possible cumulative impacts as a result of other similar solar projects and associated infrastructure in the area could have cumulative negative and positive impacts for the local community.

- » Positive-
 - Cumulative impacts of employment opportunities, business opportunities, skills development, socio-economic development
- » Negative-
 - Cumulative impact with large scale in-migration of people
 - Cumulative impacts on the sense of place and landscape

Conclusion

Based on the initial assessment of the receiving environment it is anticipated that the proposed project could have some negative as well as positive social impacts. The main negative impacts are associated with intrusion impacts associated with the construction phase. The most important potential social benefits associated with the construction and operation of the proposed project include job opportunities and possible socio-economic spin-offs created. The extent of the negative impacts and possible benefits will be further assessed during the EIA phase.

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List of Abbreviations

DoE	Department of Energy
CNA	Community Needs Assessment
CSP	Concentrated Solar Power
DEA	Department of Environmental Affairs
DGDS	District Growth and Development Strategy
DM	District Municipality
EAP	Economically Active Population
EIA	Environmental Impact Assessment
EMF	Environmental management Framework
EMPr	Environmental Management Programme
EMZ	Environmental Management Zone
GDP	Gross Domestic Product
HA	Hectares
HD	Historically Disadvantaged
HDSA	Historically Disadvantaged South Africans
IDP	Integrated Development Plan
IPP	Independent Power Producer
KPA	Key Performance Area
kV	Kilovolts
LED	Local Economic Development
LM	Local Municipality
MW	Megawatt
NEMA	National Environmental Management Act
NSSD	National Strategy for Sustainable Development
PKSDM	Pixley ka Seme District Municipality
PV	Photovoltaic
PSDF	Provincial Spatial Development Framework
PGDS	Provincial Growth and Development Strategy
SEMP	Strategic Environmental Management Plan
SDF	Spatial Development Framework
SIA	Social Impact Assessment
SIPs	Strategic Infrastructure Projects
ULM	Umsobomvu Local Municipality
VIA	Visual Impact Assessment

1. Introduction

Savannah Environmental (Pty) Ltd has been appointed by CRESCO Energy (Pty) Ltd, to undertake an Environmental Impact Assessment (EIA) for the construction of a Concentrated Solar Power (CSP) trough facility (known as the Noupoort CSP Project) as well as all associated infrastructure. The proposed Noupoort CSP project will have capacity of up to 150MW and is proposed to be located on the Remaining Extent of the Farm 207, Portion 1 and Portion 4 of Farm Carolus Poort 167, situated approximately 4km north west of Noupoort (refer to Locality Map in Figure 1). The proposed site falls within the Umsobomvu Local Municipality (ULM) that falls within the jurisdiction of the Pixley ka Seme District Municipality (PKSDM) in the Northern Cape Province. This report contains the findings of the scoping Social Impact Assessment (SIA) for the Environmental Impact Assessment (EIA) process for the Noupoort CSP Project. The scoping level SIA was undertaken by Candice Hunter of Savannah Environmental as part of the EIA process.

1.1. Social Impact Assessment (SIA)

SIA is described as “the process of assessing or estimating, in advance, the social consequences that are likely to follow from specific policy actions or project developments, particularly in the context of appropriate national, state, or provincial environmental policy legislation” (Becker et al, 2003). By social impacts meaning the consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society. The term also includes cultural impacts involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society (National Maritime Fisheries Service, 1994).

SIA is a methodology or instrument used by social assessment practitioners to determine the social impacts from a project and to provide ways to mitigate and monitor potential impacts (Vanclay, 2003). The SIA is divided into a number of phases however the public consultation is a crucial step in the preparation of an SIA. SIA is concerned with the human dimensions of the environment, this meaning that;

“SIA is the process of analysing (predicting, evaluating and reflecting) and managing the intended and unintended consequences on the human environment of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions so as to bring about a more sustainable and equitable biophysical and human environment (Vanclay, 2003: 2).”

The National Environmental Management Act (NEMA) (Act 107 of 1998) sets out a number of principles which underpin environmental management in South Africa. A number of these principles relate to the social dimension of sustainable development and public process requirements such as transparency, accountability, democracy and environmental justice. The following principle outlines the basis for a Social Impact Assessment:

Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.

More specifically, the social, economic and environmental impacts of activities must be considered and assessed. SIA is a useful planning tool that can assist the project proponent to conceptualise and implement a project in a manner which would see the identified negative social impacts addressed through avoidance or mitigation and the positive impacts realised and optimised. It also allows the community to anticipate, plan for, and deal with the social changes once they come to effect. In this sense then the SIA is an indispensable part of the EIA, the Environmental Management Programme (EMPr) and any participative activity (E.g. Community involvement in mitigation and monitoring during planning and implementation). The purpose of an SIA report is to provide baseline information regarding the social environment and to identify possible social impacts that may come about as a result of a project. The report highlights the most likely associated social impacts to occur from the proposed project and provides methods to aim towards emphasizing positive impacts and avoiding, reducing or mitigating negative identified impacts.

1.2. Terms of Reference

The main aim of the social scoping assessment is to identify and describe social impacts that may arise from the development of the proposed project. The purpose of the study is to:

- » Provide a description of the environment that may be affected by the proposed activity and also provide a description of the manner in which the environment may be affected by the proposed project.
- » Provide a description of the potential social issues associated with the proposed project (in terms of the construction, operational and decommissioning phases of the projects);
- » Provide a description of the approach proposed for assessing the potentially significant issues that will be addressed by the SIA in the EIA phase.

1.3. Specialist Details

The SIA scoping report was prepared by Candice Hunter of Savannah Environmental, a SIA specialist with a Master's degree in Environmental Management and an advanced certificate in SIA from the University of Johannesburg. The SIA report will be reviewed in the EIA Phase by Dr Neville Bews, an independent external SIA specialist who has consulted in the SIA field for over 10 years and has a Ph.D in Sociology.

1.4. Declaration of Independence

A signed declaration of independence for Candice Hunter of Savannah Environmental is attached in Appendix A.

1.5. Project Overview

Project background and description:

The proposed project will comprise parabolic trough technology with a heat transfer fluid (HTF), and a generation capacity of up to 150MW. An area of approximately 900ha is required for this proposed project. Infrastructure associated with the proposed project includes:

- » Parabolic troughs utilising a heat transfer fluid (HTF) a Power Block and an Energy centre
- » Associated infrastructure: access roads, plant substation, power line, water supply pipeline, water storage tanks, lined evaporation ponds, packaged water treatment plant, temporary laydown areas and workshop and office buildings.

The purpose of the proposed project will be to evacuate the generated power into the Eskom electricity grid. The project is proposed to be bid into the Department of Energy's (DoE) Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). Ultimately, the project will be a part of the renewable energy projects portfolio in South Africa.

Locality:

The proposed Noupoot CSP Project will be located approximately 4km north west of Noupoot within the ULM that falls within the jurisdiction of the PKSDM in the Northern Cape Province. The Noupoot CSP Project is proposed to be located on on the Remaining Extent of the Farm 207, Portion 1 and Portion 4 of Farm Carolus Poort 167. The proposed site is technically preferred by virtue of climatic conditions, relief and aspect, the availability of land, and proximity to a viable point of connection to the National grid.

Construction phase:

This section will provide an overview of the construction phase for the proposed project:

- » *Duration:* It is estimated that the construction phase for the 150MW trough facility and associated infrastructure is expected to extend over a period of approximately 36 months.
- » *Capital expenditure:* The total construction capital expenditure associated with the 150MW trough facility and associated infrastructure is estimated to be in the region of R2-3 billion (2016 rand value). It is estimated that 50% of the capital expenditure will be spent on local goods and services. In terms of business opportunities for local companies, expenditure during the construction phases will create business opportunities for the regional and local economy.
- » *Employment opportunities and wages:* the 150MW trough facility and associated infrastructure is likely to create approximately ~1210 employment opportunities, depending on the final design. Of this approximately 80% of the opportunities will be available to low-skilled workers (construction labourers, security staff etc.) and to semi-skilled workers (drivers, equipment operators etc.), and 20% will be available to skilled personnel (foreman, engineers, land surveyors, project managers etc.). Majority of low-skilled and semi-skilled opportunities are likely to be available to local workers. The total wage bill for the construction for the 150MW trough facility and associated infrastructure is estimated to be in the region of R650 million (2016 rand value). The injection of income into the area in the form of wages will represent an opportunity for the local economy and businesses in the area.
- » *Skills development and training:* The developer has indicated that a training facility will be commissioned on site and that there will be opportunities for on-site skills development and training for employees during the construction phase.
- » *Labour accommodation:* The developer has indicated that no on-site accommodation is envisaged. Most labourers will come from within the local area and will not be housed on site, given the relative proximity of the study area to Noupoort. However, overnight site worker presence will be limited to security staff; a security team is likely to be present at the construction camp at all times. Labourers and skilled staff from outside the area will be housed off-site within the nearest towns.
- » *Transportation of components and equipment:* Transportation of project components and equipment to the proposed study area would be transported using vehicular / trucking transport. The national, secondary and internal access roads will be used to transport all components and equipment required during the construction phase of the CSP facility and associated infrastructure. Some of the components (i.e. substation transformer) may be defined as

abnormal loads in terms of the Road Traffic Act (Act No. 29 of 1989)¹ by virtue of the dimensional limitations. Typical civil engineering construction equipment will need to be brought to the study area (e.g. excavators, trucks, graders, compaction equipment, cement trucks, etc.) as well as components required for the mounting of the trough facility, construction of the substation and site preparation. The access road will be off the R389 on an existing gravel secondary road.

Operational phase:

This section will provide an overview of the operation phase for the proposed project:

- » *Duration:* CSP trough facilities are designed to be operational for at least 20-25 years.
- » *Employment:* Full-time operational and maintenance crews would be required for the 150MW trough facility and associated infrastructure. Based on information provided by the developer, the proposed project will create approximately ~120 full-time equivalent employment positions during the operation phase. The employment force during the operational phase will mainly comprise of a skilled workforce.
- » *Skills development and training:* There will be opportunities for on-site skills development and training for the operation phase.
- » *On-site presence:* CSP trough facilities are designed to operate continuously and with low maintenance. Regular monitoring and maintenance activities every few weeks would be required to ensure safe and consistent operation for at least 20-25 years of operation (i.e. a mobile team for maintenance and vegetation control).

Decommissioning phase:

The proposed development is anticipated to have a lifespan of approximately 25 years. It is a possibility that the trough facility and associated infrastructure will be replaced with more modern technology at the end of its lifespan, but this will depend on the need for the project at the time. Disassembling and replacement activities will require the transport of abnormal loads to and within the site. Decommissioned components will be removed from the site and reused, recycled or disposed of in accordance with regulatory requirements. According to current legislation, infrastructure will have to be removed and the site rehabilitated once final decommissioning has occurred. Decommissioning activities will be required to be undertaken in accordance with the relevant legislation at the time.

¹ A permit will be required for the transportation of these abnormal loads on public roads.

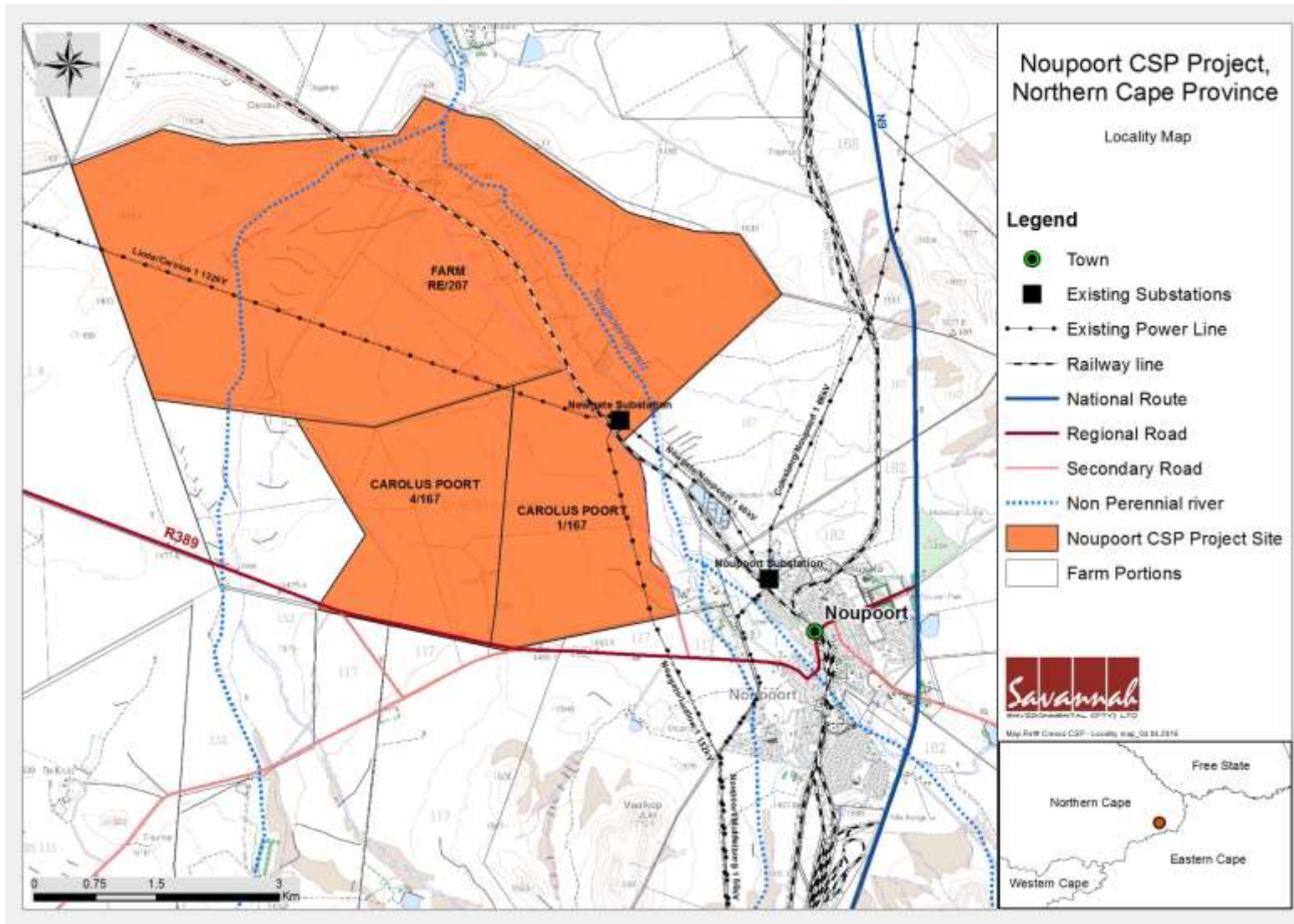


Figure 1: Location of the proposed Noupoort CSP Project near Noupoort, Northern Cape Province

2. Methodology and Approach

2.1. Approach to Study

The main aim for the social report is to identify and describe the social impacts that may arise from the proposed project. The approach used for the SIA study is based on the Western Cape Department of Environmental Affairs and Development Planning Guidelines for Social Impact Assessment (February 2007). These guidelines are based on the international best practice, the key objectives in the SIA scoping process include:

- » Describing and obtaining an understanding of the proposed project (type, scale, location), the communities likely to be affected and determining the need and scope of the SIA;
- » Collecting baseline data on the current social environment and historical social trends;
- » Identifying and collecting data on the SIA variables and social change processes related to the proposed intervention.

2.2. Data Collection

Secondary data sources were utilised in aid of the objectives of the study. Secondary data collection methods were mostly centred on a desktop study, where secondary data was gathered and analysed for the purpose of the study, in which the following documents were examined:

- » Project maps;
- » A desktop aerial study of the affected area through the use of the latest version of Google Earth 7.1 (2015);
- » The background information document (BID);
- » The 2011 South African Census Survey and the Local Government Handbook;
- » Planning documentation such as District Municipality (DM) Integrated Development Plans (IDPs), Spatial Development Framework (SDF) and Environmental Management Framework (EMF) as well as Local Municipality (LM) IDPs and policies;
- » Relevant guidelines, policies and plan frameworks in relation to the project and in relation to the area were utilised, as outlined in Section 3 of this report;
- » Other similar specialist studies and relevant information has been fed into the SIA where there have been cross-cutting issues; including the EIAs undertaken for previous solar energy facilities in South Africa.

Information that was relevant to the project were identified and assessed from these sources within the context of the proposed project.

2.3. Stakeholder Identification

Stakeholders are defined as “any group or organisation which may affect or be affected by the issue under consideration (UN, 2001: 26)”. These may be direct or indirect stakeholders and may include organisations, institutions, groups of people or individuals, and can be at any level or position in society, from the international to the national, regional, household level (Farnke and Guidero, 2012). Stakeholders are those who need to be considered and whose participation and support are crucial to achieving the success of project goals.

Stakeholder analysis involves identifying the key stakeholders in the project. The first step in the process of stakeholder analysis is stakeholder identification; determining who the project stakeholders are, and their key grouping and sub-groupings (IFC, 2007). Identifying stakeholders that are directly and indirectly affected by the project is important to determine who might be affected and in what way. The key stakeholders part of the proposed project have been identified, grouped / sub grouped and demonstrated in Figure 2 below (as per Ilse Aucamp SIA methodology and Aucamp et al, 2011). Direct and indirect stakeholders are sensitive social receptors that may potentially be affected by the proposed project. The key stakeholders include but are not limited to the following:

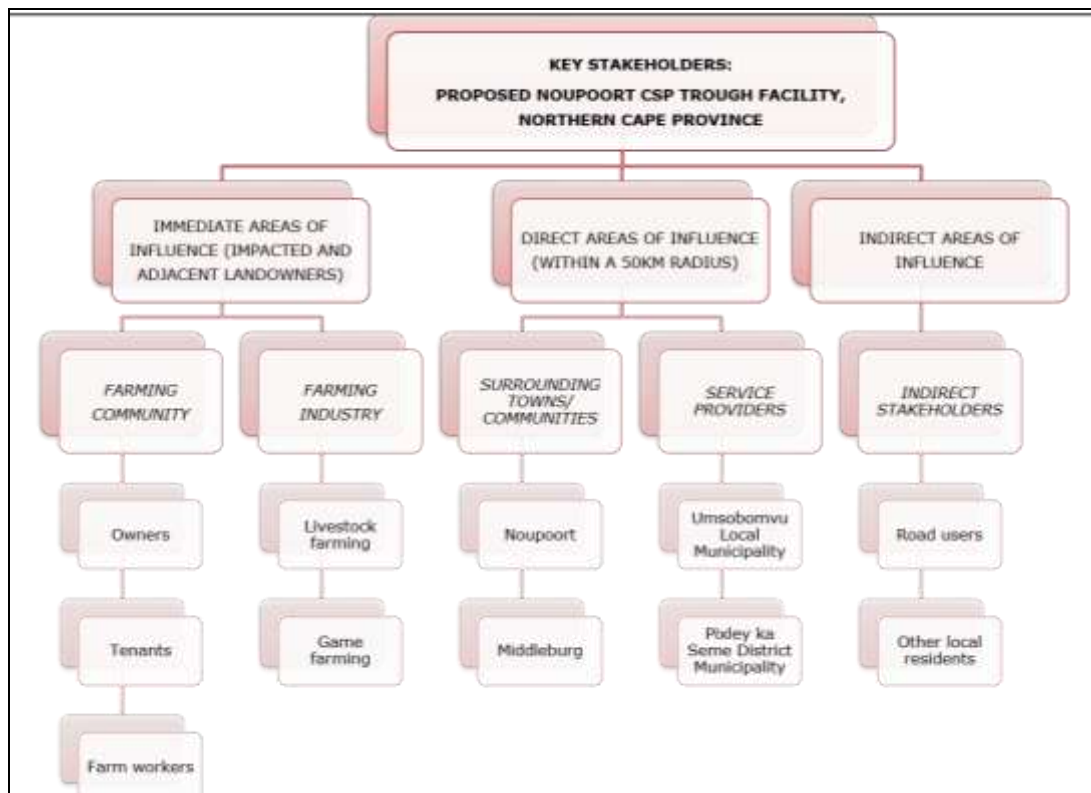


Figure 2: Key stakeholders associated with the proposed development

A description of each of the stakeholders groups in relation to the proposed project is discussed below:

- » *Farming community:* the farming community have been grouped into three categories, namely- farm owners, farm tenants and farm workers. Farm owners include farmers who own the land and make a living from their properties. Farm tenants are people who rent the land and work on the land for income. Lastly the farm workers, people who work and may also live on the farms (farm workers and their families). The farming community consists of the larger farms in the study area who may be impacted from the proposed project.
- » *Farming industry:* There are potentially vulnerable farming activities in the study area. There may be livestock agricultural activity and game farming. Impacts that may arise include stock theft and poaching from an increase of in-migrants in the area (especially during the construction phase).
- » *Surrounding towns / affected communities:* Noupoot is the closest town to the proposed site located approximately 4km away. Residents in the town may be positively and/or negatively affected by the proposed project (mainly temporarily). Employment opportunities will be available for the proposed project and it is probable that some of the labour will be sourced from the local area; this will be a positive impact for the local community.
- » *Service providers:* The major service providers which will be affected by the project include the district and local municipalities and local businesses in the area. The local municipality that will be directly impacted by the proposed project will be ULM (Ward 2). The Municipality will absorb a number of social impacts (positive and negative), impacts may relate to a marginal influx of people coming into the area, since they will be responsible to deliver services to people residing within their municipal area. There are a number of local businesses in the area that could benefit from the proposed project in terms of an increase in demand for goods and services.
- » *Indirect stakeholders:* There are a number of stakeholders that reside outside the direct area of influence but who may be marginally affected by the project. These include road users that use the R389 and local gravel roads on a frequent basis as part of their daily or weekly movement patterns. Construction vehicles and trucks will be utilising these roads during the construction phase, which will increase the traffic, create traffic disruptions and may increase the wear and tear on these roads.

2.4. Limitations and Assumptions

The following assumptions and limitations were relevant:

- » The 2011 Census is the most recent source of official statistics and this has been used for generating a lot of the information provided in the baseline profile of the study area. In addition to this, the latest District and Local

Municipality policies and plans were utilised in generating information. While the data does provide useful information, it should be noted that this data may now be out of date to some degree and may no longer accurately reflect the current socio-economic profile;

- » This study was done with the information available to the specialist at the time of executing the study, within the available timeframes. The sources consulted are not exhaustive, and additional information which might strengthen arguments, contradict information in this report, and/or identify additional information might exist. The specialist did try to take an evidence-based approach in the compilation of this report and did not intentionally exclude scientific information relevant to the assessment;
- » A limited amount of finalised project details from the project developer means that some of the actual project projections may be higher or lower than estimated in this report;
- » It was assumed that the motivation for, planning and feasibility study of the project were undertaken by the developer with integrity, and that information provided to date by the project developer, the independent environmental assessment practitioner and the public participation consultant was accurate.

3. Legislation and Guidelines

A review of the policy environment provides valuable insight into the government's priorities and plans. The review of the relevant planning and policy documents was undertaken as a part of the SIA process. The key documents reviewed included:

National Policies:

- » The Constitution of the Republic of South Africa (Act 108 of 1996)
- » The National Environmental Management Act (107 of 1998) (NEMA)
- » The National Energy Act (34 of 2008)
- » National Development Plan 2030
- » National Climate Change Response Green Paper (DEA, 2010)
- » White Paper on Energy Policy of the Republic of South Africa (1998)
- » White Paper on Renewable Energy of the Republic of South Africa (2003)
- » National Integrated Resource Plan South Africa (2010-2030)
- » Strategic Infrastructure Projects (SIPs)

Provincial Policies:

- » Northern Cape Provincial Development and Resource Management Plan / Provincial Spatial Development Framework (PSDF) (2012)
- » Northern Cape Provincial Growth and Development Strategy (PGDS) (2011)
- » Northern Cape Provincial Local Economic Development (LED) Strategy (2009)

Local and District Policies:

- » Pixley ka Seme District Municipality Integrated Development Plan (IDP) (2012-2016)
- » Umsobomvu Local Municipality IDP (2012-2017) (2015-2016 review)

Solar Energy Policies:

- » Solar Energy Technology Roadmap (2013)

The legislative and policy context plays an important role in identifying and assessing the potential social impacts associated with a proposed project. In this regards a key component of the SIA process is to assess the proposed project in terms of its suitability with regards to the key planning and policy documents. A brief overview of the most relevant policies, plans and guidelines, in relation to the proposed project are discussed in this section below.

3.1. National Policies

Any project contributing to the objectives mentioned within the national policies discussed briefly below could be considered strategically important for the nation. The review of the policy environment suggests that utilisation of renewable energy sources in the country is considered to be an integral means of reducing

carbon footprint of South Africa, diversifying the national economy, and reducing poverty. As the project would contribute renewable energy supply to provincial and national targets set out and supported within these national policies, it is considered that the proposed project fits within the national policy framework. A brief review of the most relevant national policies is provided below.

3.1.1. The Constitution of the Republic of South Africa (Act 108 of 1996)

The Constitution of the Republic of South Africa (Act 108 of 1996) has been adopted as the supreme law of the country and forms the foundations for a democratic society in which fundamental human rights are protected. In terms of the environment, Chapter 2 Section 24 states that everyone has a right:

- (a) *"To an environment that is not harmful to their health or well-being; and*
(b) *To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:*
- i. prevent pollution and ecological degradation;*
 - ii. promote conservation; and*
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."*

Chapter 7 defines the role of local government in its community. Five objectives of local government are described in Chapter 7 Section 152:

- » to provide democratic and accountable government for local communities;
- » to ensure the provision of services to communities in a sustainable manner;
- » to promote social and economic development;
- » to promote a safe and healthy environment; and
- » to encourage the involvement of communities and community organisations in the matter of local government.

The Constitution outlines the need to promote social and economic development. An SIA is a requirement for sustainable development as it assesses the social impacts associated with development and aims towards safeguarding people's future well-being. The proposed project aims to increase the economic opportunities of the area by providing more job opportunities for the local community. The development will also aid in promoting a healthy environment through the provision of clean, renewable energy.

3.1.2. The National Environmental Management Act (107 of 1998) (NEMA)

NEMA is the legislation setting out the framework for environmental management in South Africa. The Act promotes cooperative environmental governance and establishes principles for decision making on matters affecting the environment.

An overarching principle in Chapter 1 emphasises that development must be socially, environmentally and economically sustainable.

The EIA Regulations (Government Notices R982-985 of December 2014) define an environmental impact assessment as 'the process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration of that application'. The SIA aims to fulfil these requirements by providing all social information relevant to the consideration of the project. This SIA report is compliant with Appendix 6 of the National Environmental Management Act, 1998 (ACT NO. 107 OF 1998), Environmental Impact Assessment Regulations, 2014.

3.1.3. The National Energy Act (34 of 2008)

One of the objectives of the National Energy Act is to promote diversity of supply of energy and its sources. In this regard, the preamble makes direct reference to renewable resources, including solar:

"To ensure that diverse energy resources are available, in sustainable quantities, and at affordable prices, to the South African economy, in support of economic growth and poverty alleviation, taking into account environmental management requirements; to provide for increased generation and consumption of renewable energies (Preamble)."

The National Energy Act aims to ensure that diverse energy resources are available, in sustainable quantities and at affordable prices, to the South African economy in support of economic growth and poverty alleviation, taking into account environmental management requirements and interactions amongst economic sectors, as well as matters relating to renewable energy. The Act provides the legal framework which supports the development of renewable energy facilities for the greater environmental and social good.

3.1.4. National Development Plan 2030

The National Development Plan aims to eliminate poverty and reduce inequality by 2030. Given the complexity of national development, the plan sets out a number of interlinked priorities, some of which include:

- » Bringing about faster economic growth, higher investment and greater labour absorption.
- » Focusing on key capabilities of people and the state.
- » Building a capable and developmental state.

Enabling milestones include:

- » Increase employment from 13 million in 2010 to 24 million in 2030.

- » Establish a competitive base of infrastructure, human resources and regulatory frameworks.
- » Ensure that skilled, technical, professional and managerial posts better reflect the country's racial gender and disability makeup.
- » Increase the quality of education.
- » Provide affordable access to quality health care.
- » Establish effective, safe and affordable public transport.
- » Produce sufficient energy to support industry at competitive prices, ensuring access for poor households, while reducing carbon emissions per unit of power by about one-third.
- » Ensure that all South Africans have access to clean running water in their homes.
- » Make high-speed broadband internet universally available at competitive prices.
- » Realise a food trade surplus, with one-third produced by small-scale farmers or households.

The National Development Plan aims to provide a supportive environment for growth and development, while promoting a more labour-absorbing economy. The proposed project will assist in reducing carbon emissions targets and creating jobs in the local area, as well as assist in creating a competitive infrastructure based on terms of energy contribution to the national grid.

3.1.5. National Climate Change Response White Paper (2011)

South Africa's response to climate change has two objectives: 1) to effectively manage the inevitable climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity; and 2) to make a fair contribution to the global efforts to stabilise greenhouse gas (GHG) concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enabled economic, social and environmental development to proceed in a sustainable manner. The paper proposes a number of approaches dealing with climate change impacts with respect to selected sectors. Energy, in this context, is considered to be one of the key sectors that provides for possible mitigations to address climate changes. The White Paper provides support for the proposed project of renewable energy which will contribute to managing climate change impacts, supporting the emergency response capacity, as well as assist in reducing GHG emissions in a sustainable manner.

3.1.6. White Paper on the Energy Policy of the Republic of South Africa (1998)

The White Paper on Energy Policy states the need to improve the energy security in the country by means of expanding the energy supply options. This implies the increase in the use of renewable energy and encouraging new entries into the generation market. The support for the renewable energy policy is guided by a rationale that South Africa has a very attractive range of renewable resources, particularly solar and wind and that renewable applications are in fact the least cost energy service in many cases; more so when social and environmental costs are taken into account. Government policy on renewable energy is thus concerned with meeting the following challenges:

- » Ensuring that economically feasible technologies and applications are implemented;
- » Ensuring that an equitable level of national resources are invested in renewable technologies, given their potential and compared to investments in other energy supply options; and,
- » Addressing constraints on the development of the renewable industry.

The policy states that the advantages of renewable energy include minimal environmental impacts during operation in comparison with traditional supply technologies, generally lower running costs, and high labour intensities. Disadvantages include: higher capital costs in some cases; lower energy densities; and lower levels of availability, depending on specific conditions, especially with sun and wind based systems. Nonetheless, renewable resources generally operate from an unlimited resource base and, as such, can increasingly contribute towards a long-term sustainable energy future. Therefore the policy supports the advancement of renewable energy sources at ensuring energy security through the diversification of supply, which is in line with the proposed project.

3.1.7. White Paper on the Renewable Energy Policy of the Republic of South Africa (2003)

The White Paper on Renewable Energy Policy supplements the Government's overarching policy on energy as set out in its White Paper on the Energy Policy of the Republic of South Africa (DME, 1998). The White Paper on Renewable Energy Policy recognises the significance of the medium and long-term potential of renewable energy. The main aim of the policy is to create the conditions for the development and commercial implementation of renewable technologies. The position of the White Paper on Renewable Energy is based on the integrated resource planning criterion of:

"Ensuring that an equitable level of national resources is invested in renewable technologies, given their potential and compared to investments in other energy supply options."

The White Paper on Renewable Energy sets out Government's vision, policy principles, strategic goals and objectives for promoting and implementing renewable energy in South Africa. South Africa relies heavily on coal to meet its energy needs because it is well-endowed with coal resources in particular. However South Africa is endowed with renewable energy resources that can be sustainable alternatives to fossil fuels, but which have so far remained largely untapped. This White Paper fosters the uptake of renewable energy in the economy and has a number of objectives that include: ensuring that equitable resources are invested in renewable technologies; directing public resources for implementation of renewable energy technologies; introducing suitable fiscal incentives for renewable energy and; creating an investment climate for the development of renewable energy sector. The White Paper on Renewable Energy of 2003 set a target of 10 000GWh to be generated from renewable energy by 2013. The target was reviewed during the renewable energy summit of 2009 held in Pretoria. The summit raised the issue over the slow implementation of renewable energy projects and the risks to the South African economy of committing national investments in the energy infrastructure to coal technologies. Other matters that were raised include potential large scale roll out of solar water heaters and enlistment of Independent Power Producers to contribute to the diversification of the energy mix. The objectives of the White Paper on Renewable Energy are considered in six focal areas, namely: financial instruments, legal instruments, technology development, awareness raising, capacity building and education, and market based instruments and regulatory instruments. The policy supports the investment in renewable energy facilities as they contribute towards ensuring energy security through the diversification of energy supply, reducing GHG emissions and the promotion of renewable energy sources.

3.1.8. National Integrated Resource Plan for South Africa (2010-2030)

The primary objective of the Integrated Resource Plan (IRP) is to determine the long term electricity demand and detail how this demand should be met in terms of generating capacity, type, timing and cost. However, the IRP also serves as input to other planning functions, *inter alia* economic development, and funding, and environmental and social policy formulation. The accuracy of the IRP is to be improved by regular reviews and updates, and a draft revised Plan is currently available for public comment. The National Integrated Resource Plan 2010 projected that an additional capacity of up to 56 539MW of generation capacity will be required to support the country's economic development and ensure adequate reserves over the next twenty years. The required expansion is more than two times the size of the existing capacity of the system. A significant

component of the plan, amongst others, is the expansion of the use of renewable energy sources to reduce carbon emissions involved in generating electricity. In this regard, the IRP supports the development of 17GW of renewable energy generation by 2030. The proposed project contributes to the targets in this policy.

3.1.9. Strategic Infrastructure Projects (SIPs)

The Presidential Infrastructure Coordinating Committee (PICC) are integrating and phasing investment plans across 18 Strategic Infrastructure Projects (SIPs) which have five core functions: to unlock opportunity, transform the economic landscape, create new jobs, strengthen the delivery of basic services, and support the integration of African economies. A balanced approach is being fostered through greening of the economy, boosting energy security, promoting integrated municipal infrastructure investment, facilitating integrated urban development, accelerating skills development, investing in rural development, and enabling regional integration.

SIP 8 of the energy SIPs supports the development of the solar energy facility which is as follows:

» *SIP 8: Green energy in support of the South African economy:*

Support sustainable green energy initiatives on a national scale through a diverse range of clean energy options as envisaged in the Integrated Resource Plan (IRP 2010) and supports bio-fuel production facilities.

3.2. Provincial Policies

A brief review of the most relevant provincial policies is provided below. The proposed project is considered to align with the aims of these policies, even if contributions to achieving the goals therein are only minor.

3.2.1. Northern Cape Provincial Development and Resource Management Plan / Provincial Spatial Development Framework (PSDF) (2012)

As part of the development planning process that underlies the formulation of the Northern Cape Provincial Spatial Development Framework (PSDF). The PSDF not only gives effect to national spatial development priorities but it also sets out a series of provincial, district and local development priorities for the space economy of the Northern Cape.

The Northern Cape PSDF is premised upon and gives effect to the following five strategic objectives of the National Strategy for Sustainable Development (NSSD 2011-2014):

» Enhancing systems for integrated planning and implementation

- » Sustaining our ecosystems and using natural resources efficiently
- » Towards green economy
- » Building sustainable communities
- » Responding effectively to climate change

The PSDF makes reference to the need to ensure the availability of energy. Under the economic development profile of the Northern Cape PSDF, the White Paper on Renewable Energy Policy (2003) discussed a target of 10 000GWh of energy to be produced from renewable energy sources. It was also stated that the total area of high radiation in South Africa amounts to approximately 194 000km², of which the majority falls within the Northern Cape. It is estimated that, if the electricity production per km² of mirror surface in solar thermal power stations were 30.2MW and only 1% of the area of high radiation were available for solar generation, then generation potential would equate to approximately 64GW. A mere 1.25% of the area of high radiation could therefore meet projected South African electricity demand in 2025 (80GW). It was also stated in the Northern Cape PSDF that the implementation of large CSP facilities have been proposed as one of the main contributors to reducing greenhouse gas emission in South Africa. The Northern Cape PSDF also discusses economic development and that it typically responds to the availability of environmental capital (e.g. water, suitable agricultural soil, mining resources etc.) and infrastructural capital (e.g. roads, electricity, bulk engineering services etc.). One of the policies in the NC PSDF is for renewable energy sources (e.g. wind, solar, biomass, and domestic hydro-electricity generation) to comprise 25% of the Province's energy capacity by 2020. Therefore, the proposed Noupoot CSP project will assist in contributing to the province's renewable energy capacity.

3.2.2. Northern Cape Provincial Growth and Development Strategy (PGDS) (2011)

The Northern Cape Provincial Growth and Development Strategy (PGDS) sets the tone for development planning and outlines the strategic planning direction in the province. Planning for the promotion of economic growth and social development lies at the core of the Government's responsibility to provide a better life for the nation. It is essential to ensure that planning is integrated across disciplines, coordinated within and between different planning jurisdictions and aligned with the budgeting processes of national, provincial and local government. The core purpose of the Northern Cape PGDS is to enable stakeholders from public and private sectors, together with labour and civil society, to determine a plan for sustainable growth and development of the Northern Cape. The main objectives set by the Northern Cape PGDS for development planning in the province are as follows:

- » Promoting growth, diversification and transformation of the provincial economy

- » Poverty reduction through social development
- » 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 Northern Cape PGDS aims at building a prosperous, sustainable, growing provincial economy to eradicate poverty and improve social development. The proposed project will contribute to growth and development of the province by expanding the economic base, diversifying the economy and creating employment opportunities, which will contribute towards reducing poverty.

3.2.3. Northern Cape Provincial Local Economic Development (LED) Strategy (2009)

The Northern Cape Local Economic Development (LED) strategy is intended to build a shared understanding of LED in the province and put into context the role of local economies in the provincial economy. It seeks to mobilise local people and local resources in an effort to fight poverty. The Northern Cape LED strategy investigated the options and opportunities available to broaden the local economic base of the province in order to promote the creation of employment opportunities and the resultant spin-off effects throughout the local economy. Areas of opportunity include:

- » Livestock products
- » Game farming
- » Horticulture
- » Agriculture
- » Ago-related industries
- » Tourism
- » Manganese and iron Ore
- » Beneficiation of minerals
- » Renewable energy

The purpose of the LED is to build up the economic capacity of a local area to improve its economic future and quality of life for all. The LED provides local municipalities with leadership and direction in policy making, in order to administer policy, programmes and projects, and to be the main initiator of economic development programmes through public spending. It is noted in the LED that renewable energy is an area of opportunity to broaden the local economic base and promote the creation of employment opportunities as well as local economy spin-off effects.

3.3. District and Local Municipalities Policies

These strategic policies at the district and local level have similar objectives for the respective areas, namely to accelerate economic growth, create jobs, uplift communities and alleviate poverty. The proposed project is considered to align with the aims of these policies, even if contributions to achieving the goals therein are only minor.

3.3.1. Pixley ka Seme District Municipality Integrated Development Plan (IDP) (2012-2016)

The vision for the PKSDM as set out in the IDP is to commit to “commit to be developed municipality where the quality of life for all people in the district will be improved.” In terms of the mission statement, the PKSDM sets out to achieve:

- » Efficient service delivery
- » Optimal human and natural resource development
- » Local economic growth and development, job creation and poverty alleviation
- » A vibrant tourism industry and
- » A safe, secure and community friendly environment

Key development challenges identified for the PKSDM most likely to have a fundamental effect on the long-term economic viability of the district include:

- » Optimising on the opportunities presented by the regions geo-political location between Cape Town, Bloemfontein, Johannesburg and Pretoria, which are among the most important cities in South Africa;
- » Optimising on the opportunities presented by the N1, N12, N9 and N10 corridors, which already transport many tourists, good and services throughout the year through the region
- » The potential opportunities of the proposed renewable energy hub in the region;
- » The HIV/AIDS pandemic and its impact on regional demographics;
- » Management of investor risk, and where necessary, direct intervention in order to attract international capital;
- » The maintenance and preservation of pristine environment; and
- » High levels of unemployment and poverty (PKSDM; 2012: 110).

Key objectives and strategies of relevance to the proposed project include:

LED, Tourism and Poverty Alleviation:

Key identified challenges include high levels of poverty and low skills levels; and a relatively undiversified economy, relying mainly on primary sector activities. Key interventions would include promoting SMMEs; attracting and retaining investors in the region; development of identified development corridors; value-adding to/beneficiation of local produce; and the promotion of tourism development. Policies/targets aimed at addressing these challenges include:

- » LED 1: Promote Local Economic Development (LED) in the region;

- » LED 2: Increase SMME promotion;
- » LED 6: Reduce employment and poverty by 50% each, respectively in the region by 2014.

HIV/ AIDS:

Key identified challenges include low awareness levels, inadequate health care facilities, including a lack of trained professionals, mobile clinics, a hospice, etc.

- » Policy HIV 1 focuses on reducing the level HIV/AIDS infections amongst young men and women in the District.

Education, Youth and development:

Key identified challenges include limited or no access to higher learner institutions; lack of IT skills in the region; poor qualification and skills of the community limiting their entry to institutions of higher learning; very few training facilities in the region; and a lack of funds available to the majority of learners.

- » Policy Y1 focuses on improving the well-being of young men and women, including improving access to vocational training (Y1.2).

Safety and security:

Key identified challenges include high endemic levels of family and child abuse; and high levels of alcohol abuse.

- » Policy SS1 provides for the promotion of a safe and secure environment in the District.

Renewable Energy Hub:

The PKSDM convened a conference on investment and renewable energy which was held from the 14th to the 16th of September 2010. The intention of the conference was to provide insight around virgin opportunities that could be exploited in key sectors of the district economy, namely: mining, tourism, manufacturing, retail, agriculture and agro-processing and also in the renewable energy sector, namely: solar, wind, hydro, biomass, bio-digestion and geo-thermal development. The investment and renewable conference took resolutions on matters including Infrastructure development and rural industrialization and development zones. The PKSDM is currently actively promoting itself as renewable energy hub, and hopes to become the national solar hub. It is hoped that the development of multiple solar energy facilities in the PKSDM would create sufficient critical mass to support the development of local solar-related manufacturing and servicing industry, and potentially even the establishment of a renewables related vocational training centre. Spatially, the concentration of renewable facilities is envisaged in the De Aar area, but also including Prieska, Hanover and Noupoot (where the proposed project is located). Unlike the Gariiep/ Orange River valley located to the north (mooted as "Karoo riviera"), the Noupoot area is not considered visually/ tourist sensitive.

The proposed Noupoot CSP project will contribute towards the LED targets in terms of creating employment opportunities in the area, promoting LED in the region, increasing the skills capacity of local community members and stimulating economic growth through local procurement. It is important that benefits from the proposed development are enhanced for the local area. It is crucial that a minimal number outside workers are brought into the area, to avoid increasing HIV/AIDS and safety and security issues. Overall the project will provide positive benefits in line with PKSDM IDP and the IDP has identified renewable developments - and solar in particular - as a key local economic growth and development strategy, with potential spinoffs in terms of direct long term employment creation, and major potential cumulative downstream benefits in terms of local investment, manufacturing and spending, as well as local tertiary vocational training.

3.3.2. Umsobomvu Local Municipality Integrated Development Plan (IDP) (2012-2017) (2015-2016 review)

The IDP document represents the third review of ULM IDP for the current five-year local government planning and implementation time-frame, i.e. 2012 - 2017 and considers the 2015/2016 budget cycle. The IDP is regarded as the single most important strategic document of the Municipality and consolidates all municipal strategies and documents. The current vision of the ULM is *"to be the Fastest Economically Developing Municipality in South Africa"*. The mission of the ULM is to *"serve the community by delivering quality services and customer care through dedicated staff for the upliftment of the community socially and economically."*

The ULM IDP indicates that the most critical challenge facing the ULM is the reduction of poverty. The other challenges that need to be addressed include:

- » Ensuring that all citizens have access to basic services such as water, sanitation, electricity and housing;
- » Increasing access to services in education, health and social services;
- » Stabilising and decreasing the rate of HIV and AIDS infection, tuberculosis etc.;
- » Reduction in the rate of crime;
- » Economic empowerment;
- » The shortage of critical skills;
- » Improving skills of the labour force etc.
- » Targeting special groups e.g. women, disabled and youth; and
- » Sustainable job creation.

To align the needs of the ULM, strategic objectives have been identified which are in line with the national Key Performance Areas (KPA). The KPA's and key indicators are based on the local priorities and IDP objectives and are as follows:

- » KPA 1 – Basic Service Delivery and Infrastructure Development
 - Effective management and provision of sanitation services
 - To educate consumers regarding the use of water
 - Upgrade and maintain internal streets
 - To facilitate access to electricity for each consumer within Municipality
 - To facilitate Integrated Waste Management
 - To improve the provision of sufficient and increasing availability of public transport facilities
 - To coordinate service delivery in respect of Housing
 - To ensure the optimal use of land
- » KPA 2 – Institutional Development and Municipal Transformation
 - To improve organizational effectiveness
 - To provide for an integrated and coordinated disaster management policy that focus on prevention or reducing the risk of disaster
 - To coordinate the provision of recreation facilities within the Municipality.
 - Maintenance and upgrading of existing recreation facilities within the Municipality.
 - To facilitate integrated cemeteries and crematoria provision.
- » KPA 3 – Good Governance and Public Participation
 - To promote effective district wide communication infrastructure
- » KPA 4 – Financial Viability and Management
- » KPA 5 – Local Economic Development
 - Increase the economic growth rate
 - To diversify and expand the economic base
 - To integrate and coordinate tourism and development
 - To coordinate service delivery in respect of Land Reform Projects
 - Plan environmental aspects in integrated manner
 - Ensure environmental friendly waste management systems
- » KPA 6 – Safety and Security
 - Promote law enforcement and visible policing
- » KPA 7 – Social Upliftment
 - Coordination of the Municipality’s needs for the provision of educational facilities
 - Coordination of the Municipality’s needs for the provision of health facilities
 - Mitigate the effect of the HIV/AIDS pandemic
 - To increase literacy levels

The ULM focus is on economic and social development and service delivery. The proposed project will contribute to economic and social development through employment opportunities and business opportunities in the local area which will contribute towards reducing the poverty levels in the ULM.

3.4. Solar Energy Policies

3.4.1. Solar Energy Technology Roadmap 2013

Diffusion of renewable energy, generally, and solar technology, specifically, in South Africa aims to address the government's desire to aggressively integrate renewable energy technologies into the national energy mix to reduce the country's carbon emissions levels, to help address its growing electricity generation needs, and its industrial heat needs (DEA draft integrated Energy planning report, 2012). The use of solar radiation for power generation is considered a non-consumptive use of a natural resource which produces zero greenhouse gas emissions during its operation. The generation of renewable energy will contribute to South Africa's electricity market which has, to date, been heavily dominated by coal-based power generation. The advancement of renewable energy is a priority for South Africa as the government has set a goal of generating 17GW renewable electricity by 2030, as part of the IRP 2010. Furthermore, recent policy highlights the desirability of clean, green energy and solar generated energy will play a significant role in reaching these quotas.

3.5. Conclusion

The findings of the review of the relevant policies and documents pertaining to the energy sector indicate that solar energy and the establishment of solar energy facilities such as the one proposed is supported at a national, provincial, and local level, and that the proposed project will contribute towards the various targets and policy aims.

4. Socio-Economic Profile

The proposed study area for the Noupoort CSP Project falls under the jurisdiction of the Umsobomvu Local Municipality (ULM) and within the greater jurisdiction of the Pixley ka Seme District Municipality (PKSDM) in the Northern Cape Province. The proposed site lies approximately 4km north west of Noupoort on on the Remaining Extent of the Farm 207, Portion 1 and Portion 4 of Farm Carolus Poort 167. The purpose of the section is to provide an overview of the current socio-economic situation within the proposed study area. This section will provide a strategic understanding of the socio-economic profile of the Northern Cape Province, ULM and PKSDM, in order to develop a better understanding of the socio-economic performance as a background to the development of the proposed project. The data presented in this section has been largely derived from the IDPs, the most recent (2011) Census, as well as the local government handbook 2012. Overall, this section will provide a brief overview of the study area; from a regional context, local context (which includes the baseline description of the local social environment), site context and surrounding land use context (which includes the land use character of the immediate area of influence).

4.1. Regional Context

4.1.1. Northern Cape Province

The vast and arid Northern Cape is by far the largest province in South Africa, taking up nearly a third of South Africa's land area (refer to Figure 3). The area covers 372 899km², which is 30.5% of South Africa's total area. However, the Northern Cape has the country's smallest population with a little over 1 million people (population 1 145 861), which is 2.2% of South Africa's population, and an extremely low population density of three people per square kilometre. Just over half of the population speak Afrikaans (53.8%), with other languages being Setswana (33.1%), isiXhosa and English. The capital of the Northern Cape is Kimberley, located on the Province's eastern border. Other important towns are Noupoort, the centre of the karakul sheep and dried fruit industries, and the most northerly wine-making region of South Africa, Springbok, located in the heart of the Namaqualand spring flower country, and De Aar, the hub of the South African railway network.

Portions of the Northern Cape Province that border the Orange River and Namibia have the highest solar radiation intensity in the world (State of the Environment Report (SOER), 2005, cited in the Northern Cape PSD, 2012: 31). This represents a huge comparative economic advantage. At a provincial level, the Northern Cape has been identified as the area with highest potential for solar renewable energy generation, with high solar radiation levels and the availability

of vast tracts of land. There are already a number of solar PV and CSP facilities planned in the region.



Figure 3: Location of the Northern Cape Province in South Africa (Source: Local Government Handbook. 2012)

4.1.2. Pixley ka Seme District Municipality

The PKSDM lies in the south-east of the Northern Cape Province and shares its borders with three other provinces, namely the Free State province to the east, the Eastern Cape Province to the south-east and the Western Cape Province to the south-west (refer to Figure 4). It is comprised of eight local municipalities: Ubuntu, Umsobomvu, Emthanjeni, Kareeberg, Renosterberg, Thembelihle, Siyathemba and Siyancuma. Its main town is De Aar. It is one of the five district municipalities in the Province and is the second-largest. Two of the major dams in South Africa, the Vanderkloof and Gariep Dams, are situated on the borders of the district municipality. The major cities/towns in the PKSDM include Britstown, Burgerville, Campbell, Carnarvon, Colesberg, Copperton, De Aar, Douglas, Griekwastad, Griesenkraal, Hanover, Hopetown, Hutchinson, Loxton, Marydale, Niekerkshoop, Norvalspont, Noupoort, Petrusville, Philipstown, Prieska, Richmond, Riet River, Schmidtsdrif, Strydenburg, Van der Kloof, Vanwyksvlei, Victoria West, Vosburg. The main economic sectors in the PKSDM are as follows; Finance and business services (22.5%), manufacturing (17.4%), trade and accommodation

(15.4%), government services (12.9%), transport and communication (11.3%), mining (6.8%), community and social services (5.6%), construction (3.3%) and agriculture (2.7%). Renewable energy projects in the various local municipalities within the District are key projects for the PKSDM. Other key investment opportunities include mining (uranium and diamond deposits) and rail revitalisation.

According to the PKSDM IDP 2015-2016, the PKSDM proactively took bold steps towards diversification of the District economy from one that relies on mining and agriculture. The Pixley ka Seme District 2010 Investment and Renewable Energy Conference was an important milestone aimed at 'Setting the District on a Growth Path' through innovative local economic development initiatives. The PKSDM is declared as a Renewable Energy Hub seeking to attract foreign direct investments into solar, wind, hydro and biomass projects. PKSDM and its eight local municipalities are currently promoting a green economy in the district that seeks to promote generated economic activities that preserve and enhance environmental quality while using natural resources more efficiently.



Figure 4: Location of the Pixley ka Seme District municipality in the Northern Cape (Source: Local Government Handbook, 2012)

4.2. Local Context

4.2.1. Umsobomvu Local Municipality (ULM)

The ULM is situated within the PKSDM in the Northern Cape Province (refer to Figure 5). The ULM economical activities are dominated largely by agriculture, financial services, trade, hospitality industry, tourism and transport. The main economic sector in the ULM is agriculture. The area is known as an agricultural area dedicated almost entirely to horses and merino sheep. By virtue of the ULM geographic location the ULM prides itself as a natural transportation route for people travelling to destinations such as Cape Town, Port Elizabeth, Gauteng and Bloemfontein since two of the major national roads, namely N1 and N9, pass through the Municipality.

The major cities/towns in the ULM include Colesberg, Norvalspont and Noupoot. Colesberg is a town located on the main road from Cape Town to Johannesburg. In a sheep-farming area spread over 500 000 hectares, greater Colesberg breeds many of the country's top merinos and is also renowned for producing high-quality racehorses and many stud farms are located in the area. Noupoot is a town in the eastern Karoo region that principally revolved around the railways and is still used as a traction change-over facility from diesel to electric locomotives on the Noupoot-Bloemfontein line. It links up with the electric line to De Aar, part of the main artery for iron ore and manganese exports from the Northern Cape through Port Elizabeth Harbour on the south coast. Commercial activity in Noupoot is heavily dependent on railway activity. After a long period of increasingly less demand on the rail network, the town suffered from a drastic decline in local business leading to increasingly dire socioeconomic conditions for the local population. Poverty increased concomitantly with the decline in rail activity (Local Government Handbook, 2012). The status of the Municipality's economy epitomizes the legacy of apartheid thought its skewed development among former white areas and townships. All communities are affected in terms of poverty and development deficit. Census 2011 indicates that the ULM has the highest rate of unemployment (33%, which is attributed to the decline in the railway industry). Upliftment of the local economy has therefore been a key area of focus for the Municipality (ULM IDP 2012-2017).



Figure 5: Location of the Umsobomvu Local Municipality within the Pixley ka Seme District Municipality (Source: Local Government Handbook, 2012)

The ULM embarked on identifying the needs and issues of the ULM through a consultative process. General baseline characteristics and challenges of the ULM are as follows (Census, 2011 and ULM IDP 2015/2016):

Physical:

- » Dust pollution occurs in the region as a result of sparse vegetation and low variable rainfall.

Demographics:

- » The Municipality has a population of ~28 376 which is 15.2% of the total population of the PKSDM.
- » Of the ~28 376 population, about 51.8% are female, while 48.2% are male.
- » More than 62.6% of the population comprise the Black African ethnic group and 30.6% comprise the coloured ethnic group.
- » The most spoken language in the ULM is Xhosa (comprising 55.2% of the population) and the second most spoken language is Afrikaans comprising 38.6% of the population.
- » There is a reasonably low population growth rate in the rural areas. The average growth rate is -1.29% per annum.

- » The younger age group which is the future labour force of the Municipality is demanding services such as education, shelter, recreational facilities and employment.
- » Theft and other illegal activities are a result of many problems e.g. unemployment that are dictated by unpleasant economic conditions of the Municipality.
- » A review of the existing level of education by population indicates a clear shortage of skilled manpower in the Municipality.
- » There are low levels of literacy amongst the members of the community. The level of education influences growth and economic productivity of a region. In the ULM 16.3% of the population have no schooling, 23.1% have completed matric and only 6.3% of the population have higher education. This means that majority of the population have a low-skill level and would need job employment in low-skill sectors.
- » The majority of the households in the Municipality who live below the Minimum Living Level (MLL) of Poverty Datum Line (PDL) are really faced with financial hardships.

Social and community facilities:

- » Inadequate schools especially in the rural areas results in many young people having to travel long distances to areas where the schools exist.
- » No tertiary institution is available.
- » Some of the health centres in the region are ill-equipped and understaffed.
- » No health centres are available in the rural areas.
- » Lack of aftercare facilities and support services to patients.
- » Recreational facilities in the townships do not have basic services and infrastructure.
- » The findings also revealed that recreational facilities in the historically disadvantaged communities or neighbourhoods are poorly developed.
- » Lack of privacy and overcrowding in homes are a result of housing backlog.
- » The rising number of informal dwelling units in the Municipality is also a result of housing backlog.
- » The social dimension of the local municipality is characterized by high and rising levels of poverty which is caused by:
 - Landlessness;
 - Unemployment;
 - Vulnerability (deprivation, insecurity, defencelessness and exposure to risk);
 - Lack of control over any resources;
 - Limited or no access at all to basic services e.g. water and shelter and
 - Lack of income opportunities.
- » Some cemeteries are presently in a poor state.
- » The ground surveys also revealed that quite a number of graves in some cemeteries have been vandalized.
- » The existing number of libraries is inadequate and many of those that are presently operating are not very resourceful.

Socio-economic conditions:

- » Unemployment is rife in all the local municipalities within the District. The Municipality's unemployment rate is high at 33% (in 2011).
- » The Economically Active Population (EAP) (individuals that are aged 15-64 that are either employed or actively seeking employment) accounts for 62.8% of the entire population.
- » The population aged 0-14 years comprise 31.4% of the population and those aged 65 years and above accounts for 5.8% of the entire municipal population.
- » The dependency ratio is the amount of individuals that are below the age of 15 and over the age of 64, that are dependent on the EAP. The dependency ratio in the ULM comprises 37.2% of the population.
- » In the ULM there are approximately ~7 841 households with an average household size of ~3.5 persons per household. Approximately 88.2% of the ULM population live in formal dwellings.
- » High levels of poverty and low levels of education.
- » Households that have either no income or low income fall within the poverty level (R0- R38 200 per annum) accounts for 67.1%. A middle-income is classified as earning between R38 201 - R307 600 per annum. Approximately 29.7% of the households earn a middle income and 3.4% of households earn a high income that is classified as earning R307 601 or more per annum. A high percentage of household income falls within the poverty level. The high poverty level has social consequences such as not being able to pay for basic needs and services.
- » The level of income is far below the MLL or PDL for majority of the people hence there is a high number of people who are not able to pay for their municipal services.
- » The rapid growth of informal settlements in many urban areas is a result of many social and economic problems such as landlessness and housing backlog.
- » Increase of HIV infections amongst the youth.
- » Alcohol and substance abuse.
- » Street children.
- » Communities need more police stations.
- » Insufficient police stations.
- » Intensification of HIV/AIDS programmes in the region.
- » Rise in teenage pregnancies.
- » Burglaries at houses.
- » Abuse of social grants.
- » Current land ownership and land development patterns strongly reflect the political and economic conditions of the past era. Racially based land policies were a cause of insecurity, landlessness and poverty amongst black population and a cause of inefficient land administration and land use.
- » Limited or no land available to stimulate small and medium sized economic activities in the region.
- » Very little of the land is owned by provincial and national governments, local authorities and parastatal organizations.
- » Almost all the visible active/arable lands within the district are owned by the white population. This situation clearly indicates that there is a need for Local

and District municipalities to be more proactive in the implementation of land reform programmes as outlined in the White Paper on Land Policy so as to open up land which is needed for stimulating the kind of economic growth that will ensure a better life for all.

- » The Municipality has a declining economy that is largely based on sheep farming.
- » The Municipality has an economy that was too dependent on Spoornet (Transnet Freight Rail) in Noupoort, which has since declined because of the withdrawal of Spoornet.

The greatest social problems in the ULM are illiteracy, poverty and lack of basic service infrastructure. The ULM has a declining economy. The income distribution is distorted in the ULM to the disadvantage of the less economically secured people, who also represents the majority of the municipal area. Poor households are a result of a lack of wage income, either due to unemployment or low-paying jobs. Access to basic services such as electricity, toilets and piped water is also closely correlated with poverty.

4.2.2. Direct area of influence impacted by the proposed project

The proposed project may affect the major service providers which include the local municipality and local businesses in the area. The local municipality that will be directly impacted by the proposed project will be ULM. The Municipality will absorb a number of social impacts (positive and negative), especially impacts related to an influx of people, since they will be responsible to deliver services to people residing within their municipal area. Negative dimensions of impacts such as influx of jobseekers into the area putting pressure on the provision of basic services and poverty level will need to be assessed.

The proposed project will however contribute towards social and economic development through enabling skills development and training in order to empower individuals and promote employment creation within the local area. The proposed project would mainly focus on economic benefits to the area and introduce a new industry into the local economy. There are a number of local businesses in the area that could benefit from the proposed project in terms of an increase in demand for goods and services (positive cumulative impacts).

According to the World Wide Fund (WWF, 2015), renewable energy projects under the Renewable Energy Independent Power Producer Procurement (REIPPP) Programme are obliged to make a real contribution to local economic development in the area. These requirements have to be fulfilled within a 50km radius of the project site and renewable energy companies are obliged to engage with the development opportunities and needs of communities around the project site. Awarded projects are required to spend a certain amount of their generated revenue on Socio-Economic Development (SED) and Enterprise Development

(ED) and share ownership in the project company with local communities. These criteria, as well as the creation of a specific number of jobs, are incentivised through awarding higher scoring to projects that realise such criteria within a 50km radius to the project site during the evaluation process. Additionally, projects add value to the local economy through targeted procurement from local businesses. Job creation requirements target national and local citizens. Between 12% and 20% of the people employed on the project have to be residents of local communities located within 50km of the project site. Only "in the event that there are no residential areas or villages within 50km from the project site (are project developers allowed to source workers) in the nearest residential areas or villages to the project site" (DoE 2011). The DoE indicates that the programme offers great potential to realise positive socio economic outcomes- such as job creation, local ownership, socio-economic development and enterprise development. The project's direct area of influence will extend to a 50km radius from the proposed site. The closest urban areas to the proposed site within the project's direct area of influence (within 50km radius) include Noupoot and Middleburg.

The situational analysis and statistics presented in the baseline description of the ULM and information taken from the ULM IDP indicate the developmental challenges facing the Municipality, such as poverty, unemployment, and service delivery backlogs. Socio-economic spin-offs from the proposed project could contribute to better infrastructure provision and educational investment in the local areas. According to IDP 2012-2017 (2015-2016 review), the following is a summary of the needs identified in ward 1 and 2 (Noupoot area) that was done through an extensive consultation process:

- » Building of houses
- » Street lights
- » Removal of the Asbestos School in Noupoot
- » Paving of streets
- » Department of Labour and Home Affairs satellite offices
- » Police station in Kwazamuxolo and EurekaVille
- » Library in Kwazamuxolo
- » Erection of signs at dumping sites
- » Renovation of dilapidating RDP Houses
- » Public toilets in town

However an in-depth community needs assessment (CNA) will need to be carried out at a later stage to ensure that the real needs of communities are addressed (in line with the local government) by development programmes in order to significantly contribute towards local economic growth, SED and ED. The proposed project has the potential to contribute towards positive socio-economic improvements within the local area. Potential negative impacts on these towns

will be during the construction phase and will be associated with pressure on infrastructure (e.g. health facilities, basic services) and different social/cultural behaviour influences; from an external workforce being brought into the local area. The positive social impacts associated with the proposed project for the surrounding towns include economic growth and development (economic opportunities such as jobs and expenditure in the local area).

4.2.3. Indirect areas of influence impacted by the proposed project

The indirect areas of influence extend to all areas that will be indirectly affected by the proposed project. There are a number of stakeholders that reside outside the direct area of influence but who may be affected by the proposed project. These include road users that use the R389 on a frequent basis as part of their daily or weekly movement patterns. Construction vehicles and trucks may be utilising these roads during the construction phase which will increase the traffic and may increase the wear and tear on these roads. Also the low and semi-skilled workers will likely be transported to site with busses. The proposed project may also have an indirect effect on the town's local residents; with a possible influx of in-migrants and growth in the local economy.

4.3. Immediate area of influence impacted by the proposed project

The immediate area of influence includes the site area and adjacent areas. This section will describe the land use characteristics of the immediate area of influence. The proposed Noupoot CSP Project will be located approximately 4km north west of Noupoot within the ULM that falls within the jurisdiction of the PKSDM in the Northern Cape Province. The Noupoot CSP Project is proposed to be located on the Remaining Extent of the Farm 207, Portion 1 and Portion 4 of Farm Carolus Poort 167. Majority of the land surrounding the proposed study area comprises large open degraded spaces / agricultural areas. Prominent features within or surrounding the proposed study area includes (also refer to Figure 6):

- » Possible agricultural activities which may take place on impacted and adjacent farms, it is anticipated that primarily livestock farming takes place in the local area (this will be confirmed during the EIA phase).
- » There are also a few dwellings/buildings located in the study area. During the EIA phase a survey will be undertaken to determine what these buildings are utilised for and if there are any residents (farmers, tenants, farm workers) living in the proposed study area.
- » There are some agricultural farmlands surrounding the study area.
- » The surrounding area is sparsely populated. Figure 6 indicates the position of buildings/dwellings located within the adjacent farm properties.
- » Noupoot town is located 4km south east of the proposed study area.

- » R389 regional road runs along a portion of the southern boundary of the proposed study area.
- » Overhead power lines traverse the eastern and northern sections of the proposed study area.
- » A railway line is located along the north eastern boundary of the proposed study area.

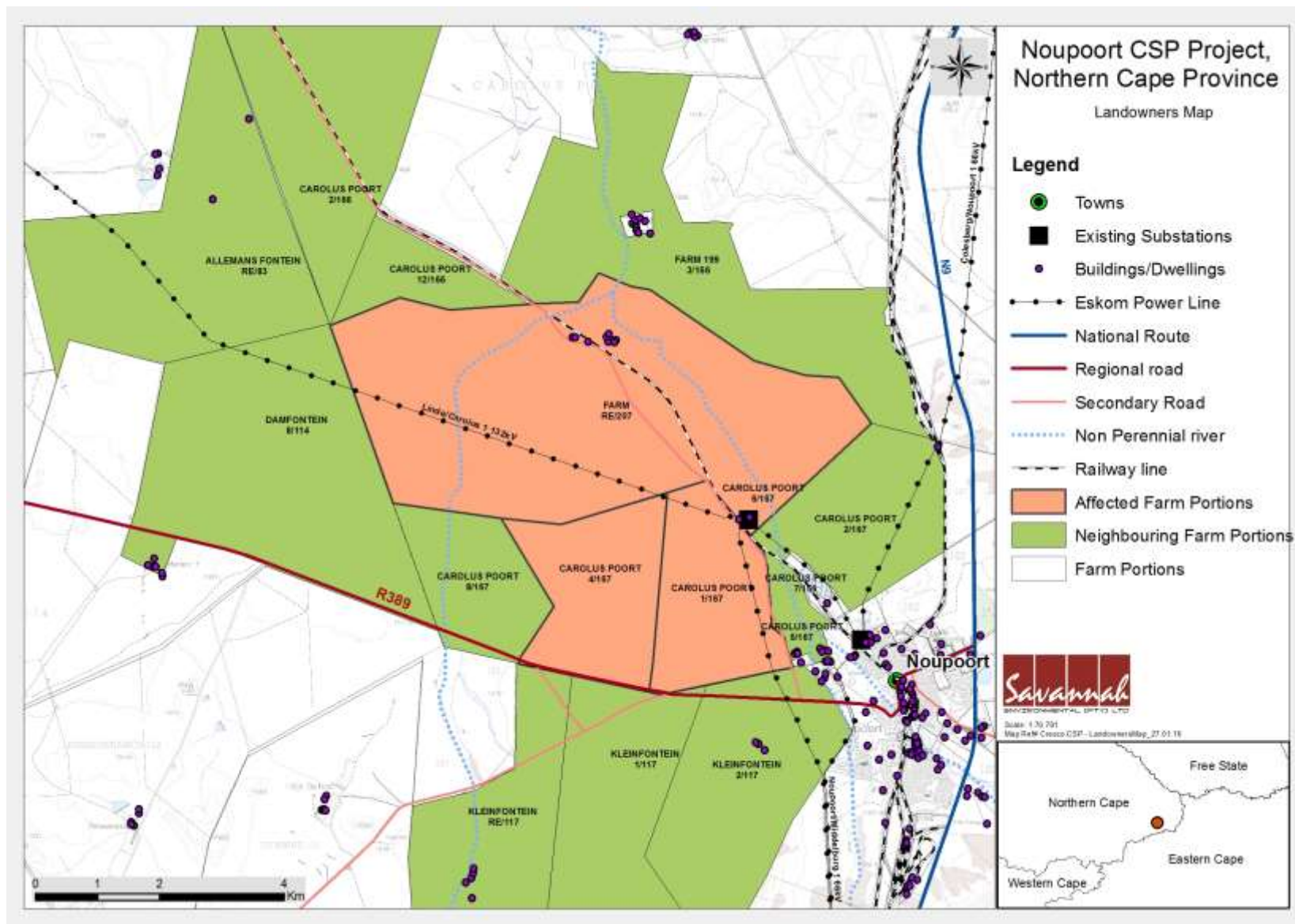


Figure 6: Landowners map for Noupoot CSP Project

5. Identification of Key Potential Social Impacts

The potential issues and impacts associated with the different phases of the proposed project have been identified and discussed below.

5.1. Construction phase

The potential positive impacts which could arise as a result of the construction activities include the following:

- » Socio-economic benefits could accrue through job creation (primarily lower skilled levels) during the construction phase. The local community could therefore benefit in this regard;
- » It is anticipated that more skilled positions could be filled by individuals from around South Africa;
- » Should employment be linked to training and capacity building it would further the positives in this regard;
- » At this stage it is not anticipated that local procurement would be achievable for the technology requirements associated with a project of this nature. Local procurement would be more focused on the procurement of general construction materials, goods and services.

Impact:

Direct employment opportunities and skills development:

The construction of the proposed project will require a workforce and therefore direct employment will be generated (approximately ~1210 employment opportunities for the duration of the construction phase of 36 months). The proposed project will create employment opportunities for the local community. This is therefore a positive social impact. The proponent has indicated that training will be provided to employees associated with the proposed project.

Desktop Sensitivity Analysis of the Site:

People from the ULM and nearby towns / settlements are most likely going to benefit the most from this positive impact due to the requirements stipulated in the REIPPP programme.

Issue	Nature	Extent of Impact	No-Go Areas
Direct employment opportunities and skills development	The creation of employment opportunities and skills development opportunities during the construction phase for the country and local economy	Local-regional	None

Description of expected significance of impact

The potential impact is expected to be positive, probable, short term, with a low intensity and have a medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. In terms of reversibility of the impact and irreplaceable loss of resources, this is not applicable to this type of impact. The potential impact may be enhanced with possible enhancement measures which will be elaborated in the SIA EIA phase.

Gaps in knowledge and recommendations for further study

It is recommended that a detailed SIA is undertaken to determine actual impact of job creation and skills development.

Impact:

Economic multiplier effects:

There are likely to be opportunities for local businesses to provide services and materials for the construction phase of the project. The local service sector will also benefit. The economic multiplier effects from the use of local goods and services opportunities will include, but is not limited to, construction materials and equipment and workforce essentials such as services, safety equipment, ablution, accommodation, transportation and other goods. In terms of business opportunities for local companies, expenditure during the construction phase will create business opportunities for the regional and local economy. Also the injection of income into the area in the form of wages will represent an opportunity for the local economy and businesses in the area.

Desktop Sensitivity Analysis of the Site:

The ULM and nearby towns are most likely going to benefit the most from this positive impact due to the requirements stipulated in the REIPPP programme.

Issue	Nature	Extent of Impact	No-Go Areas
Economic multiplier effects	Significance of the impact from the economic multiplier effects from the use of local goods and services	Local-regional	None

Description of expected significance of impact

The potential impact is expected to be positive, probable, short term, with a minor intensity and have a low - medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. In terms of reversibility of the impact and irreplaceable loss of resources, this is not applicable to this type of impact. The potential impact may be enhanced with possible enhancement measures which will be elaborated in the SIA EIA phase.

Gaps in knowledge and recommendations for further study

It is recommended that this impact is further assessed in the EIA phase of the SIA.

The potential negative impacts which could arise as a result of the construction activities include the following:

- » A large number of construction vehicles utilising the R389, local gravel roads and internal access roads for the duration of the construction phase for the

proposed project could add to the negative impact on the roads. Construction vehicles utilising these roads over the construction period with heavy construction vehicles could increase the wear and tear on the roads utilised, regional roads and internal access roads; also crossing over the roads to access the site could increase the risk of accidents;

- » An influx of workers and jobseekers to an area (whether locals are employed or outsiders are employed) could increase the safety risks in the local area and have an impact on the local social dynamics. Should locals be employed it could minimise the perceived and actual risk in this regard;
- » An influx of an outside workforce could put pressure on municipal services, as indicated from the baseline description of the local area. Therefore introducing an external workforce to the local area will put pressure on local services and local community. This would, however, also depend on the exact size of the workforce.
- » Adjacent landowners could be negatively affected by impacts from dust, noise or negative aesthetics created as a result of the construction activities.

Impact:			
<u>Safety and security impacts:</u>			
An increase in crime is often associated with construction activities. The perceived loss of security during the construction phase of the proposed project due to the influx of workers and/or outsiders to the area (as influxes of construction workers, newcomers or jobseekers are usually associated with an increase in crime), may have indirect effects, such as increased safety and security issues for neighbouring properties and damage to property, such as the risk of veld fire, stock theft, crime and so forth.			
Desktop Sensitivity Analysis of the Site:			
Areas of concern include the impacted farmland and adjacent farming areas where livestock and game farming occurs.			
Issue	Nature	Extent of Impact	No-Go Areas
Safety and security impacts	Temporary increase in safety and security concerns associated with the influx of people in the study area during the construction phase	Local	None at this stage
Description of expected significance of impact			
The potential impact is expected to be negative, improbable, short term, with a low intensity and have a low significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be avoided with possible mitigation measures which will be elaborated in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			

A site visit and consultations with key stakeholders will need to take place in the EIA phase in order to determine the perceived safety and security risks associated with the proposed development.

Impact:

Impacts on daily living and movement patterns (traffic impacts):

An increase in traffic due to heavy vehicles could create short-term disruptions and safety hazards for current road users. Transportation of project components and equipment to the proposed study area will be transported using vehicular / trucking transport. The access road will be off the R389.

Desktop Sensitivity Analysis of the Site:

Farmers/residents residing in the study area that currently utilize the R389, local gravel roads and the access road off the R389 to access their farms.

Issue	Nature	Extent of Impact	No-Go Areas
Impacts on daily living and movement patterns	Temporary increase in traffic disruptions impacting local communities movement patterns and increased safety risks for road users	Local	None

Description of expected significance of impact

The potential impact is expected to be negative, probable, short term, with a moderate intensity and have a low significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated in the SIA EIA phase.

Gaps in knowledge and recommendations for further study

Consultations with key stakeholders will need to take place in the EIA phase in order to determine the impact on daily living and movement patterns.

Impact:

Pressure on economic and social infrastructure impacts from an in-migration of people:

The in-migration of people to the area as either non-local workforce of construction workers and/or jobseekers could result in pressure on economic and social infrastructure (municipal services) due to in migration of construction workers and jobseekers and pressure on local population (rise in social conflicts and social dynamics). Influx of people into the area, especially by job seekers, could further lead to a temporary increase in the level of crime, cause social disruption and put pressure on municipal services.

Desktop Sensitivity Analysis of the Site:

Sensitive areas in the ULM and nearby towns such as Noupoot.

Issue	Nature	Extent of Impact	No-Go Areas
Pressure on economic and social	Added pressure on economic and social	Local-regional	None

infrastructure impacts from an in-migration of people	infrastructure during construction phase as a result of in-migration of people		
Description of expected significance of impact			
The potential impact is expected to be negative, improbable, short term, with a low intensity and have a low significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			
Consultations with key stakeholders (ward councillor and municipalities) will need to take place in the EIA phase.			

Impact:			
<u>Nuisance Impacts (noise and dust):</u>			
Impacts associated with construction related activities include noise, dust and disruption to adjacent properties is a potential issue.			
Desktop Sensitivity Analysis of the Site:			
Areas of concern include the impacted farmland and adjacent farming areas where farming communities may be living.			
Issue	Nature	Extent of Impact	No-Go Areas
Nuisance Impacts (noise and dust)	Nuisance impacts in terms of temporary increase in noise and dust, on site and on farm roads for access to the site	Local	None
Description of expected significance of impact			
The potential impact is expected to be negative, probable, short term, with a moderate intensity and have a low significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			
A site visit and consultations with key stakeholders (impacted and adjacent landowners) will need to take place in the EIA phase in order to determine the extent of this impact.			

5.2. Operation Phase

The potential positive impacts which could arise as a result of the operation phase include the following:

- » Employment opportunities would be created resulting in benefits to unemployed individuals within the local communities.

- » Capacity building and skills development throughout the life of the development could be to the benefit of the employees and could assist them in obtaining transferable skills.
- » Local procurement for general materials, goods and services (e.g. transport, catering and security) and other spin-off benefits could materialise.
- » The presence of permanent security personnel at the site could be beneficial to the overall security measures implemented in the area.
- » The proposed project could assist in the generation of “green energy” which would lessen South Africa’s dependency on coal-generated energy and the impact of such energy sources on the bio-physical environment. The project thereby providing clean, renewable energy supply.

<p>Impact: Direct employment opportunities and skills development: The operation phase (20-25 years) of the proposed project will require a workforce and therefore direct employment will be generated. Primarily skilled and high skilled personal will be required during the operation phase. The proponent has also indicated that training will be provided for employees during the operation phase.</p> <p>Desktop Sensitivity Analysis of the Site: A limited number of local community members are likely going to benefit from this positive impact.</p>			
Issue	Nature	Extent of Impact	No-Go Areas
Direct employment opportunities and skills development	The creation of long term employment opportunities and skills development opportunities during the operation phase for the country and local economy	Local-regional	None
<p>Description of expected significance of impact The potential impact is expected to be positive, probable, long term, with a minor intensity and have a low - medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. In terms of reversibility of the impact and irreplaceable loss of resources, this is not applicable to this type of impact. The potential impact may be enhanced with possible enhancement measures which will be elaborated in the SIA EIA phase.</p>			
<p>Gaps in knowledge and recommendations for further study It is recommended that a detailed SIA is undertaken to determine actual impact of job creation and skills development opportunities during the operation phase.</p>			

<p>Impact: Economic multiplier effects: There are likely to be opportunities for local businesses to provide services and materials for the operation phase of the development. The local service sector will also benefit from the proposed project. In terms of business opportunities for local companies, expenditure</p>

during the operation phase will create business opportunities for the regional and local economy. Also the injection of income into the area in the form of wages will represent an opportunity for the local economy and businesses in the area.

Desktop Sensitivity Analysis of the Site:

The ULM, nearby towns and local community members are most likely going to benefit from this positive impact.

Issue	Nature	Extent of Impact	No-Go Areas
Economic multiplier effects	Significance of the impact from the economic multiplier effects from the use of local goods and services	Local-regional	None

Description of expected significance of impact

The potential impact is expected to be positive, probable, long term, with a minor intensity and have a low significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. In terms of reversibility of the impact and irreplaceable loss of resources, this is not applicable to this type of impact. The potential impact may be enhanced with possible enhancement measures which will be elaborated in the SIA EIA phase.

Gaps in knowledge and recommendations for further study

It is recommended that this impact is further assessed in the EIA phase of the SIA.

Impact:

Socio-Economic Development (SED), Enterprise Development (ED) and share ownership in the project company with local communities:

Renewable energy projects under the Renewable Energy Independent Power Producer Procurement (REIPPP) programme are obliged to make a real contribution to local economic development in the area. Awarded projects are required to spend a certain amount of their generated revenue on SED and ED and share ownership in the project company with local communities. These criteria, as well as the creation of a specific number of jobs, are incentivised through awarding higher scoring to projects that realise such criteria within a 50km radius to the project site during the evaluation process. Additionally, projects add value to the local economy through targeted procurement from local businesses. Job creation requirements target national and local citizens. Between 12% and 20% of the people employed on the project have to be residents of local communities.

Desktop Sensitivity Analysis of the Site:

The ULM and local people from the nearby towns are most likely going to benefit from job opportunities and SED/ ED.

Issue	Nature	Extent of Impact	No-Go Areas
SED, ED and share ownership in the project company with local communities	Positive long-term impact from SED, ED and local share ownership in the project company	Local	None

Description of expected significance of impact

The potential impact is expected to be positive, probable, long term, with a moderate intensity and have a medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be enhanced with possible enhancement measures which will be elaborated on in the SIA EIA phase.

Gaps in knowledge and recommendations for further study

An additional in-depth community needs assessment (CNA) will need to be carried out at a later stage to make sure that the real needs of communities are addressed (in line with the local government) by development programmes in order to significantly contribute towards local economic growth, SED and ED. A detailed SIA is also recommended to determine the actual impact of these benefits.

Impact:

Development of clean, renewable energy infrastructure:

The use of solar radiation for power generation is considered a non-consumptive use of a natural resource which produces zero greenhouse gas emissions. The generation of renewable energy will contribute to South Africa's electricity market. The advancement of renewable energy is a priority for South Africa. Bringing in the renewable energy sector to the local economy may contribute to the diversification of the local economy and provide greater economic stability.

Desktop Sensitivity Analysis of the Site:

N/A

Issue	Nature	Extent of Impact	No-Go Areas
Development of clean, renewable energy infrastructure	Positive long-term impacts from the generation of renewable energy	Local-regional-national	None

Description of expected significance of impact

The potential impact is expected to be positive, probable, long term, with a moderate intensity and have a medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact.

Gaps in knowledge and recommendations for further study

None at this stage in the process.

The potential negative impacts which could arise as a result of the operation phase include the following:

- » The permanent visual impact associated the proposed project (solar energy facility, power line, access roads, firebreaks, etc.) would alter the landscape. Perceptions with regards to the intensity of such an impact are expected to differ among landowners, stakeholders and other individuals. It is anticipated that each person would experience such an impact in a different way

depending on their perception of the proposed project itself, the activities undertaken on the surrounding area, their interest in the project and their exposure to the project on a daily basis. The proposed project is located in a rural area so the visual implications could have a further negative impact on the area's sense of place.

- » Direct occupation of land by the proposed project has the effect of taking the impacted land out of agricultural production (livestock grazing), through the occupation of the site by the footprint of the project.

Impact:			
<u>Visual impact and impacts on sense of place:</u>			
The sense of place is developed over time as the community embraces the surrounding environment, becomes familiar with its physical properties, and creates its own history. The sense of place is created through the interaction of various characteristics of the environment, including atmosphere, visual resources, aesthetics, climate, lifestyle, culture and heritage. Importantly though it is a subjective matter and is dependent on the demographics of the population that resides in the area and their perceptions regarding trade-offs. An impact on the sense of place is one that alters the visual landscape to such an extent that the user experiences the environment differently, and more specifically, in a less appealing or less positive light. The social impacts associated with the impact on sense of place relate to the change in the landscape character and visual impact from the proposed project.			
Desktop Sensitivity Analysis of the Site:			
Sensitive receptors include the immediate area of influence; landowners in the study area and commuters utilising the R389.			
Issue	Nature	Extent of Impact	No-Go Areas
Visual impact and impacts on sense of place	Visual impacts and sense of place impacts associated with the operation phase of the project	Local	None
Description of expected significance of impact			
The potential impact is expected to be negative, probable, long term, with a moderate intensity and have a low-medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			
A visual impact assessment will need to be undertaken to determine the exact visual impacts associated with the proposed project.			

Impact:
<u>Impacts associated with the loss of agricultural land for livestock grazing:</u>
The activities associated with the operation phase of the proposed project will result in a loss of farmland available for grazing and potential loss of agricultural production for the

operation period of 20-25 years.			
Desktop Sensitivity Analysis of the Site:			
Sensitive areas include the proposed site and development footprint area.			
Issue	Nature	Extent of Impact	No-Go Areas
Impacts associated with the loss of agricultural land	Impacts associated with loss of farmland available for agricultural use due to occupation of land by the proposed project for 20-25 years	Local (Site)	None
Description of expected significance of impact			
The potential impact is expected to be negative, probable, long term, with a low intensity and have a low-medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated on in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			
It is recommended that this impact is further assessed in the EIA phase of the SIA.			

5.3. Cumulative Impacts

Possible cumulative impacts as a result of other similar projects and associated infrastructure in the area could have cumulative negative and positive impacts for the local community. Cumulative impacts have been considered as part of the scoping social impact assessment and identified where relevant. The cumulative impacts of the project are related to the construction and operation phases. The site for the proposed project is located within less than 30km from other renewable energy facilities. The impact of solar facilities on the landscape is considered to be a key issue in certain parts of South Africa where there is a growing number of solar energy facility applications. There are a number of projects proposed and authorised projects in the vicinity of the proposed Noupoot CSP Project site, within the PKSDM.

Table 1 below lists the known renewable energy projects in the area. It is clear from the table below and Figure 7 that there is a concentration of solar facilities in the broader area around Noupoot. The potential for significant cumulative impacts is however likely to be high. This could result in positive permanent impacts on the economy, business development, employment and education in the area and the province. It may also result in some negative impacts such as influx jobseekers and change the landscape and areas sense of place.

Table 1: Other renewable energy projects/ developments within 30km from the study area

Project Name	Location	Approximate distance from the proposed Noupoort CSP Project site	Project Status
Toitdale Solar Energy Facility	Portion 1 Of The Farm Caroluspoort 167	Located within the proposed farm portion	Received Authorisation
Kleinfontein Solar Energy Facility	Portion 4 Of The Farm Caroluspoort 167	Located adjacent to the proposed site along the western boundary	Received Authorisation
Carolus Poort 20MW Solar Energy Facility	Remainder of the Farm Carolus Poort No. 207	Located adjacent to the proposed site along the northern boundary	Received Authorisation
Inkululeko PV voltaic (PV) Solar Energy Facility	Portion 2 Of The Farm Carolus Poort 167	Located adjacent to the proposed site along the eastern boundary	Received Authorisation
14MW Gillmer Solar Energy Facility	Farm Noupoort No. 306 Within The Umsobomvu Local Municipality In Northern Cape Provinc	Located 2.5km south east of the proposed study area	Received Authorisation
Damfontein Solar Energy Facility	Portion 8 of the farm Damfontein 114	Located 7km north west of the proposed study area	Received Authorisation
Allemans Fontein Solar Energy Facility	Remainder of Farm Allemans Fontein 83	Located 9.6km north west of the proposed study area	Received Authorisation
20MW Wonderheuwel PV Solar Energy Facility	Portion 7 of the Farm Damfontein No. 114.	Located 10.2km west of the proposed study area	Received Authorisation
188.6MW Wind Energy Facility	Remainder of the Farm 168, Portion 1 of the Farm Holbrook 181, Portion 21 of the Farm Hartebeest Hoek 182	Located 10.3km east of the proposed study area	Received Authorisation: Preferred Bidder Round 3
Klip Gat Solar Energy Facility	Portion 2 of the Farm Klip Gat 80	Located 17.8km west of the proposed study area	Received Authorisation

75MW Naauw Poort Solar Energy Facility	Remaining extent of Portion 1 of the Farm Naauw Poort	Located 12.9km south of the proposed study area	Received Authorisation
11 Mw Tollie Solar Energy Facility	Remaining extent of Portion 1 Of The Farm Naauw Poort 1	Located 12.9km south of the proposed study area	Received Authorisation
Middleburg Solar Park 1	Remaining extent of Portion 4 of Farm Twee Fontein 11	Located 17.6km south east of the proposed study area	Received Authorisation
Middleburg Solar Park 2	Remainder of Farm Twee Fontein 11	Located 19.4km south east of the proposed study area	Received Authorisation
20MW Amandla Welanga PV Solar Energy Facility	Remaining extent of farm Rietfontein 140	Located 25.2km north east of the proposed study area	Received Authorisation
11 MW Dida Solar Energy Facility	Portion 3 Of The Farm Rietfontein	Located 27km north east of the proposed study area	In Process
Linde Project, PV Solar Energy Facility	Remaining extent and portion 1 of the Farm Van der Linderskraal No 79	Located 28.3km north west of the proposed study area	Received Authorisation: Preferred Bidder Round 2

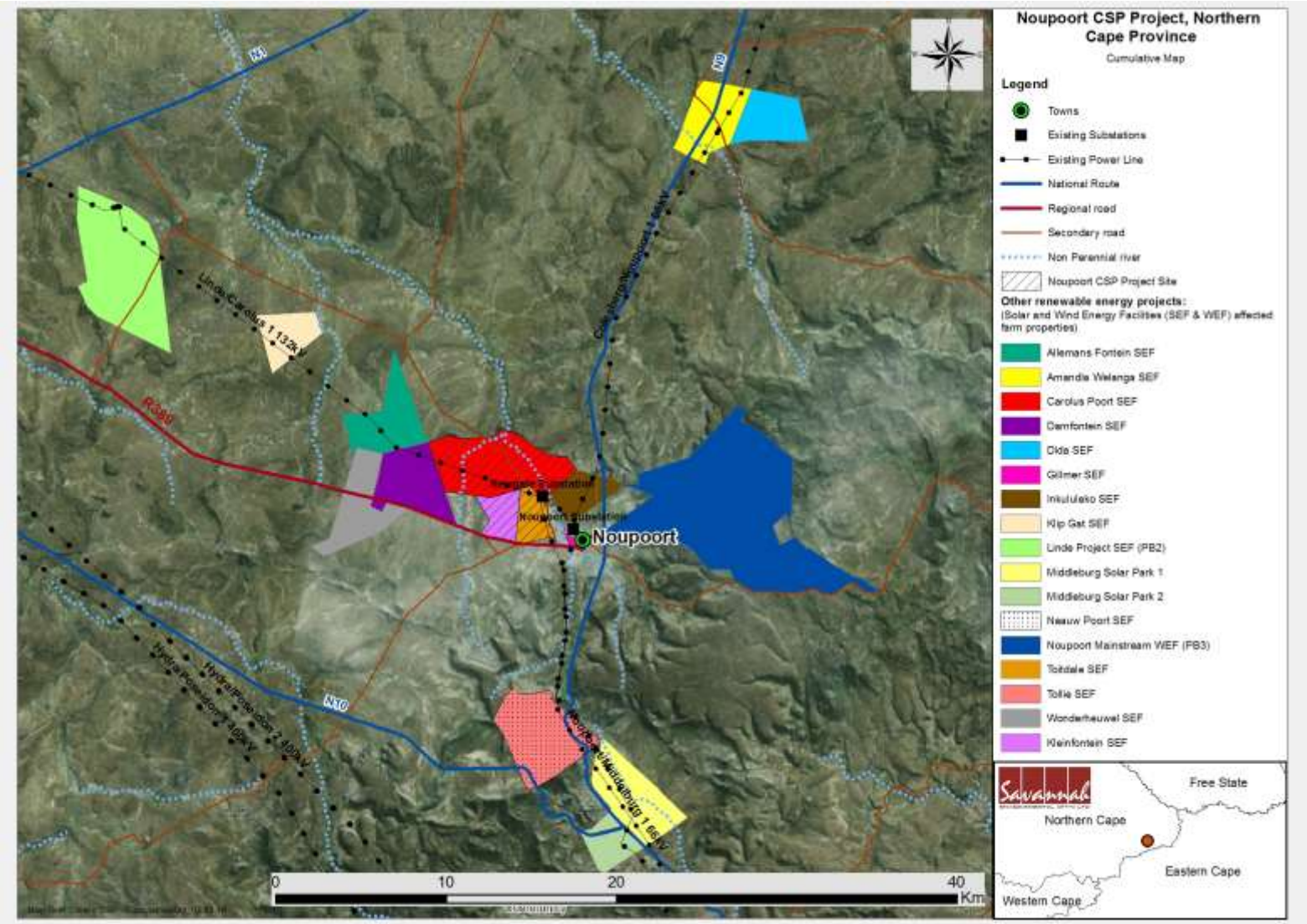


Figure 7: Location of other renewable energy projects / developments within 30km from the study area

Cumulative Impact:
Cumulative impacts of employment opportunities, business opportunities, skills development, socio-economic development:

The positive cumulative impacts include creation of employment, skills development and training opportunities, and downstream business opportunities. Benefits to the local, regional and national economy through employment and procurement of services could be substantial should many renewable energy facilities proceed.

Desktop Sensitivity Analysis of the Site:

People from the ULM and nearby towns are most likely going to benefit from job opportunities and economic benefits from solar energy developments

Issue	Nature	Extent of Impact	No-Go Areas
Cumulative impacts of employment opportunities, business opportunities and skills development	An increase in employment opportunities, skills development and business opportunities with the establishment of more than one solar energy facility	Local-regional	None

Description of expected significance of impact

The potential impact is expected to be positive, probable, long term, with a moderate intensity and have a medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. In terms of reversibility of the impact and irreplaceable loss of resources, this is not applicable to this type of impact. The potential impact may be enhanced with possible enhancement measures which will be elaborated on in the SIA EIA phase.

Gaps in knowledge and recommendations for further study

An in-depth community needs assessment (CNA) will need to be carried out to confirm that the real needs of communities are addressed (in line with the local government) by development programmes in order to significantly contribute towards local economic growth, SED and ED. A detailed SIA is also recommended to determine the actual impact of employment opportunities, business opportunities, skills development, and socio-economic development opportunities.

Cumulative Impact:

Cumulative impact with large scale in-migration of people:

The development of large-scale solar projects in the local area will likely draw a large number of labour, businesses and jobseekers to the area. If the local labour force cannot be sourced locally or the local labour pool is inadequate for the solar energy projects, outside labour will likely move to the area to fill the gap. The area may experience an influx of new residents who may move to the area looking for job opportunities; which will have effects on the existing population during the construction period that could entail problems of housing, sanitation, water usage and solid waste disposal.

Desktop Sensitivity Analysis of the Site:

Sensitive areas include the ULM and nearby towns such as Noupoot.			
Issue	Nature	Extent of Impact	No-Go Areas
Cumulative impact with large-scale in-migration of people	Negative impacts and change to the local economy with an in-migration of labourers, businesses and jobseekers to the area.	Local-regional	None
Description of expected significance of impact			
The potential impact is expected to be negative, probable, long term, with a low intensity and have a low-medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated on in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			
It is recommended that a detailed SIA study is undertaken to assess this impact further.			

Cumulative Impact:			
<u>Cumulative impacts on the sense of place and landscape (visual impacts):</u>			
The visual impact of solar energy facilities is likely to change the immediate landscape of the area. The cumulative impact of other solar energy projects in the area could alter the nature of the visual landscape. The potential impact of solar facilities on the landscape is an issue that needs to be taken into consideration.			
Desktop Sensitivity Analysis of the Site:			
Sensitive receptors includes the immediate area of influence; landowners in the study area and indirect areas of influence such as commuters utilising the R389.			
Issue	Nature	Extent of Impact	No-Go Areas
Visual impact and impacts on sense of place assessment	Visual impacts and change in the sense of place impacts associated with the establishment of more than one solar energy facility in the area	Local	None
Description of expected significance of impact			
The potential impact is expected to be negative, highly probable, long term, with a moderate intensity and have a medium significance. This will be confirmed during the EIA phase following detailed investigations and assessment of impacts. The potential impact can be reversed and there is no irreplaceable loss of resources associated with the potential impact. The potential impact may be mitigated with possible mitigation measures which will be elaborated on in the SIA EIA phase.			
Gaps in knowledge and recommendations for further study			
A visual impact assessment will need to be undertaken to determine the exact cumulative			

impacts from numerous solar energy facilities in the area.

5.4. Conclusion

Based on the initial assessment of the receiving environment it is anticipated that the proposed project could have some negative as well as positive social impacts.

The most important potential social benefits associated with the construction and operation of the proposed project include job opportunities and possible socio-economic spin-offs created. New economic activities such as this project has the potential to assist with the developmental challenges that much of the province is faced with, providing employment and skills development to the local community and contributing to the social, economic and institutional development of the local area. Employment and associated indirect economic benefits could improve the quality of life of the local community. The main negative impacts are associated with the influx of in-migrants and intrusion impacts associated with the construction phase, as well as the visual impacts/ sense of place impacts from the proposed project during the operation phase. The extent of the negative impacts and possible benefits would be further assessed during the EIA phase when these would be investigated in more detail.

6. Proposed Methodology and approach for the SIA

6.1. Proposed Approach to SIA Study

The main aim for the social report will be to determine the social impacts that may arise from the proposed project. The proposed approach that will be used for the SIA study will be based on the Western Cape Department of Environmental Affairs and Development Planning Guidelines for Social Impact Assessment (February 2007). These guidelines are based on the international best practice, the key objectives in the SIA process will include:

- » Describing and obtaining an understanding of the proposed project (type, scale, location), the communities likely to be affected and determining the need and scope of the SIA;
- » Collecting baseline data on the current social environment and historical social trends;
- » Identifying and collecting data on the Social Impact Assessment variables and social change processes related to the proposed intervention. This requires consultation with affected individuals and communities;
- » Assessing and documenting the significance of social impacts associated with the proposed project;
- » Assessing the project (including any feasible alternatives) and identifying potential mitigation and enhancement measures;
- » Developing an Environmental Management Programme.

6.2. Data Collection

Primary and secondary data sources will be utilised to inform the study in aid of the objectives of the study. Primary data sources for the SIA will include the following (refer to Figure 8):

- » A site visit will be undertaken. Observations will also be made while on site and within the study area.
- » Meetings will be undertaken to collect information from representatives of key stakeholder groups. These included individuals both directly and indirectly associated with the proposed project. The meetings will mostly be undertaken face-to-face and where not possible telephonically. A project specific questionnaire will be developed and utilized for the semi-structured interviews. These meetings will form the basis of the primary data collection and assisted with the gathering of baseline information as well as establishing the stakeholder's perceptions, interests and concerns on the proposed project.

Secondary data collection methods mostly centred on desktop study will be gathered and analysed for the purpose of the study, in which the following documents will be examined (refer to Figure 8):

- » Project maps;
- » A desktop aerial study of the affected area through the use of the latest version of Google Earth Pro 2015;
- » The background information document (BID);
- » The 2011 South African Census Survey and the Local Government Handbook;
- » Planning documentation such as District Municipality (DM) Integrated Development Plans (IDPs), Spatial Development Framework (SDF) and Environmental Management Framework (EMF) as well as the Local Municipality (LM) IDPs and policies;
- » Relevant guidelines, policies and plan frameworks
- » Other similar specialist studies and relevant information where there have been cross-cutting issues, such as the EIAs undertaken for previous solar energy facilities in the Northern Cape Province and other parts of South Africa;
- » Literature reviews of social issues associated with solar energy facilities.

Information that is relevant to the project will be identified and assessed from these sources within the context of the pre-construction, construction, operational and decommissioning phases of the proposed project. The evaluation of the social impacts will involve the assessment of both quantitative and qualitative data and the use of professional judgement. Quantitative data collected through national sources or local level interviews will be assessed and analysed with sociological techniques. However, qualitative data collected using the same methodology is more open to interpretation. In addition, what is a major impact to one person, one household or one community may be a minor impact to another according to specific personal circumstances. Hence, the results may not lend themselves easily to being ranked or assessed in exactly the same way as environmental data.

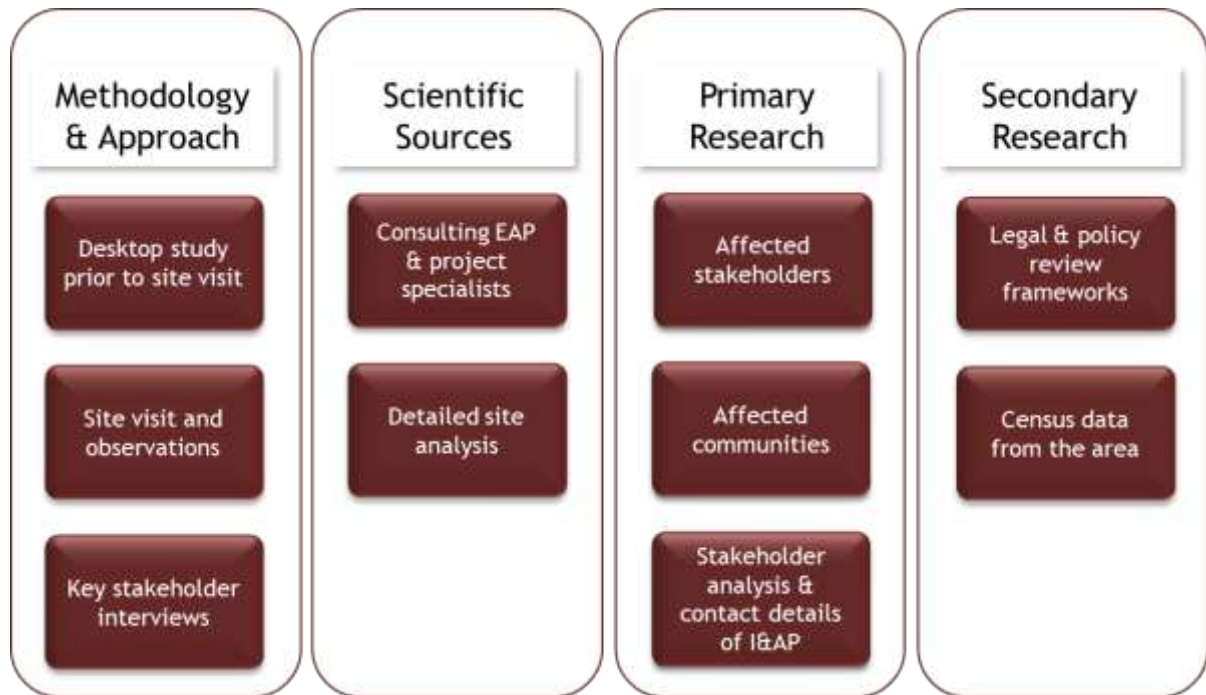


Figure 8: Proposed research methodology and sources diagram

6.3. Public Participation Process

The Public Participation Process (PPP) plays an important part in the EIA process. The process of stakeholder disclosure consultation is an ongoing overarching requirement that applies to the entire SIA process, and where possible, the PPP and SIA processes have been integrated. Effective consultation with stakeholders is important to understand the concerns and requirements of affected communities and ensuring their participation in the formulation and refinement of the project design. Relevant stakeholders are informed about the proposed project and thereafter are able to register and participate in the environmental impact assessment process. The communications during the PPP and written submission of comments will be reviewed and issues raised through this process will be incorporated into the SIA where relevant. The PPP involves raising awareness of the proposed project by providing information about the proposed project to all interested and affected parties and providing an opportunity for these parties to raise any issues and/or concerns regarding the project. Consultations are of critical importance in gaining insights into the key environment and social issues and concerns of communities and other stakeholders, and in aiding the development of potential strategies for addressing these impacts.

6.4. Assessment of Significance of Issues

According to the NEMA Regulations, 'significant impact means an impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects on the environment.'

In line with the Regulations, and based on qualitative findings of the activities, each potentially significant impact will therefore be assessed with regard to:

- » The nature of the impact (including the status which may be positive, negative or neutral);
- » The extent and the duration of the impact;
- » The probability of the impact occurring;
- » The degree to which the impact can be reversed;
- » The degree to which the impact may cause irreplaceable loss of resources;
- » The degree to which the impact can be mitigated; and
- » Cumulative and residual impacts.

Within this framework, there is the responsibility to propose mitigation or enhancement measures where relevant in order to reduce the significance of the negative impact and increase the significance of a positive impact.

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APPENDIX A: Declaration of Independence



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEAT/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014

PROJECT TITLE

Proposed Noupoort CSP Project near Noupoort, Northern Cape Province.
--

Specialist:	Candice Hunter		
Contact person:	Candice Hunter		
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Postal code:	2157	Cell:	
Telephone:	(011) 656 3237	Fax:	086 684 0547
E-mail:	Joanne@savannahsa.com / Karen@savannahsa.com		

4.2 The specialist appointed in terms of the Regulations_

I, Candice Hunter

declare that --

General declaration:

- » I act as the independent specialists in this application
- » I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- » I declare that there are no circumstances that may compromise my objectivity in performing such work;
- » I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- » I will comply with the Act, regulations and all other applicable legislation;
- » I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- » I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- » **all the particulars furnished by me in this form are true and correct; and**
- » **I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of section 24F of the Act.**

Signature of the specialist:



Savannah Environmental (Pty) Ltd

Name of company (if applicable):

14 December 2015

Date: