
PROJECT BACKGROUND INFORMATION DOCUMENT




The Proposed Establishment
and Installation, and
Operation of DanAon
Energy's 40 MW PV Solar
Park on a 20 Ha at
Maltahöhe, Hardap Region

JUNE 20

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DOCUMENT INFORMATION AND APPROVAL

Title	The Proposed Establishment and Installation of DanAon Energy's 40 MW PV Solar Park on a 20 Ha at Maltahöhe, Hardap Region	
ECC Application Reference number		
Location	Maltahöhe, Hardap Region	
Proponent	Mr. Nicodemus Dantago Soreseb DanAon Energy (Pty) Ltd P.O. Box 20764 Windhoek, Khomas, 9000 Email: danaoninv16@gmail.com	
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Mr. Lawrence Tjatindi (EAP - Reviewer) 2		13 June 2024
Approval - Client 2		
Mr. Nicodemus D. Soreseb		20 June 2024
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1. INTRODUCTION

DanAon Energy (Pty) Ltd (herein referred to as the proponent), is a Namibian registered and owned solar energy company focused on green solutions for power generation. DanAon is in the process of obtaining a license / approval from the Electricity Control Board of Namibia, to develop a 40 MW grid connected Photovoltaic Solar generating plant at Maltahöhe in the Hardap Region.

DanAon Energy (Pty) Ltd aims to develop the solar energy project using PV technology to generate electricity in Namibia. The project will help to decrease the country's dependency on traditional forms of energy by increasing the availability and use of solar energy. The generated electricity will be injected into the national grid, to support the country in meeting its renewable energy target.

To ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process.

In line with the environmental assessment process, an environmental scoping and environmental management plan encompassing environmental obligations associated with the proposed operations shall be submitted to the Department of Environmental Affairs in order to apply for Environmental Clearance Certificate (ECC).

The proposed prospecting activity triggers some listed activities in terms of the Environmental Management Act no. 7 of 2007 and the Environmental Impact Assessment Regulations of 6 February 2012 that may not be undertaken without an environmental clearance certificate (ECC).

The need for the assessment is triggered by the activities of the proposed operations falling under the following category of listed activities (**Table 1**):

Table 1: List of activities identified in the EIA Regulations which apply to the proposed project

EMA No. 7 of 2007 Aspect	Description of activity	Relevance to DanAon Energy's Solar Plant Activities
Activity 1: Energy Generation, Transmission and Storage Activities	The construction of facilities for - (a) the generation of electricity; (b) the transmission and supply of electricity;	The proposed development entails the construction of facilities for the purpose of carrying out a listed activities i.e. installation of a solar plant and other associated linear infrastructure i.e. power line and substation upgrades.
Activity 4: Forestry Activities	4. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorization in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.	The proposed development will require a portion of the land area to cleared of vegetation in order to create a levelled surface on which the solar panel field will be installed
Activity 9: Hazardous Substance Treatment, Handling and Storage	9.4 The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location.	The proposed development shall include activities for which during construction a back-up generator may be needed that necessitate the storage of fuel on-site, although less than 30 cubic meters
Activity 10: Infrastructure	10.1 The construction of- (b) public roads; (f) cableways;	The proposed development may include the construction or laying of powerlines

2. PURPOSE OF THE BID

- To ensure that the project information provided by the client is correct
- Key aspects pertaining to the EIA are identified and raised early on by the Environmental Assessment Practitioner (EAP), the Competent Authority as well as Interested and Affected Parties (I&AP's)
- The BID provides the index for the EIA Scoping Exercise and EMP (similar to dichotomous keys). In other words, what is important, what should be assessed and how should it should be assessed.

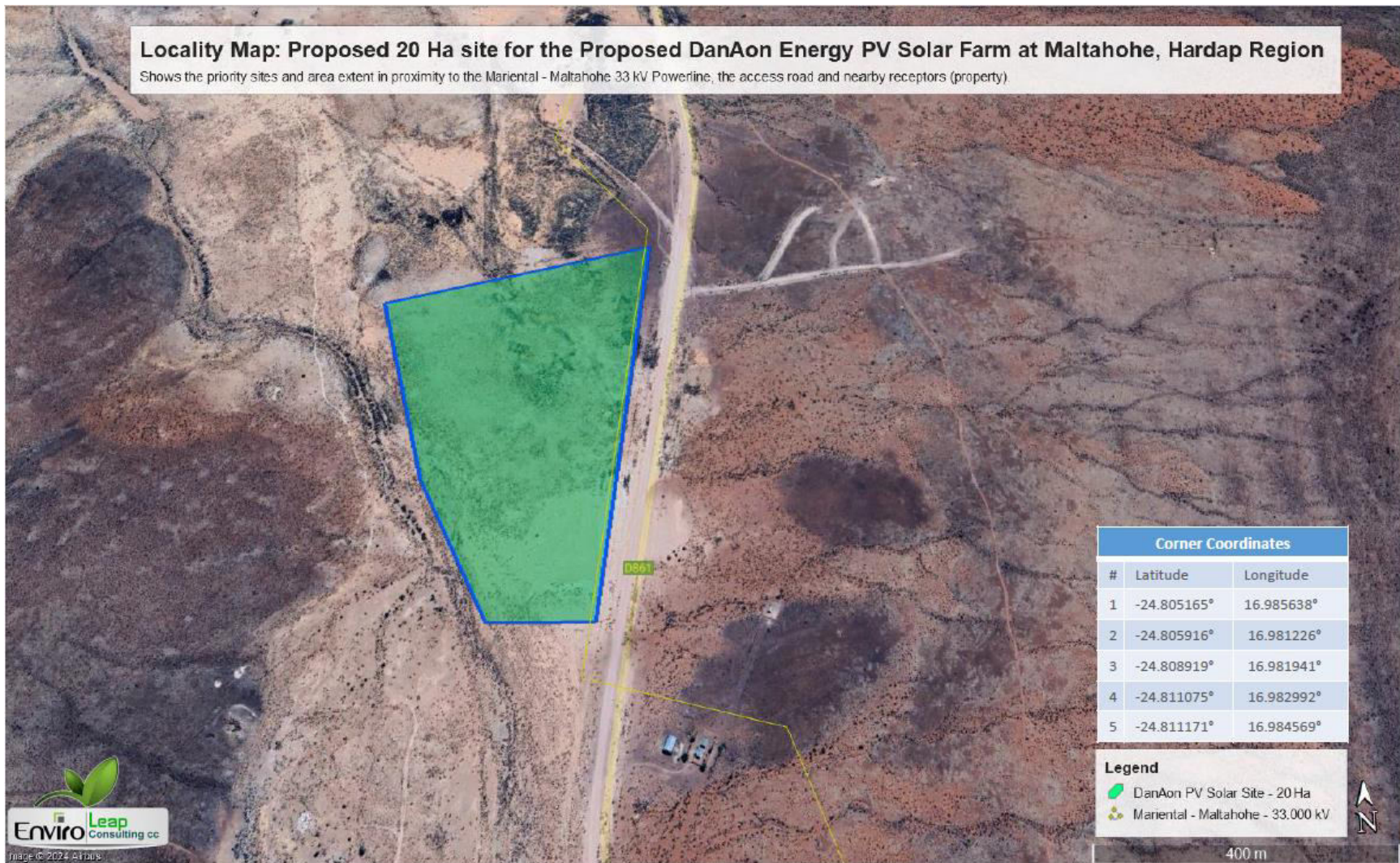


Figure 1: Shows the location and extent (20 Hectares) of the proposed DanAon PV Solar Park, Hardap Region

3. PROJECT DESCRIPTION

DanAon Energy (Pty) Ltd aims to develop the solar energy project using PV technology to generate electricity in Namibia. The project will help to decrease the country's dependency on traditional forms of energy by increasing the availability and use of solar energy. The generated electricity will be injected into the national grid, to support the country in meeting its renewable energy target. Below is a brief description of the proposed main project components:

3.1 PV Modules, Inverters and Trackers

The PV module is the main element that composes the generator or solar field. It transforms the received solar radiation into usable electricity (DC, direct current) by means of the photovoltaic effect through its several silicon cells that form the module. The project shall consist of 35 inverters (45.52 MW), the power plant controller shall be installed in order to manage all the inverters and Grid Requirements.

To enhance optimum solar uptake, the proposed plant may explore a tracking system such as the Axone horizontal single-axis tracker, which aims at minimizing the angle of incidence between the incoming irradiance and the panel, rotating on its axis back and forth in a single direction, with an inclination range of +45 to -45 degrees.

3.2 Connection Boxes, Wiring and Grounding / Lightning Protection

The solar field presents two association levels:

- Parallel association of strings (modules connected in series);
- Parallel association of buses.

The parallel association of strings will be made directly throughout the tracker by means of technology specialized for this purpose; both string poles shall be connected to their corresponding bus. All materials will be of high conductivity copper with the sufficient section to assure the required Safety principles, in compliance with local standards.

3.3 Monitoring and Control System / Station

The Monitoring and Control System shall be composed of a SCADA application (Supervisory Control and Data Acquisition), hosted in a local server installed in the Control Station of the plant and several Remote Terminal Units (RTU), installed in each inverter area, that acquire data generated by inverters, field metering, solar tracker and protection devices.

In addition, the control station shall be equipped with the necessary equipment according to Occupational Risks Prevention national normative and to Fire Protection Standards.

3.4 Civil Works and Security System

All construction activities shall occur within the site boundary limits with the exception of those activities related to the interconnections between the site and the common infrastructures i.e. powerlines connecting to the NamPower Substation situated about 3.5 km south of the proposed plant. Foundations and site conditioning shall be made according to the requirements, local and or national civil construction standards, Topographical and Geotechnical study of the site. All the foundations shall endure any load or combination of loads due to wind.

A boundary fence systems designed to prevent the intrusion of outsiders and provide protection against theft and vandalism, shall be installed around the premises. This system is structured in different areas; the anti-intrusion system and camera system, which are continuously in operation and under surveillance. The system shall cover the strategic locations and sensitive areas of the project, for comprehensive surveillance and monitoring from central control room. A fence shall be installed in the perimeter of the site according to local standards. It shall be covered with the necessary number of cameras, maintaining the capability of anti-intrusion detection.

While their operations stimulate diversification in the national economic and development activities, consequently creating employment opportunities and trickling benefits to the larger Namibian population, it poses the risks of unprecedented negative environmental impacts.

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of dust and noise pollution especially during the handling (loading and off-loading) will be experienced.

4. REGULATORY FRAMEWORK

4.1. Environmental Requirements under the Environmental Management Act

4.1.1. Environmental Management Act (No.7 of 2007)

The Environmental Management Act (also referred to as the EMA), stipulates that for each developmental project, which is listed under the EIA regulations, an Environmental Impact Assessment (EIA) should be conducted.

The aim of the EIA is to identify, assess and ascertain potential environmental impacts that may arise from the proposed activity. According to the EMA, an EIA is a process of identifying, predicting, interpreting and communicating potential impacts to interested and affected parties (I&APs).

The proposed prospecting activity triggers some listed activities in terms of the Environmental Management Act no. 7 of 2007 and the Environmental Impact Assessment Regulations of 6 February 2012 that may not be undertaken without an environmental clearance certificate (ECC). The triggered activities are shown in table 1.

The Environmental Impact Assessment Process

An EIA is a process that evaluates the likely environmental and social effects of a proposed project or development, which identifies suitable mitigation for to avoid or minimize the

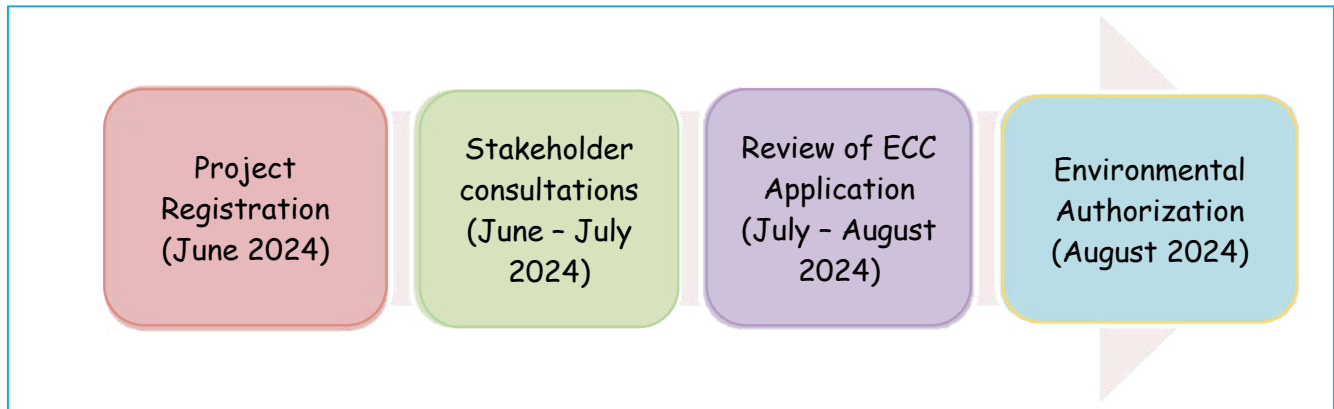


Figure 3: Anticipated Environmental Assessment Timeline

5. POTENTIAL ENVIRONMENTAL IMPACT ASSOCIATED WITH THE PROPOSED PROSPECTING ACTIVITIES

While the proposed exploration activities stimulate economic development and diversification in order to further create employment opportunities and thus trickling benefits to the larger Namibian population, it also create opportunity for unprecedented negative impacts.

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the exploration phase and process. Below is a summary of the likely positive impacts that will assessed for the different phases of the proposed exploration activities.

The following is a summary of the likely negative impacts that have been assessed for the different phases of the proposed exploration activities:

- i. Land use (Likely impacts are negligible; the EPL area and sites are isolated from the distant settlements, and conservation zones).
- ii. Noise (Likely impacts are low as the site is far from residential areas).
- iii. Ecological and biodiversity loss (Likely impacts are localized and low).
- iv. Health and safety (Overall likely impacts are low with correct PPE).
- v. Solid and hazardous waste management (Likely impacts are low with a solid waste management plan and minimal hydrocarbon fuel use).
- vi. Socioeconomic (Likely negative impacts are low)

6. STAKEHOLDERS CONSULTATION

As stipulated in the EIA Regulations (paragraphs 7 and 21), public consultation is a pre-requisite and forms an integral component of the EIA. Comments made during the consultation should be properly captured and addressed in both the EIA Scoping Report and EMP respectively.

Engaging and consulting with the public (residents, authorities etc.) and organizations that may be affected by, or interested in the proposed development allows for all parties to be informed of the proposals and provides an opportunity for views, opinions and concerns to be registered.

This process benefits the EIA and design development process as the public may provide information that may not be available otherwise, e.g. past experience and local knowledge, and local concerns and can be taken into consideration in the EIA. Engaging and consulting early on in the EIA process minimizes potential complaints and objections, and assists the ECC application process.

7. REGISTRATION AS AN I&AP

Registering as an Interested or Affected Party (I&AP) affords you an opportunity to be updated about the project and comment on the project, throughout the EIA process. All registered I&AP's will be provided with the draft scoping and EMP reports prior to submission to MEFT.

Your comments and questions are important, will add value to the EIA and will ensure that information that may not be available to the consultant is considered (e.g. past experience, local knowledge etc.).

To register or provide comments about the proposed project, please send an e-mail to: eap.trigen@gmail.com or call +264 81 622 9933 or 085 322 9933.

COMMENT FORM

APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE PROPOSED ESTABLISHMENT AND INSTALLATION OF DANAON ENERGY'S 40 MW PV SOLAR PARK ON A 20 HA AT MALTAHÖHE, HARDAP REGION

Please submit the comment form via e-mail or post by 12 July 2024.

Attention: Enviro-Leap Consulting cc
 Tel No: +264 81 622 9933 or 085 322 9933
 Email: eap.trigen@gmail.com
 Postal Address: P.O. Box 25874, Windhoek

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION		E-MAIL	
POSTAL ADDRESS		POSTAL CODE	
TEL NO.		FAX NO.	
CELL NO.			

Please list any colleagues/friends or organizations that you feel should also be registered as Interested or Affected Party for the proposed project (with contact details if available).

Name / Organisation	Postal Address	Tel No.	E-mail

1. Please provide your comments below 3, write a formal letter or simply send an e-mail to: eap.trigen@gmail.com

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2. Your comment should not be limited by the space provided & you may submit as many pages, as necessary

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Thank you for the comments