



mineral resources
& energy

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ISICWANGCISO SOLAWULO LWEGESI 2024

Isalathiso

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ISIHWANKATHELO

UMzantsi Afrika unikezela ngoninzi lwemithombo yamandla okuqala aphuhliswa ngokorhweba kude kube ngoku uqhuba ukukhula koqoqosho nophuhliso loluntu. Izibaso zezimbiwa ezifana namalahle, iyureniyamu, izibaso zolwelo negesi zidlala indima ebaluleke kakhulu kuphuhliso loqoqosho-ntlalo lwamazwe amaninzi kwilizwe jikelele. Imithombo yamandla okuqala kufuneka enze imali ngendlela efanelekileyo kubume bemeko yendawo. Ukusetyenziswa okunempumelelo kwemithombo yonke yamandla enokwenzeka kwiinjongo zorhwebo kubalulekile kukukhula kuqoqosho oluzinzileyo nakuphuhliso.

Ukhuseleko lwamandla sisithako esisiseko kukuzinza nakukukhula koqoqosho. URhulumente kufuneka agqalisele kwinjongo yobuchule engundoqo ukuqinisekisa ukhuseleko lwamandla, ukuqinisekisa ubukho kwemithombo yamandla nofikelelo kwiinkonzo zamandla ngendlela yokuba nakho ukuhlawula nezinzileyo, ekubeni kuqinisekiswa ukunciphisa iimpembelelo zommandla ezichazeneyo ezinxulumeneyo.

IsiCwangciso soLawulo lweGesi (GMP) songenza kwimigaqo yamandla akhoyo njengokuzibandakanya kwindlela yenkqubo yokucwangcisa amandla ahlangeneyo. Isicwangciso segesi sichaza indima yegesi yemvelo kwimeko yomxube wamandla nokubonelela ulawulo lomgaqo kumashishini. Ekuvunyweni kokugqibela, kuya kubonelelwa ngendleko yesiseko samandla egesi sexesha elide, ngaphaya kwesixokelelwano sexabiso sokubonelela igesi.

Umda wayo uncitshiswe kukuveliswa kumantla omlambo nakwimisebenzi enxulumeneyo (kungaqukwanga ukuhlolwa) nothungelwano lokugqithiselwa kumphakathi womlambo (kungaqukwanga imbonakalo enjengomnatha).

Inkqubo eyamkelweyo liSebe ekuphuhliseni esi sicwangciso kukwenza icandelo legesi elindelekileyo, kusekelwe kwimfuno yegesi ebonisiweyo njengoko iinguqulelo zelizwe kwikhabhoni ephezulu zincitshiselwa kwikhabhoni ephantsi encitshiselwa kubuchwepheshe ekubeni kuziziswa ukhuseleko lwamandla ukwanelisa iprofayile yamandla yoqoqosho lezorhwebo.

Iziphumo ezinzulu zalo msebenzi womfuziselo ziqulethwe kwicandelo lesi-6 apha. Icandelwana lesi-6.5 linika iinkcukacha zemithombo yegesi nesiseko ezifunwayo ukufezekisa imfuno yeendawo eziphakathi kwelizwe nezisemanxwemeni ezibonisiweyo.

INTSHAYELELO NEMVELAPHI

Inkqubo yokusebenza kwamasebe kwinqanaba lesizwe igunyazisa ukuba kuveliswe iimigaqo yecandelo, umthetho nemimiselo njengoko kuchazwa ngumGaqa-siSeko woMzantsi Afrika. Imigaqo yecandelo ifuna

ukuba ilungelelane nesiCwangciso soPhuhliso seSizwe(NDP) nembono yobuchule embaxa ephelisa ubuhlwempu, ukunciphisa ukungalingani nokunciphisa ukungaphangeli ngesiqingatha ngowama-2030..

Isahluko sesi-4 se-NDP sigxininisa ukuba uMzantsi Afrika uyile imigaqo nezicwangciso ukuphucula imeko yamandla elizwe nezinye iindlela zokunciphisa ikhaboni ephezulu kubuchwepheshei bamandla. Igesi namandla ahlaziyekileyo kufuneka zihlolwe njengezixhobo zomgaqo enzingundoqo nokucwangcisa okubalulekileyo. ISebe leziMbiwa naMandla (DMRE) linegunya lomgaqo-siseko lokwenza nokuzalisekisa imigaqo yamandla nezimbiwa ehlangeneyo ukuphucula nokukhuthaza ukuzalisa imali kwimigodi nakwicandelo lamandla.

Umthetho ukhoyo kwicandelo legesi kumThetho weGesi (UmThetho onguNombolo wama-48 wowama-2001). Iinjongo zalo mThetho zilungelelaniswa nePhepha leNgxelo likaRhulumente lowe-1988 kumGaqo waMandla. Umthetho okwamisela isakhelo solawulo lesizwe kwishishini lwegesi ehanjiswa ngemibhobho.

Kwixesha lokuphuhlisa isiCwangciso soLawulo lweGesi (GMP), umThetho ujongene nesilungiso. UmThetho wesiLungiso ufuna ukulungisa iziphako, ukungenzi neminye imiceli-mngeni efunyenweyo ngexesha lokuzalisekisa umThetho. Ngoko umthetho ulindeleke ukuba womelenze inkxaso nokukhuthaza ukuthobela kwicandelo legesi.

I-GMP yazisa uninzi lwemithombo yamandla okuqala yoMzantsi Afrika, ukuba ukwenza imali kungaqhuba kukhula koqoqosho, uphuhliso loluntu nenzuzo yelizwe. Izibaso zezimbiwa ezifana namalahle, iyureniyamu, izibaso zolwelo negesi zidlala indima enzulu kuphuhliso loqoqosho-ntlalo lwesizwe. Urhulumente uzibophelele ukwenza ezi zimbiwa ngendlela efanelekileyo yobume bemeko ekubeni eqinisekisa ukhuseleko lokubonelela igesi. Ukusetyenziswa okunempumelelo kwemithombo yamandla yonke enokwenzeka kwiinjongo zorhwebo kubalulekile kukukhula koqoqosho oluzinzileyo nakuphuhliso.

Ukhuseleko lwegezi sisiseko kukukhula koqoqosho oluqukeneyo. URhulumente kufuneka agqalisele kwiinjongo yobuchule engundoqo ukuqinisekisa ukhuseleko lwamandla, ukuqinisekisa ubukho kwemithombo yamandla nofikelelo kwiinkonzo zamandla ngendlela yokuba nakho ukuhlawula nezinzileyo, ekubeni kuqinisekiswa ukunciphisa iimpembelelo zommandla ezichazeneyo ezinxulumeneyo.

I-GMP yongenza kwimigaqo yamandla ekhoyo njengenguqulelo zesizwe kwinkqubo yokucwangcisa amandla ahlangeneyo.

2. ISICWANGCISO SOLAWULO LWEGESI KWIMEKO

2.1 linjongo zesiCwangciso sokuLawula iGesi

I-GMP ichaza indima yegesi yemvelo kwimeko yomxube wamandla kwaye inika ulawulo lomgaqo kumashishini. Isicwangciso sicinga ngendima enzulu yokuba igesi yemvelo idlala indima kuqoqosho lonke lelizwe kwaye iceba isiseko esilindelekileyo esifunekayo kulungiselelo lwegesi, kubuncinane kwisisekelo sendleko kumandla nakumacandelo amashishini nezithuthi, isicwangciso sibonelela indleko yesiseko samandla egesi sexesha elide, kwaye sisicwangciso esininzi esinenjongo sokuphumelela ezi njongo zininzi zilandelayo :

- Ukuqinisekisa ukuba isibonelelo segesi sikhuselekile ngeenketho zokubonelela ezingafani kwiimarike zasekhaya nezamazwe ngamazwe, ekubeni kuncitshiswa zonke iindleko sokubonelela nokutyhileka kwimali yamanye amazwe. Ukubonisa ukubonelela kusekelwe kwimfuno elindelweyo kwixesha elizayo.
- Ukuququzela uthungelwano lwesiseko samandla esiphendulayo, esikhuphisanayo nesifanelekileyo (amancedo ogcino lwegesi, amancedo okungeniswa elizweni kwegesi yemvelo ecwengileyo (LNG), uthungelwano loluhlu lwemibhobho nemizi-mveliso nenkqubo yokusebenzisa ubushushu ukuguqula igesi yemvelo yolwelo ukuze kube lula ukuyihambisa nokuyisasaza) eya kwandisa okwalapha, ekubeni ngaxesha-nye kusenziwa imisebenzi nokukhulisa uqoqosho.
- Ukuchonga oomahlulelane abanobuchule kwi-Southern African Development Community (SADC) ukuvula imfuno yegesi ekhaya nakwisithili.
- Ukuqinisekisa ukuba iziphiwo zommandla nobutyebi bemvelo ziyakhuselwa kwaye zandiswa ngokuqhubekayo ngobuchwepheshe bamandla obucocekileyo.
- Ukumisela iinketho zesiseko zegesi ezomeleleyo kwimeko engaqinisekiswa yemfuno nokunokwenzeka kwamva kwinguqulelo yezibaso ezicocekileyo .

I-GMP isebenza njengesixhobo somgaqo, sibonelela indlela yezigqibo zobuchule, zopolitiko neziko eziya kukhokela ucwangciso zokuzalisa imali yeshishini legesi nokuzalisekiswa okulungelelanisiweyo.

Ukukhula koqoqosho lwegesi kulindeleke ukuba kuphucule ukhuseleko lokubonelela amandla ngokungafani kwemithombo yamandla apho uqoqosho luthembele kukukhula. Igesi yemvelo njengomthombo wokuvelisa amandla inganyusa uxinzelelo lwemfuno yesibonelelo sombone kwixesha elifutshane neliphakathi njengokuba abaxumi bombane beya kuba neenketho zokuguqukela kwigesu yemvelo njengegalelo kwimisebenzi yabo.

I-GMP iya kuqinisekisa ukuba imfuno yegeasi yemvelo yelizwe ilawulwa ngokufanelekileyo kwaye isibonelelo samandla esibanzi xa igesi yemvelo inokuba yinketho ethembisayo kwiimarike zasekhaya

nezamazwe ngamazwe apho sikhuselekile, ngokulandelayo kuququzelelwe uthungelwano lwesiseko samandla esiphendulayo, esikhuphisanayo nesifanelekileyo (amancedo ogcino lwegesi, igesi yemvelo yolwelo (LNG) amancedo angena elizweni, uthungelwano loluhlu lwemibhobho nemizi-mveliso nenkqubo yokusebenzisa ubushushu ukuguqula igesi yemvelo yolwelo ukuze kube lula ukuyihambisa nokuyisasaza) eya kwandisa okwalapha, ekubeni ngaxesha-nye kusenziwa imisebenzi nokukhulisa uqoqosho.

2.2 Umda we-GMP

I-GMP inqamleza kumalungu esixokelelwano sexabiso lwegesi amantla omlambo, kumphakathi womlambo nakumazantsi omlambo..

Umda wesicwangciso uncitshiswe kukuveliswa kumantla omlambo nakwimisebenzi enxulumeneyo (kungaqukwanga ukuhlolwa) nothungelwano lokugqithiselwa kumphakathi womlambo (kungaqukwanga imbonakalo enjengomnatha) kwisixokelelwano sexabiso. .

Isicwangciso sicinga ngetopoloji yegesi yemvelo kumantla omlambo, kumphakathi womlambo nakumazantsi omlambo, kwisiseko sokubonelelwa/kuveliswa kwegesi nakwisiseko sokukgeniswa kwilizwe kwegesi kuthingelwano lokugqithisela langaphakathi komlambo nakwuthungelwano lokusasazwa kumazantsi omlambo.

2.3 INdima yeGesi

Ukwenziwa kwemali yegesi yemvelo kusize utshintsho olubonakalayo kumazwe amanzi okubangele ukuzalisa kwemali yenkunzi kwisiseko segesi nakwingeniso evela kurhwebo oluthunyelwa kwamanye amazwe. Amanye amazwe, kuqatshelwa abavelisi abancinane, basebenzisa igesi yemvelo yabo, kudityaniswa nokungeniswa elizweni kwegesi njengezibaso ukwandisa ukuveliswa kombane . Amazwe asebenzisa igesi njengegalelo lomthombo wamandla kukuveliswa kwamandla abone ukuveliswa kombane kukhula ngokukhawuleza malunga namaxesha amathathu (3 kwiminyaka elishumi (10) edlulileyo kunalawo angenakho ukusebenzisa igesi¹.

Igesi yemvelo yenye yezinto eziphambili zamandla ehlabathi jikelele. Ukusetyenziswa okuliqela lokwenza imali kumandla, kwishishini elikhulu nakumacandelo ezithuthi. Igesi eyimvelo ihlanganiswa phakathi kweendlela ezitshiphu zamandla ezikhoyo kwindawo zokuhlala zabaxhasi apho isiseko sihambisa loo gesi endaweni. Ikwatshisa ngokucocokileyo kwaye zizibaso zezimbiwa ezikhula ngokukhawuleza (IEA, 2021). Kwihlabathi jikelele, ukusetyenziswa kwegesi yemvelo kunyuka ngokukhawuleza, kubalwa

¹ African Energy Commission (AFREC). (July 2021). Natural Gas in the African Energy Landscape. A Special Policy Report on Energy

malunga nekota yokuveliswa kombane welizwe jikelele kwaye phantse nesiqingatha sokukhula kwimfuno yamandla kwilizwe lonke jikelele ngowama-2018 (IEA, 2021).

Ngowama-2020, uMzantsi Afrika ujoyine ezinye iinkokheli² zamazwe aphucukileyo ehlabathi, wazisa ulwahlulelwano lwembali ukuxhasa inguqulelo efanelekileyo ekuthoba ikhaboni noluntu olunyamezela imozulu. UMzantsi Afrika ngoko uzibophelele ukwenza kancinane ukuthoba ubuchwepheshe bekhboni ekubeni uqinisekisa ukuba uluntu, imisebenzi neempiliso aziphenjelelwa ngokungakhiyo, ingakumbi kwilizwe apho uninzi (malunga nama-90%) lokuveliswa kombane luvela kumalahle.

Igesi eyimvelo ingasetyenziswa ukuxhasa unciphiso ukukhutshwa kwezinto ezingcolisayo kwi-atmosfere. Kwimeko ecocekileyo yokutshintsha kubuchwepheshe bokuciphisa ikhaboni ephezulu kwigesi kunokvela xa kunokwenzeka ukuba kusetyenziswa isiseko sokuveliswa kwamandla esikhoyo ukubonelela iinkonzo zamandla ezifanayo nokukhutshwa kwekhboni ephantsana. Indawo engundoqo yokhuphiswano phakathi kwamalahle angayekelelanga negesi kuseMelika naseYurophu bekuoloko kuveliswa umbane njengokuthenjela kutshintsho lwegesi namalahle kwiinxalenye ezahlukeneyo zamacandelo³ amandla. Le ndlela yotshintsho ikwabonelela isisombululo kubaxhasi kumacandelo anzima okususa ikhaboni efana nokwakhiwa, amashishini entsimbi nestili..

Ukusetyenziswa kwamashishini anamandla egesi yemvelo kunika iinzuzo zommandla ezahlukeneyo nokusebenzisa ngokufanelekileyo okuquka ukukhutshwa okumbalwa, nokuphinda utshise, ukunciphisa i-oli emdaka nokuveliswa. Kukuveliswa kombane igesi yemvelo isetyenziswa kumacandelo okuvelisa umphunga, ukubeka embindini iinjini zegesi, amacandelo ojikelezo ahlangeneyo, iintloko zikaloliwe, ukuveliswa okusasazwayo, iinjini zomlilo wegesi yemvelo yeshishini, iinjini ezincinane neeseli zezibaso..

Phakathi kwamacandelo asebenzisa ekugqibeleni ushishino ngumnikeli omkhulu kukhula okulindelweyo kwimfuno yegesi. . Igesi yemvelo luncedo lokhuphiswano olucacileyo kukusetyenziswa kweshishini apho ibonisa imithombo yamandla asekelwe kwizimbiwa ezinendlekoa kakhulu ⁴.

Kwicandelo lezithuthi, igesi yemvelo ingabonelela ukhethe iimveliso ze-oyile kubakhweli, nakukusetyenziswa kwenqwelo-moya ethutha iimpahla nangolwandle. Igesi eninzi isetyenziswa kwizakhiwo kwaye namhla kukufudumeza isithuba, nangona okunye ukusetyenziswa kokugqibela okufana nokupheka, ukufudumeza amanzi kusanda kubaluleko .

EMelika igesi isetyenziswa ikakhuluisetyenziswa liqela labahlali ekufudumezeni isithuba nasekuphekeni ngenxa yendleko yayo emalunga nesiqingatha saloo mbane, nokokuba kukwalula ukuyigcina nokufudumeza ngokukhawuleza. Ngokwembali Igesi yemvelo sesona sibaso sithandwa

² France, Germany, United Kingdom and United States as well as the European Union

³ International Energy Agency. (2019). The Role of Gas in Today's Energy Transitions

⁴ International Energy Agency. (2019). The Role of Gas in Today's Energy Transitions

kakhulu ngokufudumeza ekuhlaleni. Ngowama- 2000, malunga namashumi amahlanu ananye eepesenti (51%) yamakhaya afudumeleyo emelika asebenzisa igesi yemvelo ngokuchazwa yi- *American Gas Association (AGA)*⁵. Igasi yemvelo isoloko isetyenziswa kwizakhiwo zoshishino lorhwebo ukufudumeza isithuba nakwiinjongo zokufudumeza amanzi nokupholisa. Igasi yemvelo ikwabonelela izithako ezisisiseko zemveliso efana neeplastiki, into eqanda ukukhenkceka kwamanzi namalaphu,

Nangona kusetyenzwa ngegasi yemvelo kuyatshintsha kumacandelo onke oqoqosho, ugqaliselo lwe-GMP luncitshisiwe kulungiselelo lwegasi ukufezekisa iimfuno eziboniswa kumandla, kumashishini nakumacandelo ezithuthi. Kumacandelo agqiba kakhulu, kucacile ukuba igasi izisa iinzuzo zommandla. Nangona kunjalo akukho sisimbululo esinye sokujika ukukhutshwa, iinkqubo ezininzi, imigaqo nobuchwepheshe ziya kufuneka kumaxesha ohlukeneyo..

IPhepha leNgxelo likaRhulumente lwe-1988 lifuna ukuqinisekisa ukhuseleko lwamandla ngokutshintsha imithombo yokubonelela nabathuthi bamandla bokuqala. Kumaxesha abekiweyo athile namacandelo, ukutshintsha kwizibaso ezingcolisayo ukuya kwigasi kungadlala indima ebalulekileyo. Igasi yemvelo icingelwa njengesibaso senguqulelo kumalahle angayekelelanga nedizili.

Kwimeko yoMzantsi Afrika igasi yemvelo ingadlala indima ecacileyo ecaleni kokuvela kwamandla anokuhlaziywa, uphuculo kukusebenza kwamandla nakulungelelaniso olukhulu, umxube wamandla acocakileyo ekunciphiseni ukukhutshwa kwecandelo lamandla.

3. IMFUNO YEGESI

3.1 limeko zemfuno yegesi

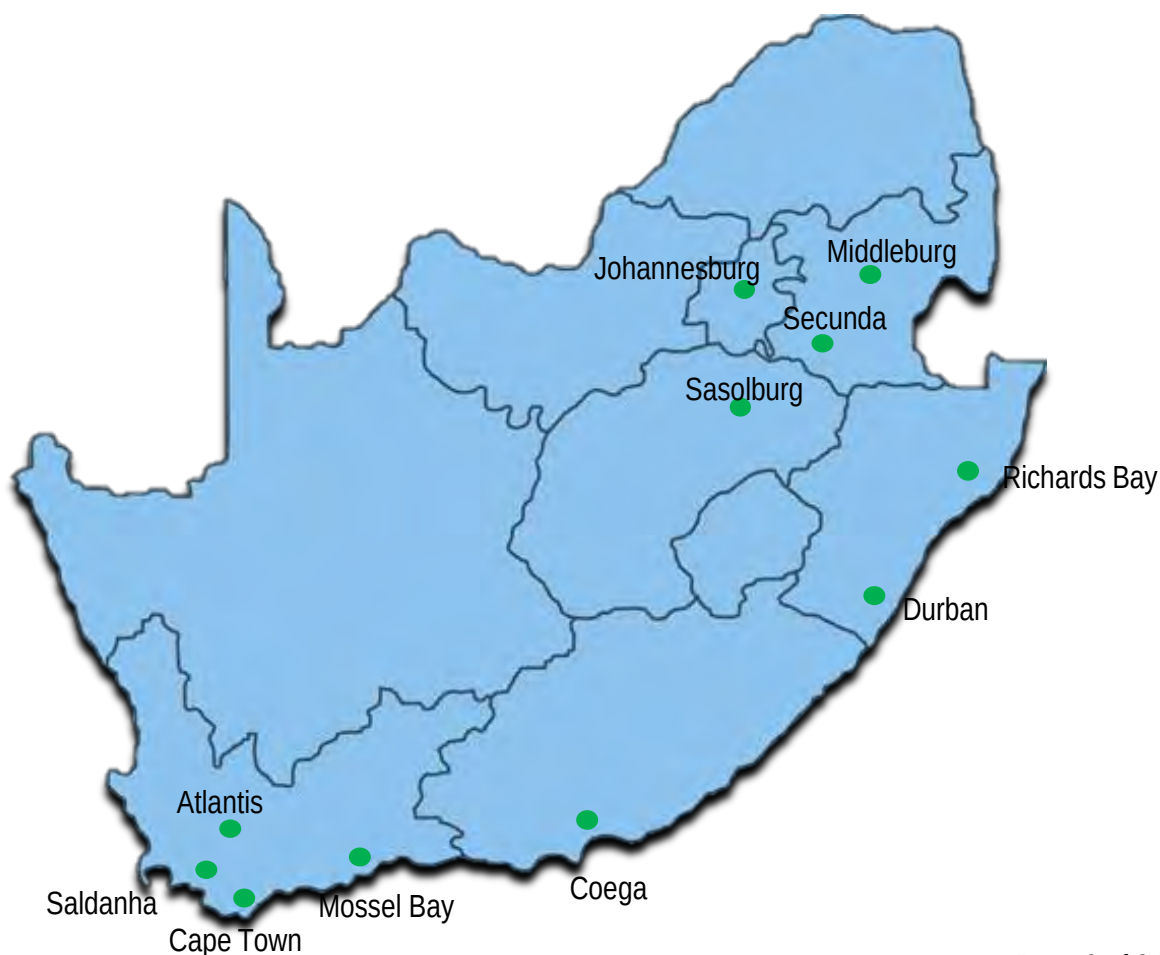
Iingqikelelo zemfuno yegesi ezasiswe kwisifundo zinikezelwa yitopoloji yothungelwano lwegasi yelizwe, njengoko igasi yemvelo eninzi igqitywa elizweni ingeniswa elizweni ngemibhobho yegesi esuka eMozambique. Nangona kwamkelwe jikelele ukuba imithombo yeentlobo ezininzi zegasi iphakathi kwe-19tcf kwaye ngaphezu kwama-400 tcf namandla akhoyo kummandla waseKaroo, ezi zigcinelo kusafuneka zifunyanwa. Kude kube ezi zigcinelo zifunyanwe kwaye zenziwe zibe yegesi esebenzayo, uMzantsi Afrika usasele ungenisa elizweni igasi evela kwamanye amazwe ngoko iingqikelelo zemfuno ezasiswe kweli candelo kuya kulindeleka ukuba ziqhube isiseko sokungenisa elizweni ngakwimimandla eseluxwemeni yelizwe ukuququzelela ukungeniswa elizweni kwegasi kwixesha elifutshane neliphakathi.

⁵ Fang-Yu Liaibano-malungung, Marta Ryvak, Sara Sayeed, Nick Zhao. The Role of Natural Gas as a Primary Fuel in the Near Future, Including Comparisons of Acquisition, Transmission and Waste Handling Costs of Gas with Competitive Alternatives

Ittheyibhuli yoku- 1: Iindibano-malungu yeeMfuno zeGesi ezichongiweyo

Indibano-malungu yemfuno	Inkcazelo
E-Atlantis	Uguqulo lwesikhululo samandla i-Ankerlign
Engqura	Ukwakha okutsha, uguqulo kwezikhululo zamandla egesi etshayo, ukubakho kotshintsho lwamashishini lube yiges yemvelo
Ekapa	Uguqulo lwezikhululo zamandla egesi etshayo kutshintsho lwamashishini lube yiges yemvelo
Ethekwini	Usebenziso lwegesi yamashishini
Erhawutini	Usebenziso lwegesi yamashishini nokuguqulwa kwezikhululo zamandla
EMossel Bay	Usebenziso lwegesi yamashishini nokuguqulwa kwezikhululo zamandla egesi etshayo
Emiddleburg	Usebenziso lwegesi yamashishini nokuguqulwa kwezikhululo zamandla egesi etshayo
ERichards Bay	Ukwakha okutsha, uguqulo kwezikhululo zamandla egesi etshayo, ukubakho kosebenziso lwegesi yamashishini
ESaldanha Bay	Ukwakha okutsha nokubakho kosebenziso lwegesi yamashishini
Esasolburg	Usebenziso lwegesi yamashishini nokuveliswa kwamandla kwiges yabucala
Esecunda	Usebenziso lwegesi yamashishini nokuveliswa kwamandla kwiges yabucala

Umzobo woku-1: Inkcazelo yokuzotyweyo yeeNdibano-malungu yeeMfuno



limeko zemfuno ezintathu (3) ziyacingwa kuhlalutyo lokukhula kwemfuno yethu. Kukho ezi meko (i) ukukhula kwemfuno ephantsi, (ii) ukukhula kwemfuno ephakathi (iii) ukukhula kwemfuno okuphezulu, imfuno yegesi iqhutwa ikakhulu licandelo lamandla kwegesi ukuya kumandla. Itheyibhuli yesi-2 ukuya kweyesi-4 isishwankathelo sobuninzi obungatshintshiyo beempawu zobugcisa ngemeko yemfuno..

Imfuno yegesi yemvelo kwicandelo lamandla iqhutywa ziziqalelo ezintlanu (5) ezizeziy (i) uguqulo kweNjini yeGesi kumJikelezo oVulekileyo (OCGT) kwizikhululo zamandla eNjini yeGesi yomJikelezo oHlangeneyo (CCGT), (ii) ukuzalisekiswa okupheleleyo kwe-IRP2019, (iii) ukuzalisekiswa kweNkqubo yokuFumana koMvelisi waMandla aZimeleyo kukuNciphitshiswa kweNgozi/ *Risk Mitigation Independent Power Producer Procurement Programme (RMI4P)*, (iv) U-Eskom unika ukumiswa kunye (v) nokuguqulwa kwezikhululo zamandla amalahle ezindala zika-Eskom.

Wonke uMvelisi waMandla oZimeleyo (IPP) uqikelela ukwakha okutsha iFekta yoThwalo eSebenzayo oyipensenti angamashumi amahlanu (50%) nenani lokusebenza elizipensenti ezingamashumi amathathu anethoba (39%). Izikhululo zamandla kwincam ka-Eskom ziqikelela iFekta yoThwalo eSebenzayo yepensenti elishumi elinezibini (12%) nenani lokusebenza leepensenti ezingamashumi amahlanu anesihlanu (55%) ekubeni ukwakha kwayo okutsha noguqulo ukusuka kumalahle ukuya kwegesi kuqikelelwa kwifekta yomthwalo yomsebenzi ophakathi wokusebenza uyipensenti ezingamashumi amane anesibhozo (48%) nenani lokusebenza oluyipensenti engamashumi amane anesibhozop. Ezi meko zintathu zibonelela ukwabiwa kombilini ofakelweyo kubuninzi bendibano-malungu emfuno.

Itheyibuli yesi- 2: linkolelo zeCandelo lwaMandla kwiMeko yeMfuno yeGesi

Iindibano-malungu yeeMfuno	Amandla afakelweyo (MW)	Ifekta yomthwalo	Inani lomsebenzi (%)
<i>Inguqulo yezikhululo zamandla ukusuka kwi-OCGT ukuya kwi- CCGT:</i>			
EMossel Bay (Gourikwa)	746	12	55
E-Atlantis (Ankerlig)	1 338	12	55
Amandla afakelweyo ewonke (2 kwiindobano-malungu)	2 084		

Izikhululo zamandla ezimbini (2) i- Ankerlig e-Atlantis e-Gourikwa eMossel Bay, zibandakanywe kwimeko yemfuno yegesi ephantsi. Ziqikelelwa ukuba zifanelwe ukuba zisebenze kwincam yefekta yomthwalo elishumi elinesibini 12% njengokuba kuchaziwe kwi-IRP2019. Impucuko yenani lokusebenza elingamashumi amahlanu anesihlanu 55% liyaqikelelwa kule meko ngenxa yoguqulo lokuveliswa kwamandla ukusuka kwi-OCGT ukuya kwi- CCGT.

ltheyibhuli yesi- 3: linkolelo zeCandelo lwaMandla kwiMeko ePhakathi yeMfuno yeGesi

lindibano-malungu yeeMfuno	Amandla afakelweyo (MW)	Ifekta yomthwalo	Inani lomsebenzi (%)
<i>Inguqulo yezikhululo zamandla ukusuka kwi-OCGTukuya kwi- CCGT:</i>			
EMossel Bay (Gourikwa)	746	12	55
E-Atlantis (Ankerlig)	1 338	12	55
<i>Ukhwakhiwa okutsha ngenxa ye- IRP2019:</i>			
ENgqura (IPP)	1 000	50	39
EMiddleburg (IPP)	2 000	50	39
<i>Ukwakhiwa okutsha ngenxa ye- RMI4P:</i>			
ERichards Bay (IPP)	450	50	39
ENgqura (IPP)	650	50	39
ESaldanha Bay (IPP)	320	50	39
<i>Ukwakhiwa okutsha ngenxa yokumiswa ngu-Eskom:</i>			
ERichards Bay (Eskom)	3 000	48	48
<i>Uguqulo lwezikhululo zamandla ka- Eskom ukusuka kumalahle ukuya kwezegesi etshisayo – Ukuyekiswa kwi-IRP2019:</i>			
EMiddleburg (Komati)	1 000	48	48
Amandla afakelweyo ewonke (6 lindibano-malungu)	10 504		

linkolelo zencandelo zamandla kwimeko yemfuno yegesi ephakathi zifaka iinkolelo ezifanayo njengakwimeko yemfuno yegesi ephantsi, ukuquka ukwakhiwa okutsha okongezelelweyo ngenkqubo ye-IPP eqhutywa ngurhulumente, iCandelo lika-Eskom elingama-34 lokufumana ukumiswa noguqulo lwezikhululo zamandla zamalahle atshiswayo ezidala zakwa-Eskom ekufuneka ziyekisiwe ukuze zibe zizikhululo zamandla zegesi etshayo ngokwe-IRP2019.

Izikhululo zamandla zegesi etshayo ezintsha zakwa-Eskom ziqikelela ukusebenzi kwifekta yomthwalo wemfaneleko ephakathi engamashumi amane anesibhozo (48%) nenani lokusebenza komzi-mveliso ongamashumi amane anesibhozo (48%) ekubeni icam yezikhululo zamandla ziqikelelwa ukuba zisebenze kwifekta yomthwalo olishumi elinesibini (12%) neni lokusebenza komzi-veliso ophucukileyo yipesenti yamashumi amahlanu anesihlanu (55%). Inkqubo IPP kaRhulumente iqikelelwa ukuba isebenze kwifekta yomthwalo wemfaneleko ephakathi engamashumi amahlanu eepesenti (50%) nenani lokusebenza elizipesenti ezingamashumi amathathu anethoba (39%).

Table 4: IiNkolelo zeCandelo lwaMandla kwiMeko yeMfuno ePhezulu yeGesi

lindibano-malungu yeeMfuno	Amandla ofakelweyo (MW)	Ifekta yomthwalo	Inani lomsebenzi (%)
<i>Inguqulo yezikhululo zamandla ukusuka kwi-OCGTukuya kwi- CCGT:</i>			
EMossel Bay (Gourikwa)	746	12	55
E-Atlantis (Ankerlig)	1 338	12	55
EThekweni (Avon)	670	12	55
ENgqura (Port Rex)	171	12	55
ENgqura (Dedisa)	335	12	55

EKapa (Acacia)	171	12	55
<i>Ukwakhiwa okutsha ngenxa ye- IRP2019:</i>			
ENgqura (IPP)	1 000	50	39
EMiddleburg (IPP)	2 000	50	39
<i>Ukwakhiwa okutsha ngenxa ye-RMI4P</i>			
ERichards Bay (IPP)	450	50	39
ENgqura (IPP)	650	50	39
ESaldanha Bay (IPP)	320	50	39
<i>Ukwakhiwa okutsha ngenxa yokumiswa kuka-Eskom:</i>			
Richards Bay (Eskom)	3 000	48	48
<i>Uguqulo lwezikhululo zamandla ka- Eskom ukusuka kumalahle ukuya kwezegesi etshisayo – Ukuyekiswa kwi-IRP2019:</i>			
EMiddleburg (Komati)	1 000	48	48
EMiddleburg (Hendrina)	2 000	48	48
EMiddleburg (Camden)	1 600	48	48
EMiddleburg (Grootvlei)	1 200	48	48
Amandla ofakelweyo ewonke (8 lindibano-malungu)	16 651		

Iimeko zephezulu neziphakathi zabelana ngeenkolelo zobugcisa ezifanayo ngokunxulumene nefekta yomthwalo nenani lokusebenza, umahluko ongundoqo ububukhulu boqilelelo lombilini ofakelweyo ewonke. Imeko ephakathi iqukelela amandla afakelweyo wamandla ayigesi ongamawaka angama-10 504 MW ekubeni imeko ephhezulu iqukelela amawaka ali-16 651 MW.

4. UKUBONELELA NGEGESI

4.1 Inkqubo yokubonelela ngegese

Injongo yokusebenza la ngesixokelelwano segesi yemvelo kukufumana ngowona ,xume woqoqosho lwesibonelelo segesi nesiseko ukuqinisekisa indlela engcono enokwenzeka yokuhambisa igesi kubasebenzisi ngokwengqiqo ecwangcisiweyo ngowama-2023 ukuya kuma-2050. Umsebenzi ngowexesha elide ngokwesimo kwaye kufuneka ngoko *unciphise* iindleko zesixokelelwano zexesha elide eziqulethe:

- Ukuveliswa kwendleko zemimandla yegesi
- Iindleko zokungeniswa elizweni ze-LNG
- Ukwakhiwa nokusebenzisa iindleko zokufumana nokusasaza isiseko se-LNG
- Ukwakhiwa nokusebenzisa iindleko zesixokelelwano sokuthutha igesi

Unyanzelisa unywino olulandelayo weimhla ngemihla/lweminyaka ngoknyaka:

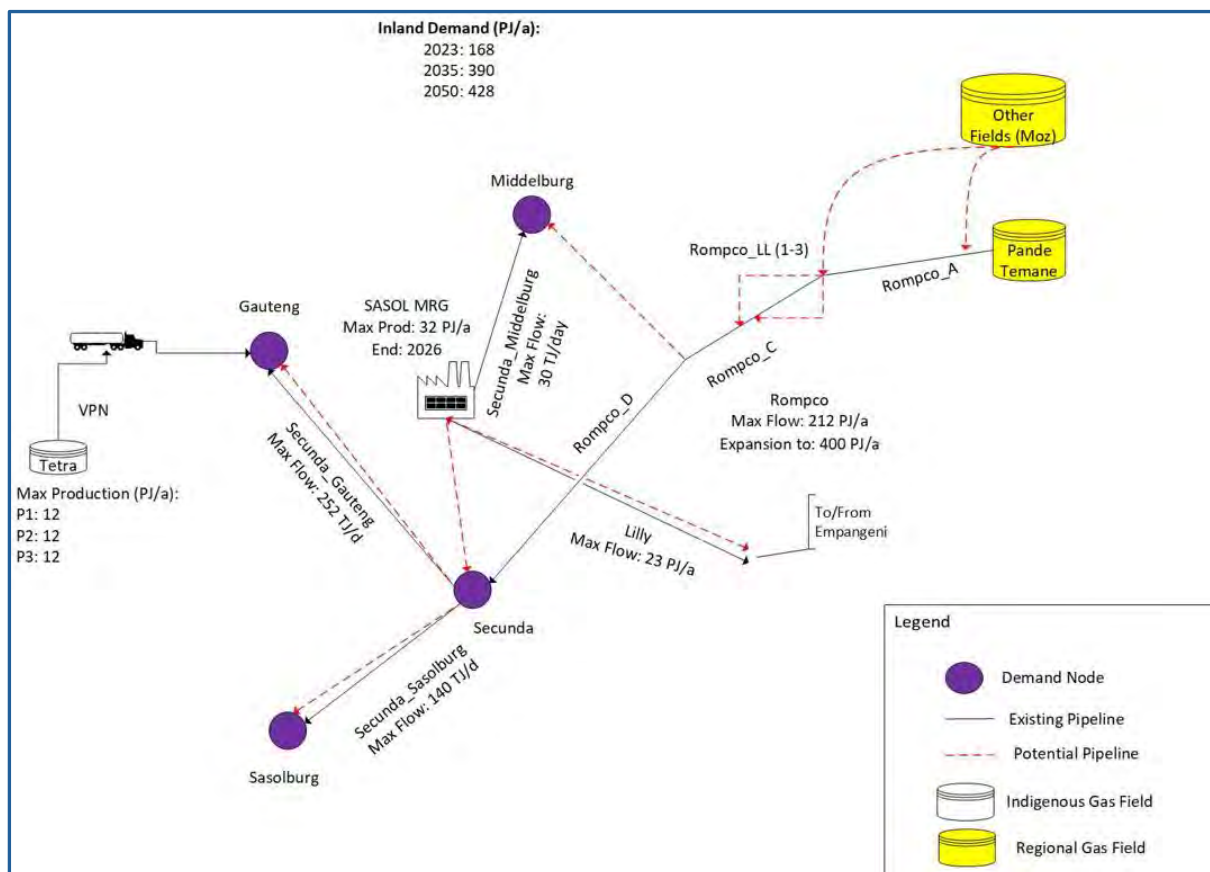
- Ukuveliswa: Unywino lokuveliswa kweminyaka ngonyaka/lwemihla ngemihla kwimimandla
- Ugcino: Amandla nenani elirhoxisiweyo lobukhulu
- Uizithuthi: Ubukhulu obuvelayo

Imodeli yimeko eqinileyo kwaye ebonisa ukulingana ngaphaya kwexesha (akukho kungalingfani). Oku kulandelayo yinkqubo yemizekelo yamalungu esixokelelwano segesi lemvelo. :

Itopoloji yegesi:

Ukuqonda iinketho zokubonelela ngegese enokwenzeka kwiindawo ezalathelwe ukuphuhlisa kweemfuno ezichongiweyo, kuyimfuneko ukuba kuhlalutywe/kucazululwe “njengokuba” itopoloji yokusebenziso-lothutho-lokubonelela. Umzobo wesi-2 ubonisa itopoloji yegesi ekhoyo eMzantsi Afrika. Isiseko esitsha esinokubakho esifuneka ekufezekiseni imfuno eboniswayo uboniswe bomvu. Umzobo ukwabonisa iindlela ezinokubakho ezinokulandelwa yigesi ukufezekisa imfuno. Injongo yomsebenzi kukumisela indlela yendleko encinane.

Umzobo wesi- 2: ITopoloji yegesi



Inkqubo yokusebenza

Imimandla yegesi:

Ukuveliswa kwimimandla yegesi emitsha kukugqakadula kancinane kancinane kwiminyaka emithathu yokuqala (3) yokuveliswa kombili womzi-mveliso. Igesi etyebileyo efunyanwa kumgodi wamalathe (MRG) enikele ngemfuno KwaZulu-Natali iya kuyeka ngowama-2027 ize isetyenziswe kusetyenziso likaSasol.

Izitishi zokugqibela zeGesi:

Kulo msebenzi ukwakheka kwesimo okuboniswe kwitheybhuli yesi-5 kwasetyenziswa. Icandelo lehe *Floating Storage Regasification Unit* (FSRU) kwi- RMI4P isetyenziselwe inketho eqeshisayokwaye kwisivumelwano esimielweyo seminyaka esixhenxe (7), ngaphandle kokukhuphisana nayo nayiphi enye inketho. Ukususela ngowama-2030, le FSRU ivunyelwe ukuba ikhuphisane nezinye iinketho ezintathu kwizibuko ngalinye nokungeniswa elizweni sisithili iseyinketho . Umsebenzi uncitshiswe ekukhetheni ukuqeshisa i-FSRU okanye ekwakheni Isitishi sokugqibela ngaselunwemeni esityhutyha ubushushukwizibuko ngalinye elindulyuliweyo.

Ittheyibhuli yesi- 5: Uqwalaselo lokulandelelana kwamaxesha obuchwepheshe be-LNG

Ubuchwepheshe	Ubukhulu (m3)	Unyaka								
		2023	2027	2029	2030	2035	2040	2045	2050	
Lesithili (Emanxwemeni okanye i- FSRU: Ukuqeshisa) ⁶	125 000 - 170 000									
RMI4P (FSRU: Ukuqeshisae RB, SB, NGQ	125 000									
Ubuchwepheshe: Ukuqeshisa/ukuthenga/ngasemanxwemeni – RB	170 000									
Ubuchwepheshe: Ukuqeshisa/ukuthenga/ngasemanxwemeni – eNgqura	125 000									
Ubuchwepheshe: Ukuqeshisa/ukuthenga/ngasemanxwemeni – SB	125 000									

Ugcino:

Njengokuba imfuno yegesi yemvelo ihlanganiswa ngonyaka ukzekelo usebenzisa ubukhulu benyathelo lonyaka omnye. Le nkqubo ichanekile kubalo lomthamo wonyaka njengoko kungekho mfuno yokutshintshana kwixesha lonyaka..

Isiseko soluhlu lwemibhobho:

Indleko yezithuthi yoluhlu lwemibhobho ekhoyo lunikwe o njengoluhlu lwamaxabiso (R/GJ) kwaye ngumzekelo onjengokungena kwentalwulo emele ukubuyisa inkunzi kwiimpahla ezilungiselelweyo. Kuqikelelwa ukuba eli xabiso likwakuquka nalo naluphi uxinzelelo olufunekayo kwaye ngoko iindleko zoxinzelelo zoluhlu lwemoibhobho ekhoyo aliboniswa ngokucacileyo.

IsiGuqulu nesiBaso:

Iindleko zoxinzelelo ukuquka iindleko zesibaso esinxulumeneyo ziqukiwe kwiindleko zonke zoluhlu lwemibhobho.

⁶ Regional options are not restrictive to LNG only. Other fields could offer better supply opportunities.

UbuKhulu boluhlu lwemiBhobho:

Imodeli ingakhiwa kuluhlu lwemibhobho eyahlukeneyo ngokobulkhulu (iidayamitha) – 12, 16, 20, 24, 30 nakuma-36 e-intshi. Sisinye (1) kuphela sedayamitha yoluhlu lombhobho esivunyiweyo phakathi kweendibano=malungu ezimbini (2). Kungoko imodeli iqikelela ubukhulu obufanayo kubude obupheleleyo lombhobho.

IMfuno yeGesi:

Indleko yemfuno engasetyenziswanga yabekwa kwixabiso eliphezulu ukunyanzela imodeli ukuba yanelise imfuno xa umthombo wokubonelela ukho. Oku kuhambisana nenjongo yokumiselwa kwendleko ukwanelisa imfuno iyonke.

5. IIMEKO EZISISEKO NEEMKO EZICINGWAYO

Eli candelo liquka iimeko ezine (4) ekufuneka zicingiwe kukuphuhliswa kwe- GMP, ezizezi *Imeko yoku-1*: Isikhokhelo esisiseko, *Imeko yesi- 2*: Ukubaluleka kweGesi yeMveli , *Imeko yesi- 3*: Uhlanganiso lwesiThili, *-Imeko yesi- 4*: IGesi njengesiBaso seNnguqulelo. Ezi meko zahlulwe zaba zimeko zokukhula kwemfuno eboniswayo neemeko zegalelo ezingundoqo. Inkcazelo emfutshane yemeko nganye ichazwe ngezantsi.

5.1 Imeko yoku-1: Isikhokhelo esisiseko/sikhokhelo esiSalathiso

Isikhokhelo esisiseko/sikhokhelo esisalathiso iqikelela ukukhula kwemfuno ephakathi yegesi kumacandelo amandla nakumacandelo angengawo awamandla njongoko kuchaziwe kwimeko yemfuno. Kusebenzisa kuphela kwimimandla yexesha elifutshane njengoko kuchaziwe kwitheybhuli yemeko..

Additional Modelling Information I: LNG from USA, Australia, Qatar and Nigeria.

5.2 Imeko yesi- 2: UkuBaluleka kweGesi yeMveli

Imfuno yegesi iqikelelwa ukuba ibe phantsi kwimeko yokubaluleka kwegesi yemveli. Ukunciphisa iinketho zokubonelela, imimandla yegesi yemveli kufuneka kusetyenzwe ngemfuno ephantsi. Oko kukuthi msinyane kangakokuba imimandla yemveli inokubakho kwixesha eliphakathi, kufuneka kuthathe indawo yokunye ukungeniswa elizweni kwe-LNG. Oku kuthetha ukuba izivumelwano kufuneka zibe nokuguquka ukuvumela imithamo engena elizweni kwixesha eliphakathi xa kuthelekiswa kwisikhokhelo esisiseko sexesha elifutshane.

I- AE kummandla waseMpumalanga neLephalale CBM zinketho ezinokuba negalelo kwimimandla yegesi yemveli xa iidatha zazo zinokubakho.

5.3 IMeko yesi-3: UkuHlanganiso lwesiThili

Ngokungafani nemeko esisiseko apho i- LNG iqikelelwa ukuba ibivela kwiimmarke ezimisiweyo, kwimeko yohlanganiso lwesiThili igesi yehlabathi jikelele kufuneka yongeze kwigesi yesithili. Ngamanye amazwi ukungeniswa elizweni kwe-LNG ebivela kwiimmarke zesithili kufuneka indawo yazo ithathwe yi-LNG yeemmarke zesithili ezifana neNamibia neMozambique kuthathelwa ukuba kufutshane kwazo. Izivumelwano zokuqeshisa kufunak ngoko zibe zezexesha elifutshane ukuvumela uguqulo..

Additional Modelling Information III: Replace US, Australia, Qatar and, Nigeria with regional markets.

Igesi engeniswa ngemibhobho yesithili iya kucingelwa kwisongezo (okanye ukuthatha indawo) yenketho ye-LNG yesiThili xa kukho idatha.

5.4 IMeko yesi- 4: IGesi njengesibaso esiyoNguqulelo

Phantsi kwale meko ukusetyenziswa kwegesi kukhula kwisantya esiphezulu, kwexesha lamathafa asentabeni kwaye kuncitshiswe kamva kwiminyaka. Imfuno yegesi yemvelo inciphisa izibaso ezitsha ezingeniswayo ezifana nokwaziswa kwehayidrojini ukunciphisa ukukhutshwa kwentsalela ye-GHG. Nangona kunjalo ihayidrojini iqulathe amandla aphantsi kunegesi yemvelo, ngoko ihayidrojini eninzi iya kufuneka ikhyule ngemveliso yamandla afanayo. Oku kungathetha ukuba kufuneka ukwandiswa kweziseko ezininzi

KwiMeko yesi-4, imimandla icingela zonke iimeko zeemfuno eziphezulu. Ngaphaya kwexesha lamathafa asentabeni kwakhiwe isiseko esifana neziphelo zogcino olusenxwemeni noluhlu lwemibhobho olunokuthi luqhubeka ekusetyenzisweni nokokuba kusemva koguqulelo kunye nokunye ukulungiswa ukwenzela izibaso ezahlukeneyo ezifana nehayidrojini.

Imeko ezinduliliweyo ezine (4) zishwankathelwe kwaye zahlulwa kwiTheyibhuli yesi-6 njengobuninzi begalelo elingundoqo nokukhula kwemfuno eziqikelelwayo.

Itheyibhuli yesi- 6: Isishwankathelo semeko

Amacandelo/ imithombo yokubonelela	Abaqhubi	Ixabiso/iNkcazelo	Imeko esisiseko/i meko yesalathiso	Ukubaluleka kwemvelo	Uhlanganiso lwesiThili	Igesi njengesibaso senguqulelo
Imfuno	Imfuno ephantsi			x		
	Imfuno ephakathi		x	x	x	
	Imfuno ephezulu					x
Imimandla yesibonelelo	Ixesha elifutshane	Pande Temane, Tetra, Block	x	x	x	x

		11B/12B Phase 1, Block 2A				
	Ixesha eliphakathi	ELephalale CBM		x	x	x
	Ixesha elide	Uhlobo oluthile lwegesi AE eMpumalanga, Imida yangaphesheya		x	x	
Iindleko zokuveliswa \$/GJ (R/GJ)	Indleko yokuveliso kwimvelo ephantsi	4 (69)				
	Indleko yokuveliswa yemvelo ephakathi	6 (104)	x	x	x	x
	Indleko yokuveliswa kwimvelo ephezulu	8 (138)				
Amaxabiso afunyenwe kwisithili Est. \$/GJ (R/GJ)	Amaxabiso afunyenwe kwisithili (SB)	13.43 (232.11)		x		
	Amaxabiso afunyenwe kwisithili (Ngqura)	13.97 (241.41)		x		
	Amaxabiso afunyenwe kwisithili (RB)	13.87 (239.67)		x		
Amaxabiso afunyenwe kumazwe ehlabathi Est. \$/GJ (R/GJ)	Amaxabiso afunyenwe kumazwe ngamazwe (SB)	14.04 (242.57)	x			
	Amaxabiso afunyenwe kumazwe ehlabathi (eNgqura)	14.24 (246.15)	x			
	Amaxabiso afunyenwe kumazwe ehlabathi (RB)	14.13 (244.09)	x			

6. UHLALUTYO LWEZIPHUMO

Eli candelo lazisa iziphumo zokwenza ezisekelwe kukwandisa okunendleko ezincinane kwixesha lowama-2023 ukuya njongo kukwandisa imimandla yokuvelisa yemvelo, ukungeniswa elizweni kwe-LNG, iziseko zeziphelo zamazibuko nothungelwano lwezithuthi. Injongo kukwandisa ezi nketho zegesi yemvelo emantla omlambo ukufezekisa imfuno eyandayo eqikelelweyo kwindleko encinane ukuba kunokwenzeka.

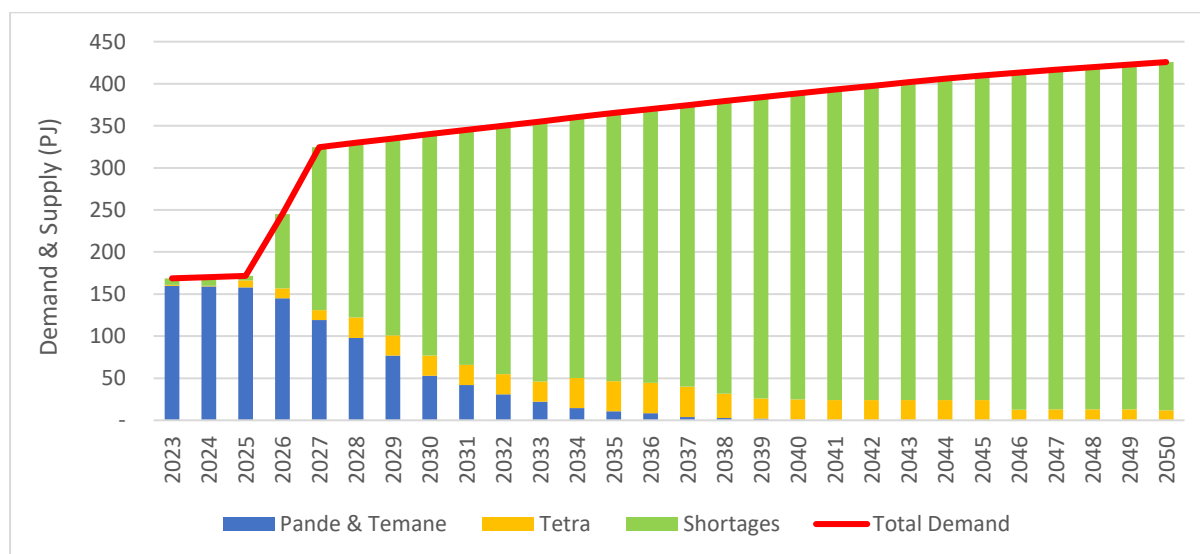
6.1 UkuDingeka kweGesi Phambi koKwandisa

Uphengululo jikelele lwemfuno neenkolelo zeziibonelelo phambi kokwandisa kunikiwe apha. Xa kuhlalutywa iingqikelelo zemfuno nokubakho kweenketho zezibonelelo kwaqalaselwa ukudingeka okukhulu. Injongo yokwenza ngoko kukufumana iindlela ezinokwenzeka zokushenxisa ukudingeka ekubeni kuncitshiswa indleko yesiseko esinokwenzeka. Ukwenza oku ukudingeka kwegesi yemvelo kuhlalutywe njengamaqela amabini (2), angala ukudingeka okuphakathi elizweni nokwiindawo ezinamanxweme.

6.1.1 UkuDingeka Ingaphakathi eliZweni

Kunika iinkolelo kwimfuno nakukubonelela amanani okuveliswa amakhulu aqikelelwayo kwimimandla yemvelo ayanelanga ukuba yanelise imfuno eqikelelwayo ngaphaya kwengqiqo yokucwangcisa imeko yesiseko. Umzobo wesi-3 ubonisa ukudingeka kwiindawo eziphakathi kwilizwe.

Umzobo wesi- 3: UkuDingeka kwiindawo eziphakathi kwilizwe

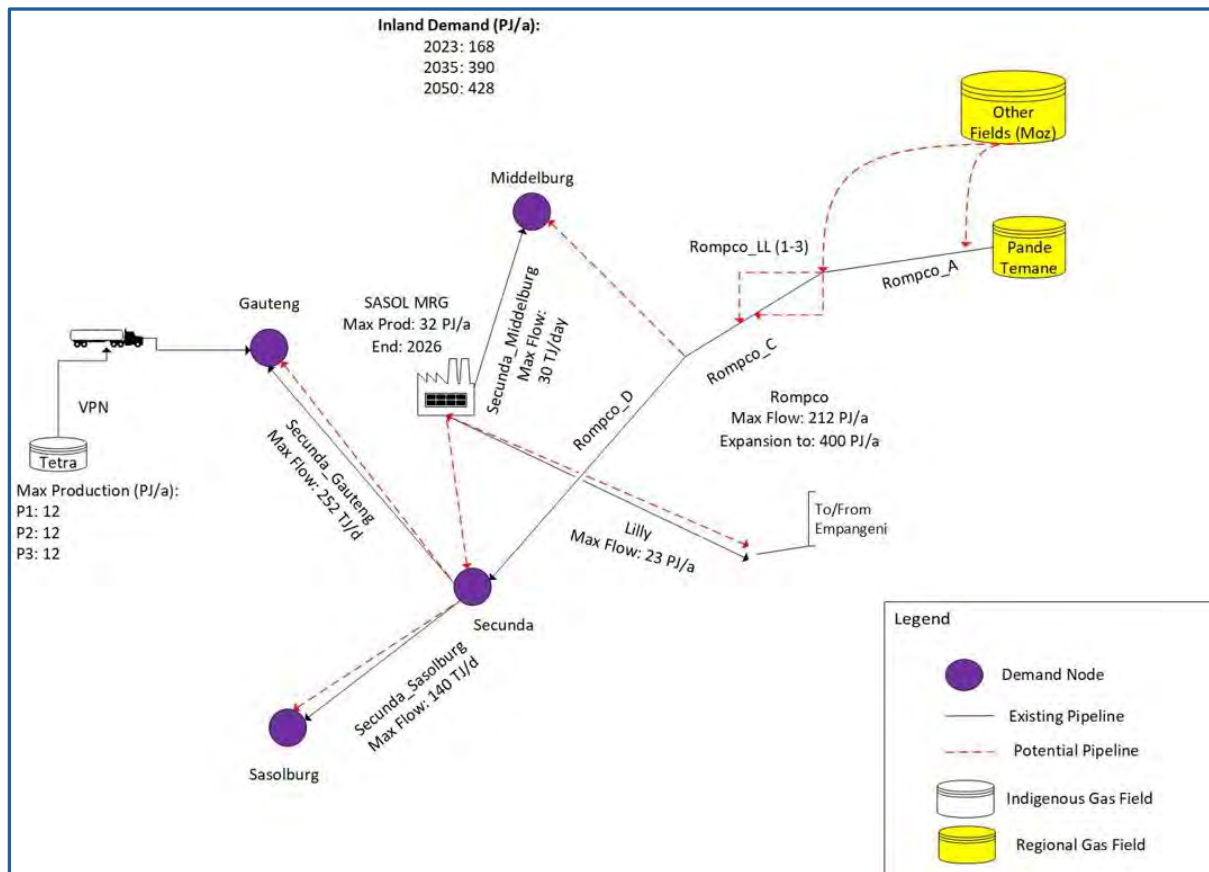


Njengoko kubonisiwe kumZobo wesi-4 imfuno kwindawo ephakathi kwilizwe idibanisa iGauteng (eRhawutini nasePitoli), eSasolburg, eSecunda naseMiddelburg. Inxalenye yemfuno yeSecunda iya kunceda ngu-Sasol Methane Rich Gas (MRG) ukususela ngowama-2027 xa inkampani ingayeki ukubonelela abaxhasi KwaZulu-Natali naseMiddelburg. Imfuno yaseSecunda iya kwanda kuze oko kubangela ukuba iSecunda ibe yindawo eyalathelwe uphuhliso emfuno yokusetyenziswa ephezulu kwimeko esisiseko/imeko yesalathisi.

Umzobo wesi- 4 ukwabonisa isiseko esinxulumeneyo kunye nemithombo yezibonelelo enokubakho kuphuhliso lweendawo eziphakathi kwilizwe. Imithombo yakutsha-nje ePande naseTemane ngoluhlu lwemibhobho ye- ROMPCO naseVirginia (Tetra) ngothungelwano lwemibhobho eneMbonakalo yenyani (VPN), ekubeni isibonelelo esinokubakho kwimithombo eyameneyo ingaphakathi eMozambique,

kungeniswe ngoxinzelelo kuluhlu lwemimbobho i-ROMPCO, nesiphelo seRichards Bay ngokuphendulela uluhlu lwemibobho yeLilly kunye/okanye imibobho enokubakho kuthelekiso. I-LNG yesiThili zingacingelwa kwakhona njengenketho yesibonelelo esinokubakho, nangona kunjalo isibonelelo sinokungabikho njengoko kukhutshiswa nokunye ukungeniswa ngoxinzelelo kwi-ROMPCO.

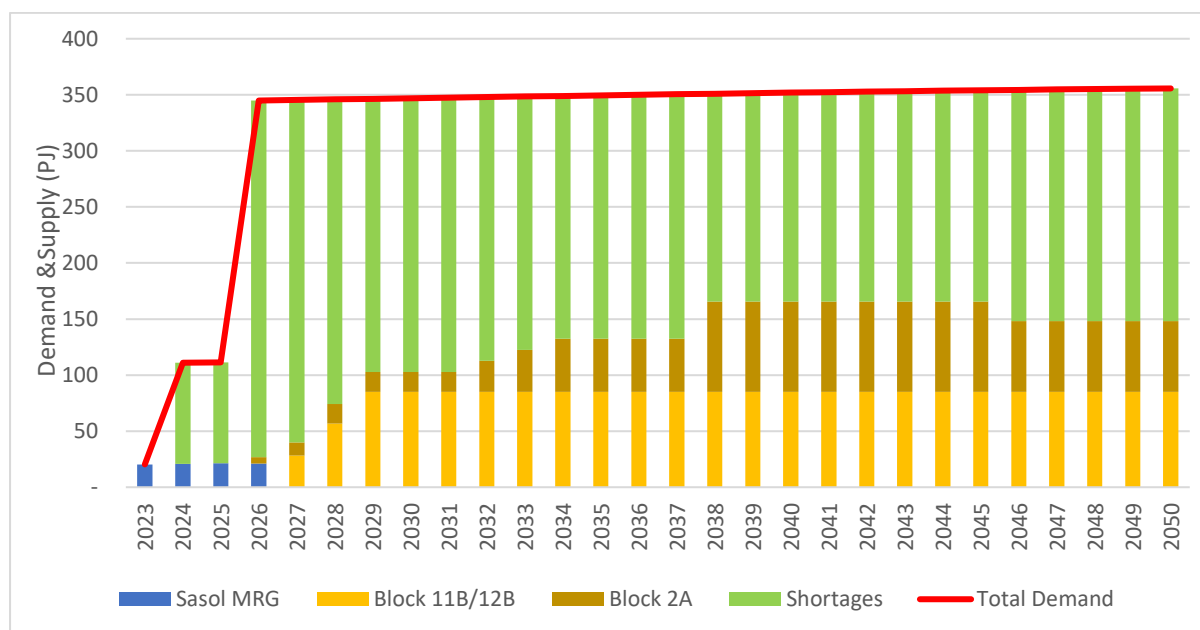
Umzobo wesi- 4: ITopoloji yeendawo eziphakathi elizweni



6.1.2 UkuDingeka kwiindawo ezisemanxwemeni

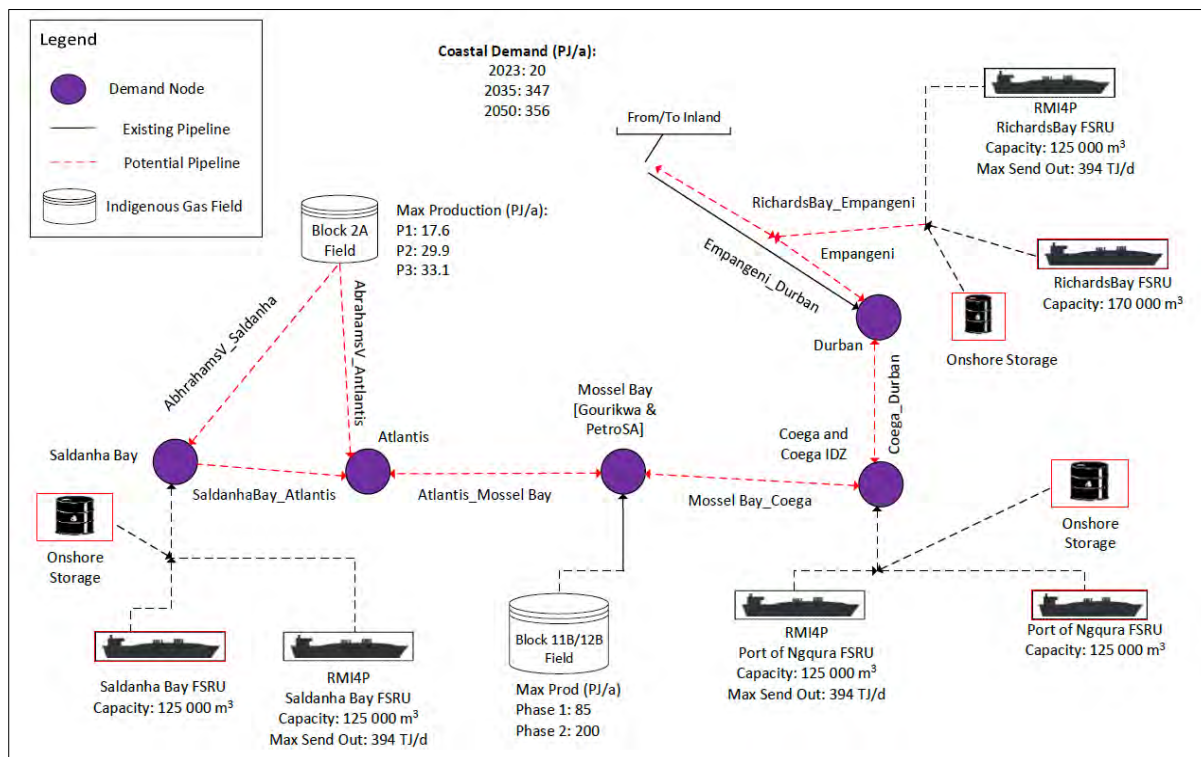
Imfuno yasemanxwemeni iyonke iboniswe kumzobo wesi-5 ngezantsi kwimfuno yamandla ekwiNkqubo yokuFumana koMvelisi waMandla oZimeleyo kwiNgozi enokuNcithiswa i (RMI4P) eseRichards Bay, eNgqura naseSaldanha Bay nemfuno yamandla e-IRP 2019 eNgNgqura naseMiddleburg (kuqikelelwa ukuphendulela imibobho yeLilly).

Umzobe wesi- 5: UkuDingeka weMfuno kwiindawo ezisemanxwemeni



I-Sasol MRG ngumboneleli ozinikeleyo kuphela kutsha-nje kunxweme olusempuma kwaye ivela lis eSecunda ngemibhobho ukuya KwaZulu-Natali. Njengoko kuchaziwe. Olu bonelelo luya kupheliswa ukususela ngowama-2027. Umthombo otshintshayo unokubakho, kufutshane kwindawo eyalathelwe uphuhliso kunxweme olusempuma luya kuba kukungeniswa elizweni kweLNG ngeRichards Bay. Kutsha-nje akukho mithombo yagesi kumanxweme asemazantsi nasentshona ukubonelela ezo ndawo zophuhliso lwemfuno. Imithombo enokwenzeka iya kuba yimimandla enokubakho efana sources would ne-Block 2A ned Block 11B/12B, kwaye ukungeniswa elizweni kwe-LNG ukusuka eSaldanha Bay nase Ngqura ziboniswe kumboniso wesi- 6.

Umzobo wesi-6: IToploji yeendawo ezisemanxwemeni

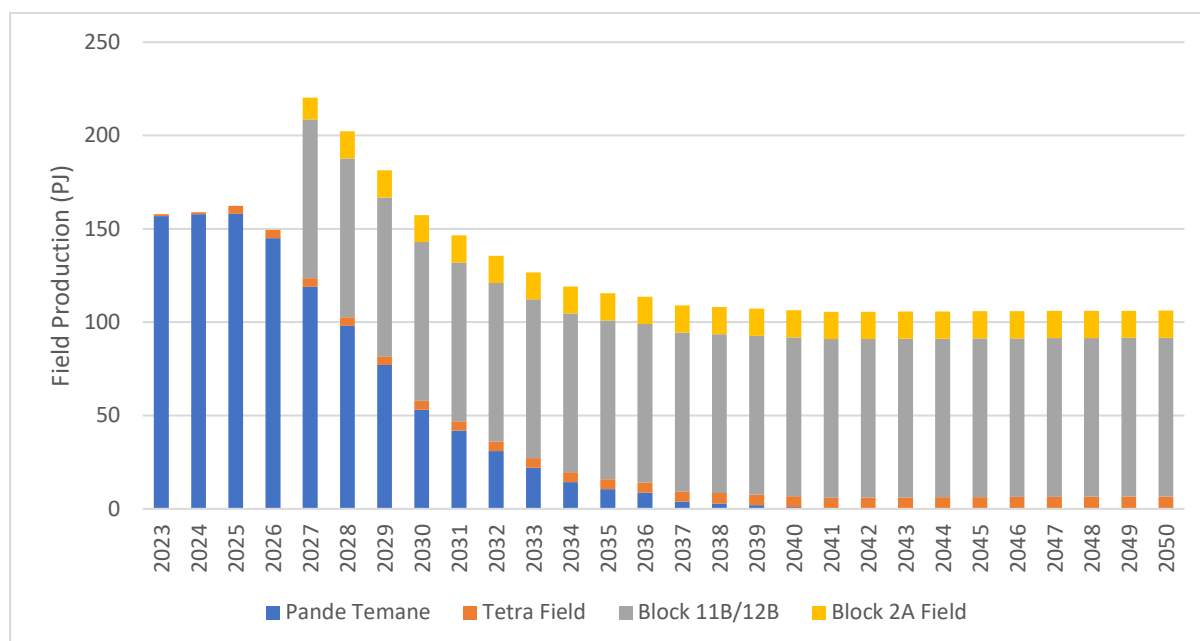


Ukuiithelekisa ukudingeka kwiindawo eziphakathi elizweni nezisenxwemeni, ukudingeka kwemfuno kwiindawo eziphakathi elizweni kuba kuninzi ngokuhamba kwexesha kuba ukukhula okuqikelelweyo kwemfuno kuyabonakala kwiindawo eziphakathi elizweni ekubeni uqikelelo lwemfuno kwiindawo ezikumaxweme zisele zithe tyaba ikakhulu kwingqiqo yocwangciso.

6.2 UHlalutyo lokuVelisa uMmandla weMveli

Eli candelo lihlalutya imveliso engumzekelo emva kokwandiswa. Iprofayile yemveliso yesibonelelo semeko esisiseko/imeko esisalathiso, icingela imimandla yegesi yemveli yemveli enobubakho kwaye ekhoyo iboniswe kumzobo wesi-7.

Imimandla engabanikeli abangundoqo belizwe lwegesi yemvelo yimimandla yegesi iPande-Temane eseMozambique. Igesi ezalisa ukusuka kulo mmandla kulindeleke ukuba yehle ukususela ngowama-2026 kuba utshitsho olukhulu luqwalaselwe kule profayile. Kufuneka kuqwalaselwe ukuba kuya kubakho igezi equkuqela ukusuka kulo mmandla ukunceda imfuno yoMzantsi Afrika ukuya kuthi ga ngowama-2035, nangona imithamo iya kwehla although ngowama-2026. Kwangaxesha-nye i-MRG eveliswa nguMzi-mveliso weGesi waseSasol unciphisa iinketho zokubonelela ngenxa yezalathisi zeSasol zokuba iya kusebenzisa usebenziso lwayo ukususela ngowama-2027. IVirginia (Tetra) iyalise ukuvelisa ngesiqingatha sesibini sowama-2022kwaye kulindeleke ukuthambeka ngaphaya kwexesha, ukufikelela kwimeko eqinileyo ngowama-2026/27.



Kwisikhokhelo esisiseko/isikhokhelo sesalatjiso, uBlock 11B/12B uvelisa amandla wePetroSA's omninzi kuma- 85 PJ ngonyaka. Kugcino lwesibonelelo sikaBlock 2A e-Atlantis nentsalela egqithiswa ngeMossel Bay ukufezekisa imfuno yamandla emalunga 5 PJ kwindawo eyalathelwe ukuphuhliswa. Njengoba kubonwa ukuvelisa igesi yemveli akwanelanga ukufezekisa imfuno eqikelelwayo iyonke kungoko ukungeniswa elizweni kwe-LNG kufuneka kuncitshiswe ukudingeka ukusuka kwixesha elifutshane ukuya kwixesha eliphakathie ekubeni urhulumente ekhuthaza imisebenzi yohlolo lwemveli.

Ukuba nasiphi isibonelelo zemveli esiqikelelweyo asenzeki isikhewu phakathi kwesibonelelo nemfuno ziba banzi, oko kubeke ukuthembela kakhulu kukungeniswa elizweni kwe-LNG..

6.3 IsiSeko nemiThamo yokuNgeniswa eliZweni kweGesi yeMvelo eluLwelo (LNG)

Ukungeniswa elizweni kwe-LNG kufezekisa ukukhula kwemfuno yegesi, isiseko sokungeniswa elizweni kufuneka siphuhlise, kucingelwa amaxesha okukhokela kwe-LNG kuphuhliso laloo maphulo ezizeko ezikhulu. Ukwandisa ukungena kokungeniswa kwegesi elizweni, Izitishi zokugqibela zamazibuko e-LNG kufuneka afunyanwe kwizibuko laseRichards Bay, laseNgqura nelaseSaldanha Bay emzantsi Afrika kwaye ukuba kunokwenzeka kumazibuko ezithili ezisentshona nezisempuma..

6.3.1 Ukwandiswa kweziPhelo ze-LNG nemiThamo yokuNgeniswa eLizweni kwe-LNG

Umzobo wesi-3 nowesi-5 ongasentla ubonisa ukudingeka kwiindawo eziphakathi elizweni nezisemanxwemeni ezinokufezekiswa eneneni ngokungeniswa elizweni kwe-LNG. Le mithamo ye- LNG ingafunyanwa ngamazibuko achongiweyo (Richards Bay, Ngqura naseSaldanha Bay). Izitishi

zokugqibela zeCandelo loGcino eliXhasa iNkqubo yokusebenzisa ubushushu ukuguqula i-LNG ukusuka kulwelo lube yigesu ukuze kube lula ukuyithutha nokuyisasaza/ *The Floating Storage Regasification Unit (FSRU)* ezisetyenziswayo zizinkela kwii-RMI4P FSRU ukususela ngowama-2024 ukuya ngowama-2030, kuze emva koko imodeli ikhethe kwiinketho ezahlukeneyo ezinikiweyo.

Ukususela ngowama-2030, iziphumo zibonisa ukuba imodeli yandisa iinketho zokuThenga ze-FSRU eRichards Bay, eNgqura naseSaldanha Bay, ukurhoxisa zonke ii-RMI4P FSRU. Nokwenzeka kokwenza imali eMatola LNG kusasele ingumbuzo. Izitishi zokugqibela ze-LNG ezandileyo zibonisiwe ngoko kuTheyibhuli yesi- 7.

Ittheyibhuli yesi- 7: Ubuchwepheshe beziphelo Selected Terminal Technologies

Ubuchwepheshe	Ubukhulu (m3)	Unyaka								
		2023	2027	2029	2030	2035	2040	2045	2050	
Lesithili (Emanxwemeni okanye i- FSRU: Ukuqeshisa) ⁷ Lease) ⁸	125 000 - 170 000									
RMI4P (FSRU: Ukuqeshisa) RB, SB, NGQ	125 000									
Ubuchwepheshe: Ukuqeshisa/ukuthenga/ngasemanxwemeni – RB	170 000									
Ubuchwepheshe: Ukuqeshisa/ukuthenga/ngasemanxwemeni – eNgqura	125 000									
Ubuchwepheshe: Ukuqeshisa/ukuthenga/ngasemanxwemeni – SB	125 000									

Imithamo engeniswa elizweni ye-LNG kwisitishi sokugqibela ngasinye esikhethiweyo siboniswe kuMzobo wesi-4. 3. Ekuqaleni zonke izitishi zokugqibela ze- RMI4P FSRU ayiyomithombo yegesi kuphela ye-RMI4P kodwa ikwayimithombo yezinye iindawo ezalathelwe uphuhliso. Isitishi sokugqibela saseRichards Bay silungiselelwe ukubonelela ngemfuno yeendawo eziphakathi kwilizwe kunye besibonelelo ezingeniswe elizweni lwesithili esikhulayo.

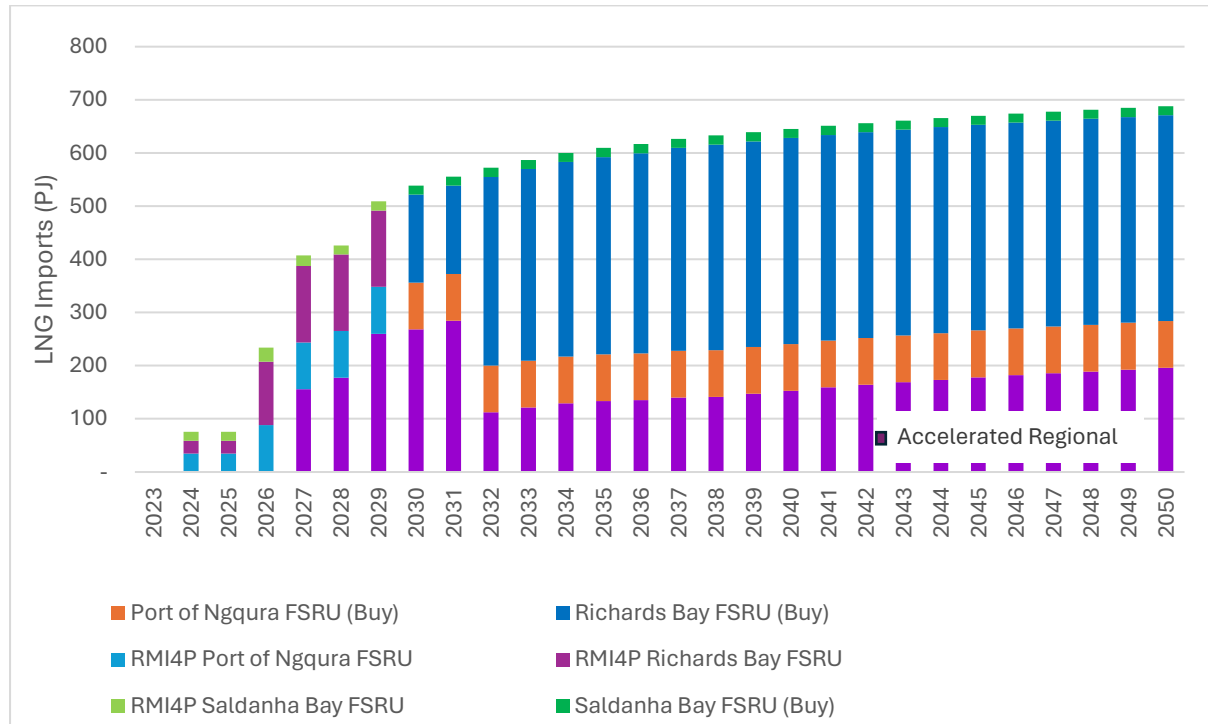
Esi sibonelelo singeniswa elizweni siya kufikelela kuma-284 PJ/a ngowama-2031 size sehle sibe li-112 PJ/a ngowama-2032 xa i- FSRU eRichards Bay isenyusa ukusebenza kwaye isanda kancinane kancinane ukufikelela kwi-196 PJ/angowama-n 2050. Imodeli yazisa kancinane kancinane amazibuko eLNG eRichards Bay LNG ngokuqalisa ngesibonelelo kwi-RMI4P FSRU ukususela ngowama-2024, ukuze kusetyenziswe i-FSRU enkulwana ukususela ngowama-2030.

⁷ Regional options are not restrictive to LNG only. Other fields could offer better supply opportunities.

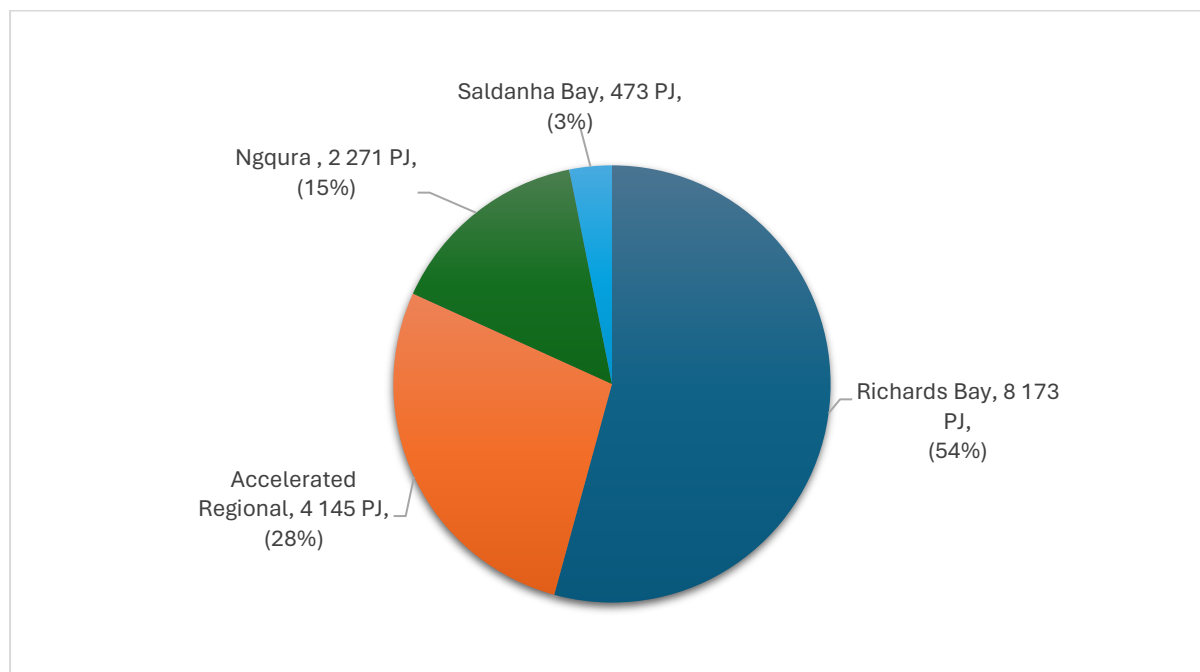
⁸ Regional options are not restrictive to LNG only. Other fields could offer better supply opportunities.

Amazibuko eRichards Bay ikhule ukusuka kwi- 165 PJ/a ngowama- 2030 ukufikelela kwincam yama-387 PJ/a ngowama- 2038 kwaye kusasele kuziznzile kude kube kukuphela kwengqiqo yokucwangcisa.

Umzobo wesi- 8: ImiThamo ye- LNG engeniswa elizweni nobuChwepheshe obuNxulumeneyo



Amazibuko asuka eNgqura ajolise kwimfuno yamandla akummandla kwaye aya kubonelela ngama- 88 PJ ngonyaka kude kube sekupheleni kwengqiqo yokucwangcisa. Amazibuko eLNG aseSaldanha Bay aya kubonelela imfuno yamandla eSaldanha Bay kwi- 17 PJ ngonyaka. Umzobo we-9 ubonisa imithamo yonke eya kubonelelwa zezi zitishi zokugqibela zeLNG ngexesha lengqiqo yokucwangcisa ngowama- 2030 ukuya ngowama-2050 kulindelwe imithamo emikhulu evela eRichards Bay nemincinane evela eSaldanha Bay.



6.4 IsiBonelelo seGesi siSonke, iMfuno nokuDingeka

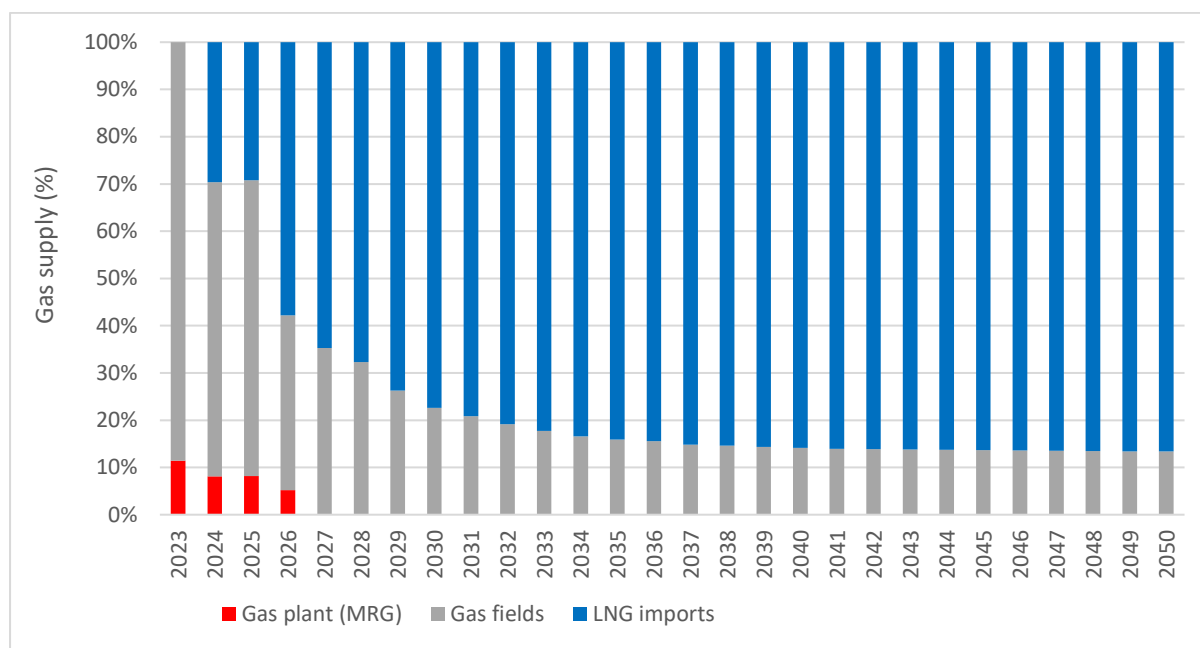
6.4.1 TisiBonelelo seGesi siSonke

Amazibuko e-LNG alindeleke ukuba iqikelelwe malunga neepesent ezingamashumi amathathu (30%) of yesibonelelo sisonke xa kusazisa ngowama-2024, ukukhula malunga namashumi asibhozo anesixhenxe eepesenti (87%) ngowama-2050 ngemizi-mveliso yegesis (MRG) nemimandla egesi eqikelela intsalela ngexesha lengqiqo yokucwangcisa.

Ngaphandle kolunye uphuhliso kwimimandla yemveli, imimandla yegesi echongiweyo kwisikhokhelo esisisiseko/isikhokhelo sesalathisi ukubonelela kutsha-nje kumalunga ne- 160 Pj kwaye incam ingaphezulu nje kuma-200 PJ ngowama- 2027, kuya kuonelelwa malunga ne-100 PJ ekupheleni kwengqiqo yokucwangcisa.

Le mbono inokuguquka ngokubonakalayo ngesantya sokuphuhliswa kommandla wohlobo lwegesi ethile kwaye ilizwe lingaguquka ekubeni libe ngumgenisi elizweni libe ngumthumeli wenzuzo wegesi yemvelo ngeenzuzo zoqoqsho ezicacileyo.

Umzobo we- 10: IsiBonelelo seGesi siSonke (Ngaphandle kweGesi yohlobo oluthile)

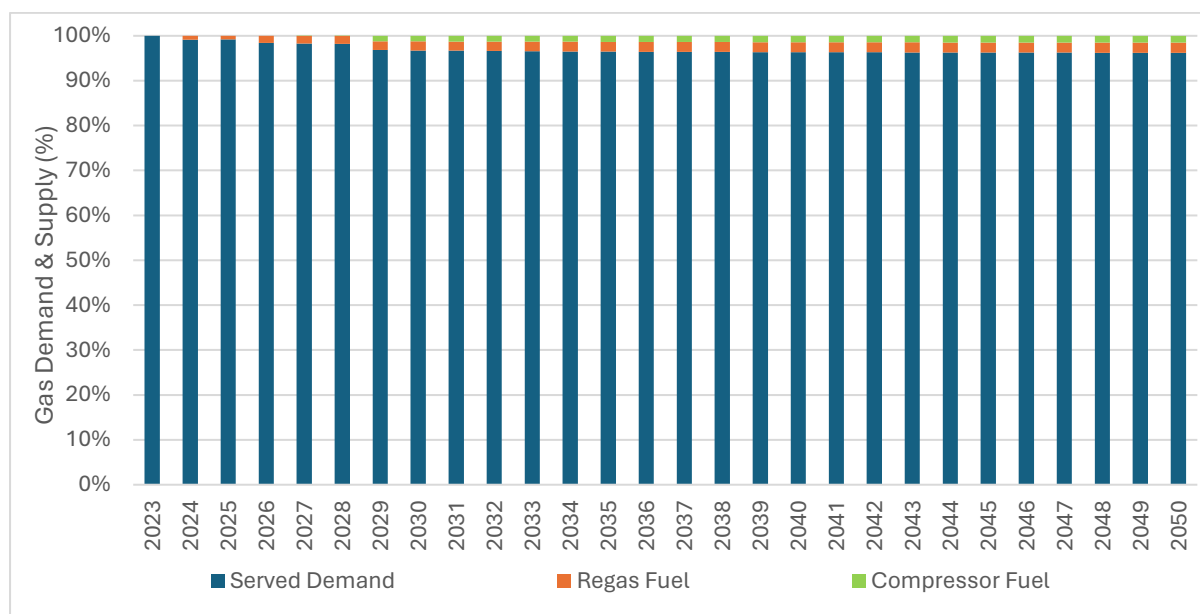


6.4.2 IMfuno

Umzobo we-11 ubonisa indlela esetyenziswa ngayo igesi ebonelelwayo. Njengoko kubonisiwe ngezantsi uninzi lwegesi yemvelo yimfuno esetyenziswayo. Ukususela ngowama-2024 ukuya ngowama-2028 isibonelelo sisonke sisasazwe phakathi kwemfuno esetyenziswayo kwaye izibaso zegesi zigcwalisiwe, ekubeni iziguquli zemibhobho ziqalisa ukusebenzisa inxalenye yonke yesibonelelo ngowama- 2029.

Ngowama- 2050, igesi egcwalisiweyo nesiguquli sesibaso zinikele ngeenxenye ezimbini ezingamashumi amabini anesihlanu (2.25%) nenxenye enye ezingamashumi amahlanu anesine eepesenti (1.54%) yesibonelelo sonke ngokulandelelana. Kuqikelelwa ukuba iipesenti ezine (4%) yemveliso iya kusetyenziswa kwiziguquli zezibaso ekubeni inxenye ezimbini zepesenti engamashumi amathandathu anesithathu (2.63%) ye-LNG iya kusetyenziswa ngabatshisi ekuhlaziyeni kwakhona i-LNG ibe yigesi yemvelo phambi kokuba ithunyelwe ngemibhobho.

Umzobo we-11: UkuLingana kweGesi Emva koKwandiwa



6.4.3 UkuDingeka

Ukudingeka kwenzeke emva kolwandiso pkathi kowama-2023 nowama-2028 njengoko kuboniswa kumzobo we- 12. Oku kudingeka kwenzeke ngenxa yokungabikho kwemimandla yegesi enokwenzeka kunye namazibuko e-LNG, okanye ukunganeli kwamazibuko asebenza ngemfuno. Ukwandiswa kokudingeka, amazibuko ePande-Temane aqale ukwehla ngowama-2026 njengoko imfuno eqikelelwayo eSasolburg ilindeleke ukuba yande kwangaloo nyaka, kungoko ubungakanani bokudingeka bandile kuloo nyaka.

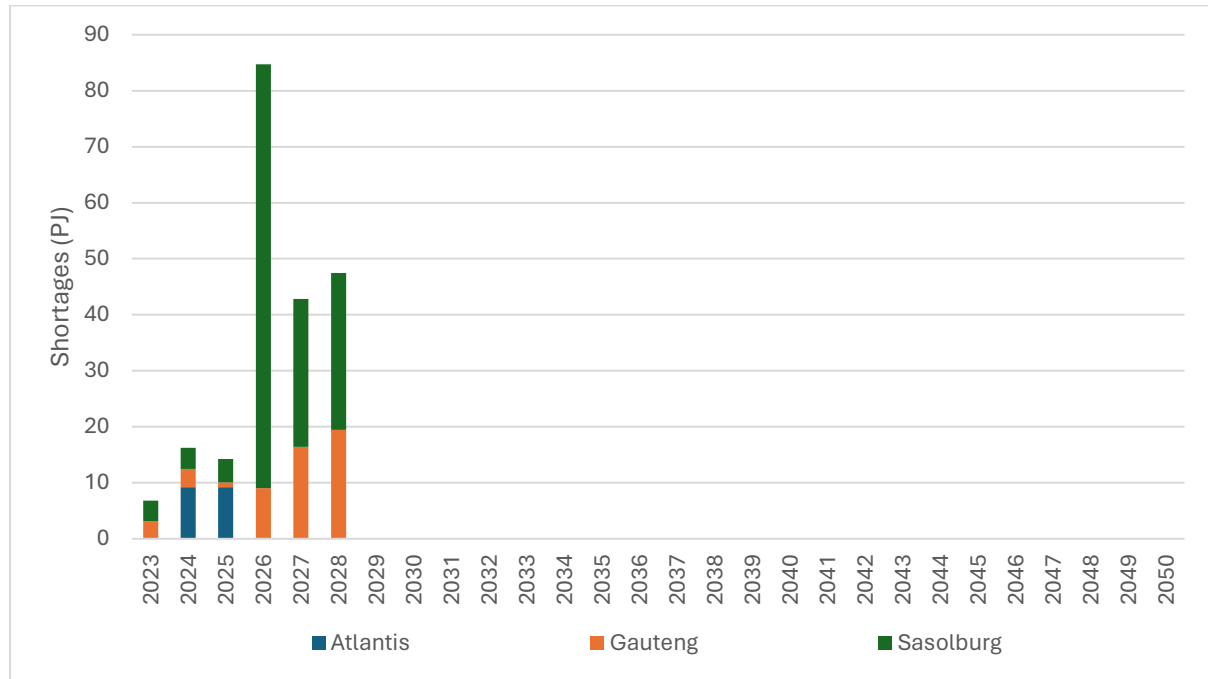
Ukwanda kwezibuko lesiThili ngowama-2027 kushenxiswe okunye ukudingeka kwiindawo eziphakathi kwelizwe, nangona kunjalo imfuno ilindeleke ukuba ikhule eMiddleburg, tiges i eyongezelelelweyo ebonelelwa nge-ROMPCO isetyenziswe okokuqala eMiddleburg, phambi kokuba ifike eGauteng. Ngoko kwenza ukudingeka eGauteng phakathi kowama-2027 nangowama-2028.

Ngowama-2029 konke ukudingeka kuyashenxiswa ngenxa yokulindelwa kokugqityw a kokwandiswa kwamandla eROMPCO ngokuqikelelwa imitya yokurhintyela kwaye enakho ukwandisa ukugqithisela igesi ukusuka eMozambique. Ukudingeka kwiindawo eziphakathi elizweni (eGauteng naseSasolburg) zishenxiswe ikakhulu ngamazibuko andileyo ukusuka ezambique anamazibuko e-LNG i ukuya eRichards Bay kwingqiqo ecwangcisiweyo. Ukudingeka e-Atlantis kufezekiswe ngesibonelelo esiya kuvela kummandla weBlock 2A sakuba sikho.

Ukunciphisa ukudingeka kwesibonelelo segesi phakathi wowama-2026 ukuya kuma-2030, kungxamisekile ukuzibandakanya kwisithili ukumisela abenzi abanakho ukuveza izibonelelo sesithili

esongezelelweyo esinokwenzeka. Izivumelwano zikarhulumentekurhulumente zingaba zizixhobo zifanelekileyo zokuveza amaphulo esithili.

Umzobo we- 12: Ukudingeka emva kokwandisa



6.5 IsiBonelelo ngokwendawo eyalathelwe ukuphuhlisa iMfuno

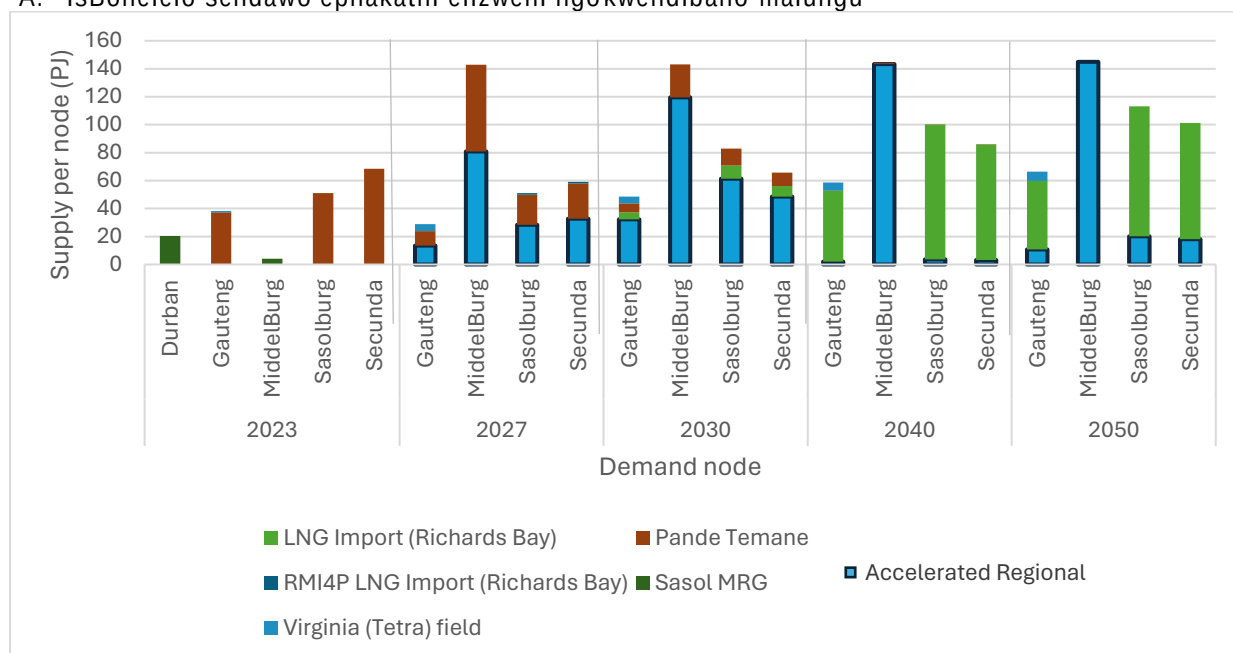
6.5.1 Isibonelelo seendawo eziphakathi elizweni nezisemanxwemeni

Kunikwa umfuno eqikelelwayo kwindawo nganye kunye neenketho zesibonelelo neenketho zaokuzalisa imali kwisiziseko, isixokelelwano segesi elizweni siyalingana njengoko kubonisiwe kumzobo we- (A.kwiindawo eziphakathi elizweni B.neendawo ezisemanxwemeni).

Umzobo ubonisa iinketho zesibonelelo esandisiweyo kwindawo yemfuno nganye kwigqiqo ezicwangciswayo zonke. Indawo nganye ibonelelwa yimithombo eyahlukeneyo esekelwe kukubakho nokuba kufutshane kumthombo. Ngowama-2023 yindawo yemfuno enye kuphela eyayikho kwaye iinketho zesibonelelo ziboniswe ukususela ngowama-2027 apho iindawo ezalathelwe iimfuno zamandla zingongezwa neenketho zesibonelelo zamandla.

Umzobo we-e 13: Isibonelelo seMfuno ngokwendibano-malungu

A. Isibonelelo sendawo ephakathi elizweni ngokwendibano-malungu



indibano-malungu lweemfuno kwiindawo eziphakathi elizweni ngowama-2023 zibonelelwe yimithombo yokubonelela igesi ezikhoyo ukusuka ePande-Temane (Mozambique) ukuya eSecunda (eMzantsi Afrika) kusetyenziswa imibhobho yokugqithisela igesi ye- ROMPCO. Okulandelayo, iindawo ezalathelwe uphuhliso lweemfuno eGauteng naseSasolburg zibonelelwe ngegisi evela ePande naseTemane kusetyenziswa imibhobho ehlanganisa iSecunda-Gauteng neSecunda-Sasolburg ngokulandelenayo. IMiddelburg ibonelelwe yiSasol MRG ngemobhobhop phakathi kweendibano-malungu ezimbini (2) (Sasol MRG-Middelburg). Umlinganiselo omncimnane wemfuno eGautengubonelelwe ngummandla waseVirginia (Tetra) kusetyenziswa umbhobho obonakalayo. (Uthungelwano lwendlela).

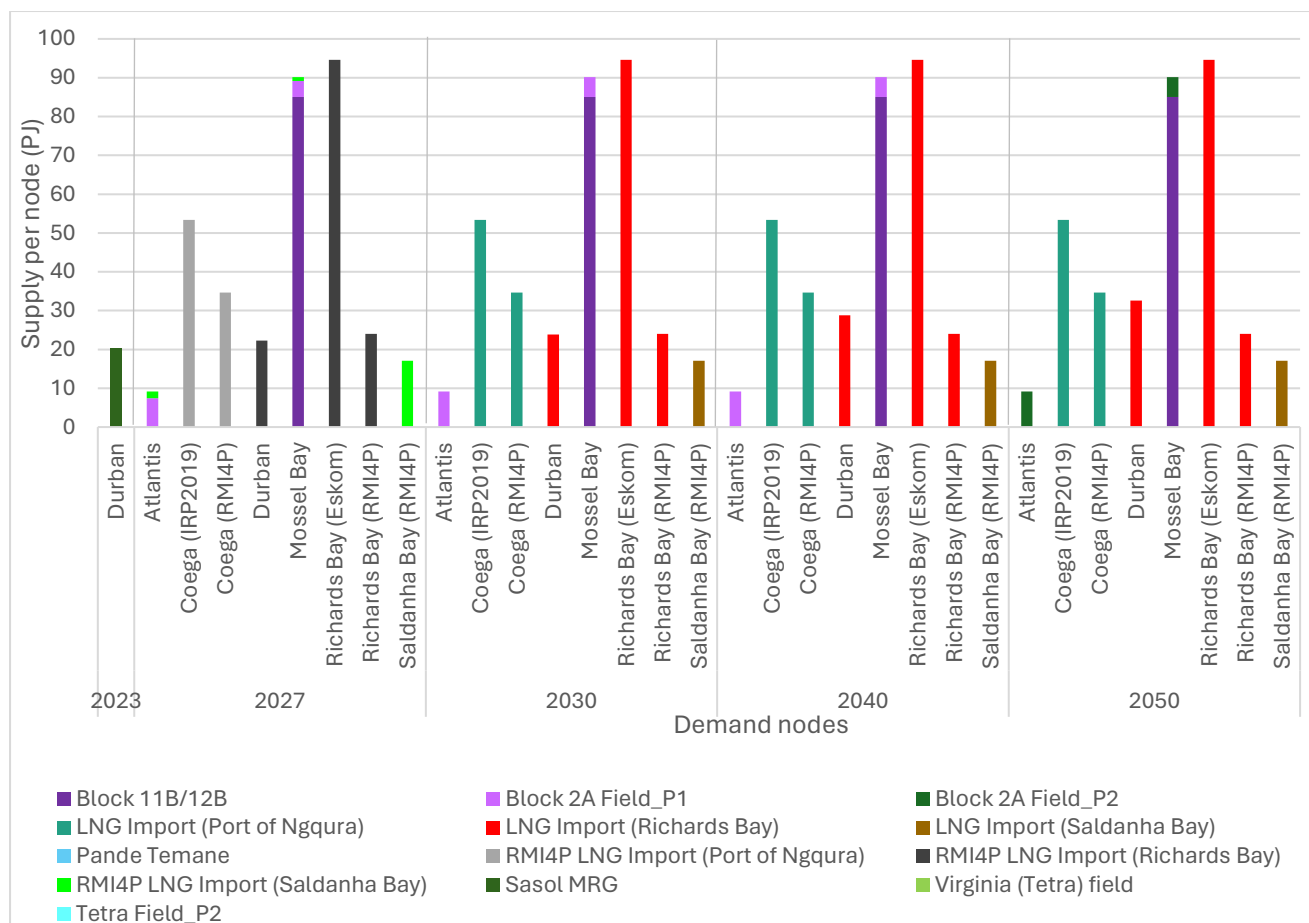
Ngowama- 2027, isibonelelo esinokubakho kwisiThili sinika isibonelelo kwiindawo zophuhliso zeendawo eziphakathi elizweni ezine (4) nge- ROMPCO neminye imibhobho ekhoyo njengePande neTemane eqalisa ukwehla nokwanda kwemfuno. Nangona kunjalo kwimeko yaseMiddelburg, umbhobho omtsha ophambuka ukusuka kwi-ROMPCO ukuya eMiddelburg uyakhiwa, uthutha igesi ukusuka ePande naseTemane nakweminye imimandla yamandla ukufezekisa imfuno eyandayo kwindibano-malungu yaseMiddelburg, kulandela ukuphelisa isibonelelo seSasol MRG ngowama-2026 nokurhoxisa imibhobho yaseSasol MRG-Middelburg. Ukuvezwa kwesibonelelo samandla esithili ukususela kowama-2027 ekufuna izivumelwano zikarhulumente kurhulumente.

Ngowama-2030, isibonelelo esisuka ePande naseTemane siyaqhubeka ukwehla, isibonelelo esingeniswayo kwisithili siyanda kwaye igesi esuka kwisitishi eRichards Bay LNG sazisiwe kwiindibano-malungu eendawo eziphakathi elizweni, zithuthwa ngemibhobho yamandla ukusuka kwitishi sokugqibela saseRichards Bay LNG (Richards Bay-Empangeni) ukuya eSecunda (Empangeni-Secunda).

Emva ngowama- 2040, IPande Temane iyekile ukuvelisa igesi kwaye uninzi lwemfuno yeendawo eziphakathi elizweni zifezekiswa ngegesi esuka kwisitishi sokugqibela saseRichards Bay, ekubeni iMiddelburg ibonelelwa ngokungeniswa ekwisithili.

Intsingiselo efanayo iqhubeka iye kowama-2050, ngokwaziswa kommandla P2 waseVirginia (Tetra) kwimfuno yesibonelelo yaseGauteng. Lo mmandla uthatha indawo ka-P1.

B. Isibonelelo seendawo ezisemanxwemeni ngokwendibano-malungu



Ngowama-2023, isibonelelo kwimfuno eThekwini isuka e Sasol MRG ngemibhobho yaseLilly.

Ngowama-2027, Itheke libonelelwa yi-RMI4P LNG eRichards Bayngemibhobho yaseLilly (Empangeni-Durban), kulandela ukulindelwa kwesithintelo sokubonelela seSasol MRG ngowama- 2026. Iindibano-malungu yemfuno yase-Atlantis ibonelelwa kummandla osuka e2A Field (P1) ngemibhobho yaseBlock 2A-Abrahams, yase-Abrahams-Saldanha, yaseSaldanha-Atlantis (ehlangene ngothotho). Esi

sibonelelo songezwa ngokungeniswa kwilizwe e-RMI4P LNG (Saldanha Bay). Ibonelelwa ikakhulu ngemfuno eNgqura kwi-IRP2019 nakwi-RMI4P ibonelelwa ngezitishi zokugqibela zokungeniswa kwilizwe nge-RMI4P LNG (Izibuko laseNgqura). Indibano-malungu yemfuno yaseMossel Bay ibonelelwa ikakhulu ngummandla waseBlock 11B/12B ngemibhobho yas Block 9-Mossel Bay kwaye yongezwa ngokubonelelwa okusuka kummandla waseBlock 2A (P1) ngothotho lwemibhobho (Block 2A-Abrahams, Abrahams-Saldanha, Saldanha-Atlantis, Atlantis-Mossel Bay).

Imfuno yaseRichards Bay (Eskom ne-RMI4P) iya kubonelelwa kukungeniswa yi- RMI4P LNG ukusuka eRichards Bay ngemibhobho yase Bay-Empangeni. Indibano-malungu yemfuno yeSaldanha Bay (RMI4P) ibonelelwa ukusuka e-e RMI4P LNG (Saldanha).

Ukufezekisa ukwanda wemfuno eqikelelweyo, isiseko se-FSRU sokungeniswa kwe-LNG . kwiinjongo ze-RMI4P zokuyeka ngowama- 2030 kwaye isiseko esitsha esikhulwana sifakelwe kumazibuko ahlukeneyo ukubonelela i-RMI4P neendibano-malungu zemfuno ezisebumelwaneni..

Ngowama-2030, indibanomalungu yemfuno yaseThekwini ibonelelwa kukungeniswa kwe-LNG lokusuka eRichards Bay ngemobhobho yaseRichards Bay-Empangeni nase-Empangeni-Durban.. indibano-malungu yemfuno evela kwa-Eskom ne-RMI4P e Richards Bay zikwabonelelwa ngokungeniswa kwe-LNG e-Richards Bay.

Iindibano-malungu yemfuno ye- IRP2019 ne-RMI4P zaseNgqura zibonelelwa kukungeniswa yi-LNG ukusuka kwizibuko laseNgqura, ekubeni iindibano-malungu ezivela kwi-RMI4P eSaldanha ziya kubonelelwa kukungeniswa kwe-LNG (Saldanha), ngentsingiselo yokuqhubekeka ukuya ngowama-2040.

Ngowama-2050, ummandla weBlock 2A (P2) uya kubonelela indibano-malungu ye-Atlantis ngemibhobho ka-Block 2A-Abrahams, ye-Abrahams-Saldanha Bay, neyeSaldanha Bay, kulandelwa ukuncitshiswa kommandla we Block 2A (P1). Isibonelelo senye imfuno eMossel Bay iyakongezwa ngummandla ka Block 2A (P2) ngemibhobho yase-Atlantis-Mossel Bay.

Itheyibhuli yesi-8 inika isishwankathelo sesiseko semibhobho efunywayo ekubeni itheyibhuli ye-9 inika ulwazi kwi-FSRU efunekayo ukubonelela ngegesi engeniswa elizweni, njengoko kuchaziwe kwicandelo le-6.5.1.

Ittheyibhuli yesi- 8: Isiseko semibhobho

		Iindawo ezalathelwe isibonelelo (ukusuka)							
		Ummnandla Block 11/12B	Ummandla Block 2A	Pande & Temane	Virginia (Tetra) Field	Umthombo wesiThili	RMI4P Izibuko leNgqura FSRU	RMI4P Richards Bay FSRU	RMI4P Saldanha Bay FSRU
Iindawo ezalathelwe ukuvelisa imfuno (ukuya)	E-Atlantis		✓(2027)						✓ (2026)
	ENgqura (IRP2019)						✓(2026)		
	ENgqura (RMI4P)						✓(2024)		
	EThekwini							✓(2027)	
	EGauteng			✓(kutsha-nje)	✓(kutsha-nje)	✓(2027)		✓(2027)	
	EMiddelburg			✓(2026)		✓(2027)			
	EMossel Bay	✓(2027)	✓(2027)						✓(2027)
	ERichards Bay (Eskom)							✓(2026)	
	ERichards Bay (RMI4P)							✓(2024)	
	ESaldanha Bay (RMI4P)								✓(2024)
	ESasolburg			✓(kutsha-nje)		✓(2027)		✓(2027)	
	ESecunda			✓(kutsha-nje)		✓(2027)		✓(2027)	

Ittheyibhuli ye-9: Ukuxhasa ugcino lwemilinganiselo yokuguqulwa kwegesi

Amazibuko (Ukungeniswa elizweni)			
	ERichards Bay	ENgqura	ESaldanha Bay
	Ukuqeshisa (2024)	Ukuqeshisa (2024)	Ukuqeshisa (2024)
	Ukuthenga (2030)	Ukuthenga (2030)	Ukuthenga (2030)
FSRU			

7. IZINDULULO

URhulumente woMzantsi Afrika kufuneka qahubeke kwimizamo yakhe yokutshintsha imithombo yamandla ngenjongo yokunciphisa ukuthembela kakhulu kumalahle angayekelelanga nokuqonda umxube wamandla osebenzayo ekubeni kuphuculwa ukhuseleko lokubonelela amandla elizwe nokunciphisa ukukhutshwa kwixesha elide. Ilizwe kufuneka liqhube uhlolo lwamaphulo

olongezelelweyo olukhulu, ekubeni ngaxesha-nye lunceda uphuhliso lwamandla ngenye iindlela yamandla egesi eMzantsi Afrika.

Imigaqo yokomeleza amandla nokuzalisa imali ukwenza ummandla onakho ukusebenzisa ngokwanda igesi yemvelo elizweni kufuneka kube phakathi kwezinto ezibalulekileyo zikarhulumente ezingundoqo. Loo nkqubo ingandisa uhlobo lwemvelo nemisebenzi yokuvelisa namathuba okuvelisa igesi kusetyenziso lwasekhaya nokuthumela kwiimarike kwixesha eliphakathi nelide.

Ukubaluleka kwegesi yemvelo, ngendlela yegesi yemibhobho ne-LNG evela kumazwe asebumelwaneni ngesibonelelo esigqithileyo yinketho eqondwayo kwixesha elifutshane neliphakathi. Ubukho begesi kwimarike yasekhaya kuya kuququzela ezoshishino nophuhliso lwamashishini egesi, ukuquka i-LNG, ukwenziwa kwegesi nesiseko semibhobho yegesi. Oko kuzalisa imali kuya kuba negalelo elicacileyo kwi-GDP yelizwe kwaye lenze amathuba emisebenzi ekhaya.

Kuya kuxhasa imarike yasekhaya kwixesha elifutshane nakwixesha eliphakathi. UMzantsi Afrika kufuneka ugqalisele ekuqhubeni iziqalelo neenkqubo ezijolise ekuphuculeni uphuhliso lwe-LNG njengesisombululo sexesha eliphakathi. Kwakhona kuncitshiswe kwintsilelo yokubonelela imfuno eqikelelwa kwixesha eliphakathi ngowama-2026 ukuya ngowama-2023, ukubandakanywa kwesithili ukumisela abazi abanakho ukuveza amandla okubonelela ongezelelweyo kwisithili kufuneka kwenziwe kubaluleke. Izivumelwano zikarhulumente ngurhulumente zingaba zizixhobo ezifanelekileyo ukuveza amaphulo anjalo ezithili.

Ukuzalisekiswa kwesiCwangciso soLawulo lweGesi kufuneka kuigcine ingqaliselo yobuchule ekutshintsheni iinketho zesibonelelo segesi ngokulandela imibhobho yemvelo neenketho ze-LNG ezingeniswayo elizweni ukunciphisa iingozi zopolitiko-zelizwe nokhuseleko kwizisongelo zokubonelela ezinokuza nokuthembela okucacileyo kwigesi engeniswa elizweni. Ukutshintsha isibonelelo segesi kuya kunika imarike yasekhaya iinketho ezisebenzayo namaxabiso okhuphiswano nokufikelela kwigesi.

Ilizwe kufuneka ibe semlinganisweni phakathi kwegesi yasekhaya/yemvelo nokungeniswa kwemibhobho nokungeniswa kwe-LNG ukuqinisekisa ukutshintsha imithombo yesibonelelo nokunciphisa iingozi kukhuseleko lwesibonelelo. Ukunyusa kakhulu amaxabiso e-LNG kungadala ingozi kwilizwe, ukuxabisa kufuneka ngoko konganyelwe ngocoselelo kwaye izixhobo zokulawula ezisebenzayo zandiswe.

8. ISIPHELO

Ekugqibeleni, ubungqina bunuinzi bokuba uqoqosho loMzantsi Afrikal uthembele kakhulu kubukho kwabathuthi bamandla abanemali . Kule meko yegesi yemvelo ukubonelela ngengesi yemvelo kudala imiceli-mngeni ngokukhawuleza kuphuhliso lwamashishini egesi elizwe.

Njengoko kubonisiwe kwiziphumo zokwenza kwisikhokhelo esisiseko, imfuno yegesi yodlula isibonelelo, oku kudingeka kulindeleke kube mandundu kwixesha elizayo njengoko imfuno iqikelelwa ukuba ikhule. Ukwanelisa ubutyebi begesi yemvelo eyehlayo nonywino lelizwe uphuhliso olwemarike yegesi njengomnye umthombo wamandla kufuneka ngoko uhlolwe ngokungxamisekileyo.

UBume bomGaqo wesi-7 wesiCwangciso soButyebi obuHlangeneyo (IRP 2019) ikhuthaza ukuzalisekiswa nokulandela inkxaso enkulu yophuhliso lwesiseko segesi, ukufezekisa inkqubo yamandla-ngegesi eqikelelwayo, izindululo zesiCwangciso soLawulo lweGesi a kufuneka zibe zezibalulekileyo..

Iziko lwemarike yegesi lesizwe liya kudla amathuba aliqela kumacandelo oqoqosho aliqela namathuba okubhucula izakhono kubasebenzi abakhoyo, ukugqithisela izakhono zamazwe ngamazwe nokudala umsebenzi omtsha ngaphaya kwecandelo lwamandla. Ukwenza imarike yegesi yasekhaya ibe sisakhiwo esiya kuphucula imbonakalo yoqoqosho nonguqulelo yelizwe ekuncipohiseni u buhlwempu nempilo engcono yabemi bemveli.