

APPENDIX C8
MEETING NOTES



Proof to be included in
final Environmental Impact Assessment Report

**ENVIRONMENTAL IMPACT ASSESSMENT AND
PUBLIC PARTICIPATION PROCESSES
FOR THE
PHAKWE RICHARDS BAY GAS-TO-POWER3 2000MW
COMBINED CYCLE POWER PLANT (CCPP) IN RICHARDS
BAY, KWAZULU-NATAL PROVINCE**

DFFE Reference Number:14/12/16/3/3/2/2117

**MEETING NOTES OF THE FOCUS GROUP MEETING HELD WITH THE KZN
PROVINCIAL DEPARTMENT OF ECONOMIC DEVELOPMENT, TOURISM &
ENVIRONMENTAL AFFAIRS AND EZEMVELO KZN OFFICIALS
HELD ON THURSDAY, 25 NOVEMBER 2021 AT 11H30
VENUE: MICROSOFT TEAMS, VIRTUAL MEETING**

Notes for the Record prepared by:

Tammy Lee-Goddard

Savannah Environmental (Pty) Ltd

E-mail: publicprocess@savannahsa.com

***Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting.
Please address any comments to Savannah Environmental at the above address***

RICHARDS BAY GAS-TO-POWER3 2000MW CCPP LOCATED IN RICHARDS BAY, KWAZULU-NATAL PROVINCE

MEETING ATTENDEES

Name	Position
Ezemvelo KZN Wildlife	
Dominic Wieners	Integrated Environmental Management Unit
Phakwe Group	
Jordi Fernandez	Operations manager
Savannah Environmental	
Tamryn Lee Goddard	Environmental Consultant
Jana De Jager	Environmental Consultant
Nicolene Venter	Public Participation and Social Consultant
Jo-Anne Thomas	Director

APOLOGIES

No apologies were submitted.

The Attendance Record is attached as **Appendix A** to the workshop notes.

PRESENTATION

Nicolene Venter welcomed Mr Wieners at the Focus group meeting and thanked him for his attendance.

She presented the agenda and purpose of the meeting.

Jana de Jager presented the following:

- project description for the Phakwe Richards Bay Gas-to-Power3 2000MW CCPP project;
- the locality of the project site;
- the scoping and public participation processes followed to date;
- the environmental studies that have been undertaken; and
- a key summary of the results of the environmental studies undertaken.

Nicolene Venter informed Mr Wieners that it is important to note that the public participation process is an ongoing process and commences when site notices are erected at the development site and with the distribution of the Background Information Document (BID) and is not limited to the 30-day review and comment period of the Scoping Report. The public participation process is only concluded once registered Interested and Affected Parties are notified of the Department of Forestry, Fisheries, and the Environment's (DFFE) decision to issue Environmental Authorisations for the project.

The presentation is attached as **Appendix B** to the meeting notes.

DISCUSSION SESSION

Question / Comment	Response
Dominic Wieners	
In terms of the climate change study, would the cumulative impact be assessed during the impact phase?	Jana de Jager responded that the air quality and climate change specialist will look at the various authorized projects in the area and assess the cumulative impact.
Why are the coal terminals and south dunes included in the cumulative map as there are no gas to power facilities proposed at this location?	Jana de Jager responded that gas power plants and the impacts by surrounding industries (including the coal terminals) would be considered during the cumulative air quality study.
The project team was informed that the Eskom CCPP project's footprint is larger than the actual footprint and it seems that the wetland offsets are included in the footprint on the cumulative map.	Jana de Jager thanked Mr Wieners for the information and confirmed that the team will relook at the matter and adjust the footprint as required.
How many studies have been done in the scoping phase?	Jana de Jager responded that all the studies as presented have done on desk-top level, and will be assessed further during the EIA phase. The only two studies outstanding are the climate change and health, which will only be undertaken during the EIA phase.
Jordi Fernandez	
As a closing statement, Mr Fernandez thanked Mr Wieners for his valuable inputs into the process.	

WAY FORWARD AND CLOSURE

Nicolene Venter asked whether Mr Wieners would be attending the Focus Group Meeting that is scheduled with the Richards Bay IDZ Environmental Review Committee to which he responded positively. She enquired whether there were any other environmental-related comments that Mr Wieners would like to raise before closing the FGM officially. It was noted that no further comments needed to be raised at this time. She informed Mr Wieners that he can submit any further written comments via e-mail, and she reminded the attendee that the Scoping Report commenting period is ending on Monday, 13 December 2021 and that it would be appreciated if written comments can be received before or on the 13th of December 2021.

She thanked the Mr Wieners for making time to attend the FGM and for his valuable inputs into the EIA and public participation process.

The meeting was closed at 12h00.

LIST OF ABBREVIATIONS AND ACRONYMS

BID	Background Information Document	FGM	Focus Group Meeting
CCPP	Combined Close Power Plant	KZN	KwaZulu-Natal
DFFE	Department of Forestry, Fisheries, and the Environment		

APPENDIX A: Attendance Record

SE2662: Phakwe Richards Bay Gas-to-Power CCPP Project		
Total Number of Participants	5	
Meeting Title	RICHARDS BAY GAS-TO-POWER3 2000MW CCPP: Invitation to Focus Group Meeting - KZN DEDTEA & Ezemvelo KZN	
Meeting Start Time	11/25/2021, 11:21:37 AM	
Meeting End Time	11/25/2021, 12:05:17 PM	
Meeting Id	b7df1554-b5ef-4d6f-8728-3b26ed58587d	
Full Name	Join Time	Leave Time
Jana de Jager	11/25/2021, 11:21:37 AM	11/25/2021, 12:05:15 PM
Nicolene Venter	11/25/2021, 11:21:55 AM	11/25/2021, 12:05:17 PM
Tamryn Lee Goddard	11/25/2021, 11:23:31 AM	11/25/2021, 12:05:14 PM
Dominic Wieners	11/25/2021, 11:30:34 AM	11/25/2021, 12:05:14 PM
Jordi Fernandez	11/25/2021, 11:32:26 AM	11/25/2021, 12:05:16 PM

Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant, Richards Bay, Kwazulu-Natal Province

Focus Group Meeting
December 2021




AGENDA

- Welcome and Introduction
- Meeting Conduct
- Purpose of the Meeting
- Introduction and Project Overview
- Scoping Assessment & Findings
- Discussion
- Way Forward

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CONDUCT OF THE MEETING

- Recording of Meeting
- Please stay on mute during the presentation 
- Register attendance on Chat  function (name, surname & affiliation)
- Please raise your hand  to indicate a comment or question to raise
- Questions submitted in Chat function will be responded at the end of the presentation
- Equal opportunity
- Questions in your choice of language
- When speaking please enable video, if possible

PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant (CCPP)
- Summary of the **Environmental Impact Assessment (EIA) & Public Participation** being undertaken
- Present a summary of key environmental findings as documented in the **Scoping Report**
- Provide stakeholders the opportunity to seek clarity regarding the project and environmental assessment
- Obtain and record comments for inclusion in the **Final Scoping Report** to be submitted to the DFFE

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PROJECT OVERVIEW (Jana de Jager)

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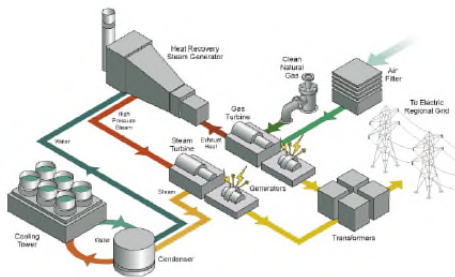
PROJECT OVERVIEW

- **Applicant:** Phakwe Richards Bay Gas Power 3 (Pty) Ltd
- **Project Description:** up to 2000MW combined cycle gas to power plant operated on natural gas or a mixture of natural gas and hydrogen
- **Location:** Erf 16820, Erf 16819, Erf 1/16674, and Subdivision of Erf 17442, Richards Bay IDZ Phase 1F, Richards Bay, KwaZulu Natal.

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Combined Cycle Gas to Power Technology



- CCGP is one of the most efficient power generating technologies to convert either gas or potentially a mixture of gas and hydrogen to mechanical power or electricity.
- Using a blend of hydrogen gas as a fuel source for turbine operation benefits the reduction in carbon emissions pre-combustion (if green or similarly sourced hydrogen is used), as well as during combustion.

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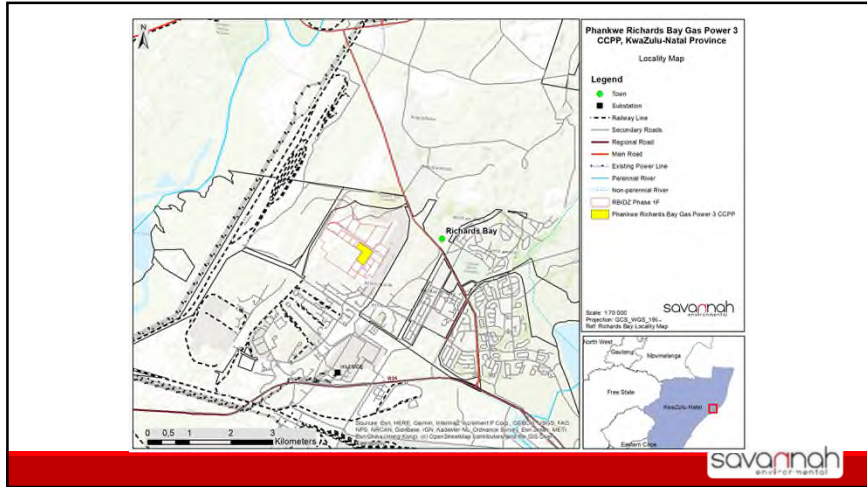
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OVERVIEW OF THE SITE

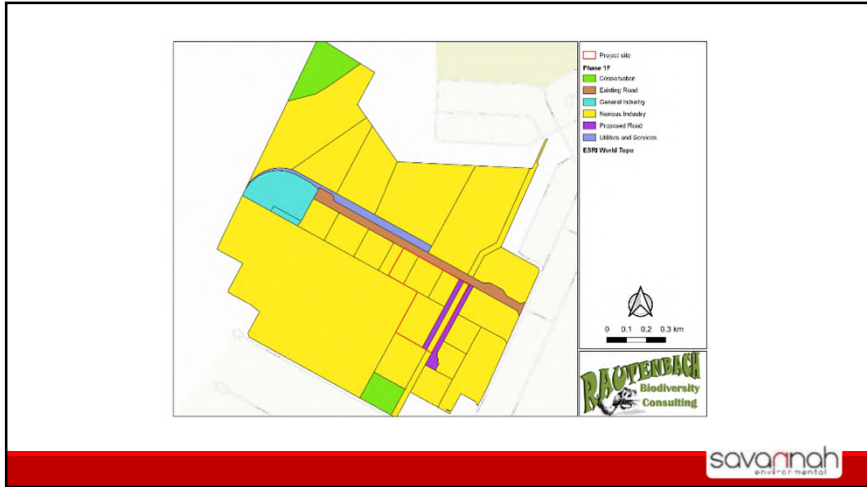
- Located in an industrial area (Richards Bay IDZ Phase 1F) with existing heavy industries
- Zoned for noxious industry (City of uMhlatuze land use zoning)
- Vegetation and ecological conditions onsite have been previously transformed
- Richards Bay IDZ has been authorised to infill wetlands onsite (DFFE Ref No.: 14/12/16/3/3/665)
- The site will be accessed via existing roads within the IDZ Phase 1F (already approved through an EIA undertaken for the Phase 1F infrastructure)

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ENVIRONMENTAL IMPACTS/SENSITIVITIES IDENTIFIED

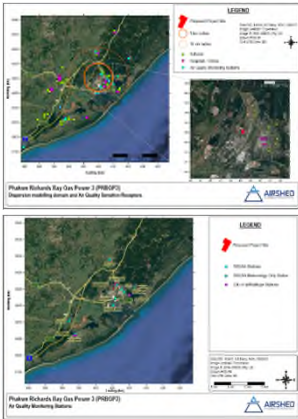
- The following has been identified within the Scoping Phase:
 - Terrestrial Biodiversity Impacts (fauna & flora);
 - Wetland and Aquatic Impacts;
 - Palaeontological & Archaeological Impacts;
 - Air Quality Impacts (incl. human health related impacts);
 - Climate Change Impacts;
 - Noise Impacts;
 - Visual Impacts;
 - Socio- Economic Impacts

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Terrestrial Biodiversity & Aquatic Assessments

- Terrestrial Ecology
 - Site was found to be degraded during preliminary site investigation
 - Fauna and flora of conservation concern may be present although unlikely
- Aquatic
 - IDZ offset wetlands are located within the development area – earmarked to be offset within other areas as part of the RBIDZ development

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Air Quality Assessment

- Baseline air quality information summarised from the available air quality monitoring stations (RBCAA & City of uMhlatuze).
- Sensitive receptors identified
- Impact to ambient air quality will be simulated during EIA phase

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Noise Assessment

- Potential noise sensitive receptors were identified
- Ambient sound levels measured within industrial area and closest residential area

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Visual Impact Assessment

- The viewshed analyses will be undertaken from the project components height above ground level, taking into account the industrial character of the landscape
- The zones of visual influence of the proposed PRBG3 will be modelled

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SCOPING SPECIALIST ASSESSMENTS

Specialist Study	Approach/Methodology
Heritage and Paleontological	<ul style="list-style-type: none"> • No heritage resources of significance were recorded within the study site.
Climate Change	<ul style="list-style-type: none"> • Although the Phakwe Richards Bay Gas Power 3 CCPP proposes to progressively reduce carbon emission over time with the increased presence of green hydrogen as part of the fuel mix, climate change impacts associated with the development of the Phakwe Richards Bay Gas Power 3 CCPP relate to the combustion of fuel (natural gas) at the CCPP which will produce greenhouse gas emissions that will contribute to the global phenomenon of anthropogenic climate change. A Greenhouse Gas (GHG) inventory will be calculated for the proposed PRBG3 to quantify the effects of the Project on climate change.
Socio-economic	<ul style="list-style-type: none"> • Detailed overview of the socio-economic environment which will be impacted by the proposed CCGPP development and associated infrastructure.

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SPECIALIST SERVICES

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SUMMARY OF POTENTIAL IMPACTS

Impact Report Specialist Studies	Assessment of issues
Terrestrial Biodiversity Assessment (fauna & flora);	<ul style="list-style-type: none"> Loss of vegetation Loss of faunal species Potential habitat fragmentation Infestation of alien species
Wetland and Aquatic Assessment	<ul style="list-style-type: none"> Altered hydrology Impaired water quality Impeded ecological services
Paleontological & Archaeological	<ul style="list-style-type: none"> No impacts on archaeological and palaeontological resources is expected in this project study area.
Noise Assessment	<ul style="list-style-type: none"> Increased noise levels in the vicinity of the plant

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SUMMARY OF POTENTIAL IMPACTS

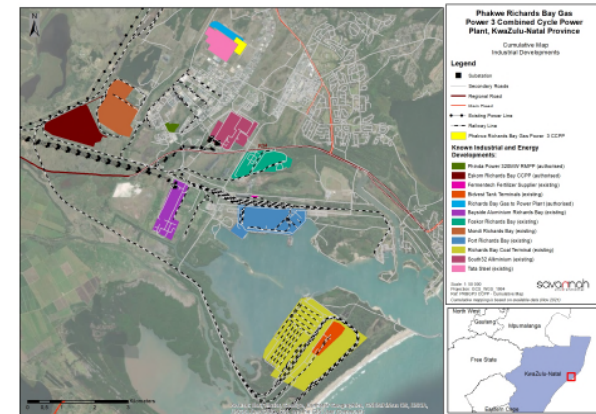
Impact Report Specialist Studies	Assessment of issues
Air Quality Assessment	<ul style="list-style-type: none"> Potential to impact on the ambient air quality of the area through elevated daily PM10 concentrations (during construction) Contribute NO_x, CO, SO_x and VOCs to the existing baseline concentrations
Climate Change Assessment	<ul style="list-style-type: none"> GHG emissions into the atmosphere that contribute to anthropogenic climate change
Visual Assessment	<ul style="list-style-type: none"> Impact on sensitive receptors and sense of place
Socio-Economic Assessment	<ul style="list-style-type: none"> Increase in the production and GDP, and Employment opportunities (economic) Impact on sense of place, presence of construction workers, social upliftment (social)
Traffic Assessment	<ul style="list-style-type: none"> Traffic congestion (construction) Noise and dust impacts due to traffic

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CUMULATIVE IMPACTS

- The approach in assessing cumulative impacts will be informed by the scale at which the impact is likely to occur, as well as surrounding developments.
- Developments considered as part of cumulative assessment:
 - Large-scale industrial developments within a 30km radius of the PRGP3 CCPP
 - Energy facilities located within a 30km radius of the proposed PRBGP3 CCPP
 - The assessment as part of the EIA phase will take into consideration both of the RMIPPPP and 3000MW gas to power procurement programmes (worst-case scenario).

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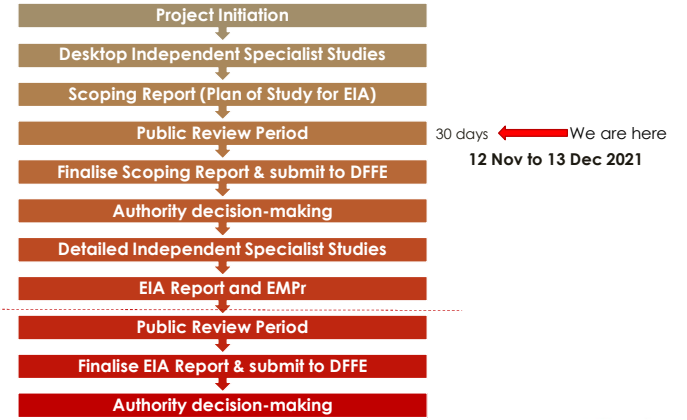
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CONCLUSIONS AND RECOMMENDATIONS

- The PRBGP3 is located in an industrial area with a limited development footprint
- The findings of the Scoping Report were based primarily on desktop assessments and site visits
- Based on this assessment, no environmental fatal flaws have been identified to be associated with the project at this stage in the process
- Therefore, there is no reason why the project cannot be evaluated further in a detailed EIA study
- Plan of Study for EIA is detailed in the Scoping Report, including specialist investigations to be undertaken

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EIA PROCESS



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DISCUSSION

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WAY FORWARD & CLOSURE (Nicolene Venter)

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WAY FORWARD

- Meeting notes will be distributed for verification together with the presentation
- Review and comment period ends **Monday, 13 December 2021**
- Final Scoping Report submission to DFFE (January 2022)

WHO TO CONTACT

Savannah Environmental (Pty) Ltd

Nicolene Venter

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Tel: 011 656 3237

Fax: 086 684 0547

Cell: 060 978 8396

www.savannahSA.com

**ENVIRONMENTAL IMPACT ASSESSMENT AND
PUBLIC PARTICIPATION PROCESS
FOR THE
PHAKWE RICHARDS BAY GAS-TO-POWER3 2000MW
COMBINED CYCLE POWER PLANT (CCPP) IN RICHARDS
BAY, KWAZULU-NATAL PROVINCE**

DFFE Reference Number:14/12/16/3/3/2/2117

**NOTES OF THE FOCUS GROUP MEETING HELD WITH THE KING
CHETSHWAYO DISTRICT MUNICIPALITY AND THE CITY OF UMHLATHUZE
LOCAL MUNICIPALITY OFFICIALS
HELD ON THURSDAY, 25 NOVEMBER 2021 AT 09h00
VENUE: MICROSOFT TEAMS, VIRTUAL MEETING**

Notes for the Record prepared by:

Tammy Lee-Goddard

Savannah Environmental (Pty) Ltd

E-mail: publicprocess@savannahsa.com

***Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting.
Please address any comments to Savannah Environmental at the above address***

PAKWE RICHARDS BAY GAS-TO-POWER3 2000MW CCPP LOCATED IN RICHARDS BAY, KWAZULU-NATAL PROVINCE

MEETING ATTENDEES

Name	Position
City of uMhlatuze	
Lindiwe Khumalo	Deputy Energy Manger: Air Quality Management Unit
Brenda Strachan	City Development Department - Spatial and Environmental Planning Team
Gugu Gazu	Air Quality Management Unit
Sabelo Gwala	Air Quality Management Unit
King Chetshwayo District Municipality	
Xolile Dube	Environment and disaster management
Wisdom Mpofo	Environment and disaster management
Gift Mathalise	Planning Department
Phakwe Group	
Jordi Fernandez	Operations Manager
Savannah Environmental	
Tamryn Lee Goddard	Environmental Assessment Practitioner
Jana De Jager	Environmental Assessment Practitioner
Nicolene Venter	Public Participation and Social Consultant

APOLOGIES

Wisdom Mpofo submitted apologies on behalf of Londeka Ngcobo.

The list of invitees and the Attendance Record is attached as **Appendix A** to the workshop notes.

PRESENTATION

Nicolene Venter welcomed the attendees at the Focus group meeting and thanked them for their attendance.

She presented the agenda and purpose of the meeting.

Jana de Jager presented the following:

- project description for the Pakwe Richards Bay Gas-to-Power3 2000MW CCPP project;
- the locality of the project site;
- the scoping and public participation processes followed todate;
- the environmental studies that have been undertaken; and
- a key summary of the results of the environmental studies undertaken.

The presentation is attached as **Appendix B** to the meeting notes.

Nicolene Venter highlighted that the public participation process is an ongoing process and commences when site notices are erected at the development site and with the distribution of the Background Information Document (BID) and is not limited to the 30-day review and comment period of the Scoping Report. The public participation process is only concluded once registered

Interested and Affected Parties are notified of the decision of the Department of Forestry, Fisheries and the Environment (DFFE) dec for the project.

DISCUSSION SESSION

Question / Comment	Response
Xolile Dube	
<p>Are there any plans on looking at waste management and monitoring after implementation and how would the Wastewater be treated?</p>	<p>Jana de Jager responded that where required, mitigation and monitoring measures related to waste management would be included in the Environmental Impact Assessment (EIA) phase.</p> <p>Jordie Fernandez responded that water would be sourced from potable water supplied by the IDZ or potentially the proposed municipal industrial wastewater facility, which PRBGP3 will pass through a water treatment system to demineralise before use at the plant. The end-product (brine) would then be fed back into the municipal wastewater (sewerage) system. The discharge water will not need to be demineralised (treated) as the salts within the brine is not considered to be hazardous.</p>
<p>Why are the projects i.e., fuel source, grid connection, etc. separated and not assessed holistically as they are closely interlinked?</p>	<p>Jana de Jager responded that the feasibility of the plant first needs to be determined, after which the feasibility of the other projects would be assessed.</p> <p>Jordi Fernandez added that it is not currently known whether the procurement process would include a national gas supply project. There is an unknown factor in terms of the requirements from the Department of Mineral Resources and Energy (DMRE) such as whether IPPs would be required to build their own pipelines and terminals or use Transnet's proposed pipeline. For these reasons, it was decided to separate the processes. Discussions still need to take place with Eskom regarding the grid connection.</p>
Brenda Strachan	
<p>Please confirm where the supply of gas would be sourced from.</p>	<p>Jana de Jager responded that anything related to the gas pipeline will be separate authorisation process to that currently being undertaken. The source of gas is yet to be determined.</p>
<p>How will the power generated be evacuated to the national grid?</p>	<p>Jana de Jager responded that power generated by the plant will be evacuated by transmission infrastructure which will be assessed</p>

Question / Comment	Response
	as part of a separate EIA process and not included in this EIA application.
Gugu Gazu	
What is the capacity of the boilers?	Jordi Fernandez indicated that this information if not available at this stage. This will depend on the final layout of the plant and depend on the number of turbines and boilers for the combined cycle. He informed the attendees that for a combined cycle power plant a boiler is not required, whereas in a coal plant a boiler is needed to burn the coal for steam to activate the turbines. In a gas plant, the gas turbine is used to heat the steam and produce energy. The gas turbine is essentially warming the steam in a closed circuit without a boiler.
Giff Mathalize	
Queried the emphasis of negative impacts and lack of emphasis of positive impacts on the community, economy, and local community.	Jana de Jager responded that more detail on the positive and negative impacts, specifically from a socio-economic perspective, would be presented in the EIA report.
Wisdom Mpofo	
Queried the source of the gas and the pipeline for which a separate EIA.	Jordi Fernandez added that the fuel source would be natural gas or a mixture of natural gas and green hydrogen. The gas would be provided through Transnet's pipeline from the Richards Bay harbour, or the IPP would consider building their own pipeline. It would not be feasible to transport the gas to the site via trucks. The source of natural gas still needs to be established through further consultation with Transnet and other authorities.
<p>Holistically, should this project be successful, why going through the EIA process if the fuel supply source is uncertain?</p> <p>What are the implications to the current EIA if the pipeline project is rejected?</p>	<p>Nicolene Venter acknowledged the question and responded that a response will be provided in the meeting notes, addressing the holistic approach.</p> <p>Post-meeting note: Although there are uncertainties regarding the fuel supply, a strategic approach is being followed. As such when the fuel supply is duly authorised and confirmed, the required authorisation processes for the CCPP would have been undertaken so as not to delay project implementation.</p> <p>The Phakwe RBG2P3, in totality, requires three (3) Environmental Authorisations (EAs) i.e. gas</p>

Question / Comment	Response
	plant, grid connection and pipeline (gas connection). Should one of the EAs not be granted, then the entire project would not be viable. Separate EA applications are submitted to avoid any possible delays in the processes, as each project component has different timelines.

WAY FORWARD AND CLOSURE

Nicolene Venter thanked everyone for their inputs to the meeting. She informed the attendees that they can submit any further written comments via e-mail, and she reminded the attendee that the Scoping Report comment period is ending on Monday, 13 December 2021 and advised that it would be appreciated if written comments can be received before or on the 13th of December 2021.

She thanked the attendees for making time to attend the FGM and for their valuable inputs into the EIA and public participation process.

The meeting was closed at 10h00.

LIST OF ABBREVIATIONS AND ACRONYMS

BID	Background Information Document	EA	Environmental Authorisation
CCPP	Combined Close Power Plant	EIA	Environmental Impact Assessment
DFFE	Department of Forestry, Fisheries, and the Environment	FGM	Focus Group Meeting
DMRE	Department of Mineral Resources and Energy	MW	Megawatt

APPENDIX A: Attendance Record

Total Number of Participants	13	
Meeting Title	RICHARDS BAY GAS-TO-POWER3 2000MW CCPP: Invitation to Focus Group Meeting (King Chetshwayo DM & City of uMhlathuze LM)	
Meeting Start Time	11/25/2021, 8:42:35 AM	
Meeting End Time	11/25/2021, 10:13:02 AM	
Meeting Id	c636f0b5-9f0d-44cd-a9e2-d226026dbc1b	
Full Name	Join Time	Leave Time
Brenda Strachan	11/25/2021, 9:01:26 AM	11/25/2021, 10:08:55 AM
Gift Mathalise	11/25/2021, 8:55:54 AM	11/25/2021, 8:57:10 AM
Gift Mathalise	11/25/2021, 9:02:56 AM	11/25/2021, 10:08:58 AM
Gugu Gazu	11/25/2021, 9:26:56 AM	11/25/2021, 10:11:57 AM
Jana de Jager	11/25/2021, 8:43:18 AM	11/25/2021, 10:09:24 AM
Jordi Fernandez	11/25/2021, 9:00:52 AM	11/25/2021, 10:08:58 AM
Lindiwe Khumalo	11/25/2021, 9:00:21 AM	11/25/2021, 10:09:20 AM
Nicolene Venter	11/25/2021, 8:42:35 AM	11/25/2021, 10:09:11 AM
Sabelo Gwala	11/25/2021, 9:05:08 AM	11/25/2021, 10:13:02 AM
Tamryn Lee Goddard	11/25/2021, 8:46:50 AM	11/25/2021, 10:08:57 AM
Wisdom Mpofu	11/25/2021, 9:05:26 AM	11/25/2021, 10:08:58 AM
Xolile Dube	11/25/2021, 9:00:44 AM	11/25/2021, 10:08:55 AM
Zipho Zondo	11/25/2021, 10:10:23 AM	11/25/2021, 10:10:23 AM

Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant, Richards Bay, Kwazulu-Natal Province

Focus Group Meeting
December 2021



AGENDA




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- Purpose of the Meeting
- Introduction and Project Overview
- Scoping Assessment & Findings
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- Way Forward



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CONDUCT OF THE MEETING

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PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant (CCPP)
- Summary of the **Environmental Impact Assessment (EIA) & Public Participation** being undertaken
- Present a summary of key environmental findings as documented in the **Scoping Report**
- Provide stakeholders the opportunity to seek clarity regarding the project and environmental assessment
- Obtain and record comments for inclusion in the **Final Scoping Report** to be submitted to the DFFE



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PROJECT OVERVIEW (Jana de Jager)

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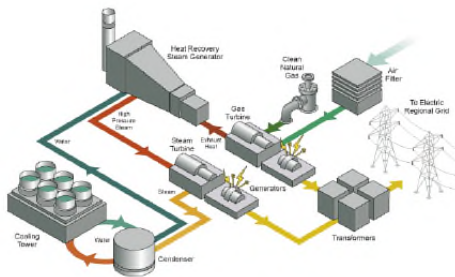
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- **Location:** Erf 16820, Erf 16819, Erf 1/16674, and Subdivision of Erf 17442, Richards Bay IDZ Phase 1F, Richards Bay, KwaZulu Natal.

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Combined Cycle Gas to Power Technology



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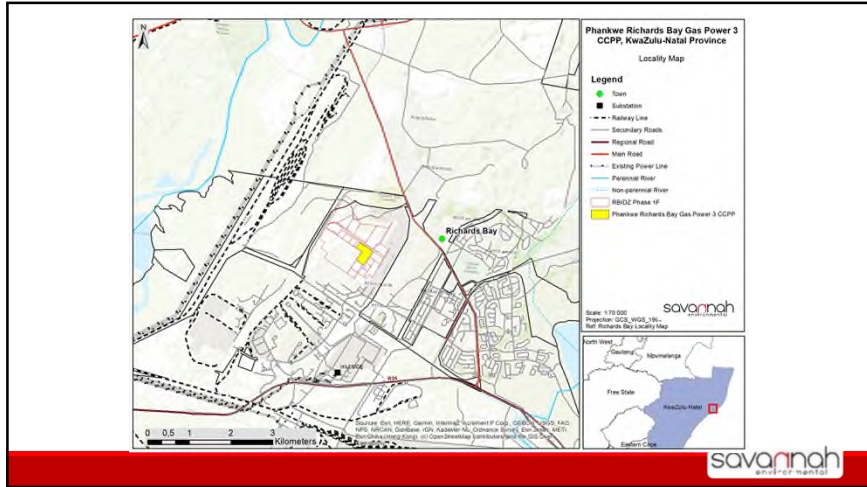
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OVERVIEW OF THE SITE

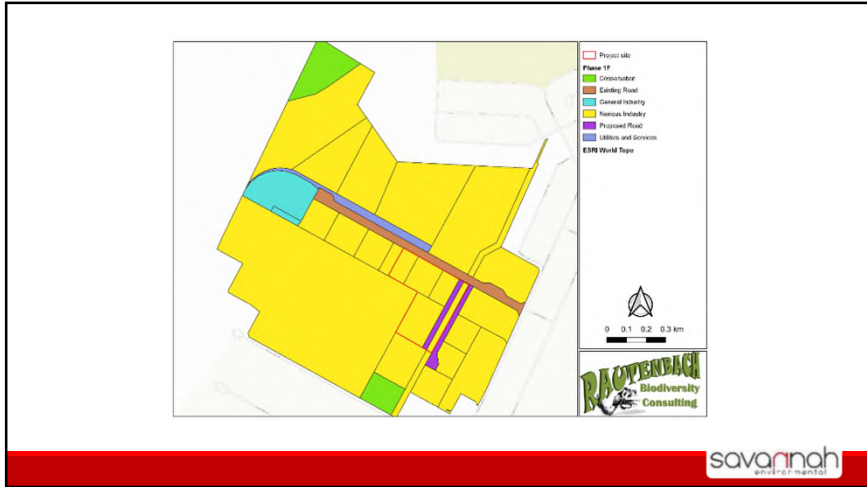
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ENVIRONMENTAL IMPACTS/SENSITIVITIES IDENTIFIED

- The following has been identified within the Scoping Phase:
 - Terrestrial Biodiversity Impacts (fauna & flora);
 - Wetland and Aquatic Impacts;
 - Palaeontological & Archaeological Impacts;
 - Air Quality Impacts (incl. human health related impacts);
 - Climate Change Impacts;
 - Noise Impacts;
 - Visual Impacts;
 - Socio- Economic Impacts

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WORLD OF IMPACTS

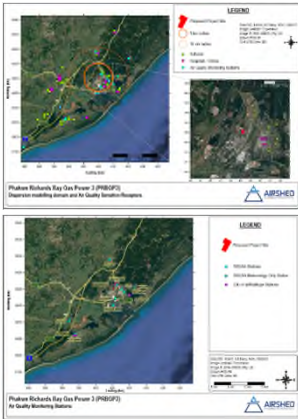
11

Terrestrial Biodiversity & Aquatic Assessments

- Terrestrial Ecology
 - Site was found to be degraded during preliminary site investigation
 - Fauna and flora of conservation concern may be present although unlikely
- Aquatic
 - IDZ offset wetlands are located within the development area – earmarked to be offset within other areas as part of the RBIDZ development

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WORLD OF IMPACTS

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Air Quality Assessment

- Baseline air quality information summarised from the available air quality monitoring stations (RBCAA & City of uMhlatuze).
- Sensitive receptors identified
- Impact to ambient air quality will be simulated during EIA phase

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Noise Assessment

- Potential noise sensitive receptors were identified
- Ambient sound levels measured within industrial area and closest residential area

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Visual Impact Assessment

- The viewshed analyses will be undertaken from the project components height above ground level, taking into account the industrial character of the landscape
- The zones of visual influence of the proposed PRBG3 will be modelled

15

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SCOPING SPECIALIST ASSESSMENTS

Specialist Study	Approach/Methodology
Heritage and Paleontological	<ul style="list-style-type: none"> • No heritage resources of significance were recorded within the study site.
Climate Change	<ul style="list-style-type: none"> • Although the Phakwe Richards Bay Gas Power 3 CCPP proposes to progressively reduce carbon emission over time with the increased presence of green hydrogen as part of the fuel mix, climate change impacts associated with the development of the Phakwe Richards Bay Gas Power 3 CCPP relate to the combustion of fuel (natural gas) at the CCPP which will produce greenhouse gas emissions that will contribute to the global phenomenon of anthropogenic climate change. A Greenhouse Gas (GHG) inventory will be calculated for the proposed PRBG3 to quantify the effects of the Project on climate change.
Socio-economic	<ul style="list-style-type: none"> • Detailed overview of the socio-economic environment which will be impacted by the proposed CCGPP development and associated infrastructure.

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SPECIALIST ASSESSMENTS

16

16

SUMMARY OF POTENTIAL IMPACTS

Impact Report Specialist Studies	Assessment of issues
Terrestrial Biodiversity Assessment (fauna & flora);	<ul style="list-style-type: none"> Loss of vegetation Loss of faunal species Potential habitat fragmentation Infestation of alien species
Wetland and Aquatic Assessment	<ul style="list-style-type: none"> Altered hydrology Impaired water quality Impeded ecological services
Paleontological & Archaeological	<ul style="list-style-type: none"> No impacts on archaeological and palaeontological resources is expected in this project study area.
Noise Assessment	<ul style="list-style-type: none"> Increased noise levels in the vicinity of the plant

17

SUMMARY OF POTENTIAL IMPACTS

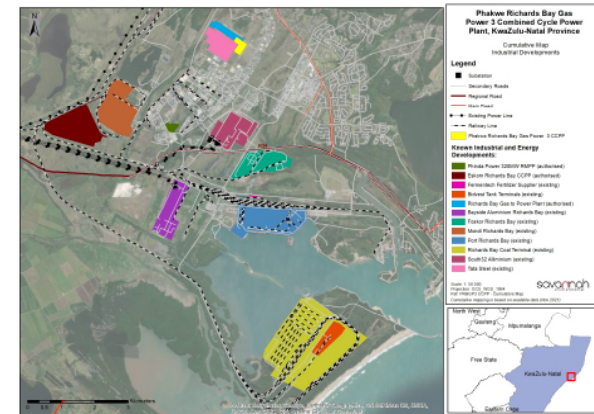
Impact Report Specialist Studies	Assessment of issues
Air Quality Assessment	<ul style="list-style-type: none"> Potential to impact on the ambient air quality of the area through elevated daily PM10 concentrations (during construction) Contribute NO_x, CO, SO_x and VOCs to the existing baseline concentrations
Climate Change Assessment	<ul style="list-style-type: none"> GHG emissions into the atmosphere that contribute to anthropogenic climate change
Visual Assessment	<ul style="list-style-type: none"> Impact on sensitive receptors and sense of place
Socio-Economic Assessment	<ul style="list-style-type: none"> Increase in the production and GDP, and Employment opportunities (economic) Impact on sense of place, presence of construction workers, social upliftment (social)
Traffic Assessment	<ul style="list-style-type: none"> Traffic congestion (construction) Noise and dust impacts due to traffic

18

CUMULATIVE IMPACTS

- The approach in assessing cumulative impacts will be informed by the scale at which the impact is likely to occur, as well as surrounding developments.
- Developments considered as part of cumulative assessment:
 - Large-scale industrial developments within a 30km radius of the PRGP3 CCPP
 - Energy facilities located within a 30km radius of the proposed PRBGP3 CCPP
 - The assessment as part of the EIA phase will take into consideration both of the RMIPPPP and 3000MW gas to power procurement programmes (worst-case scenario).

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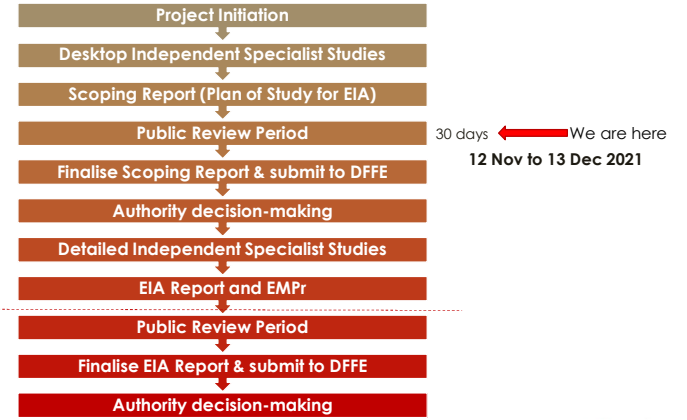
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CONCLUSIONS AND RECOMMENDATIONS

- The PRBGP3 is located in an industrial area with a limited development footprint
- The findings of the Scoping Report were based primarily on desktop assessments and site visits
- Based on this assessment, no environmental fatal flaws have been identified to be associated with the project at this stage in the process
- Therefore, there is no reason why the project cannot be evaluated further in a detailed EIA study
- Plan of Study for EIA is detailed in the Scoping Report, including specialist investigations to be undertaken

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EIA PROCESS



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DISCUSSION

23

WAY FORWARD & CLOSURE (Nicolene Venter)

24

WAY FORWARD

- Meeting notes will be distributed for verification together with the presentation
- Review and comment period ends **Monday, 13 December 2021**
- Final Scoping Report submission to DFFE (January 2022)

WHO TO CONTACT

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Fax: 086 684 0547

Cell: 060 978 8396

www.savannahSA.com

**ENVIRONMENTAL IMPACT ASSESSMENT AND
PUBLIC PARTICIPATION PROCESS
FOR THE
PHAKWE RICHARDS BAY GAS-TO-POWER 3 2000MW
COMBINED CYCLE POWER PLANT (CCPP) IN RICHARDS
BAY, KWAZULU-NATAL PROVINCE**

DFFE Reference Number:14/12/16/3/3/2/2117

**MEETING NOTES OF THE FOCUS GROUP MEETING HELD WITH THE
RICHARDS BAY INDUSTRIAL DEVELOPMENT ZONE (IDZ) ENVIRONMENTAL
REVIEW COMMITTEE MEMBERS
HELD ON WEDNESDAY, 08 DECEMBER 2021 AT 09H00
VENUE: MICROSOFT TEAMS, VIRTUAL MEETING**

Notes for the Record prepared by:

Nicolene Venter

Savannah Environmental (Pty) Ltd

E-mail: publicprocess@savannahsa.com

***Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting.
Please address any comments to Savannah Environmental at the above address***

RICHARDS BAY GAS-TO-POWER3 2000MW CCPP LOCATED IN RICHARDS BAY, KWAZULU-NATAL PROVINCE

MEETING ATTENDEES

Name	Department / Company / Organisation
Richards Bay Industrial Development Zone: Environmental Committee Meeting Members (Alphabetically according to <u>Name</u>)	
Dominic Wieners	Ezemvelo KZN: Integrated Environmental Management Unit
Gugu Gazu	
Lefitia Moodley	
Muzi	
Nozipho Khati	Air Quality: King Cetshwayo District Municipality
Percy Langa	Safety, Health, Environment, Quality: RB IDZ
Sandy Camminga	Chairperson: Richards Bay Clean Air Association
Sethabile Gcume	Environmental Officer: RB IDZ
Simthembile Mapu	RB IDZ
Wisdom Mpofu	Senior Manager: Statutory & Development Planning: King Cetshwayo District Municipality
Xolile Dube	King Cetshwayo District Municipality
Ziqubu Siyabonga	Air Quality Specialist
Phakwe Group	
Jordi Fernandez	Operations manager
Savannah Environmental	
Jana De Jager	Environmental Consultant
Nicolene Venter	Public Participation and Social Consultant

APOLOGIES

No apologies were submitted.

The Attendance Record is attached as **Appendix A** to the Meeting notes.

PRESENTATION

Nicolene Venter welcomed the Members of the Richards Bay IDZ Environmental Review Committee at the Focus group meeting and thanked them for their attendance.

She presented the agenda and purpose of the meeting.

Jana de Jager presented the following:

- project description for the Phakwe Richards Bay Gas-to-Power3 2000MW CCPP project;
- the locality of the project site;
- the scoping and public participation processes followed to date;
- the environmental studies that have been undertaken; and
- a key summary of the results of the environmental studies undertaken.

Nicolene Venter informed the attendees that it is important to note that the public participation process is an ongoing process and commences when site notices are erected at the development site and with the distribution of the Background Information Document (BID) and is not limited to the 30-day review and comment period of the Scoping Report. The public participation process is only concluded once registered Interested and Affected Parties are notified of the Department of Forestry, Fisheries, and the Environment's (DFFE) decision to issue Environmental Authorisation for the project.

All meeting attendees introduced themselves. Jordi Fernandez gave a short overview of Phakwe Richards Bay Gas Power 3 as a company of the Phakwe Group and their engagement in the renewable energy sector as follows:

- Phakwe Group is a 100% black-owned south Africa group of companies.
- Phakwe Richards Bay Gas Power 3 (Pty) Ltd (PRBGP3) is a 100% black-owned company belonging 100% to the Phakwe Group.
- Phakwe Group has been an important player in the Energy Sector in South Africa for a number of years since Round 1 of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).
- The Portfolio of energy assets of Phakwe Group includes one (1) Wind Farm and eight (8) Solar Photovoltaic (PV) plants.
- Phakwe Group is the only South Africa black-owned company that is a majority (90%) owner of an energy plant in South Africa.
- Phakwe intend to diversify the energy mix of its portfolio, including Gas-to-Power plants. To this purpose, Phakwe, through the PRGP3, is proposing the 2000MW Gas-to-Power plant project for which this Environmental Authorisation application is applicable.

The presentation is attached as **Appendix B** to the meeting notes.

DISCUSSION SESSION

Question / Comment	Response
Wisdom Mpofu	
<p>The expectation from the presentation was to see impacts being categorised in positive and negatives, and it seems that more emphases has been placed on negative impacts and that the socio-economic positive impacts associated with a project such as this, are not being presented.</p> <p>The importance of presenting both the negative and positive impacts is for stakeholders to make informed contributions when commenting on the content of the report.</p>	<p>Jana de Jager responded that although the positive and negative impacts are summarised in the Scoping Report (SR) the presentation could be improved to also highlight the positive impacts associated with the proposed development e.g. employment opportunities, contribution to local economic, etc.</p>
Xolile Dube	
<p>Reiterated the residual impacts as alluded to by Mr Mpofu to see positive impacts presented.</p>	<p>Jana de Jager reiterated the presentation could be improved to also highlight the positive impacts associated with the proposed development</p>

<p>It was suggested that mitigation measures to minimise negative impacts and enhance positive impacts also be presented.</p>	<p>Jana de Jager responded that the impact significance and the mitigation thereof would be addressed during EIA phase. The scoping phase served to only highlight the positive and negative impacts, directly or indirectly affected, cumulative impacts, etc. When presenting the summary of the EIA report, the presentation would change drastically as to present a summary of all the impacts and mitigations and providing stakeholder an opportunity to engage in the proposed mitigation measures.</p>
<p>Would waste water be generated as part of this process?</p>	<p>Jordi Fernandez responded the plant would produce wastewater as an output of the demineralisation plant on site and the washing of turbines, blow down, as well as oily water. The wastewater will be contaminated with heavy metals and need to be disposed of by a specialist contractor. The wastewater would be stored in a sump at each unit. Oily water will be collected from drains and would be sent to an oily water separator located on the site. Grey water from the separator would be discharged into the Richard's Bay IDZ's wastewater system which is a dedicated effluent discharge pipeline used by existing industrial users in the area. However, prior to any discharge of grey water, it is important to check with the Richard's Bay IDZ that the correct oily water separator filter, as per the Richard's Bay IDZ, is purchased as it would ensure that grey water discharged into the Richard's Bay IDZ's system would not contaminate the wastewater system.</p>
<p>Would the potential waste management impacts be monitored prior, during and after construction?</p>	<p>Jana de Jager responded that as Jordi Fernandez alluded to is that it is not contamination risk are not expected and therefore there is no specific requirements for monitoring from a geohydrological perspective.</p>
<p>Gugu Gazu</p>	
<p>What is the capacity of the boilers?</p>	<p>Jordi Fernandez responded that infrastructure capacity is dependent on the final configuration of the plant. It is envisaged that the final configuration / technical design of the plant would subject to the procurement process.</p>
<p>The reason for the question regarding boiler capacity is that the City of uMhlathuze works with AEL applications up to 10MW and any boiler capacity above 10MW, the application</p>	<p>Jordi Fernandez informed the delegate that there are different technologies for a combined gas cycle process and that of a coal fired power plant. For this project's process, there are no</p>

needs to go to the King Chetshwayo District Municipality for evaluation and approval.	boilers. Boilers are applicable in coal power plants where water is boiled to create steam to turn the turbines.
Wisdom Mpofu	
Asked where the gas source is coming from and would there be any gas supply provided by truck.	<p>Jana de Jager responded that the gas would be provided to the plant through the proposed Transnet pipeline network within the Richards Bay area. The location of pipeline has not yet been confirmed. The gas pipeline process would undergo a separate EIA process. It can be confirmed that gas would not be trucked to the plant.</p> <p>Jordi Fernandez added that the source of the gas or combination thereof has not yet been determined. It can, however, be confirmed that it would be transported from the Richards Bay harbour through a Transnet pipeline but should Transnet's pipeline not be in time to provide fuel to the plant, the alternative option is to consider a private owned pipeline infrastructure.</p> <p>Due to the high volume of gas required at the plant, no trucking of gas could be considered and as the gas would be in liquid form, there is no regassification plant at the site and also currently not a technical option.</p>
Brenda Strachan	
For confirmation, would the gas supply and the evacuation infrastructure of the energy generated be separate EA processes.	Jana de Jager confirmed that the gas pipeline and evacuation infrastructure would be separate EA processes to this current EA process being undertaken.
Confirm whether energy that has been generated, the grid connection from the plant to the grid network and any other associated infrastructure would be assessed separately.	Jana de Jager confirmed that the grid connection infrastructure would follow a separate EA process.
Xolile Dube	
Why are these processes separated as they are closely link and should be assessed holistically?	<p>Jana de Jager responded that it relates to the feasibility of the plant, and should it be feasible, then the next would be the fuel supply and if that is in place, then the grid connection can be assessed.</p> <p>Although the question for a holistically approach is understood, the reasoning why such a process is not followed is that each process has its own impacts that needed to be assessed.</p>

	<p>Jordi Fernandez added that the Government is running a separate process in terms of providing natural gas to the Richard's Bay area, and there are also the unknowns from the DMRE procurement / specification process for gas-to-power.</p> <p>In terms of the electrical grid infrastructure, discussions were held with Eskom and the outcome was that they need clarity as to which projects receive EAs. When the time is right, Phakwe will approach Eskom and initiate the process for the grid connection when a more defined route would be known.</p>
Wisdom Mpfu	
<p>Commenting that he is in support of a holistically EA approach for all the processes, but after hearing the explanations, the reasoning behind separate EA applications is understood.</p>	<p>Nicolene Venter thanked Mr Mpfu for his added comment to the holistically approach of the EAs.</p>
Percy Langa	
<p>All layout maps, especially that on slide 10 of the presentation must be aligned with the EIA-approved and WULA-approved layouts. Refer to Layout Map No. 2 (preferred layout) in the 1F EIA Report.</p>	<p>Jana de Jager responded that the maps will be updated as requested.</p> <p>Post-meeting note: The updated maps are included in Appendix L of the final Scoping Report (SR).</p>
<p>Will Savannah Environmental also be applying for any other licenses or permits e.g. AEL, WML, effluent disposal?</p>	<p>Jana de Jager responded that no additional permits form part of this project's EA application.</p> <p>Jordi Fernandez added that permit applications processes are not part of Savannah Environmental's scope of work as they are only appointed to undertake the EIA process. All permit applications would follow after the EA has been issued. Currently, a WML is not required as no waste would be generated, and the effluent would go into the Municipal sewage system.</p>
<p>Cumulative assessment must also include other G2Ps e.g. Karpowership, NFIPP, Phinda Power.</p>	<p>Jana de Jager responded that the EIA phase cumulative assessment will follow a worst-case scenario taking into account known heavy industries and gas power facilities in the Richard's Bay area.</p>
Dominic Wieners	
<p>Recommended a dual assessment for cumulative impacts with all proposed G2P proposals, and those that have already been authorised (e.g. Eskom).</p>	<p>Jana de Jager reiterated that the cumulative assessment will take into account the known existing and authorised gas to power facilities.</p>

Percy Langa	
Does this project include transmission power lines?	Jana de Jager responded that a separate EA process would be followed for the grid connection infrastructure for the facility.
Sandy Camminga	
The current status is that the Port does not know where the gas would be sourced from and the proposed pipeline routing from the Port to the various G2P plants and this makes it difficult for stakeholders to comments on these applications.	Jordi Fernandez responded that unfortunately, as a developer, they do not have any control over the fuel source and the proposed pipeline routing. To date, the timeframes also get moved out and at some stage Government considered Coega as a port of entry for the gas.
The Air Quality Report would be fully interrogated in the EIA phase, especially the possible impact to the nearby communities.	Jana de Jager thanked Ms Camminga and indicated that the team is looking forward to the RBCAA inputs.
It was mentioned that Phakwe might need to look at their own Disaster Management operation as the City of uMhlathuze would not be able to handle / assist should there be a disaster situation.	Jana de Jager responded that aspects related to disaster management will be further considered during the EIA phase.
It was enquired who the Air Quality Assessment specialist is.	Jana de Jager responded that Savannah Environmental appointed Airshed due to the quality of their work and knowledge of the air quality matters in the Richard's Bay area.
Dominic Wieners	
There are serious limitations for the port getting gas out from the port (at their south dunes proposed locations) to any of the IDZ areas, or the greater Richards Bay landscape	Jana de Jager responded that these limitations ought to be considered during the separate EA process for the gas pipeline infrastructure.
Jordi Fernandez	
As a closing statement, Mr Fernandez thanked the attendees for their valuable inputs into the process.	

WAY FORWARD AND CLOSURE

Nicolene Venter asked whether there were any other environmental-related comments that the Committee Members would like to raise before closing the FGM officially. It was noted that no further comments needed to be raised at this time. She informed the attendees that they can submit any further written comments via e-mail, and she reminded the attendee that the Scoping Report commenting period is ending on Monday, 13 December 2021 and that it would be appreciated if written comments can be received before or on the 13th of December 2021.

She thanked the attendees for making time to attend the FGM and for their valuable inputs into the EIA and public participation process.

The meeting was closed at 10h10.

LIST OF ABBREVIATIONS AND ACRONYMS

AEL	Air Emissions License	NFIPP	Nseleni Independent Floating Power Plant
DMRE	Department of Mineral Resources and Energy	RB	Richard's Bay
EA	Environmental Authorisation	RBCAA	Richard's Bay Clean Air Association
EIA	Environmental Impact Assessment	SR	Scoping Report
EMPr	Environmental Management Programme	WML	Waste Management License
G2P	Gas-to-Power	WULA	Water Use License Application
IDZ	Industrial Development Zone		

APPENDIX A: Attendance Record

Total Number of Participants	13
Meeting Title	RICHARDS BAY GAS-TO-POWER3 2000MW CCPP: RB IDZ Environmental Review Committee
Meeting Start Time	12/8/2021, 8:47:31 AM
Meeting End Time	12/8/2021, 10:04:10 AM
Meeting Id	2eb4f7f9-7c63-41ab-b56d-29f24dea6a4d

ATTENDEES

Nicolene Venter
Ziqubu Siyabonga
Jana de Jager
Percy Langa
Jordi Fernandez
Sethabile Gcume
Dominic Wieners
Sandy Camminga
Ziqubu Siyabonga
Simthembile Mapu
Nozipho Khathi
Muzi
Letitia Moodley

Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant, Richards Bay, Kwazulu-Natal Province

Focus Group Meeting

Richards Bay Industrial Development Zone: Environmental
Review Committee

December 2021



AGENDA

- Welcome and Introduction
- Meeting Conduct
- Purpose of the Meeting
- Introduction and Project Overview
- Scoping Assessment & Findings
- Discussion
- Way Forward



1

2

CONDUCT OF THE MEETING

- Recording of Meeting
- Please stay on mute during the presentation
- Register attendance on Chat function (name, surname & affiliation)
- Please raise your hand to indicate a comment or question to raise
- Questions submitted in Chat function will be responded at the end of the presentation



PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant (CCPP)
- Summary of the **Environmental Impact Assessment (EIA) & Public Participation** being undertaken
- Present a summary of key environmental findings as documented in the **Scoping Report**
- Provide stakeholders the opportunity to seek clarity regarding the project and environmental assessment
- Obtain and record comments for inclusion in the **Final Scoping Report** to be submitted to the DFFE



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PROJECT OVERVIEW (Jana de Jager)

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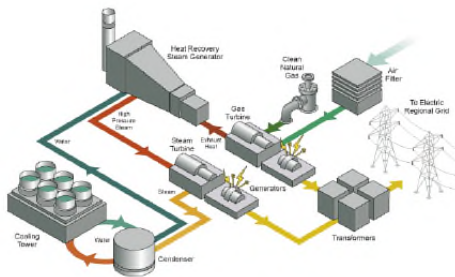
PROJECT OVERVIEW

- **Applicant:** Phakwe Richards Bay Gas Power 3 (Pty) Ltd
- **Project Description:** up to 2000MW combined cycle gas to power plant operated on natural gas or a mixture of natural gas and hydrogen
- **Location:** Erf 16820, Erf 16819, Erf 1/16674, and Subdivision of Erf 17442, Richards Bay IDZ Phase 1F, Richards Bay, KwaZulu Natal.

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6

Combined Cycle Gas to Power Technology



- CCGP is one of the most efficient power generating technologies to convert either gas or potentially a mixture of gas and hydrogen to mechanical power or electricity.
- Using a blend of hydrogen gas as a fuel source for turbine operation benefits the reduction in carbon emissions pre-combustion (if green or similarly sourced hydrogen is used), as well as during combustion.

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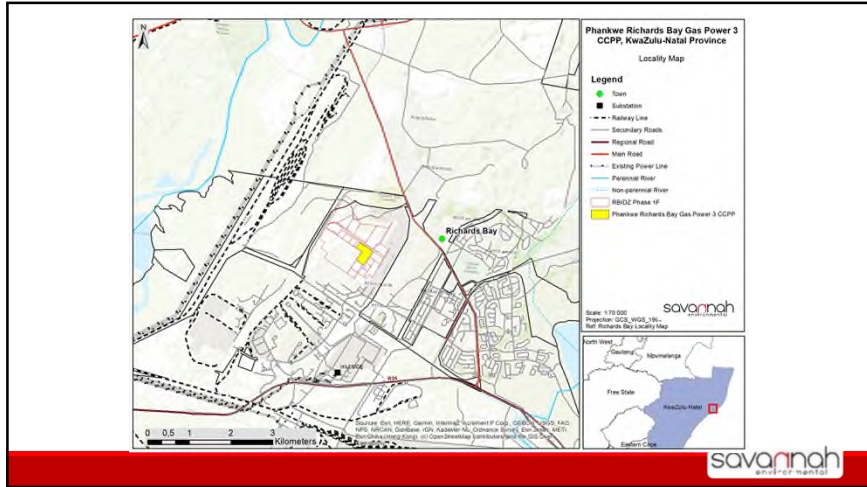
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OVERVIEW OF THE SITE

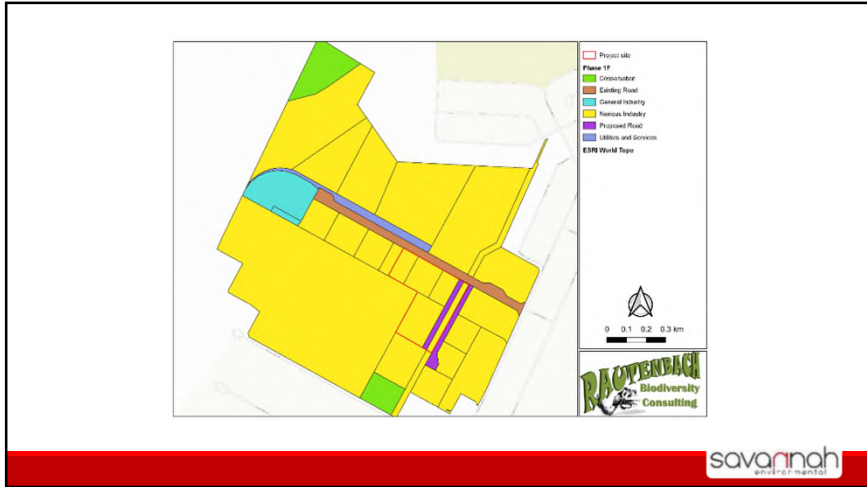
- Located in an industrial area (Richards Bay IDZ Phase 1F) with existing heavy industries
- Zoned for noxious industry (City of uMhlatuze land use zoning)
- Vegetation and ecological conditions onsite have been previously transformed
- Richards Bay IDZ has been authorised to infill wetlands onsite (DFFE Ref No.: 14/12/16/3/3/665)
- The site will be accessed via existing roads within the IDZ Phase 1F (already approved through an EIA undertaken for the Phase 1F infrastructure)

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ENVIRONMENTAL IMPACTS/SENSITIVITIES IDENTIFIED

- The following has been identified within the Scoping Phase:
 - Terrestrial Biodiversity Impacts (fauna & flora);
 - Wetland and Aquatic Impacts;
 - Palaeontological & Archaeological Impacts;
 - Air Quality Impacts (incl. human health related impacts);
 - Climate Change Impacts;
 - Noise Impacts;
 - Visual Impacts;
 - Socio- Economic Impacts

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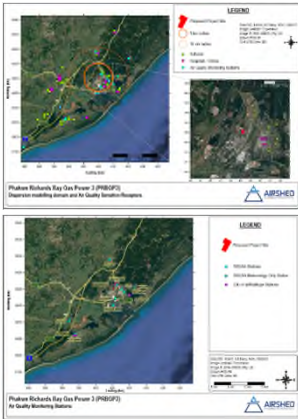
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Terrestrial Biodiversity & Aquatic Assessments

- Terrestrial Ecology
 - Site was found to be degraded during preliminary site investigation
 - Fauna and flora of conservation concern may be present although unlikely
- Aquatic
 - IDZ offset wetlands are located within the development area – earmarked to be offset within other areas as part of the RBIDZ development

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Air Quality Assessment

- Baseline air quality information summarised from the available air quality monitoring stations (RBCAA & City of uMhlatuze).
- Sensitive receptors identified
- Impact to ambient air quality will be simulated during EIA phase

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Noise Assessment

- Potential noise sensitive receptors were identified
- Ambient sound levels measured within industrial area and closest residential area

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Visual Impact Assessment

- The viewshed analyses will be undertaken from the project components height above ground level, taking into account the industrial character of the landscape
- The zones of visual influence of the proposed PRBG3 will be modelled

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SCOPING SPECIALIST ASSESSMENTS

Specialist Study	Approach/Methodology
Heritage and Paleontological	<ul style="list-style-type: none"> • No heritage resources of significance were recorded within the study site.
Climate Change	<ul style="list-style-type: none"> • Although the Phakwe Richards Bay Gas Power 3 CCPP proposes to progressively reduce carbon emission over time with the increased presence of green hydrogen as part of the fuel mix, climate change impacts associated with the development of the Phakwe Richards Bay Gas Power 3 CCPP relate to the combustion of fuel (natural gas) at the CCPP which will produce greenhouse gas emissions that will contribute to the global phenomenon of anthropogenic climate change. A Greenhouse Gas (GHG) inventory will be calculated for the proposed PRBG3 to quantify the effects of the Project on climate change.
Socio-economic	<ul style="list-style-type: none"> • Detailed overview of the socio-economic environment which will be impacted by the proposed CCGPP development and associated infrastructure.

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16

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SUMMARY OF POTENTIAL IMPACTS

Impact Report Specialist Studies	Assessment of issues
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Paleontological & Archaeological	<ul style="list-style-type: none"> No impacts on archaeological and palaeontological resources is expected in this project study area.
Noise Assessment	<ul style="list-style-type: none"> Increased noise levels in the vicinity of the plant

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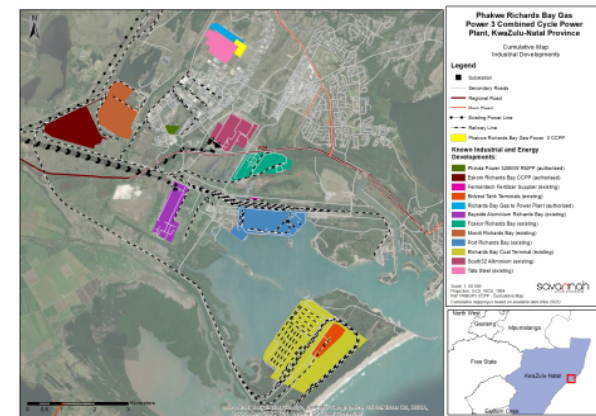
Impact Report Specialist Studies	Assessment of issues
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Climate Change Assessment	<ul style="list-style-type: none"> GHG emissions into the atmosphere that contribute to anthropogenic climate change
Visual Assessment	<ul style="list-style-type: none"> Impact on sensitive receptors and sense of place
Socio-Economic Assessment	<ul style="list-style-type: none"> Increase in the production and GDP, and Employment opportunities (economic) Impact on sense of place, presence of construction workers, social upliftment (social)
Traffic Assessment	<ul style="list-style-type: none"> Traffic congestion (construction) Noise and dust impacts due to traffic

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CUMULATIVE IMPACTS

- The approach in assessing cumulative impacts will be informed by the scale at which the impact is likely to occur, as well as surrounding developments.
- Developments considered as part of cumulative assessment:
 - Large-scale industrial developments within a 30km radius of the PRGP3 CCPP
 - Energy facilities located within a 30km radius of the proposed PRBGP3 CCPP
 - The assessment as part of the EIA phase will take into consideration both of the RMIPPPP and 3000MW gas to power procurement programmes (worst-case scenario).

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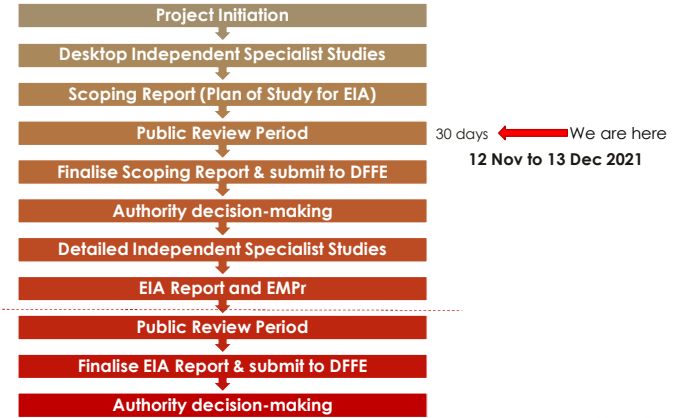
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CONCLUSIONS AND RECOMMENDATIONS

- The PRBGP3 is located in an industrial area with a limited development footprint
- The findings of the Scoping Report were based primarily on desktop assessments and site visits
- Based on this assessment, no environmental fatal flaws have been identified to be associated with the project at this stage in the process
- Therefore, there is no reason why the project cannot be evaluated further in a detailed EIA study
- Plan of Study for EIA is detailed in the Scoping Report, including specialist investigations to be undertaken

21

EIA PROCESS



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DISCUSSION

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WAY FORWARD & CLOSURE (Nicolene Venter)

24

WAY FORWARD

- Meeting notes will be distributed for verification together with the presentation
- Review and comment period ends **Monday, 13 December 2021**
- Final Scoping Report submission to DFFE (January 2022)

WHO TO CONTACT

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**ENVIRONMENTAL IMPACT ASSESSMENT AND
PUBLIC PARTICIPATION PROCESSES
FOR THE
PHAKWE RICHARDS BAY GAS-TO-POWER3 2000MW
COMBINED CYCLE POWER PLANT (CCPP) IN RICHARDS
BAY, KWAZULU-NATAL PROVINCE**

DFFE Reference Number:14/12/16/3/3/2/2117

**NOTES OF THE KEY STAKEHOLDER WORKSHOP
HELD ON THURSDAY, 9 DECEMBER 2021
VENUE: MICROSOFT TEAMS, VIRTUAL MEETING**

Notes for the Record prepared by:

Tammy Lee-Goddard

Savannah Environmental (Pty) Ltd

E-mail: publicprocess@savannahsa.com

*Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting.
Please address any comments to Savannah Environmental at the above address*

PHAKWE RICHARDS BAY GAS-TO-POWER3 2000MW CCPP LOCATED IN RICHARDS BAY, KWAZULU-NATAL PROVINCE

MEETING ATTENDEES (Alphabetically according to Company)

Name	Position
City of uMhlathuze	
Brenda Strachan	City Development Department - Spatial and Environmental Planning Team.
Zipho Zondo	Environmental Planning
Lindiwe Zonde	Electrical and Energy Services
Centre for Environmental Rights	
Gabriel Knott	Attorney
Department of Fisheries, Forestry and the Environment (DFFE)	
Portia Makitla	Control Biodiversity Officer
Auliciaj Maifo	Control Biodiversity Officer
Ayanda Mnyungula	KZN Forestry Branch
Thembalakhe Sibozana	Forestry Regulations and Support
Department of Water and Sanitation	
Sibango Lwandle	Environmental Specialist
Ziyanda Malibiji	Scientific Technician
Eskom	
Koogendran Govender	Gas and Renewable Chief Engineer
Ezemvelo KZN Wildlife	
Dominic Wieners	Principle Conservation Planner
Foskor (Pty) Ltd	
Khumbulani Buthelezi	Senior Manager: SHREQ
Groundworks (NPO)	
Avena Jacklin	Senior Manager: Climate and Energy Justice
King Cetshwayo District Municipality	
Nozipho Khathi	Air Quality Manager,
KZN Department of Economic Development, Tourism and Environmental Affairs	
Muzi Mdamba	Environmental Officer
Muzi Mthamba	
Nosipho Ktasi	Air Quality Intern
Richards Bay Clean Air Association (RBCAA)	
Sandy Camminga	Chairperson
Richards Bay Alloys	
Frans Schmidt	SHREQC Manager
Richards Bay Industrial Development Zone	
Sethabile Gcume,	Environmental Officer
Frans Schmidt	SHREQC Manager Richards Bay Alloys (RB IDZ1F)
Tembakazi Koali	Business Development and Support
Percy Langa	SHEQ Manager
Letifia Moodley	Investor Retention
Richards Bay Minerals – Rio Tinto	
Londi Mchunu	
South Durban Community Environmental Alliance	

Cassandra Schnoor	Environmental Project Officer: Oil, Gas and Energy
Transnet National Ports Authority	
Basil Ngcobo	Port Engineer
Lumko Ncapai	Sustainability specialist
Vuyo Keswa	Environmental Manager
Jabulani Sithole	Executive Manager Business Development Oil & Gas Infrastructure
Transnet Port Terminals – Richards Bay	
Lumka Khumalo	Communications Manager
Phakwe Group - Applicant	
Jordi Fernandez	Operations Manager
Unidentified Attendees (not registered their attendance on the Conversation Platform)	
Zakithi	
Sethabile Thabede	
Zainul Sheikh	
Savannah Environmental	
Jo-Anne Thomas	Director
Jana De Jager	Environmental Assessment Practitioner
Nicolene Venter	Public Participation and Social Consultant
Tamryn Lee Goddard	Environmental Consultant

APOLOGIES

Makhosi Mthembu – City of uMhlathuze

The list of invitees and the Attendance Record is attached as **Appendix A** to the workshop notes.

PRESENTATION

Nicolene Venter welcomed the attendees at the Key Stakeholder Workshop and thanked them for their attendance.

She presented the agenda and purpose of the meeting.

Jana de Jager presented the following:

- project description for the Phakwe Richards Bay Gas-to-Power3 2000MW CCPP project;
- the locality of the project site;
- the scoping and public participation processes followed to date;
- the environmental studies that have been undertaken; and
- a key summary of the results of the environmental studies undertaken.

Jordi Fernandez gave an overview of Phakwe Richards Bay Gas Power 3 as a company of Phakwe Group and their engagement in the renewable energy sector.

The presentation is attached as **Appendix B** to the workshop notes.

DISCUSSION SESSION

Question / Comment	Response
Frans Schmidt	
<p>The cumulative impact map was queried as presented in the project overview by stating that the location (indicated in blue on the locality map) for the proposed RBG2P3 is in the same area as the approved Chlor-Alkali Plant.</p> <p>Frans responded to the project team that it seems there are now two projects being proposed on the same site.</p>	<p>Jana de Jager responded that she was aware of the Chlor-Alkali project but was not certain if it falls within the IDZ and that this query would be addressed in the cumulative assessment as part of the EIA phase.</p> <p>Jo-Anne Thomas added that the area indicated as the RBG2P3 project is the authorized area for the RBG2P2 project (400MW Gas-to-power) and the area as indicated is correct for the RBG2P3 project.</p> <p>Jordi Fernandez responded to Frans's comment that the area indicated for the RBGP2 project site is the only project as indicated in blue on the locality map, and that the Chlor-Alkali authorized area does not fall within the RBGas2Power plant area.</p>
Percy Langa	
<p>Confirmed the query raised by Frans, stating that part of the area indicated in the blue polygon to the West is the Chlor-Alkali approved Gas project and that the cumulative map would need to be updated to indicate the correct study area.</p>	<p>Jana de Jager responded that the map would be updated and included in the final Scoping Report.</p>
Sandy Camminga	
<p>It was reiterated that, as mentioned at various meetings, Transnet cannot provide a clear answer or updated information as to where in the port the off take would be and what the pipeline infrastructure would look like.</p>	<p>Basil Ngcobo responded this matter needs to be posed and addressed by the Department of Mineral Resources and Energy (DMRE) as to where the consolidation lies.</p> <p>He added that the port only act as a vehicle / platform to receive and distribute the gas, and to supply the necessary infrastructure. The IPP would have to source the gas and the port would issue the required permits and facilitate the gas received at the port and the distribution thereof.</p>
<p>The floating Gas-to-Power and other Gas-to-Power applications cannot be excluded from the cumulative impact assessment as these projects are both currently in appeals process and therefore still a 'live' application.</p>	<p>Jana de Jager responded that authorised gas power development as well as existing heavy industries will be included in the cumulative assessment as part of the EIA. The inclusion of the floating gas power projects, although not authorised, will be looked into for the EIA phase.</p>

Question / Comment	Response
<p>The gas source for the facility needs to form part of the application and it was enquired for clarification purposes where would the gas be sourced from, the pipeline routes, and associated timeframes.</p>	<p>Jordi Fernandez responded that at this stage the source of fuel is not yet determined and that the fuel source could be transported by the proposed pipeline</p>
<p>Dominic Wieners</p>	
<p>Additional to Sandy Camminga's question for clarification on where the gas would be source from and how the gas would be excavated from the proposed keys. He commented that the excavation would fall within the jurisdiction of Transnet</p>	<p>Jo-Anne Thomas responded that this activity is not within Savannah Environmental's scope of work but that the question raised is an important issue that needs to be addressed and requested Transnet to provide information regarding this matter for inclusion in the EIA process as this issue has been raised on various platforms in the PP process.</p> <p>Basil informed the attendees that would not be excavating any gas and that the gas would most probably be imported from overseas. The gas would be brought in in LNG Vessels and would be either permanently store in the vessels at the berth. It is envisaged that new berths would have to be established to accommodate the number of LNG Vessels expected at the Port. The gas would be re-gasify for transporting it either by pipeline or road to the power plants. He noted that this matter would be followed up after the meeting with the relevant parties.</p>
<p>Khumbulani Buthelezi</p>	
<p>There is a concern with looking at the project from a site perspective in isolation and not considering the associated infrastructure and subsequent cumulative impacts on the environment. He noted that once the information from the above questions is obtained then only would the EIA contain meaningful input.</p> <p>The summary of the potential impacts as presented does not address the importance of mitigation strategies of these impacts in the Richards Bay area.</p>	<p>Jana de Jager responded that these questions would be addressed in the EIA phase by the various specialists and would also provide the appropriate mitigation measures for each potential negative impact.</p>

Question / Comment	Response
Sandy Camminga	
It was commented that it is important not to lose track of the issue regarding the evacuation of the gas and the regasification infrastructure, and the impacts associated with these features.	Jana de Jager acknowledged the comment, and that the evacuation of the gas would form part of Transnet's EIA application.
Avena Jacklin	
Depending on LNG imports, has climate change implications all along the supply chain from its extraction to production to distribution and storage with high risk of methane gas emissions been assessed? She commented that this impact should form part of the project's climate change impacts and cumulative impacts?	Jana de Jager responded that the climate change assessment to be undertaken as part of the EIA phase take on a life cycle view on the project such as the supply and distribution of the gas.
It was commented that the response does not answer the question as there are environmental impacts associated with the supply of LNG into our shores and that the process of obtaining the gas involves fracking and that it goes further than the source but involves the extraction phase, distribution, and utilization. All emissions need to be looked at from the entire supply chain.	Jo-Anne Thomas responded that the climate change specialist considers international best practice and standards and does look at the entire supply chain from a life cycle perspective as well as the cumulative impacts thereof. She informed the attendee that this comment would be submitted to the Air Quality Specialist to clarify their methodology as documented in the Scoping Report.
Avena also queried the potential impacts of displacement and replacement of existing livelihoods by a change of land use in the area and would a proper socio-economic impact study be conducted?	Jana de Jager responded that there would be no land-use change associated with this project as the project is located in the IDZ and the land has already been identified for Onoxius Industry. The comment regarding the impact of displacement would be submitted to the Socio-economic Specialist and to include it in their EIA Report.
Gabriel Knott	
It was commented that the impacts of a Floating Storage Regasification Unit (FSRU) facility or similar gas supply options need to be included in the cumulative assessment.	Jana de Jager noted the request and responded that this impact would be submitted to the specialists to include in their cumulative impact assessment.
Avena Jacklin	
The Needs and Desirability of the project needs to be reconsidered, as gas is not needed in the energy mix. The energy baseload can be met through other renewable processes. It was commented that the project did not fully explore alternatives that are safer, cleaner and more sustainable!	Jo-Anne Thomas responded that the Need and Desirability of the project would be addressed further in the EIA phase. The IRP includes the requirements for gas to form part of the energy mix to balance the renewable energy sector. Jordi Fernandez contested the statement that gas is not needed in the energy mix, as gas is part of the IRP 2019 that defines the energy mix

Question / Comment	Response
	required for the country and gas would be used to replace coal. Gas plants can supply energy during off peak times in the renewable energy sector.
<p>The IRP indicates that 3000MW in total for gas, yet Richard's Bay alone has 15,000MW worth of gas-to-power applications. How does this project consider and evaluate all the other applications in this area, let alone the country as whole?</p>	<p>Jo-Anne Thomas responded that Savannah Environmental is aware that the IRP has a cap of 3000MW until 2030 but are not sure of what could happen after 2030. There is no clarity on the best positions for gas projects at this point, but are aware of other applications, and these will be considered during the EIA phase as a number of EAs have been rejected by the Department.</p> <p>Jordi Fernandez responded that as a developer Phakwe is bringing its best proposal to the table for the benefit of the country but it is important to note that the decision lies with the Department and the government will decide on the allocated megawatts based on the defined capacities of the country and the procurement standards. There is a possibility that not all the megawatts would be approved but the application for EA for this project will be authorized up to the limit defined. Phakwe acknowledges these limits and the implications.</p>
Gabriel Knott	
<p>It was requested that a slide listing the 'assessment of issues' in terms of Climate Change Assessment as 'GHG emissions into the atmosphere that contribute to anthropogenic climate change' be included in the next presentation. It is believed that these could be expanded on further to include all elements that need to be assessed per the DFFE's national guidelines for consideration of climate change impacts which is currently in draft form.</p>	<p>Jana de Jager acknowledged the request and comment and said that these would be considered in the EIA phase.</p>
Sibango Lwandle	
<p>It was stated that the 32m regulated zones needs to be considered when dealing with water resources, thereby "overlooking" the Department of Water and Sanitation (DWS) "stricter" statutes. The project team was requested to consider the DWS regulatory requirements as well in the specialists' assessments of impacts related to water resources.</p>	<p>Jana de Jager responded that these regulations are considered, i.e. the 500-meter buffer around wetlands and that this would be considered as part of the assessment process in the EIA phase.</p>

Question / Comment	Response
<p>Avena Jacklin</p> <p>As an alternative fuel, investing in gas-to-power infrastructure is expensive and would only create local jobs in its construction phase. Gas infrastructure will have to be decommissioned and it does not fit into the country's ambitions for a just transition to a low carbon economy and one that develops a safe and sustainable local economy. As an independent EAP, Savannah Environmental had not covered this aspect adequately.</p>	<p>Jo-Anne Thomas responded that the EIA process is currently only in the scoping phase however appreciate comments raised which would be forwarded to the independent specialists for adequate assessment in the EIA phase. As mentioned earlier, gas is part of the energy mix for South Africa and for the just transition to low carbon economy, this would be further investigated and included in the EIA assessment. This comment will also be submitted to the socio-economic specialist to address the issue regarding job creation and just transition.</p> <p>Jordi Fernandez responded that he disagreed with the concern raised regarding the lack of job creation that the project would contribute to the economy. He informed the attendees that jobs would be created during the construction, and during the operational phase jobs would be created in the form of maintenance, with various levels of skill sets. It was further elaborated that the goal of the country is to be completely decarbonized by the year 2050, and that although not included in the presentation, Phakwe Richards Bay Gas-to-Power Plant intends to incorporate Hydrogen into the gas mix and eventually move to 100% Hydrogen when it is fully available to use. At this point the facility will have zero carbon emissions.</p> <p>Jordi Fernandez responded that the Green Hydrogen Plans are based on the plans of South Africa available to the public and in terms of timelines, Phakwe's timelines are based on the targets set by South African Institutions. Phakwe RBGP3 will be users of the power of GH when available. The timelines will therefore be based on when plans for availability of green hydrogen becomes publicly available.</p>
<p>In terms of the plan to move to GHG, what are the definite timelines for this plan and what would it entail in terms of additional infrastructure to move to GHG.</p>	<p>Jordi Fernandez responded that according to the information given by the gas turbine provider, the technology that are providing can operate to up to 20% hydrogen mix with natural gas and would be able to evolve and adapt to accommodate 100% hydrogen with only small engineering changes without the whole turbine being replaced i.e. minor technology upgrades.</p>

Question / Comment	Response
	<p>Phakwe's intentions are to be 50% GHG by 2035 and be 70 or more over 2040 depending on the availability of GHG resource and technology.</p> <p>In terms of the availability of GHG, noting that there are intensive talks and prospects for South Africa in the GHG economy and how South Africa would evolve into this production sphere, which Phakwe would like to embrace. However, this is not in Phakwe's hands. The timelines are uncertain and are depended on the evolution of GHG in South Africa, however Phakwe is committed to utilizing GHG production in the local sphere.</p>
<p>Could the plans and timelines for the move to GHG be shared and put in writing and included with the meeting notes?</p>	<p>Jordi Fernandez responded that the Green Hydrogen Plans are based on the plans of South Africa available to the public and in terms of timelines, Phakwe's timelines are based on the targets set by South African Institutions. PRBGP3 will be users of the power of GH when available. The timelines will therefore be based on when plans for availability of green hydrogen becomes publicly available.</p>
<p>Gabriel Knott</p>	
<p>The reference to local unskilled jobs, which are primarily available to local communities during construction is noted. However, thereafter, unskilled jobs during operation phase are minimal as these jobs would be mainly reserved for energy engineers and similar. It was requested that this matter be adequately addressed in the socio-economic assessment for the EIA.</p>	<p>Jana de Jager responded that Savannah Environmental take note of the request and confirm that it would be adequately addressed in the Socio-economic assessment of the EIA. The Socio-economic Specialists will consider the figures related to unskilled and skilled labor during the construction and operational phase.</p>
<p>Avena Jacklin</p>	
<p>What is the estimated volume of water usage for cooling and heating, and where will the extraction and discharge points be located?</p>	<p>Jordi Fernandez estimated an average of 1 000 000 m³ of water per year and the source of water would be potable water. The plant is located in the Richards Bay IDZ and the water would be provided by the Richards Bay IDZ for the plant based on their allocation. Other sources of water may become available as the Municipality is planning a water recycling plant for water being used from industry. When this becomes available, Phakwe can look at using this water source and not that of potable water.</p> <p>In terms of discharge of water, the Richards Bay IDZ have a sewer system to evacuate the effluent which is connected to the municipality</p>

Question / Comment	Response
	<p>effluent system. This way no water will be discharged to the soil. The effluent the plant would provide is potable water with a high concentration of natural salts present in potable water. The effluent concentration will be maintained at the limits defined by the municipality for salts. In this way there will be no polluting.</p>
Ayanda Mnyungula	
<p>A concern was raised over the mangroves in the Richards Bay area and the biodiversity living in these mangroves and the indirect impact both short term and long term impacts and these would need to be assessed in the EIA phase.</p>	<p>Jana de Jager confirmed that the terrestrial biodiversity and aquatic specialists would be assessing these impacts and provide adequate mitigation strategies for any negative impacts identified.</p>
Sibongo Lwandle	
<p>It was requested that the EAP consult with the Richards Bay IDZ whether they have the spare water capacity for the project or does the Richards Bay IDZ have their own water purification plant they are running. The DWS would like a confirmation of the water source and what is the capacity thereof for the project. Secondly, is the water being used for the cooling process? The DWS would like an assessment of the resultant temperature of the water once it is cooled as such that it can be discharged into the system.</p>	<p>Jana de Jager de Jager responded and acknowledged that aspect of confirmation of water availability from the IDZ and the temperature of the effluent will be considered.</p> <p>Jordi Fernandez clarified that in terms of the water being cooled, the cooling system is a closed system (circuit) where it is heated and cools down and heated and cools down. Therefore, the effluent does not consist of hot water. He mentioned that the turbine is cooled by air.</p>
Avena Jacklin	
<p>What is the estimated heat output from the combustion process based on similar operations?</p>	<p>Jordi Fernandez responded that the estimated temperature inside the turbine is approximately 1 600 or 1700 degrees. This varies in different places but when the heat arrives to heat the water in the steam circuit it is already lower but hot enough to convert the water to steam in the close circuit. The tower that discharges the steam to the atmosphere is above the cooling system so this would be lower, but he does not have the exact temperature. This would be checked and clarified.</p>
<p>Clarifying the question pertaining to the heat output, it was referred to what is discharged into the atmosphere. Would this be considered in the air quality assessment?</p>	<p>Jana de Jager, as alluded to by Jordi Fernandez, that the air temperature at the exit of the stacks would be considered as part of the air quality assessment.</p>

Conversation Function Notes and the delegate had to leave the meeting and agreed that a response can be provided in the Workshop Notes

Question / Comment	Response
Dominic Wieners	
Switching to green hydrogen raises further concerns that there is currently no infrastructure or planned infrastructure for import or evacuation from the port, should it be found to be best imported there.	<p>Jordi Fernandez: The development of the infrastructure to deliver the green hydrogen to the customers will be part of the Green Hydrogen Economy strategy and plans, that not only is considering the production, but also the transport and distribution of the hydrogen produced.</p> <p>When time arrives and H2 becomes available PRBGP3 will only focus on the last-mile connection from the plant to the distribution site. Given that hydrogen can use the same pipeline than natural gas and will be mixed with it, most probably PRBGP3 will be using the existing last-mile gas connection to bring the hydrogen into the plant.</p>

WAY FORWARD AND CLOSURE

Nicolene Venter asked whether there were any other environmental-related comments that the attendees would like to raise before closing the KSW officially. It was noted by all attendees that no further comments needed to be raised at this time.

She informed the attendees that they can submit any further written comments via e-mail, and she reminded the attendees that the Scoping Report's commenting period is ending on Monday, 13 December 2021 and that it would be appreciated if written comments can be received before or on the 13th of December 2021.

The attendees were also informed that should they not have any written comments, they can also email or send a formal letter stating that the content of the report was reviewed, and no written comments would be submitted.

She thanked the participants for making time to attend the KSW and for their valuable inputs into the EIA and public participation process.

The meeting was closed at 11h00.

LIST OF ABBREVIATIONS AND ACRONYMS

BID	Background Information Document	FSRU	Floating Storage Regasification Unit
CCPP	Combined Close Power Plant	GH	Green Hydrogen
DFFE	Department of Forestry, Fisheries, and the Environment	GHG	Greenhouse Gas
DMRE	Department of Mineral Resources and Energy	IDZ	Industrial Development Zone

DWS	Department of Water and Sanitation	IPP	Independent Power Producer
EA	Environmental Authorisation	IRP	Integrated Resource Plan
EAP	Environmental Assessment Practitioner	KSW	Key Stakeholder Workshop
EIA	Environmental Impact Assessment	KZN	KwaZulu Natal
FGM	Focus Group Meeting	LNG	Liquid Nitrogen Gas

APPENDIX A: Attendance Record

APPENDIX A: Attendance Record		
Meeting Title	RICHARDS BAY GAS-TO-POWER3 2000MW CCPP: Invitation to Key Stakeholder Workshop	
Total Number of Participants	39	
Meeting Start Time	12/9/2021, 8:46:47 AM	
Meeting End Time	12/9/2021, 3:20:47 PM	
Meeting Id	d17fef67-9f60-467c-9634-ee628fa94f92	
Full Name	Join Time	Leave Time
Aulicia Maifo	12/9/2021, 9:06:07 AM	12/9/2021, 10:53:53 AM
Avena Jacklin	12/9/2021, 9:38:18 AM	12/9/2021, 10:53:42 AM
Ayanda Alex Mnyungula	12/9/2021, 9:03:26 AM	12/9/2021, 10:41:58 AM
Basil Ngcobo	12/9/2021, 9:00:26 AM	12/9/2021, 10:39:52 AM
Brenda Strachan	12/9/2021, 9:06:09 AM	12/9/2021, 10:53:38 AM
Cassandra Schnoor	12/9/2021, 9:01:47 AM	12/9/2021, 10:53:42 AM
Dominic Wieners	12/9/2021, 9:06:48 AM	12/9/2021, 10:26:43 AM
Franz Schmidt	12/9/2021, 9:05:58 AM	12/9/2021, 10:53:42 AM
Gabrielle Knott	12/9/2021, 9:16:12 AM	12/9/2021, 10:53:47 AM
Jabulani Sithole	12/9/2021, 9:39:45 AM	12/9/2021, 10:53:54 AM
Jana de Jager	12/9/2021, 8:50:06 AM	12/9/2021, 10:53:48 AM
Jo-Anne Thomas	12/9/2021, 8:49:34 AM	12/9/2021, 10:53:47 AM
Jordi Fernandez	12/9/2021, 9:03:27 AM	12/9/2021, 10:53:52 AM
Khumbulani Buthelezi	12/9/2021, 9:17:38 AM	12/9/2021, 12:42:16 PM
Koogendran Govender	12/9/2021, 9:05:32 AM	12/9/2021, 1:22:29 PM
Letitia Moodley	12/9/2021, 8:56:33 AM	12/9/2021, 10:53:40 AM
Lindiwe Zondi	12/9/2021, 9:03:55 AM	12/9/2021, 10:38:29 AM
Lumko Ncapai	12/9/2021, 9:00:42 AM	12/9/2021, 11:06:31 AM
Mchunu, Londi	12/9/2021, 9:02:42 AM	12/9/2021, 9:09:12 AM
Muzi Mdamba	12/9/2021, 9:08:57 AM	12/9/2021, 10:51:15 AM
Nicolene Venter	12/9/2021, 8:47:51 AM	12/9/2021, 10:54:05 AM
Nondumiso Bulunga	12/9/2021, 8:47:15 AM	12/9/2021, 9:28:26 AM
Nozipho Khathi	12/9/2021, 9:06:36 AM	12/9/2021, 10:53:48 AM
Percy Langa	12/9/2021, 9:01:44 AM	12/9/2021, 10:53:44 AM
Portia Makitla	12/9/2021, 9:09:35 AM	12/9/2021, 10:38:19 AM
Sethabile Thabede	12/9/2021, 9:39:33 AM	12/9/2021, 10:54:14 AM
Sandy Camminga	12/9/2021, 9:22:42 AM	12/9/2021, 10:24:33 AM
Seoka Lekota	12/9/2021, 9:47:44 AM	12/9/2021, 9:51:28 AM
Sethabile Gcume	12/9/2021, 9:03:09 AM	12/9/2021, 10:53:52 AM
Sibango Lwandle	12/9/2021, 8:58:17 AM	12/9/2021, 10:53:51 AM
Tamryn Lee Goddard	12/9/2021, 8:46:47 AM	12/9/2021, 10:53:48 AM
Tembakazi Koali	12/9/2021, 9:01:49 AM	12/9/2021, 10:53:50 AM
Thembalakhe Sibozana	12/9/2021, 8:56:58 AM	12/9/2021, 10:57:38 AM
Vuyo Keswa	12/9/2021, 9:22:37 AM	12/9/2021, 10:53:39 AM
Zainul Shiekh	12/9/2021, 8:58:21 AM	12/9/2021, 8:59:40 AM

Zakithi	12/9/2021, 9:04:08 AM	12/9/2021, 9:26:43 AM
Zipho Zondo	12/9/2021, 8:54:19 AM	12/9/2021, 3:20:47 PM
Ziyanda Malibiji	12/9/2021, 9:02:28 AM	12/9/2021, 10:53:55 AM

Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant, Richards Bay, Kwazulu-Natal Province

Key Stakeholder Workshop
December 2021



AGENDA

- Welcome and Introduction
- Meeting Conduct
- Purpose of the Meeting
- Introduction and Project Overview
- Scoping Assessment & Findings
- Discussion
- Way Forward



1

2

CONDUCT OF THE MEETING

- Recording of Meeting
- Please stay on mute during the presentation
- Register attendance on Chat function (name, surname & affiliation)
- Please raise your hand to indicate a comment or question to raise
- Questions submitted in Chat function will be responded at the end of the presentation



PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant (CCPP)
- Summary of the **Environmental Impact Assessment (EIA) & Public Participation** being undertaken
- Present a summary of key environmental findings as documented in the **Scoping Report**
- Provide stakeholders the opportunity to seek clarity regarding the project and environmental assessment
- Obtain and record comments for inclusion in the **Final Scoping Report** to be submitted to the DFFE



3

4

PROJECT OVERVIEW (Jana de Jager)

5

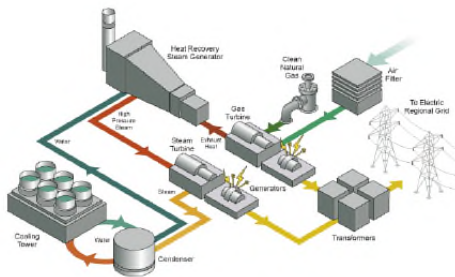
PROJECT OVERVIEW

- **Applicant:** Phakwe Richards Bay Gas Power 3 (Pty) Ltd
- **Project Description:** up to 2000MW combined cycle gas to power plant operated on natural gas or a mixture of natural gas and hydrogen
- **Location:** Erf 16820, Erf 16819, Erf 1/16674, and Subdivision of Erf 17442, Richards Bay IDZ Phase 1F, Richards Bay, KwaZulu Natal.

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Combined Cycle Gas to Power Technology



- CCGP is one of the most efficient power generating technologies to convert either gas or potentially a mixture of gas and hydrogen to mechanical power or electricity.
- Using a blend of hydrogen gas as a fuel source for turbine operation benefits the reduction in carbon emissions pre-combustion (if green or similarly sourced hydrogen is used), as well as during combustion.

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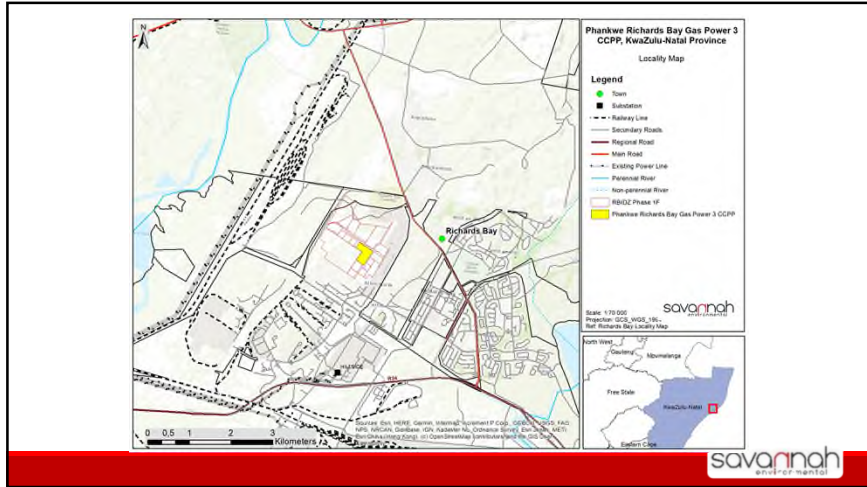
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OVERVIEW OF THE SITE

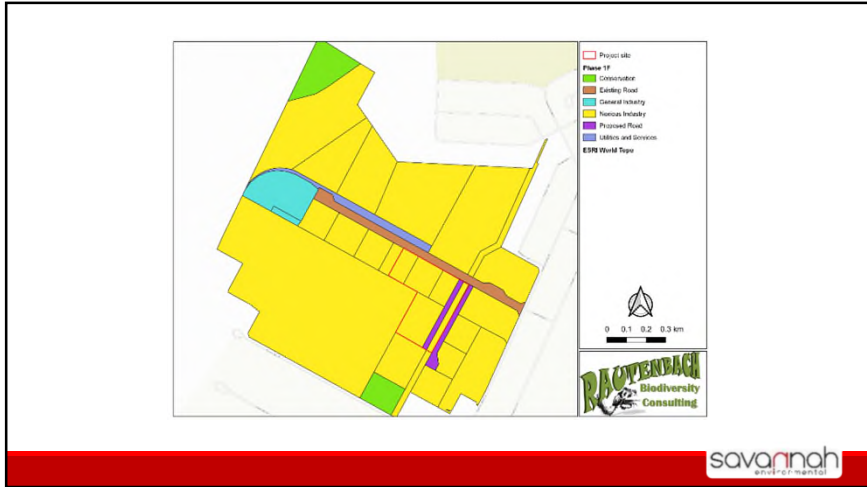
- Located in an industrial area (Richards Bay IDZ Phase 1F) with existing heavy industries
- Zoned for noxious industry (City of uMhlatuze land use zoning)
- Vegetation and ecological conditions onsite have been previously transformed
- Richards Bay IDZ has been authorised to infill wetlands onsite (DFFE Ref No.: 14/12/16/3/3/665)
- The site will be accessed via existing roads within the IDZ Phase 1F (already approved through an EIA undertaken for the Phase 1F infrastructure)

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ENVIRONMENTAL IMPACTS/SENSITIVITIES IDENTIFIED

- The following has been identified within the Scoping Phase:
 - Terrestrial Biodiversity Impacts (fauna & flora);
 - Wetland and Aquatic Impacts;
 - Palaeontological & Archaeological Impacts;
 - Air Quality Impacts (incl. human health related impacts);
 - Climate Change Impacts;
 - Noise Impacts;
 - Visual Impacts;
 - Socio- Economic Impacts

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WORLD OF IMPACTS

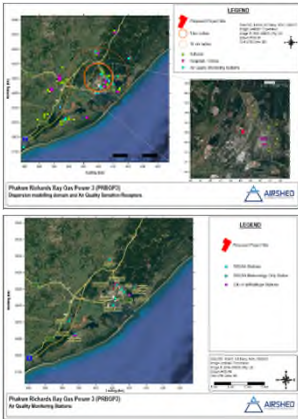
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Terrestrial Biodiversity & Aquatic Assessments

- Terrestrial Ecology
 - Site was found to be degraded during preliminary site investigation
 - Fauna and flora of conservation concern may be present although unlikely
- Aquatic
 - IDZ offset wetlands are located within the development area – earmarked to be offset within other areas as part of the RBIDZ development

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WORLD OF IMPACTS

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Air Quality Assessment

- Baseline air quality information summarised from the available air quality monitoring stations (RBCAA & City of uMhlatuze).
- Sensitive receptors identified
- Impact to ambient air quality will be simulated during EIA phase

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Noise Assessment

- Potential noise sensitive receptors were identified
- Ambient sound levels measured within industrial area and closest residential area

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Visual Impact Assessment

- The viewshed analyses will be undertaken from the project components height above ground level, taking into account the industrial character of the landscape
- The zones of visual influence of the proposed PRBG3 will be modelled

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SCOPING SPECIALIST ASSESSMENTS

Specialist Study	Approach/Methodology
Heritage and Paleontological	<ul style="list-style-type: none"> • No heritage resources of significance were recorded within the study site.
Climate Change	<ul style="list-style-type: none"> • Although the Phakwe Richards Bay Gas Power 3 CCPP proposes to progressively reduce carbon emission over time with the increased presence of green hydrogen as part of the fuel mix, climate change impacts associated with the development of the Phakwe Richards Bay Gas Power 3 CCPP relate to the combustion of fuel (natural gas) at the CCPP which will produce greenhouse gas emissions that will contribute to the global phenomenon of anthropogenic climate change. A Greenhouse Gas (GHG) inventory will be calculated for the proposed PRBG3 to quantify the effects of the Project on climate change.
Socio-economic	<ul style="list-style-type: none"> • Detailed overview of the socio-economic environment which will be impacted by the proposed CCGPP development and associated infrastructure.

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SPECIALIST ASSESSMENTS

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SUMMARY OF POTENTIAL IMPACTS

Impact Report Specialist Studies	Assessment of issues
Terrestrial Biodiversity Assessment (fauna & flora);	<ul style="list-style-type: none"> Loss of vegetation Loss of faunal species Potential habitat fragmentation Infestation of alien species
Wetland and Aquatic Assessment	<ul style="list-style-type: none"> Altered hydrology Impaired water quality Impeded ecological services
Paleontological & Archaeological	<ul style="list-style-type: none"> No impacts on archaeological and palaeontological resources is expected in this project study area.
Noise Assessment	<ul style="list-style-type: none"> Increased noise levels in the vicinity of the plant

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SUMMARY OF POTENTIAL IMPACTS

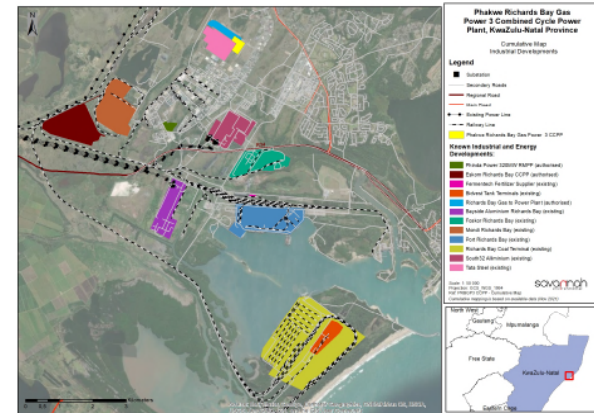
Impact Report Specialist Studies	Assessment of issues
Air Quality Assessment	<ul style="list-style-type: none"> Potential to impact on the ambient air quality of the area through elevated daily PM10 concentrations (during construction) Contribute NO_x, CO, SO_x and VOCs to the existing baseline concentrations
Climate Change Assessment	<ul style="list-style-type: none"> GHG emissions into the atmosphere that contribute to anthropogenic climate change
Visual Assessment	<ul style="list-style-type: none"> Impact on sensitive receptors and sense of place
Socio-Economic Assessment	<ul style="list-style-type: none"> Increase in the production and GDP, and Employment opportunities (economic) Impact on sense of place, presence of construction workers, social upliftment (social)
Traffic Assessment	<ul style="list-style-type: none"> Traffic congestion (construction) Noise and dust impacts due to traffic

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CUMULATIVE IMPACTS

- The approach in assessing cumulative impacts will be informed by the scale at which the impact is likely to occur, as well as surrounding developments.
- Developments considered as part of cumulative assessment:
 - Large-scale industrial developments within a 30km radius of the PRGP3 CCPP
 - Energy facilities located within a 30km radius of the proposed PRBGP3 CCPP
 - The assessment as part of the EIA phase will take into consideration both of the RMIPPPP and 3000MW gas to power procurement programmes (worst-case scenario).

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CONCLUSIONS AND RECOMMENDATIONS

- The PRBGP3 is located in an industrial area with a limited development footprint
- The findings of the Scoping Report were based primarily on desktop assessments and site visits
- Based on this assessment, no environmental fatal flaws have been identified to be associated with the project at this stage in the process
- Therefore, there is no reason why the project cannot be evaluated further in a detailed EIA study
- Plan of Study for EIA is detailed in the Scoping Report, including specialist investigations to be undertaken

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EIA PROCESS



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DISCUSSION

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WAY FORWARD & CLOSURE (Nicolene Venter)

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WAY FORWARD

- Meeting notes will be distributed for verification together with the presentation
- Review and comment period ends **Monday, 13 December 2021**
- Final Scoping Report submission to DFFE (January 2022)

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