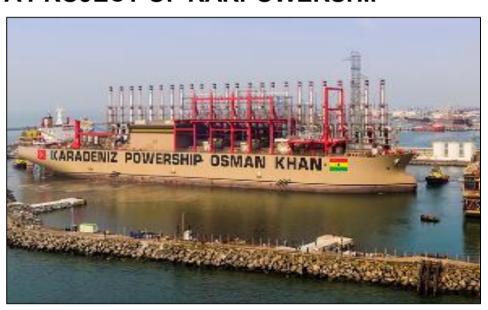
#### **BACKGROUND INFORMATION DOCUMENT:**

PUBLIC PARTICIPATION PROCESS FOR AN **APPLICATION FOR** ENVIRONMENTAL **AUTHORISATION** AND AN ATMOSPHERIC **EMISSION** LICENCE FOR PROPOSED POWERSHIP AT PORT OF RICHARDS **BAY AT** UMHLATHUZE LOCAL MUNICIPALITY, **CETSHWAYO** KING DISTRICT, **KWAZULU-NATAL** 

## A PROJECT OF KARPOWERSHIP



**21 SEPTEMBER 2020** 



### **DOCUMENT DESCRIPTION**

Client / Applicant: Karpowership SA (PTY) LTD

Report name: Public Participation Process for an

Application for Environmental Authorisation and an Atmospheric Emission Licence for Proposed Powership at Port of Richards Bay at UMhlathuze Local Municipality, King

Cetshwayo District, KwaZulu-Natal.

Report type: Background Information Document (BID) (as

part for the public participation process for an application for environmental authorisation

and an atmospheric emission licence)

Project name: Powership at Port of Richards Bay at

UMhlathuze Local Municipality, King

Cetshwayo District, KwaZulu-Natal.

Project number: E-BL01.200446

Version: Original

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#### INTRODUCTION

Karpowership SA (Pty) Ltd (Karpowership) requires environmental authorisation and an atmospheric emission licence (AEL) before it can commence with its activities and generate electricity from its Powership at Port of Richards Bay, at UMhlathuze Local Municipality, King Cetshwayo District, KwaZulu-Natal.

Triplo4 Sustainable Solutions (hereafter referred to as Triplo4) is the appointed Independent Environmental Assessment Practitioner for the Environmental Impact Assessment (EIA) process, required for the applications for these two approvals.

#### **PURPOSE OF THIS DOCUMENT**

This Background Information Document (BID) is part of the public participation process for the EIA and its purpose is to:

- provide preliminary information to Interested and Affected Parties (I&APs) on the project and application process;
- invite I&APs to register;
- inform I&APs of their opportunities to participate, including commenting in response to the BID and on draft reports;
- inform I&APs of who to contact to obtain further information; and
- inform I&APs of how and to whom to submit their comments.

The comments, issues, concerns and suggestions from I&APs on any aspect of the proposed project, including the technical and public participation processes, will help to focus the application, and will ultimately assist the authorities to make a decision. The BID does not serve to provide detailed information on the potential impacts of the proposed development – these will be initially identified in the Scoping Report and then subsequently assessed in more detail in the Environmental Impact Assessment Report (EIA Report) as part of the EIA process.

#### PROJECT DESCRIPTION

The project entails the generation of electricity from a floating mobile Powership moored in the Port of Richards Bay. This includes three ships berthing during the project lifespan, Floating Storage Regasification Unit (FSRU), and two Powerships. A Liquefied Natural Gas Carrier (LNGC) carrier will supply Liquefied Natural Gas (LNG) to the FSRU on a short term basis (1-2 days). The natural gas will be pumped from the FSRU to the Powership via the development and operation of a subsea gas pipeline.

The proposed design capacity for the Richards Bay Powership is 554MW, which comprises of 27 gas engines having a heat output of 18.32 MW each. From the ship, electricity will be evacuated via a 132kV transmission line over a distance of approximately 3km, from the Richards Bay Port to the Bayside substation, to supply the national grid.

The fuel used by the Powership will be natural gas sourced from the FSRU via gas pipeline. The subsea gas pipeline connecting the FSRU to the Powership will be routed along the toe of the existing dredged slopes and will connect to the vessels via a flexible marine hose riser.

The proposed technology for the production of electricity through natural gas-fired reciprocating engines and steam engines will improve efficiency of energy generation. Construction is limited to transmission and gas supply lines as the ships are built internationally and arrive fully equipped in the port ready for operation.

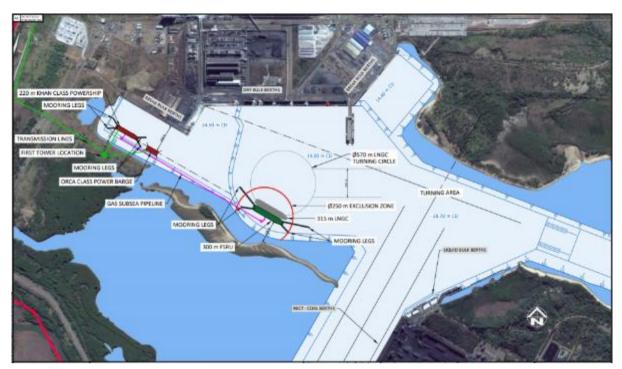
#### **LOCATION OF PROPOSED PROJECT**

Description	Location of the Activity	
District Municipality	King Cetshwayo District Municipality	
Local Municipality	uMhlathuze Local Municipality	
Ward	Ward 2	
Area / Town / Village	Port of Richards Bay situated in Richards Bay	

The proposed project is of utmost national strategic importance as it forms part of National Government's intent to address the debilitation economic impacts of both the energy crisis as well as the COVID-19 pandemic on the country. The Richards Bay Port was identified as a preferred location as it meets the specifications for the proposed powership project and occurs within a close proximity to the Richards Bay Industrial Development Zone (RBIDZ) (Figure 1 and 2 below).



Figure 1: Photograph showing the Port of Richards Bay, KwaZulu-Natal.



**Figure 2: Preferred Location** 

#### **ENVIRONMENTAL LICENSING APPLICATION PROCESSES**

This development triggers listed activities that require Environmental Authorisation from the competent authority, the Department of Environment, Forestry and Fisheries (DEFF) in terms of the National Environmental Management Act 107 of 1998 (NEMA). It also triggers a listed activity under the National Environmental Management: Air Quality Act 39 of 2004 (NEM:AQA) which requires an atmospheric emission licence (AEL). The Atmospheric Emission Licensing Authority for the AEL is DEFF: Delegated Provincial Organ of State; Metropolitan and District Municipalities.

The same Environmental Impact Assessment process, including public participation will be conducted for both licence applications according to the EIA Regulations, 2014 (as amended).

The following listed activities under NEMA and NEM:AQA have been identified:

EIA REGULATIONS LISTING NOTICE 1 OF 2014 (GN 983 (as amended))			
ACTIVITY No.	ACTIVITY DESCRIPTION	APPLICABILITY	
12	The development of—  (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs—  (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse	Based on the path of the transmission line it is anticipated that development may take place within 32 metres of a watercourse.	
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.	Based on the path of the transmission line it is anticipated that development may take place within watercourses. This can only be confirmed with onsite verification.	

19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (i) the seashore; (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea.  ONS LISTING NOTICE 2 OF 2014 (GN 984 (as amended)	The erection of the transmission lines may require the removal of more than 5 cubic metres of sand from an estuary.
ACTIVITY No.		
	ACTIVITY DESCRIPTION	APPLICABILITY
2	The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more.	Starting from the design, and ending with delivery of electricity, Karpowership fully executes all activities hence potentially no development may be applicable to the Powership and FSRU.
		The proposed design capacity for the Ngqura Powership is 554MW, which comprises of 27 gas engines having a heat output of 18.32 MW each. The 3 steam turbines have a heat out of 15.45 MW each.
6	The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent.	Engines used for electricity generation are classified as a Listed Activity in terms of Section 21 of the NEM: AQA if the design capacity is equal to or greater than 10 MW heat input per unit (Subcategory 1.5: Reciprocating Engines). In the case of the proposed project, the Powerships will have a combined sum of 27 engines that all have a heat input capacity of more than 10 MW. These will be regulated in terms of Government Notice 839 and its amendments for Listed Activities.
14	The development and related operation of—  (i) an anchored platform; or  (ii) any other structure or infrastructure —  on, below or along the sea bed	The transmission of the NG gas will flow from the moored ship along the seabed to the main ship for processing.

		This applic	•	is	deemed
EIA REGULATIONS LISTING NOTICE 3 OF 2014 (GN 985 (as amended))					
The applicability of Listing Notice 3 activities will be confirmed via specialist studies and technical input.					

In terms of Section 21 of the NEM: AQA if the design capacity is equal to or greater than 10 MW heat input per unit (Sub-category 1.5: Reciprocating Engines).

The applicability of these activities will be confirmed upon further investigation during the EIA process and authority consultation.

Because two of the activities is listed under Listing Notice 2, a full environmental impact assessment process (i.e. Scoping & Environmental Impact Reporting) must be applied. This process, inclusive of public participation, is described below.

# OUTLINE OF THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS, INCLUDING PUBLIC PARTICIPATION

The EIA comprises 2 main phases, namely Scoping and Environmental Impact Reporting. A draft report is prepared for each of these phases and subjected to a public participation process before submitted to the competent authority, DEFF.

#### Application, Notification, and Scoping

- Submission of applications for Environmental Authorisation and Atmospheric Emissions Licence (AEL) to DEFF and DEFF: Delegated Provincial Organ of State; Metropolitan and District Municipalities;
- Notification and distribution of the Background Information Document (this document) to identified potential I&APs, to announce the project, and invite registration an public participation process;
- An English and isiZulu advertisement are published in 2 local newspapers namely the Zululand Observer and the Bay Watch on the 21<sup>st</sup> of September 2020 and the 23th of September 2020 respectively;
- Placement of a site notification (3 site notices) in the two languages English and isiZulu will be on the port entrance (port's permit office) and in proximity to the Bayside substation, notifying I&APs of the proposed activity and inviting them to register as I&APs will be undertaken;
- A virtual Public Meeting will be held during the Scoping review period, with reasonable notice period given. It is proposed that this meeting will be done via a Webinar and not at the physical site locations;
- Compilation of Draft Scoping Report and making it available for a 30-day period from 06<sup>th</sup> October 04<sup>th</sup> November 2020.
- Electronic copies will be available on request and/or can be accessed via an online platform such as Dropbox or GoogleDrive which will be emailed to all registered I&APs and Triplo4's website – www.triplo4.com;
- > The public copy venue is to be confirmed with the municipality and ward councillor and depend on what venue is open under Covid. Other arrangements will be made to ensure people have access to the report should they be unable to access the public venue copy or an electronic copy; and
- > Submission of a final Scoping Report to DEFF for consideration (at this point, DEFF will either accept or refuse the Scoping Report).

#### Environmental Impact Reporting (should DEFF accept the Scoping Report):

- An email notification to registered I&APs will be sent out to inform them of the availability of the Draft Environmental Impact Assessment (EIA) Report for review. Those I&APs who don't have email will be contacted telephonically or by SMS;
- The Draft EIA Report will be made available to I&APs for public comment for period of 30 days. The report will be available on the Triplo4 website (www.triplo4.com). In addition, the EIA Report will also be electronically available via an online platform such as Dropbox or GoogleDrive which will be emailed to all registered I&APs;
- > The public copy venue will be confirmed with the municipality and ward councillor and will depend on what public venues are open under Covid. Other arrangements will be made to ensure people have access to the report should they be unable to access the public venue copy or the electronic copy.
- A virtual Public Meeting will be held during the EIR review period, with reasonable notice period given. It is proposed that this meeting will be done via a Webinar and not at the physical site locations;
- ➤ I&AP comments on the draft EIA Report will be addressed and incorporated into a final EIA Report, inclusive of the EMPr and specialist reports, which will be submitted to DEFF for consideration and a decision on the application for environmental authorisation;
- Registered I&APs will be notified of DEFF's this decision and their opportunity to appeal;
- A decision on the application for an AEL will be made by DEFF: Delegated Provincial Organ of State; Metropolitan and District Municipalities within 60 days of a decision on the environmental authorisation;
- Registered I&APs will be notified of DEFF's decision on the application for an AEL and their opportunity to appeal.

#### **SPECIALIST STUDIES**

To inform the Scoping and the EIR phases, a number of specialist studies will be undertaken. These are the specialist studies that envisaged and which will inform and be informed by the Scoping:

- Wetland Delineation and Functional Assessment;
- Terrestrial Ecological Assessment (Transmission Lines);
- Heritage & Palaeontology Impact Assessment;
- Geomorphology Assessment;
- Estuarine Functional Assessment;
- Coastal Impact and Climate Change Assessment;
- Geohydrological Assessment;
- Hydrological & 1:100 Year Floodline Assessment;
- Aquatic Assessment;
- Water Balance ;
- Hydropedology Assessment;
- Major Hazardous Installation Assessment;
- Marine and Plume Modelling, Marine Traffic Assessment;
- Marine Ecology;
- Air Dispersion Modelling.

#### YOUR CONTRIBUTIONS ARE IMPORTANT

In terms of the NEMA EIA Regulations 2014 (as amended), you are invited to formally register as an Interested and Affected Party (I&AP).

Please register by completing the enclosed registration and comment sheet and please declare the interest with regard to the project with your comments.

#### You can participate:

- By responding (by phone, fax or e-mail) to our invitation for your participation in the process;
- By completing the attached registration and comment form and e-mailing, posting or faxing it to Triplo4 Sustainable Solutions;
- In writing, contacting or telephoning us if you have a query, comment or require further project information;
- · By attending meetings; and
- By reviewing and commenting on the draft Scoping Report and draft EIA Report within the 30-day review period.

In terms of Regulation 43(1), I&APs are required to disclose any direct business, financial, personal or other interest which they may have in the approval or refusal of the application.

Please note that it is incumbent on all I&APs to notify Triplo4 if contact details change. Triplo4 will not be held responsible if information pertaining to the proposed project is undeliverable due to contact details changing.

## **REGISTRATION AND COMMENT SHEET:**

Proposed Powership at Port of Richards Bay, uMhlathuze Local Municipality, King Cetshwayo District Municipality, KwaZulu-Natal.

ATTENTION: HANTIE PLO				D: 032 946 3213
E-MAIL: ppprbay.triplo4@gmail.com		FAX: 032 946 0826		
I WOULD LIKE TO REGIS	TER AS AN INTERF.	STED AND AFF	CTED PAR	RTY FOR THE EIA PROCESS
OF THIS PROJECT	LN AO AN INTERE	OILD AND AITE	OILDIAN	NI I ON THE LIAT ROOLS
Name and Surname			Phone	
Organisation / Interest Postal Address			Cell Email	
Postal Address			Ellidii	
Registration				
- Lwould like to rec	rister as an Intereste	d and Affected Pa	arty for the	EIA process for this Project
I permit my conta	ct details to be include	ded in the EIA rep	orts that wil	I be accessible to the public
I would like you	to take me off your	distribution list f	or the Prop	osed Powership at Port of
Richards Bay. I w	ould not like to recei	ive any further inf	ormation re	garding this process.
		nancial, persona	l or other i	interest in the approval or
refusal of the application:				