



TotalEnergies EP South Africa B.V.

ENVIRONMENTAL AND SOCIAL IMPACT
ASSESSMENT (ESIA) FOR THE OFFSHORE
PRODUCTION RIGHT AND ENVIRONMENTAL
AUTHORISATION APPLICATIONS FOR BLOCK
11B/12B - REF NO: 12/4/13 PR

Draft Environmental and Social Impact Assessment Report



CHAPTER 2



TotalEnergies EP South Africa B.V.

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) FOR THE OFFSHORE PRODUCTION RIGHT AND ENVIRONMENTAL AUTHORISATION APPLICATIONS FOR BLOCK 11B/12B – REF NO: 12/4/13 PR

Draft Environmental and Social Impact Assessment Report

PUBLIC

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2 ADMINISTRATIVE AND LEGAL FRAMEWORK

2.1 SOUTH AFRICAN ADMINISTRATIVE AND INSTITUTIONAL FRAMEWORK

This section outlines the key South African administrative authorities applicable to the offshore PR and EA applications for the proposed Project.

2.1.1 DEPARTMENT OF MINERAL RESOURCES AND ENERGY

The Department of Mineral Resources and Energy (DMRE) has its mission rooted in the regularisation, transformation and stimulation of South Africa's mineral and energy sectors through the promotion of economic growth and sustainable development. The purpose is to ensure that all South Africans derive sustainable benefit from the country's mineral and energy wealth (Department of Mineral Resources and Energy, 2020). In accordance with the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (MPRDA), the State, as the custodian of South Africa's mineral and petroleum resources, through the Minister of Mineral Resources and Energy and by extension the DMRE, is responsible for granting, issuing, refusing, controlling, administering and managing any Reconnaissance Permission, Prospecting Right, Mining Right, Mining Permit, Retention Permit, Technical Co-operation Permit, Reconnaissance Permit, Exploration Right and Production Right.

The Minister, and by extension the DMRE, is required to consider the principles contained in the MPRDA and NEMA when making decisions that affect South Africa's mineral and petroleum resources so as to ensure the promotion of economic growth and sustainable development.

The DMRE is the Competent Authority responsible for granting EA for the proposed Project.

2.1.2 PETROLEUM AGENCY OF SOUTH AFRICA

In accordance with Section 70 of the MPRDA, the Minister of Mineral Resources and Energy may designate an organ of state, a wholly owned and controlled agency or a company belonging to the state to perform various functions relating to petroleum exploration and production in the country. The Petroleum Agency of South Africa (PASA) was, in June 2004, designated to regulate exploration and production activities in the country and perform the functions as detailed in the MPRDA.

In accordance with Section 71 of the MPRDA, these include, but are not limited to, the:

- promotion of onshore and offshore exploration for and production of petroleum;
- receipt and evaluations of applications of Reconnaissance Permits, Technical Co-Operation Permits, Exploration Rights and Production Rights in order to make recommendations to the Minister:
- monitoring and reporting of compliance with such permits or rights to the Minister;
- collection of prescribed fees and considerations in respect of the permits or rights;
- making recommendations to the Minister with regards to the acceptance of environmental reports and conditions of EA; and
- acting as the custodian of the national petroleum exploration and production database.

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The Petroleum Agency of South Africa (PASA) was, in June 2004, designated to regulate exploration and production activities in the country and perform the functions as detailed in the MPRDA. However, **DMRE** is the Competent Authority responsible for granting the PR for the proposed Project.

2.1.3 DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

The Department of Forestry, Fisheries and the Environment (DFFE) is legally mandated to manage, conserve and protect South Africa's natural resources. Section 24 of the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) informs the mandate and ensures that everyone has the right to an environment that is not harmful to their health or well-being; and to have the environment protected for the benefit of present and future generations (Department of Forestry, Fisheries and the Environment, 2020).

To give effect to this principle outlined in the Constitution, DFFE has over time developed a comprehensive environmental management legislative and regulatory framework. This regulatory framework comprises acts of parliament (environmental laws), regulations, policies, norms and standards, and other regulatory tools that are aimed at promoting sound environmental management practices in order to protect and conserve the environment for the benefit of current and future generations (see Section 2.2 below). In addition, other critical environmental management interventions by the DFFE include raising awareness on key environment issues and establishing and strengthening national, regional and global partnerships to address common environmental challenges.

The DFFE holds responsibility for the administration of applications for EA in terms of NEMA, except in cases relating to the acquisition, use and disposal of mineral and petroleum resources (where the DMRE assumes responsibility). However, in respect of all appeals on decisions, the DFFE will decide on appeals in accordance with the National Appeal Regulations, 2014 (GNR 995 of 2014) (National Appeal Regulations, 2014).

The DFFE is the Competent Authority responsible for deciding on appeals should any be administered as part of the EA process for the proposed Project.

2.1.4 SOUTH AFRICAN HERITAGE RESOURCES AGENCY

The South African Heritage Resources Agency (SAHRA) is the national administrative body responsible for the protection of South Africa's cultural heritage and is an organisation established under the National Heritage Resources Act, 1999 (Act 25 of 1999) (NHRA). In accordance with Section 12 of the NHRA, SAHRA's objective is to co-ordinate the identification and management of the national estate. This is done through the development of national strategies for the identification and assessment of heritage resources; the co-ordination and support of initiatives by provincial herniate authorities; the administration and funding of projects and research related to heritage resources; and the promotion of the identification and recording of aspects of living heritage, to name a few (South African Heritage Resources Agency, 2022).

In accordance with the NHRA, no person may destroy, damage, excavate, alter, deface, or otherwise disturb any cultural heritage resource without obtaining a permit from responsible heritage authority. Provincial heritage authorities are primarily responsible for the administration of the aforementioned permits, except where a resource is located in territorial waters and the maritime cultural zone and/or if the resource is considered to be Grade I. In addition, Section 38 of the NHRA lists

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certain activities that would require authorisation by SAHRA. In terms of Section 38(1)(c)(i), SAHRA would thus need to be notified regarding any development or activity that will change the character of a site (including land covered by water) exceeding 5 000 m² in extent.

SAHRA is the Competent Authority responsible for issuing any permits relating to the destruction, disturbance, excavation, alteration etc. of any heritage resources located in the proposed Project area. SAHRA would also be required to be notified of any development exceeding 5 000 m² in extent.

2.1.5 GARDEN ROUTE DISTRICT MUNICIPALITY

The Garden Route District Municipality (GRDM) came into effect due to Section 84 of the South African Local Government: Municipal Structures Act, 1998 (Act 177 of 1998) and is responsible for executing and performing a range of powers and functions, including the undertaking of integrated development planning for the district municipality; managing service delivery such as the supply of potable water, bulk supply of electricity, the disposal of wastewater, waste and sewage, the management of road transport systems in the municipality and the promotion of tourism in the area, to name a few (Garden Route District Municipality, 2022).

The District Municipality is located in the south-eastern part of the Western Cape and comprises of seven local municipalities, including Bitou, George, Mossel Bay, Hessequa, Kannaland and Oudtshoorn local municipalities. The GRDM is bordered by the following District Municipalities: Central Karroo to the north, Cape Winelands and Overberg to the west and Cacadu to the east.

The GRDM is the Air Quality Management licensing authority for the region and operates in accordance with the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) (NEM: AQA). The District's Air Quality Management Unit aims to minimise the impact of air pollutant emissions on the population and the natural environment of the Garden Route District. Furthermore, the District's Disaster Management Centre, which forms part of the Municipality's Department of Community Services, is the authority established to assist with regional emergency-related activities. Among other things, the Disaster Management Centre acts as an advisory and consultative body on issues concerning disasters and disaster management. In addition, the GRDM's Environmental Management Department conforms to the principles of sustainable development which looks for a balance between economic, social and natural environmental needs in the region. This Department is responsible for:

- the production, compilation, analysis, review and dissemination of strategic environmental policy frameworks for the Municipality;
- ensuring the consistent application of environmental legislation and procedures in activities and developments in the District;
- the undertaking of environmental regulation and control be ceasing, removing, stopping and remediation of illegal activities which are detrimental to the environment; and
- acting as a liaison between other environmental-related functions within the District and with external bodies.

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The GRDM is the Competent Authority for issuing an Atmospheric Emissions Licence (AEL) should it be determined that one would be required for the proposed Project. The Municipality would also be required to be kept abreast of the proposed Project Disaster Management Plan/Oil Spill Contingency Plan/Emergency Preparedness Plan so as to be able to mitigate impacts. Further, the Environmental Management Department acts as a Commenting Authority on the proposed Project environmental documentation and will inform the decision-making process.

2.2 SOUTH AFRICAN LEGISLATIVE FRAMEWORK

This section provides an overview of key environmental legislation and regulations applicable to the proposed Project. Other applicable legislation and international conventions related to exploration and production related activities have also been included.

2.2.1 MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002)

The MPRDA forms part of the key legislation governing the acquisition, use and disposal of mineral and petroleum resources in South Africa. The promotion of economic growth and equitable access to mineral and petroleum resources are among the key objectives of the MPRDA. Chapter 6 of the MPRDA relates to petroleum exploration and production and provides a framework for the granting of Exploration Rights and PRs, and the issuing of Technical Co-Operation Permits and Reconnaissance Permits.

Since 2 September 2014, the environmental regulation of prospecting, mining, exploration and production activities ('mineral activities') has been transferred from the MPRDA to the NEMA. The CA must apply the range of environmental principles included in Section 2 of NEMA when taking decisions that significantly affect the environment. The NEMA gives effect to Section 24 of the Constitution of South Africa, 1996 (Act 108 of 1996) by ensuring that the nation's mineral and petroleum resources are developed in an ecologically sustainable manner while promoting justifiable social and economic development. In line with the general objectives of Integrated Environmental Management (IEM), the potential impacts on the environment of listed or specified activities must be considered, investigated, assessed and reported to the CA. The minimum requirements for procedures for the investigation, assessment, management, and communication of the potential impacts are outlined in Section 24(4) of NEMA.

TEEPSA held an Exploration Right for Block 11B/12B which expired in September 2022. TEEPSA now seeks to apply for a PR. Furthermore, TEEPSA proposes to conduct further investigations, including exploration and appraisal drilling and related activities within Block 11B/12B, to enable further refinement of the geological and reservoir understanding, as is typical of developments of this nature. The current application for a PR falls under Section 83 of the MPRDA, respectively.

2.2.2 NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998)

NEMA provides a framework for cooperative environmental governance between various spheres of government by establishing principles for decision-making on matters relating to the environment. NEMA also promotes Integrated Environmental Management (IEM) to ensure sustainable resource utilisation and development. The NEMA principles (under Section 2 of the Act) guide the interpretation, administration and implementation of the Act and any other law concerned with the

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protection of the environment. Its overarching emphasis is that development must be environmentally, socially and economically sustainable. The Act also states that sustainable development requires the consideration of, *inter alia*, the following:

- That pollution and degradation of the environment are avoided, or where it cannot be altogether avoided, minimised and remedied.
- That waste is avoided, or where it cannot be altogether avoided, is minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner.
- That the use and exploitation of non-renewable natural resources is responsible and equitable and takes into account the consequences of the depletion of the resource.
- That the development, use and exploitation of renewable resources and the eco-system of which they are part do not exceed the level beyond which their integrity is jeopardised.
- That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where it cannot be altogether prevented are minimised and remedied.

Chapter 5 of NEMA outlines the general objectives and implementation of IEM, which provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals. Section 24 of the Act provides the minimum requirements for procedures for the investigation, assessment and communication of the potential impact of activities and provides a framework for granting of an EA. In order to give effect to the general objectives of IEM, the potential impacts on the environment of listed activities must be considered, investigated, assessed and reported on to the CA.

TEEPSA seeks EA to apply for a PR, and to undertake development, production, and additional exploration and appraisal drilling and related activities within Block 11B/12B. The EA application process is undertaken in accordance with the principles of NEMA where the DMRE is the CA who will be responsible for the granting of an EA.

2.2.2.1 Environmental Impact Assessment Regulations, 2014 (GNR 982 of 2014)

The EIA Regulations, 2014 as amended (GNR 983 of 2014) (EIA Regulations, 2014) promulgated under NEMA provides for the control of certain Listed Activities which cannot be undertaken without obtaining authorisation. These Listed Activities are included in Listing Notice 1 (Government Notice Regulation [GNR] 983 of 2014) (LN1); Listing Notice 2 (GNR 984 of 2014) (LN2); and Listing Notice 3 (GNR 985 of 2014) (LN3). A Basic Assessment (BA) Process is required if any activities are listed in LN1 and/or 3, while a Scoping and EIA (S&EIA) Process is required if any activities are listed in Listing Notice 2.

The EIA Regulations, 2014 also sets out the procedures and documentation required when applying for authorisation of Listed Activities. Appendix 2, Appendix 3, Appendix 4, Appendix 5 and Appendix 6 of the EIA Regulations, 2014, sets out the outcomes and requirements of reporting when compiling a SR, an ESIA Report, an EMPr, a Closure Plan and specialist reports, respectively. The proposed Project triggers Listed Activities contained in LN 1 (Activities 17 and 19A) and LN2 (Activities 4, 6, 7, 14 and 20) (see Table 2-1); therefore, application for EA, following a S&EIA process, requiring the compilation of a SR, ESIA Report, EMPr, Closure Plan (with specialist reports as supporting documentation), is submitted to the CA, the DMRE.

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Table 2-1 - Listing activities Applicable to the proposed Project

Listing Notice and Activity LN 1, Listing Activity 17: Development -The proposed Project entails the development of a gas field in the south-(i) in the sea; western section of Block 11B/12B. This (ii) in an estuary: area, known as the Project Development (iii) within the littoral active zone; Area, measures approximately 2 260 km². (iv) in front of a development setback; or Up to six production and appraisal wells will (v) if no development setback exists, within a distance of be drilled in this area, and a subsea 100 m inland of the high-water mark of the sea or an production system (SPS), subsea pipeline estuary, whichever is the greater; (also known as the production pipeline) and in respect of riser will be constructed. (a) fixed or floating jetties and slipways; In addition, the proposed Project also (b) tidal pools; entails the undertaking of exploration and (c) embankments: appraisal drilling activities in the eastern (d) rock revetments or stabilising structures including section of Block 11B/12B. This area, known stabilising walls; or as the Exploratory Priority Area, measures (e) infrastructure or structures with a development approximately 3 150 km². Up to four footprint of 50 m² or more exploration and appraisal wells will be but excluding drilled in this area. The proposed Project (aa) the development of infrastructure and structures within thus entails development in the sea, with existing ports or harbours that will not increase the infrastructure and structures with a development footprint of more than 50 m². development footprint of the port or harbour; (bb) where such development is related to the development of a port or harbour, in which case activity 26 in LN 2 applies: (cc) the development of temporary infrastructure or structures where such structures will be removed within six weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area. LN 1, Listing Activity 19A: The infilling or depositing of any The proposed Project entails development in the sea, as described above, resulting in material of more than 5 m³ into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or the movement of more than 5 m³ of rock of more than 5 m³ from material from the sea and seabed. the seashore: (ii) the littoral active zone, an estuary or a distance of 100 m inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea: but excluding where such infilling, depositing, dredging, excavation, removal or moving -(f) [sic] will occur behind a development setback; (g) [sic] is for maintenance purposes undertaken in accordance with a maintenance management plan; (h) [sic] falls within the ambit of activity 21 in this Notice. in

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[sic] occurs within existing ports or harbours that will not increase the development footprint of the port or

which case that activity applies:

harbour; or

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Listing Notice and Activity	Relevance
where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	
LN 2, Listing Activity 4: The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 m ² .	The proposed Project entails the storage and handling of more than 500 m ² of dangerous goods, including but not limited to, completion fluids, radioactive materials, fuels, biocides, cleaning agents, oils and paints.
LN 2, Listing Activity 6: The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding — (i) activities which are identified and included in LN 1; (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) applies; (iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 m³ or less; or (iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 m³ per day.	The activities associated with the proposed Project do not trigger any activities listed under Section 21 of NEM: AQA; nor will there be any controlled emitters under Section 23. However, if the final operational design and equipment register includes listed activities, controlled emitters or any other activity noted in the local by-laws, an AEL may be required, the process of which must be undertaken in accordance with NEM: AQA, and they may have to report emissions using the National Atmospheric Emissions Inventory System (NAEIS) module and/or the compliance reporting module on the South African Atmospheric Emission Licensing and Inventory Portal (SAAELIP).
 LN 2, Listing Activity 7: The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods – (i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity of more than 700 tons per day; (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity of more than 50 m³ per day; or (iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons per day. 	The proposed Project entails the construction of a subsea pipeline, also known as the production pipeline, measuring approximately 109 km to carry gas and condensates from the gas field to the F-A Platform. The anticipated throughput will exceed the trigger threshold.
LN 2, Listing Activity 14: The development and related operation of — (i) (ii) an anchored platform; or (iii) any other structure or infrastructure on, below or along the sea bed; excluding — (a) development of facilities, infrastructure or structures for aquaculture purposes; or (b) the development of temporary structures or infrastructure where such structures will be removed	The proposed Project entails the construction of a subsea production system, connecting the development wells to the F-A Platform, via the production pipeline in Block 11B/12B.

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Listing Notice and Activity	Relevance
within six weeks of the commencement of development and where coral or indigenous vegetation will not be cleared.	
LN 2, Listing Activity 20: Any activity including the operation of that activity which requires a PR in terms of section 83 of the MPRDA, as well as any other applicable activity as contained in this Listing Notice, in LN 1 or LN 3, required to exercise the PR.	The proposed Project entails an application for a PR in terms of the MPRDA for the production of gas and condensate from production wells in Block 11B/12B.

Regulations Pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations, 2015 (GNR 1147 of 2015)

The Regulations Pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations, 2015 (GNR 1147 of 2015) (Financial Provision Regulations, 2015) were published in terms of NEMA, in November 2015, in line with the "One Environmental System", under which all environmental matters pertaining to mining are be regulated in terms of environmental legislation and implemented by the Minster responsible for mineral resources. As part of the "One Environmental System", the requirements for financial provisioning for rehabilitation in the mining sector were transferred from the MPRDA to NEMA through the Financial Provision Regulations, 2015. The purpose of these Regulations is to regulate the determination and making of financial provision as contemplated in the NEMA for the costs associated with the undertaking of management, rehabilitation and remediation of environmental impacts from prospecting, exploration, mining or production operations through the lifespan of such operations and latent or residual environmental impacts that may become known in the future.

TEEPSA seeks EA to convert its Exploration Right into a PR, and to undertake development. production and additional exploration and appraisal drilling and related activities within Block 11B/12B. It follows that the costs associated with the management, rehabilitation and remediation of environmental impacts associated with the proposed Project are to be determined. This ESIA Report includes a Closure Plan and Costing.

National Environmental Management Laws Amendment Act

The National Environmental Management Laws Amendment Act (NEMLAA) came into force on 30 June 2023. Of relevance to the Project, the Act sets the scene for the replacement of the 2015 Financial Provisioning Regulations (which currently have limited application).

2.2.3 NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT 25 OF 1999)

The NHRA gives legal definition to the range and extent of what are considered to be South Africa's cultural heritage resources and provides for their protection and management under the overall direction of the national heritage agency, SAHRA, as well as provincial heritage authorities. Any person who discovers archaeological objects or material in the course of a development must immediately report the find to SAHRA. In accordance with the NHRA, no person may destroy, damage, excavate, alter, deface, or otherwise disturb any cultural heritage resource without obtaining a permit from responsible heritage authority. Provincial heritage authorities are primarily responsible for the administration of the afore-mentioned permits, except where a resource is

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located in territorial waters and the maritime cultural zone and/or if the resource is considered to be Grade I. As such the management of maritime and underwater cultural heritage resources under the NHRA is the responsibility of SAHRA. SAHRA's marine jurisdiction extends across the territorial waters and the contiguous or maritime cultural zone but may under certain circumstances also extend to the Exclusive Economic Zone.

According to Section 2(xvi) of the NHRA, a heritage resource is "any place or object of cultural significance". Together these resources are known at the National Estate, the composition of which is defined in Section 3 of the NHRA. Of the heritage resource types forming part of the National Estate, maritime and underwater cultural heritage generally includes the following sites and/or materials:

- Submerged pre-colonial archaeological sites and materials.
- Maritime and underwater cultural heritage sites and material, which are principally historical shipwrecks.
- Palaeontological features and material, which are defined by the NHRA as the fossilised remains
 or fossil trace of animals or plants which lived in the geological past.
- Other categories of heritage resources which can be encountered in or associated with the marine space include places to which oral traditions are attached or which are associated with living heritage, and submerged landscapes and natural features of cultural significance.

In addition, Section 38 of the NHRA lists certain activities that would require authorisation by SAHRA. In terms of Section 38(1)(c)(i), SAHRA would thus need to be notified regarding any development or activity that will change the character of a site (including land covered by water) exceeding 5 000 m2 in extent.

The proposed Project entails development in an area exceeding 5 000 m² in extent. In this regard, TEEPSA is required to notify SAHRA of the proposed Project. In the event that any cultural heritage resource is identified during exploration and production activities, TEEPSA would be required to notify SAHRA, and apply for the relevant permit if seabed activities will disturb the site or material.

2.2.4 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT 59 OF 2008)

The National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM: WA) provides for the regulation of waste management activities in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation. One of the main objectives of NEM: WA is to reform the law regulating waste management to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development and to provide for:

- national norms and standards for regulating the management of waste by all spheres of government;
- specific waste management measures;
- the licensing and control of waste management activities;
- the remediation of contaminated land; to provide for the national waste information system; and
- compliance and enforcement.

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NEM: WA emphasises the importance of waste avoidance and minimisation and created a system for listing and licensing of waste management activities. Activities listed in the List of Waste Management Activities, 2013 are included in Category A, B and C; and the undertaking of activities listed in Category A and B require a Waste Management Licence (WML). Undertaking activities included in Category A requires a Basic Assessment (BA) Process to be undertaken as part of the authorisation process, while activities included in Category B require a S&EIA Process. Activities listed in Category C require compliance with the relevant Norms or Standards as listed in the List of Waste Management Activities, 2013.

The proposed Project will entail waste generating activities offshore; however, it is understood that a WML would not be required as waste generated offshore, associated with exploration and production related activities, are not applicable to NEM: WA. Waste generated offshore will either be treated and disposed overboard or will be transported back onshore for further treatment, processing and/or disposal at facilities with a valid WML.

2.2.5 NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT 39 OF 2004)

The main objectives of the National Environmental Management: Air Quality Act (Act 39 of 2004) (NEM: AQA) are to protect the environment by providing reasonable legislative and other measures to:

- prevent air pollution and ecological degradation;
- promote conservation; and
- secure ecologically sustainable development and use of natural resources while promoting
 justifiable economic and social development in alignment with Sections 24a and 24b of the
 Constitution of the Republic of South Africa.

Significant functions detailed in NEM: AQA include the provision of:

- a National Framework for Air Quality Management;
- institutional planning matters;
- air quality management measures, including the:
 - listing of activities that result in atmospheric emissions and which have the potential to impact negatively on the environment and the licensing thereof through an AEL;
 - · declaration of Controlled Emitters; and
 - declaration of Controlled Fuels (WSP Group Africa (Pty) Ltd, 2023b).

NEM: AQA has devolved the responsibility for air quality management from the national sphere of government to local spheres of government (district and local municipal authorities), who are tasked with baseline characterisation, management and operation of ambient monitoring networks, licensing of listed activities, and development of emissions reduction strategies. AEL is required if the relevant listed activities in GNR 325 and/or GNR 327 are triggered, and which result in atmospheric emissions that have a significance detrimental effect. In terms of Section 22 of NEM: AQA, no person may conduct a listed activity without an AEL.

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The activities associated with the proposed development and operation related activities in Block 11B/12B, as well as exploration in the eastern portion of the Block, do not trigger any activities listed under Section 21 of NEM: AQA; nor will there be any controlled emitters under Section 23. However, if the final operational design and equipment register includes listed activities, controlled emitters or any other activity noted in the local by-laws, an AEL may be required, the process of which must be undertaken in accordance with NEM: AQA, and they may have to report emissions using the NAEIS module and/or the compliance reporting module on SAAELIP.

2.2.5.1 National Greenhouse Gas Emission Reporting Regulations, 2017 (GNR 275 of 2017)

NEM: AQA provides for the monitoring and reporting of greenhouse gas (GHG) emissions in accordance with the National GHG Emission Reporting Regulations, 2017 (GNR 275 of 2017) which was published in terms of Section 53 (a), (o) and (p) of NEM: AQA on 3 April 2017. The purpose of the National GHG Emission Reporting Regulations, 2017 (GNR 275 of 2017) is to introduce a single national reporting system for the transparent reporting of GHG emissions, which will be used to maintain a National Greenhouse Gas Inventory, allow South Africa to meet its UN Framework Convention on Climate Change reporting obligations and to inform the formulation and implementation of legislation and policy.

The emission sources and data providers who are covered by the Regulations are set out in Annexure 1 and Regulation 4. Energy is included as a sector. The Regulations also set out the reporting requirements, calculation methodology, verification procedure (to be carried out by the National Inventory Unit) and penalties (which include fines and imprisonment) for each activity.

No specific thresholds have been regulated for exploration and production related activities; therefore, the National GHG Emission Reporting Regulations (GNR 275 of 2017) require that carbon dioxide (CO₂) and methane (CH₄) levels be reported on annually via the South African Greenhouse Gas Emissions Reporting System (SAGERS) for all Project activities related to both exploration and production.

2.2.5.2 National Ambient Air Quality Standards

Section 9 of NEM: AQA tasks the Minister of the DFFE with the responsibility of identifying substances or mixtures of substances in the ambient air which, through ambient concentrations, bioaccumulation, deposition or in any other way, present a threat to health or well-being and the subsequent establishment of national standards for ambient air quality for these substances.

Ambient air quality standards are defined as "targets for air quality management which establish the permissible concentration of a particular substance in, or property of, discharges to air, based on what a particular receiving environment can tolerate without significant deterioration" [(Department of Environmental Affairs, 2000) in (WSP Group Africa (Pty) Ltd, 2023b)]. The aim of these standards is to provide a benchmark for air quality management and governance. Ambient air quality criteria apply to areas where the Occupational Health and Safety regulations do not apply, which is generally outside the property or lease area.

The principal emissions emanating from the Project will be:

 Onshore, at the port: exhaust gas emissions generated by the combustion of fuel in vessel engines, and generators used to produce electricity and heating while the engines are not operating at full capacity/load.

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 Offshore, the drill unit and support vessels, well testing including non-routine flaring, heaters and engines at the F-A Platform, and gas flaring on the platform.

These emissions include volatile organic compounds (VOCs), which are a group of hydrocarbons (HC), comprising of a vast array of compounds. TEEPSA would be required to ensure that the emissions associated with the proposed Project do not exceed the permissible amounts as per the National Ambient Air Quality Standards (NAAQS).

2.2.6 NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, 2003 (ACT 57 OF 2003)

The National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) (NEM: PAA) provides for the declaration and management of protected areas, and the promotion of sustainable utilisation of protected areas for the benefit of people in a manner that would preserve the ecological character of such areas. NEM: PAA provides for the establishment of a national register of all national, provincial and local protected areas, and for the management of those area in accordance with national norms and standards. In accordance with Part 2A of NEM: PAA, the Minister of Forestry, Fisheries and the Environment may declare an area specified as a Marine Protected Area (MPA) for the following purposes:

- To conserve and protect marine and coastal ecosystems.
- To conserve and protect marine and coastal biodiversity.
- To conserve and protect a particular marine or coastal species, or specific population and its habitat.
- If the area contains scenic areas or to protect cultural heritage.
- To facilitate marine and coastal species management by protecting migratory routes and breeding, nursery or feeding areas, thus allowing species recovery and to enhance species abundance in adjacent areas.
- To protect and provide an appropriate environment for research and monitoring in order to achieve the objectives of the NEM: PAA.
- To restrict or prohibit activities which is likely to have an adverse effect on the environment.

Various MPAs were proclaimed in terms of NEM: PAA for the South African offshore marine environment. Offshore MPAs in close proximity to Block 11B/12B include the Southwest Indian Seamounts MPA (located to the south-west of Block 11B/12B) and the Port Elizabeth Corals MPA (located to the north-east of Block 11B/12B). Whilst vessels are permitted to travel through MPAs, care must be taken to ensure that no Project activities, including discharges of effluent, bilge water etc., take place within these MPAs.

2.2.7 NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT 10 OF 2004)

The National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEM: BA) provides for the management and conservation of South Africa's biodiversity within the framework of NEMA. Key objectives of the Act include the protection of species and ecosystems that warrant protection; the sustainable use of indigenous biological resources, the fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resources and the establishment and functions of the South African National Biodiversity Institute (SANBI).

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Various areas have been identified as priority areas for conservation action in the South African offshore marine environment. The northern border of Block 11B/12B is alongside the full extent of the Kingklip Corals Ecologically and Biologically Significant Area (EBSA). In addition, Block 11B/12B lies just to the north-east of the Shackleton Seamount Complex EBSA. While the base case route for the pipeline is located approximately 16 km from the Kingklip Corals EBSA, the proposed alternative pipeline route passes through the southwestern corner of the Kingklip Corals EBSA. Furthermore, both of the proposed pipeline routing options pass through a proposed Critical Biodiversity Area (CBA), specifically a CBA Natural area, in accordance with the Proposed Approach to Spatial Development and Management for South Africa's Marine Planning Areas 2019, and the Draft marine sector plan for the Biodiversity Sector 2023 (SANBI 2017). The base case route covers an approximate area of 369 km² of CBA Natural area, while the alternative covers approximately 415 km².

2.2.8 NATIONAL ENVIRONMENTAL MANAGEMENT: INTEGRATED COASTAL MANAGEMENT ACT, 2008 (ACT 24 OF 2008)

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act 24 of 2008) (NEM: ICMA) aims to establish a system of integrated coastal and estuarine management in South Africa, including norms, standards and policies, in order to promote the conservation of the coastal environment, and maintain the natural attributes of coastal landscapes and seascapes, and to ensure that development and the use of natural resources within the coastal zone is socially and economically justifiable and ecologically sustainable. Environmental management and authorisation requirements, as included in NEMA, are supported by the NEM: ICMA but provides for additional controls specifically within the coastal environment. In this regard, the requirements as contained in **Table 2-2**, as per Section 63 of the NEM: ICMA, were considered when compiling this ESIA Report, given that the CA must consider these factors when considering an application for EA.

Table 2-2 - NEM: ICMA Requirements

Requirement	ESIA Consideration
The representations made by the applicant and by Interested and Affected Parties (I&APs)	All comments made and issues raised by I&APs to date have been included in a Comments and Responses Report (CRR) (see Appendix 5).
The extent to which the applicant has in the past complied with similar authorisations	TEEPSA was previously awarded an EA for exploration activities within Block 11B/12B. As a condition of authorisation, TEEPSA was required to appoint an independent auditor to audit TEEPSA's environmental compliance with Project documentation. The audit reports were submitted to PASA, the CA, indicating that TEEPSA materially complied with its EA.
Whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development or activity is consistent with the purpose for establishing and protecting those areas	There will be no development in the coastal zone, so no coastal public property, protection zone or access land will be affected.

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Requirement	ESIA Consideration
The estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives applicable in the area	The proposed Project is located offshore and will not affect the coastline, estuarine or coastal management objectives in any way.
The socio-economic impact if the activity -	-
(i) is authorised	Socio-economic impacts have been considered as part of this ESIA (see Chapters 9 and 10).
(ii) is not authorised	The No-Go Alternative and the impact thereof have been considered as part of this ESIA (see Chapter 9).
The likely impact of coastal environmental processes on the proposed activity.	Various coastal environmental processes, such as ecosystem-wide components and the movement of infauna, epifauna and other marine organisms, as well as fisheries and intangible heritage aspects have the potential to affect the proposed Project. These aspects have all been taken into consideration and has affected the mitigation measures proposed for the Project, as well as the overall location of the Project. For example, the presence of Marine Protected Areas near Block 11B/12B will affect the vessel discharge patterns of the Project, given that no discharges are allowed within these areas.
Whether the development or activity -	-
(i) is situated within coastal public property and is inconsistent with the objective of conserving and enhancing coastal public property for the benefit of current and future generations	The proposed Project is offshore and will not affect coastal public property.
(ii) is situated within the coastal protection zone and is inconsistent with the purpose for which a coastal protection zone is established as set out in section 17	The proposed Project is offshore and will not affect the coastal protection zone.
(iii) is situated within coastal access land and is inconsistent with the purpose for which coastal access land is designated as set out in section 18	The proposed Project is offshore and will not affect coastal access land.
(iv) is likely to cause irreversible or long-lasting adverse effects to any aspect of the coastal environment that cannot satisfactorily be mitigated	Potential impacts arising from the proposed Project have been considered as part of this ESIA (see Chapters 9). However, it must be noted that given that the proposed Project is located in the offshore marine environment, far from the South Coast of South Africa (i.e. north-west corner of Block 11B/12B is approximately 120 km offshore Mossel Bay and the north-east corner of Block 11B/12B is approximately 75 km offshore Cape St. Francis), impacts on the coast are expected to be limited. Impacts on the coasts are only expected during

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Requirement	ESIA Consideration
	unplanned events, the impacts of which have been included in Chapter 10.
(v) is likely to be significantly damaged or prejudiced by dynamic coastal processes	Block 11B/12B is located approximately 100 km offshore the coast. The subsea infrastructure is located at a depth of more than 300 m, other than the section of the pipeline that connects to the F-A Platform. It is highly unlikely that coastal processes will damage the subsea infrastructure.
(vi) would substantially prejudice the achievement of any coastal management objective	Given the distance offshore of the proposed Project infrastructure, the proposed Project activities will not prejudice the achievement of coastal zone management objectives.
(vii) would be contrary to the interests of the whole community	Potential impacts arising from the proposed Project have been considered as part of this ESIA (see Chapters 9). An Environmental Impact Statement, providing a concluding statement on the key findings of the ESIA Process, has been included in Chapter 13.
Whether the very nature of the proposed activity or development requires it to be located within coastal public property, the coastal protection zone or coastal access land	The proposed Project is located in the offshore marine environment. However, a logistics base is proposed to be established within the Mossel Bay port. In addition, the ports of Cape Town and Gqeberha may also be utilised to trans-ship large items of equipment to Block 11B/12B.
Whether the proposed activity or development will provide important services to the public when using coastal public property, the coastal protection zone, coastal access land or a coastal protected area	The proposed Project will not provide important services to the public when using coastal public property, the coastal protection zone, coastal access land or a coastal protected area.
The objects of this Act, where applicable. The objects of this Act are -	-
to determine the coastal zone of the Republic	N/A – The determination of the coastal zone is not a purpose of the proposed Project.
to provide, within the framework of NEMA, for the coordinated and integrated management of the coastal zone by all spheres of government in accordance with the principles of co-operative governance	N/A – The integrated management of the coastal zone by all spheres of government is not a purpose of the proposed Project.
to preserve, protect, extend and enhance the status of coastal public property as being held in trust by the State on behalf of all South Africans, including future generations	N/A – Block 11B/12B is not located within or in close proximity to coastal public property.
to secure equitable access to the opportunities and benefits of coastal public property	N/A – Block 11B/12B is not located within or in close proximity to coastal public property.
to provide for the establishment, use and management of the coastal protection zone	N/A – Block 11B/12B is not located within the coastal protection zone.

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Requirement	ESIA Consideration
to give effect to the Republic's obligations in terms of international law regarding coastal management and the marine environment	Chapter 2 of the ESIA Report outlines the consideration of international laws applicable to the proposed Project.
The CA must ensure that the terms and conditions of any EA are consistent with any applicable coastal management programmes and promote the attainment of coastal management objectives in the area concerned.	N/A – No coastal management programmes are applicable to the proposed Project.
Where an EA is not required for coastal activities, the Minister may, by notice in the Gazette list such activities requiring a permit or licence	N/A – The proposed Project will require EA in terms of the EIA Regulations, 2014 promulgated under NEMA (refer to Section 2.2.2.1).

2.3 OTHER SOUTH AFRICAN LAWS, POLICIES, PLANS AND FRAMEWORKS

Additional South African legislation, policies, plans and frameworks that were considered during the S&EIA Process and which are applicable to the proposed Project are summarised in Table 2-3.

Table 2-3 – Other South African Laws, Policies, Plans and Frameworks applicable to the Project

Legislation	Description	Applicability
Biodiversity Management Plan for the African Penguin, 2013	The Biodiversity Management Plan for the African Penguin was developed and gazetted in terms of NEM: BA. The African Penguin is listed as "Protected" in terms of Section 56 of NEM: BA. One of this plan's objectives is to "minimise and/or mitigate the impact of catastrophic events and other key pressures and risks on African penguins". Another objective is to "minimise the impact of pollution (oil, hazardous and noxious substances) on African penguins through preventing spills, ensuring adequate preparedness, appropriate response and monitoring success."	The IUCN conservation status of the African Penguin is Endangered. The African Penguin is a breeding resident seabird with presence along the South Coast of South Africa. In this regard, the Plan provides for actions which should take place to mitigate impacts on the African Penguin during the implementation of the proposed Project.
Carbon Tax Act, 2019 (Act 15 of 2019)	The Carbon Tax Act gives effect to the polluter-pays-principle for large emitters and helps to ensure that firms and consumers take the negative adverse costs (externalities) into account in their future production, consumption and investment decisions. Firms are incentivized towards adopting cleaner technologies.	The Act outlines that the carbon tax rate of R120 per tonne of carbon dioxide emitted will increase by consumer price inflation +2% until the end of 2022, after which it will only increase by Consumer Price Index. The Act will need to be considered to ensure that the relevant carbon tax is paid as per the emissions released by the proposed Project.

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Legislation	Description	Applicability
Carriage of Goods by Sea Act, 1986 (Act 1 of 1986)	This Act provides for the carriage of goods by sea and applies where: (a) the port of shipment is a port in South Africa; (b) the bill of lading is issued in a state which applies the Hague-Visby Rules; (c) the carriage is from a port in a contracting state; and (d) the contract contained in or evidenced by the bill of lading provides that the Carriage of Goods by Sea Act, 1986 (Act 1 of 1986) applies.	The proposed Project entails the establishment of a logistics base within the Mossel Bay port. In this regard, the proposed Project will need to comply with this Act during the implementation of the proposed Project, specifically as goods are moved from the Mossel Bay port.
Hazardous Substances Act, 1973 (No. 15 of 1973)	Provides for the definition, classification, use, operation, modification, disposal or dumping of hazardous substances.	The proposed Project will produce various types of hazardous waste, including but not limited to, oil rags and filters, batteries, oily water and medical waste, etc. The proposed Project will need to comply with this Act during the implementation of the proposed Project to ensure that these wastes are disposals of adequately.
Marine Living Resources Act, 1998 (Act 18 of 1998)	The Marine Living Resources Act, 1998 (Act 18 of 1998) intends to provide for the conservation of the marine ecosystem, the long-term sustainable utilisation of marine living resources and the orderly access to exploitation, utilisation and protection of certain marine living resources; and for these purposes to provide for the exercise of control over marine living resources in a fair and equitable manner to the benefit of all the citizens of South Africa. The Act also makes provision for the declaration of MPAs for the protection of fauna and flora. The 2014 amendment to the Act also provided a definition of a small-scale fisher and deleted the definition of subsistence fisher.	Offshore MPAs in close proximity to Block 11B/12B include the Southwest Indian Seamounts MPA and the Port Elizabeth Corals MPA. In line with the Marine Living Resources Act, 1998 (Act 18 of 1998) certain activities are prohibited within MPAs, including but not limited to, the discharge and deposit of waste or any other polluting matter. It follows that any discharge of waste will need to be undertaken in compliance with the Act and ensure that none is discharged within MPAs. The regulation of small-scale fishers includes the fish species that may be caught, the location and the size of the area in which fishing activities may take place, and that small-scale fishing is now considered a communal activity. These aspects will need to be considered during the impact assessment, and

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Legislation	Description	Applicability
		planning and implementation phases of the Project.
Marine Pollution (Control and Civil Liability) Act, 1981 (Act 6 of 1981)	The Act provides for the protection of the marine environment from pollution by oil and other harmful substances, and for that purpose to provide for the prevention and combating of pollution of the sea by oil and other harmful substances; to determine liability in certain respects for loss or damage caused by the discharge of oil from ships, tankers and offshore installations; and to provide for matters connected therewith.	The proposed Project will produce various types of hazardous waste, including but not limited to, oil rags and filters, batteries, oily water and medical waste, etc. The proposed Project will need to comply with this Act during the implementation of the proposed Project to ensure that these wastes are disposed of adequately.
Marine Pollution (Intervention) Act, 1987 (Act 64 of 1987)	This Act gives effect to the international convention relating to the Intervention of the High Seas in cases of oil pollution casualties, and to the Protocol relating to Intervention of the High Seas in cases of Marine Pollution by substances other than Oil in South African Waters.	The proposed Project will produce various types of waste, including chemicals and hazardous materials, effluent discharges and solid waste. The disposal of all waste generated by the proposed Project will need to be disposed of responsibly. In the event that wastes generated by the proposed Project lead to pollution of the environment, the Act may give rise to consequences such as fines or imprisonment.
Marine Pollution (Prevention of Pollution from Ships) Act, 1986 (Act2 of 1986)	This Act regulates pollution from ships, tankers and offshore installations, and for that purpose gives effect to MARPOL 73/78. In terms of the Act, it is an offence to discharge any oil from a ship, tanker or offshore installation within 12 miles (19 km) off the South African coast. The discharge of oily water or oil and any other substance which contains more than a hundred parts per million of oil is prohibited between 19 – 80 km offshore.	The proposed Project will occasionally discharge treated bilge water. The proposed Project will need to ensure that any bilge water is monitored for contamination prior to disposal, so as to ensure compliance with the Act.
Marine Traffic Act, 1981 (Act 2 of 1981)	To regulate marine traffic in South Africa; and to provide for matters connected therewith. This includes matters related to offshore installations and navigations routes of ships, as well as determination of safety zone of offshore installations.	The proposed Project will make sure use of various marine vessels, including supply vessels for transporting equipment, bulk materials and general supplies; specialised vessels for undertaking of survey activities; and support vessels for supporting construction, drilling, operations and

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Legislation	Description	Applicability
		decommissioning activities. All proposed Project vessels sailing in maritime waters will be required to comply with the Act.
Merchant Shipping Act, 1951 (Act 57 of 1951)	Provides for the control of merchant shipping and matters incidental thereto.	The proposed Project will make sure use of various marine vessels, including supply vessels for transporting equipment, bulk materials and general supplies. All proposed Project vessels transporting goods and personnel will be required to comply with the Act.
Marine Spatial Planning Act, 2018 (Act 16 of 2018)	The Act intends to provide for the development of marine spatial plans with the institutional arrangements for the use of the ocean by multiple sectors.	Marine spatial planning is a coordinated approach to designating where human activities occur in the ocean to minimise conflicts among stakeholders and maximise the benefits that people derive from the ocean. The proposed Project will need to take cognisance of any marine spatial plans developed for the offshore marine environment, so as to ensure that proposed Project activities do not infringe on the rights of other ocean users.
Maritime Safety Authority Levies Act, 1998 (No. 6 of 1998)	This Act provides for the imposition of levies by the South African Maritime Safety Authority (SAMSA); and for matters connected therewith	SAMSA is responsible for the implementation of current international and national Regulations regarding the maritime industry. SAMSA via the administration and/or management of all things marine-related is in effect the governing authority. SAMSA has the authority to impose levies on maritime users. The proposed Project will need to comply with the Act and pay any levies imposed by SAMSA.
Maritime Zones Act, 1994 (Act 15 of 1994)	South Africa's Maritime Zones Act of 1994 is the national legislative embodiment of the international maritime zones set out in the	The proposed Project is located in the offshore marine environment. The proposed

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Legislation	Description	Applicability	
	United Nations Convention on the Law of the Sea. The Act defines the extent of the territorial waters, contiguous zone (also known as the maritime cultural zone), Exclusive Economic Zone and continental shelf (which together comprises some 4.34 million km² of seabed) and sets out South Africa's rights and responsibilities in respect of these various maritime zones. Under the terms of Sections 4(2) and 6(2) of the Maritime Zones Act respectively, "any law in force in the Republic, including the common law, shall also apply in its territorial waters".	Project will need to comply with this Act, and by default, ensure compliance with other laws of South Africa whilst in the marine environment.	
Merchant Shipping (Civil Liability Convention) Act, 2013 (Act 25 of 2013)	The Act enacts the International Maritime Organization (IMO) Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage of 29 November 1969 into law and provides for matters connected therewith.	The purposes of the Fund Convention are to (i) Provide compensation for pollution damage to the extent that the protection afforded by the 1969 Civil Liability Convention is inadequate. (ii)	
Merchant Shipping (International Oil Pollution Compensation Fund) Act, 2013 (Act 36 of 2013)	Enacted the IMO Protocol of 1992 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 18 December 1971 into law, and to provide for matters connected therewith. It provides for the imposition of the International Oil Pollution Compensation Fund Contributions Levy on persons referred to in Article 10 of the 1992 Fund Convention also provides for administrative matters in connection with the levy imposed in terms of the Merchant Shipping (International Oil Pollution Compensation Fund) Contributions Act, 2013	Convention is inadequate. (ii) To give relief to shipowners in respect of the additional financial burden imposed on them by the 1969 Civil Liability Convention, such relief being subject to conditions designed to ensure compliance with safety at sea and other conventions. (iii) To give effect to the related purposes set out in the Convention. In this regard, in the event of an oil spill the proposed Project will need to comply with the Act.	
Merchant Shipping (Safe Containers Convention) Act, 2011 (Act 10 of 2011)	The Act gives effect to the International Convention for Safe Containers, and to provide for matters connected therewith.	The proposed Project will make sure use of various marine vessels, including supply vessels for transporting equipment, bulk materials and general supplies. All proposed Project vessels transporting containers will be required to comply with the Act.	
Mine Health and Safety Act, 1996 (Act 29 of 1996)	This Act provides for protection of the health and safety of employees and other persons at mines and, for that purpose - to promote a culture of health and safety; to provide for the enforcement of health and safety measures;	The proposed Project will provide a number of employment opportunities throughout Project Phases. The proposed Project will need to ensure compliance with the Act so as to provide	

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Legislation	Description	Applicability
	 to provide for appropriate systems of employee, employer and State participation in health and safety matters; to establish representative tripartite institutions to review legislation, promote health and enhance properly targeted research; to provide for effective monitoring systems and inspections, investigations and inquiries to improve health and safety; to promote training and human resources development; to regulate employers' and employees' duties to identify hazards and eliminate, control and minimise the risk to health and safety; to entrench the right to refuse to work in dangerous conditions; and to give effect to the public international law obligations of the Republic relating to mining health and safety. 	for the health and safety of all employees.
National Climate Change Adaptation Strategy, 2020	The National Climate Change Adaptation Strategy, 2020 provides a common vision of climate change adaptation and climate resilience for South Africa, and outlines priority areas for achieving this vision. It draws on South Africa's National Climate Change Response Policy – White Paper, 2011, the National Development Plan (NDP), the adaptation commitments included in its Nationally Determined Contributions, sector adaptation plans, provincial adaptation plans and local government adaptation plans	The main objective of the strategy is to provide guidance across all levels of government, sectors, and stakeholders affected by climate variability and change. It should also serve as the country's National Adaptation Plan and fulfils the commitment to its international obligations under the Paris Agreement.
National Policy on South African Living Heritage, 2019	This national policy framework is an attempt to arrest continuing marginalisation of this important heritage. It is also aimed at affirming cultural diversity and mutual social existence. Living heritage is at the centre of people's culture and identity; it is important to provide space for its continued existence and practice in the South African nation. In recognition of the significance of this heritage, South Africa has ratified the 2003 United Nations (UN) Educational, Scientific and Cultural Organisation (UNESCO) Convention. This will lead to the exchange of international best practice, as well as harmonisation of norms and standards in the safeguarding of living heritage. It is also the objective of the policy to encourage regional collaboration on issues of living heritage.	The proposed Project may potentially impact intangible cultural heritage. To understand the potential impacts arising from the proposed Project on this aspect, cognisance must be taken of the Act.

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Legislation	Description	Applicability	
National Ports Act, 2005 (Act 12 of 2005)	This Act regulates and controls navigation within port limits and the approaches to ports, cargo handling, and the pollution and the protection of the environment within the port limits. The Act specifies a requirement for an agreement with or a licence from the National Ports Authority to operate a port facility or service.	The proposed Project will establish a support base at the Mossel Bay port. Utilisation of the port and associated infrastructure will need to be compliance with the Act.	
National Water Act, 1998 (Act 36 of 1998)	This Act provides the legal framework for the effective and sustainable management of water resources in South Africa. It serves to protect, use, develop, conserve, manage and control water resources as a whole, promoting the integrated management of water resources with the participation of all stakeholders.	Limited freshwater will be required from local onshore sources for the proposed Project. In this regard, as well as regarding any onshore waste disposal practices the proposed Project will need to comply with the Act in exercising general duty of care towards the receiving environment and limiting impacts on water resources.	
Nuclear Energy Act, 1999 (Act 46 of 1999)	This Act provides for, <i>inter alia</i> , the regulation of the acquisition, possession and use of nuclear fuel, certain nuclear and related material and certain related equipment and prescribes measures regarding the discarding of radioactive waste and the storage of irradiated nuclear fuel. Authorisation is required for the acquisition, possession and use of nuclear material (i.e. source material and special nuclear material), restricted material and nuclear-related equipment and material.	The proposed Project will make use of limited amounts of radioactive materials, as small amounts of radioactive elements are found within specialised tools used during the drilling and well drilling evaluation process. The proposed Project will need to obtain the necessary approvals required for the acquisition and storage of	
Nuclear Energy Regulator Act, 1999 (Act 47 of 1999)	This Act provides for the establishment of a National Nuclear Regulator in order to regulate nuclear activities, for its objects and functions, for the manner in which it is to be managed and for its staff matters; to provide for safety standards and regulatory practices for protection of persons, property and the environment against nuclear damage; and to provide for matters connected therewith.	nuclear materials.	
Protection, Promotion, Development and Management of Indigenous Knowledge Act, 2019 (Act 6 of 2019)	The Act aims to provide for the protection, promotion, development and management of indigenous knowledge; to provide for the establishment and functions of the National Indigenous Knowledge Systems Office; to provide for the management of rights of indigenous knowledge communities; to provide for the establishment and functions of the Advisory Panel on indigenous knowledge; to provide for access and conditions of access to knowledge of indigenous communities; to	Various Khoi and San descended groups, such as the Gourikwas, are located within the study area. The proposed Project will need to comply with the Act in the event that indigenous knowledge is accessed.	

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Legislation	Description	Applicability
	provide for the recognition of prior learning; to provide for the facilitation and coordination of indigenous knowledge-based innovation; and to provide for matters incidental thereto.	
Sea Birds and Seals Protection Act, 1973 (Act 46 of 1973)	This Act aims to provide for the control over certain islands and rocks; for the protection, and the control of the capture and killing, of sea birds and seals; and for the disposal of the products of sea birds and seals and for matters incidental thereto. In addition, the act serves to repeal the Fish Protection Act, 1893 (Act No. 15 of 1893 of the Cape of Good Hope), and the provisions of the Sealing and Fisheries Ordinance, 1949 (Ordinance No. 12 of 1949 of South West Africa), relating to the killing, pursuit or capture of seals.	The Cape fur seal and a range of various seabirds are located off the South Coast of South Africa and in close proximity to proposed Project activities. In this regard, the proposed Project will need to comply with the Act in order to mitigate proposed Project impacts on these faunal species.
Ship Registration Act, 1998 (Act 58 of 1998)	This act aims to provide anew for the registration of ships in South Africa and to provide for incidental matters.	The proposed Project will make sure use of various marine vessels, including supply vessels, specialised vessels and support vessels. All proposed Project vessels will be required to comply with the Act.
South Africa Human Rights Commission Act, 2013 (Act 40 of 2013)	This Act provides for the composition, powers, functions and functioning of the South African Human Rights Commission; the repeal of the Human Rights Commission Act, 1994; and for matters connected therewith.	The proposed Project will need to ensure that no human rights are infringed upon during the implementation of the proposed Project, in compliance with the Act.
South Africa's National Climate Change Response Policy - White Paper, 2011	The National Climate Change Response Policy, 2011 is a comprehensive strategy to address both mitigation and adaptation in the short, medium and long term (up to 2050) (WSP Group Africa (Pty) Ltd, 2023c). Strategies are specified for the following areas: Carbon Pricing. Water Agriculture and commercial forestry. Health. Biodiversity and ecosystems. Human settlements. Disaster risk reduction and management. 	The policy has two main objectives: first, to manage inevitable climate change impacts through interventions that build and sustain social, economic and environmental resilience and emergency response capacity. Secondly, to make a fair contribution to the global effort to stabilise GHG concentrations in the atmosphere.
South Africa's Nationally Determined Contributions, 2021	South Africa updates and enhances its nationally determined contribution under the Paris Agreement, meeting its obligation under Article 4.9 to communicate NDCs every five years, and responding to the requests in	The proposed Project relates to the exploration and production of gas and associated condensates, which may have an impact on

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Legislation	Description	Applicability
	paragraphs 23 to 25 of decision 1/CP.21. The NDC was updated in 2021 to account for developments and increased ambitions since the first submission.	South Africa's GHG emissions, which could be an overall positive impact, depending on the end user of
South African Climate Change Bill, 2022	The Climate Change Bill, 2022 was introduced by the DFFE and is currently under consideration by the South African National Assembly. It will be the first South African legal framework in response to climate change impacts. The Bill aims to enable effective development of climate change responses through a long-term transition to a climate-resilient and low-carbon society and economy, while considering sustainable development. The Bill aims to contribute fairly to global GHG stabilisation, conforms to South African international climate change obligations and commitments to protect and preserve our planet for current and future generations. The Bill provides two main mechanisms to reduce the country's greenhouse gas emissions: Section 21 of the Bill obliges the Minister to determine a national GHG emissions trajectory. This trajectory must be set in consultation with Cabinet. The trajectory must specify a national GHG emission reduction objective. This objective must be informed by South Africa's current and projected GHG emissions and be consistent with South Africa's international obligations. Section 22 of the Bill deals with sectoral emissions targets. According to section 22, the Minister must identify greenhouse gas emitting sectors and sub-sectors that should be subject to sectoral emissions targets. The Minister must then set sectoral emissions targets for each sector, in consultation with the relevant Minister responsible for that sector. These targets must align with the national greenhouse gas emissions trajectory. The Minister responsible for each sector must then implement each sectoral target through a range of planning instruments, policies, measures, and programmes.	the gas. Cognisance of these policies must be made to ensure alignment with South Africa's goals and ambitions.
SAMSA Act, 1998 (Act 5 of 1998)	To provide for the establishment and functions of the SAMSA and incidental matters.	SAMSA is responsible for the implementation of current international and national Regulations regarding the maritime industry. SAMSA via the administration and/or management of all things

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Legislation	Description	Applicability
		marine-related is in effect the governing authority and as such is required to investigate maritime accidents/incidents and to provide various marine related services. The proposed Project will need to report any maritime incidents to the SAMSA.
Traditional and Khoi-San Leadership Act, 2019 (Act 3 of 2019) (invalidated in May 2023, suspended for period of 24 months)	 The Traditional and Khoi-San Leadership Act aims to: provide for the recognition of traditional and Khoi-San communities, leadership positions and for the withdrawal of such recognition. It also provides for the functions and roles of traditional and Khoi-San leaders; provide for the recognition, establishment, functions, roles and administration of kingship or queenship councils, principal traditional councils, traditional councils, Khoi-San councils and traditional sub-councils, as well as the support to such councils; provide for the establishment, composition and functioning of the National House of Traditional and Khoi-San Leaders; provide for the establishment of provincial houses of traditional and Khoi-San leaders; provide for the establishment and composition of local houses of traditional and Khoi-San Matters; provide for the establishment and operation of the Commission on Khoi-San Matters; provide for a code of conduct for members of the National House, provincial houses, local houses and all traditional and Khoi-San councils; provide for regulatory powers of the Minister and Premiers; provide for transitional arrangements; amend certain Acts; provide for the repeal of legislation; and provide for matters connected therewith. 	Various Khoi and San descended groups, such as the Gourikwas, are located within the study area. Although the validity of this Act has been suspended, the Project will need to ensure that the rights of these groups of people are respected and not infringed upon by the Project activities.
Upstream Petroleum Resources Development Bill (B 13—2021) (as introduced in the National Assembly (proposed section 76); explanatory summary of Bill and prior notice of its introduction published in Government Gazette	 The Upstream Petroleum Resources Development Bill (B 13—2021) aims to provide for the following: Advancement of national developmental imperatives by the state-owned company through the development of petroleum resources. Development of petroleum resources. Equitable access to, and sustainable development of, the nation's petroleum resources. 	The Project relates to the exploration and production of a petroleum resource. In this regard, the Project will need to take cognisance of the Bill.

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Legislation	Description	Applicability
No. 44694 of 11 June 2021)	 Active State and black persons' participation in the development of the nation's petroleum resources. A petroleum right that integrates the right to explore and to produce. Facilitation of acquisition of petroleum geotechnical data. Controlled application system through licensing rounds. Enabling an environment for the acceleration of exploration and production of the nation's petroleum resources. Provision for third party access to upstream petroleum infrastructure. Provision of a petroleum right holder to sell a percentage of petroleum to the State for strategic stocks requirements. Provision for the holder of a petroleum right to retain its empowerment status after the exit of black persons under circumscribed circumstances. Provision of local content as a development strategy to enable skills development, local recruitment and national participation through supply of goods and services. Designation of PetroSA as the regulatory authority for the upstream petroleum sector. 	
World Heritage Convention Act, 1999 (Act 49 of 1999)	The act aims to provide for the incorporation of the World Heritage Convention into South African law; the enforcement and implementation of the World Heritage Convention in South Africa; the recognition and establishment of World Heritage Sites; the establishment of Authorities and the granting of additional powers to existing organs of state; the powers and duties of such Authorities, especially those safeguarding the integrity of World Heritage Sites; where appropriate, the establishment of Boards and Executive Staff Components of the Authorities; Integrated management plans over World Heritage Sites; land matters in relation to World Heritage Sites; financial, auditing and reporting controls over the Authorities; and to provide for incidental matters	There are ten World Heritage Sites located within South Africa. In addition to these sites, South Africa has also listed two groups of properties on its tentative list, both nominated in 2015, namely The Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa. The Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa is a series of six sites related to the emergence of modern humans. Three of these sites are located in off the South Coast of South Africa and in close proximity to the proposed Project, near Cape St. Francis, Mossel Bay and Groot Jongensfontein. In this regard, the proposed Project will need to ensure that these sites are not

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Legislation	Description	Applicability
		disturbed and/or damaged as a result of Project activities.
Wreck and Salvage Act, 1996 (Act 94 of 1996)	Provides for the salvage of certain vessels and for the application in the Republic of the International Convention of Salvage, 1989.	The proposed Project will make use of various marine vessels, including supply vessels for transporting equipment, bulk materials and general supplies; specialised vessels for undertaking of survey activities; and support vessels for supporting construction, drilling, operations and decommissioning activities. All Project vessels will be required to comply with the Act, including the obligation to assist ships in distress.

2.4 INTERNATIONAL REGULATIONS, CONVENTIONS AND BEST PRACTICE GUIDELINES

Relevant international conventions and treaties which have been ratified by the South African Government and which have become law through promulgation of national legislation are included in Table 2-4.

Table 2-4 – International Regulations, Conventions and Best Practice Guideline applicable to the Proposed Project

Title	Description	
International Marine Pollution		
Basel Convention on the Control of Trans- boundary Movements of Hazardous Wastes and their Disposal, 1989	This Convention is an international treaty that was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries. It does not, however, address the movement of radioactive waste.	
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention) and the 1996 Protocol	The London Convention is an agreement to control pollution of the sea from dumping and to encourage regional agreements supplementary to the Convention. It covers the deliberate disposal at sea of wastes or other matter from vessels, aircraft and platforms. It does not cover discharges from land-based sources, such as pipes and outfalls, wastes generated incidental to normal operation of vessels, or placement of materials for purposes other than mere disposal, providing such disposal is not contrary to aims of the Convention.	

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Title	Description
International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2017	This Convention aims to prevent the spread of harmful aquatic organisms from one region to another, by establishing standards and procedures for the management and control of ships' ballast water and sediments.
International Convention for the Prevention of Pollution from Ships, 1973/1978 (MARPOL)	MARPOL 73/78 was developed by the IMO with an objective to minimise pollution of the oceans and seas, including dumping, oil and air pollution. MARPOL is divided into Annexes according to various categories of pollutants, each of which deals with the regulation of a particular group of ship emissions, as follows: Annex I: Prevention of pollution by oil and oily water Annex II: Control of pollution by noxious liquid substances in bulk Annex III: Prevention of pollution by harmful substances carried by sea in packaged form Annex IV: Pollution by sewage from ships Annex V: Pollution by garbage from ships Annex VI: Prevention of air pollution from ships All ships flagged under countries that are signatories to MARPOL are subject to its requirements, regardless of where they sail, and member nations are responsible for vessels registered on their national ship registry.
International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC Convention)	The OPRC Convention is an international maritime convention establishing measures for dealing with marine oil pollution incidents nationally and in co-operation with other countries.
International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001	The Convention prohibits the use of harmful compounds in anti-fouling paints used on ships and rigs and establishes a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems.
International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, (as amended by the 1992 Protocol)	The purposes of the Fund Convention are to (i) Provide compensation for pollution damage to the extent that the protection afforded by the 1969 Civil Liability Convention is inadequate. (ii) To give relief to shipowners in respect of the additional financial burden imposed on them by the 1969 Civil Liability Convention, such relief being subject to conditions designed to ensure compliance with safety at sea and other conventions. (iii) To give effect to the related purposes set out in the Convention. This 1992 Protocol amends the provisions of the 1971 Convention, to harmonise them with the amendment to the International Convention on Civil Liability for Oil Pollution Damage, 1969 set out in its protocol of 1992.
International Convention relating to Intervention on the High Seas in case of Oil Pollution Casualties (1969) and Protocol on the Intervention on the High Seas in Cases of Marine Pollution by substances other than oil, 1973	This Convention is an international maritime convention affirming the right of a coastal State to "take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat

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Title	Description
	of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty".
UN Convention on Law of the Sea, 1982 (UNCLOS)	UNCLOS defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.
Air and Climate	
GHG Protocol's A Corporate Accounting and Reporting Standard (Revised Edition) 2004	The global standard for companies and organizations to measure and manage their GHG emissions and become more efficient, resilient and prosperous (WSP Group Africa (Pty) Ltd, 2023c).
Intergovernmental Panel on Climate Change (IPCC), 1988	The IPCC is a panel established in 1988 by the World Meteorological Organisation WMO and the UN Environment Programme to provide independent scientific advice on climate change. The panel was originally asked to prepare a report, based on available scientific information, on all aspects relevant to climate change and its impacts and to formulate realistic response strategies. This first assessment report of the IPCC served as the basis for negotiating the United Nations Framework Convention on Climate Change. The IPCC is finalising the Sixth Assessment Report which consists of three Working Group contributions.: The IPCC Working Group I aims at assessing the physical scientific basis of the climate system and climate change. The IPCC Working Group II assesses the vulnerability of socio-economic and natural systems to climate change, negative and positive. The IPCC Working Group III assesses options for mitigating climate change through limiting or preventing GHG emissions.
IPCC Guidelines for National GHG Inventories, 2006	The 2006 Guidelines provide methodologies for making estimates of national anthropogenic emissions and removals of GHGs
ISO 14064-1:2019 Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.	This document specifies principles and requirements at the organization level for the quantification and reporting of GHG emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organisation's GHG inventory.
Kyoto Protocol on the Framework Convention on Climate Change, 1997	This Protocol was the key instrument on which the 1992 United National Framework Convention on Climate Change is based. It is the first legally binding global agreement setting out specific obligations for the reduction of the amount of greenhouse gases.
Montreal Protocol on Substances that Delete the Ozone Layer, 1987	This Protocol lays down a timetable for the reduction of controlled substances that deplete the ozone layer and have adverse effects on health and the environment.

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Title	Description	
Paris Agreement (UN Framework Convention on Climate Change), 2016	South Africa signed the Paris Agreement on 22 April 2016. This Agreement aims to strengthen the global response to the threat of climate change by limiting the increase in the global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognising that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.	
UN Framework Convention on Climate Change, 1992	The objective of the Convention is to "stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".	
Vienna Convention for the Protection of the Ozone Layer, 1985	The Convention is the first global agreement that recognised that the ozone was a serious enough problem to warrant international regulation.	
Nature and Protected Areas		
African-Eurasian Migratory Waterbird Agreement	The African-Eurasian Migratory Waterbird Agreement is an intergovernmental treaty dedicated to the conservation of migratory waterbirds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian Archipelago	
Agreement on the Conservation of Albatrosses and Petrels, 2004	The Agreement protects all the world's albatross species, seven southern hemisphere petrel and two shearwater species. A number of these occur off the South Coast of South Africa.	
Convention on International Trade of Wild Fauna and Flora Endangered Species, 1973 (CITES)	CITES is a multilateral treaty to protect endangered plants and animals.	
Convention on the Conservation of Migratory Species of Wild Animals, 1983 (Bonn Convention)	This Convention aims to conserve terrestrial, marine and avian migratory species throughout their range.	
International Convention for the Conservation of Atlantic Tunas	This Convention provides for the management and conservation of tuna and tuna-like species in the Atlantic Ocean and adjacent seas.	
International Convention for the Regulation of Whaling, 1946	The International Whaling Commission was established under the 1946 International Convention for the Regulation of Whaling to provide for the proper conservation of whale stocks and orderly development of the whaling industry.	
Memorandum of Understanding (MoU) on the Conservation of Migratory Sharks, 2010	The MoU was founded under the auspices of the Bonn Convention and serves as an international instrument for	

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Title	Description
	the conservation of migratory shark species, including species occurring off the South Coast of South Africa.
MoU on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia, 2001	The MoU is an intergovernmental agreement that aims to protect, conserve, replenish and recover sea turtles and their habitats in the Indian Ocean and South-East Asian region.
Ramsar Convention on Wetlands of International Importance (1971)	The Ramsar Convention's broad aims are to halt the worldwide loss of wetlands and to conserve, through wise use and management, those that remain. This requires international cooperation, policy making, capacity building and technology transfer. The Ramsar Convention on Wetlands of International Importance became effective in South Africa in 1975. There are currently 29 Ramsar sites in South Africa covering a total surface area of approximately 570 ha.
Revised African Convention for the Conservation of Nature and Natural Resources, 2017	The objectives of this Convention are to enhance environmental protection, to foster the conservation and sustainable used of natural resources, and to harmonise and coordinate polices in these fields.
The Nairobi Convention, 1996	The Nairobi Convention was administered by the UN Environment Programme and provides a platform for governments, civil society, and the private sector to work together for the sustainable management and use of the marine and coastal environment. Under the Convention, the Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region (1996) requires Contracting Parties take all appropriate measures to ensure the strictest protection of listed endangered species such as the Leatherback turtle, Humpback and Blue whales, prevent damage to, or destruction of, critical habitats, and take all appropriate measures to prohibit the intentional or accidental introduction of alien or new species which may cause significant harm (Anchor Environmental Consultants, 2023).
UN Convention on Biological Diversity, 1992	This Convention has three main goals: (1) conservation of biological diversity (or biodiversity); (2) sustainable use of its components; and (3) fair and equitable sharing of benefits arising from genetic resources. Its objective is to develop national strategies for the conservation and sustainable use of biological diversity.
Archaeology and Cultural Heritage	
Convention concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972)	This Convention provides for the identification, protection and conservation of the cultural and natural heritage for future generations.
Convention for the safeguarding of the Intangible Cultural Heritage	The main goal of the Convention is to safeguard the practices, representations, expressions, knowledge, and skills that communities, groups and, in some cases, individuals recognize as part of their cultural heritage

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Title	Description	
Convention on the Elimination of All Forms of Discrimination Against Women	Convention on the Elimination of All Forms of Discrimination Against Women. In 1974, the Commission on the Status of Women began drafting the Convention on the Elimination of All Forms of Discrimination Against Women. Described as an international bill of rights for women, it was instituted on 3 September 1981 and has been ratified by 189 states.	
UN Declaration on the Rights of Indigenous Peoples	The Declaration addresses both individual and collective rights; cultural rights and identity; rights to education, health, employment, language, and others. It outlaws discrimination against indigenous peoples and promotes their full and effective participation in all matters that concern them.	
UNESCO Convention on the Protection of the Underwater Cultural Heritage, 2001	The 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage was adopted in November 2021 and provides a common legally binding framework for States Parties on how to better identify, research and protect their underwater heritage, while at the same time ensuring its preservation and sustainability. The Convention considers the preservation of underwater cultural heritage in situ as a priority option and contains obligations on the prevention of commercial exploitation, looting and trafficking of underwater cultural property and commits. The Convention also commits States to cooperate in the conservation and protection of underwater cultural heritage (ACO Associates cc, 2023).	
Marine Safety		
Convention on the International Regulations for Preventing Collisions at Sea, 1972	This Convention sets an international standard for shipping and navigation. It deals with safety at sea issues and prescribes international standards for shipping, particularly to reduce the risk of collisions at sea. The rules for the prevention of collisions at sea apply to all vessels using the high seas.	
International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material, 1984	The International Atomic Energy Agency is an international organisation that seeks to promote the peaceful use of nuclear energy, and to inhibit its use for any military purpose, including nuclear weapons. These regulations provide international standards and approaches to safety promote consistency, help to provide assurance that nuclear and radiation related technologies are used safely, and facilitate international technical cooperation and trade.	
International Commission on Radiological Protection	The International Commission on Radiological Protection is an independent, international non-governmental organisation providing recommendations and guidance on radiation protection.	
International Convention for the Safety of Life at Sea, 1974 with its protocol of 1978	This Convention is an international maritime treaty which requires signatory flag states to ensure that ships flagged	

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Title	Description	
	by them comply with minimum safety standards in construction, equipment and operation.	
International Convention on Load Lines, 1966 and its protocol of 1988	This Protocol was adopted to harmonise the survey and certification requirement of the 1966 Convention with those contained in the International Convention for the Safety of Life at Sea, 1974 and MARPOL 73/78. All assigned load lines must be marked amidships on each side of the ships engaged in international voyages.	
Human Rights and Labour		
International Labour Convention	The main aims of the International Labour Convention are to promote rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue on work-related issues.	

2.5 TEEPSA'S STANDARDS AND HEALTH, SAFETY AND ENVIRONMENTAL POLICIES

TotalEnergies, the Group to which TEEPSA belongs, is a global multi-energy company that produces and markets a range of energies, including oils and biofuels, natural gas and green gases, renewables and electricity. TotalEnergies has committed to producing energy that is more affordable, cleaner, reliable and accessible (TotalEnergies, 2022). In doing so, they operate in accordance with a range of standards, policies and specifications. The proposed Project is undertaken in accordance with these standards, policies and specifications. Further detail is provided below.

2.5.1 TOTALENERGIES' SUSTAINABILITY APPROACH

TotalEnergies has placed sustainable development in all its dimensions at the heart of its strategy, projects and operations, in order to contribute to the well-being of the planet's populations, and it wants to set the standard in terms of commitment to the United Nations Sustainable Development Goals (SDG), adopted in 2015 by the United Nations and its Member States and to which TotalEnergies has committed to contribute since 2016. TotalEnergies has structured its CSR (Corporate Social Responsibility) approach for conducting its activities so as to contribute to the achievement of the SDGs. The axes of TotalEnergies CSR strategy are summarised in Figure 2-1 and below.

As part of its determination to strengthen its efforts in the segments in which it can act with most authority as an integrated multi-energy Company, TotalEnergies involves its employees in identifying the SDGs on which it can have the greatest impact, in connection with its ambition to reach carbon neutrality (net zero emissions) by 2050, together with society. TotalEnergies' CSR approach is based on four pillars:

- Climate and sustainable energy: leading the transformation of the energy model to contribute to the fight against climate change and meet the needs of populations;
- People's well-being: being a reference as an employer and responsible operator. TotalEnergies
 intends on promoting a work environment that combines performance and conviviality and

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ensuring compliance with human rights in the workplace, both within the Company and among its partners, but also the safety and health of people;

- Care for the environment: to be exemplary in the management of the environment and the use of the planet's natural resources. TotalEnergies intends on ensuring that the environmental impacts of all its operations are managed according to the Avoid-Reduce-Offset approach, thereby helping to preserve the environment, biodiversity and freshwater resources. To this end, TotalEnergies promotes the circular economy;
- Creating shared value for society: generating shared prosperity across regions. TotalEnergies aims to be a creator and a driver of positive change for the communities in its host regions. TotalEnergies actively works on each of its sustainability pillars in order to make its development a vehicle of progress that benefits as many people as possible and to be a factor of positive change for the societies and regions where it is present.

Support to global initiatives

TotalEnergies is committed to various international initiatives such as the fight against climate change, promotion of social dialogue, preservation of biodiversity, transparency in the conduct of business. TotalEnergies abides by the principles of the United Nations Global Compact. TotalEnergies is committed to respecting internationally recognized human rights, wherever it operates, especially the Universal Declaration of Human Rights, the Fundamental Conventions of the International Labour Organization (ILO), the U.N. Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the Voluntary Principles on Security and Human Rights (VPSHR).

Transparency, a principle of action

The Company believes that transparency is an essential principle of action in building a trust-based relationship with its stakeholders and enables a path of continuous improvement. Pending the adoption of an international, standardized non-financial reporting framework, TotalEnergies ensures it is accountable for its performance on the basis of the various commonly used ESG reporting frameworks. As such, TotalEnergies refers to the Global Reporting Initiative (GRI) standards and those of the Sustainability Accounting Standards Board (SASB), for which detailed tables of correspondence are available on its website. TotalEnergies' reporting includes the World Economic Forum's core indicators13. Furthermore, the Company follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for its climate reporting. TotalEnergies provides additional information on its website in pages specifically dedicated to its sustainability development approach. TotalEnergies' sustainability approach is recognized: in 2021, the Company was once again confirmed as a LEAD Company by the United Nations Global Compact for its full commitment to CSR.

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Figure 2-1 - Axes of TotalEnergies CSR strategy

2.5.2 STANDARDS FOR PROJECT DESIGN AND EXPLORATION AND PRODUCTION ACTIVITIES

TEEPSA's General Specification for the Environment: Environmental Requirements for Projects Design and Exploration and Production Activities (Total S.A, 2015a) is put in place to establish the environmental requirements for project design and exploration and production activities undertaken by TEEPSA. The Specification applies to all phases of the proposed Project's design and exploration and production activities, including seismic exploration; exploratory and production drilling; preliminary and conceptual; pre-project; basic and detailed engineering; construction; installation; commissioning; production; and decommissioning.

The Specification deals with the following aspects: environmental footprint; flaring and air emissions; fuel gas and energy use; management of liquid effluents; waste management; drill fluids and

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cuttings; chemicals; noise; dust, odours and lighting; spill response equipment; and decommissioning of installations. As per the Specification, the purpose is to reduce any significant impact of projects on the biophysical and socio-economic environment through the development and implementation of mitigation measures. It is a requirement of the Specification that ESIA requirements are integrated into project design (Total S.A, 2015a).

2.5.3 GENERAL STANDARDS FOR ESIA

The ESIA is conducted within the framework of Corporate General Specifications for ESIAs implemented by TEEPSA, including:

- General Specification for the Environment: EIA of Exploration and Production Activities (Total S.A, 2019): This document defines the processes and requirements to be implemented for conducting an ESIA. The Specification defines the minimum requirements of the contents of an ESIA. It recognises that the purpose of the ESIA is to ensure that the environment is given full and proper consideration in the decision-making process with respect to potential activities having possible negative and positive consequences on the environment. It outlines the minimum standard required by the Company to assess impacts on the environment and is adapted to the type and nature of a given project to define the Scope of Work.
- General Specification for Sustainable Development: SIA (Total S.A, 2015c): This document defines the requirements of conducting a SIA and sets out the content requirements, phases and expected results. The Specification notes the compliances with national legislation and outlines the stakeholder engagement required as part of the SIA, including discussions with government authorities and neighbouring communities. The General Specification for Sustainable Development: Social Baseline Study (Total S.A, 2015b) is noted as being an integral part of an SIA (see following bullet).
- General Specification for Sustainable Development: Social Baseline Study (Total S.A, 2015b): These specifications define the requirements for establishing an SBS and sets out the content requirements, phases and expected results. Further, it outlines the process and requirements for stakeholder engagement (including disclosure) and the assessment of social impacts. The specifications require local laws and rules to be respected, and for further specific conditions to be added, if necessary.
- General Specification for the Environment: Environmental Baseline and Monitoring Studies in Offshore and Coastal Waters (Total S.A, 2017): The purpose of these specifications are to define the process and requirements for conducting an environmental baseline study to establish the reference environmental status and for carrying out environmental monitoring offshore or in coastal waters. The Specification outlines the minimum requirements and details the main objectives to be achieved.

2.5.4 HEALTH, SAFETY AND ENVIRONMENTAL STANDARDS

TEEPSA is committed to upholding high health, safety and environmental (HSE) goals and goals to ensure a continued commitment to workplace health and safety. TotalEnergies also has a Code of Conduct for its staff and supply chain governing health, safety, security, bribery and corruption, and respect for human rights. TEEPSA is committed to conduct its business in a sustainable manner, which provides for and maintains a safe working environment, which is without risk to the wellbeing of its employees, contractors and stakeholders, and which furthermore will have a limiting impact on the surrounding environment.

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2.5.4.1 HSE Policy

The Management team at TEEPSA takes the responsibility to apply, drive and sustain the principles listed in its HSE policy in order to ensure continued improvement of TEEPSA's HSE performance and impact. TEEPSA's HSE policy is provided in Figure 2-2 below.





HEALTH, SAFETY & ENVIRONMENT POLICY

TotalEnergies EP South Africa B.V. is committed to conduct its business in a sustainable manner, which provides for and maintains a safe working environment, which is without risk to the wellbeing of its employees, contractors and stakeholders, and which furthermore will have a limiting impact on the surrounding environment.

The Management of TotalEnergies EP South Africa B.V. takes the responsibility to apply, drive and sustain the principles listed in this policy in order to ensure continued improvement of our HSE performance and impact.

IT IS OUR POLICY TO:

- Encourage and promote a positive HSE work culture throughout the organisation, by demonstrating strong visible felt leadership from management and supervision, and to involve the workforce, to take personal ownership, responsibility and accountability for Health, safety and the Environment in the workplace.
- Comply with all Local and International Laws and Regulations, as well as all Corporate Policies and Specifications applicable to our operations.
- Pro-actively identify and implement continuous improvement initiatives by setting measurable HSE targets and objectives, and regularly review our actual performance against these targets and objectives.
- Ensure that all risks associated with our operations are continuously identified, monitored and reviewed in order to mitigate and maintain our risk profiles as low as reasonably possible.

- » Continuously communicate with and consult all personnel, contractors and stakeholders on any HSE related matters.
- Incorporate and plan for effective HSE management methods in all ongoing engineering and operations activities.
- Ensure all people are trained and competent for any task they perform and ensure that such work is performed under the supervision of a person who has been trained to acknowledge the related hazards and has the authority to implement precautionary measures
- Provide for appropriate and sufficient resources, including training, in order to achieve targeted performance levels on ongoing bases.
- Work and partner with those industrial and commercial partners who demonstrate a similar commitment to our own HSE visions.
- Implement, maintain and regularly test emergency response and contingency plans.

Each and every employee, contractor and person acting on behalf of the company, has the responsibility to prevent harm to themselves, others and the surrounding environment, which may be affected by their acts or omissions.

TotalEnergies EP South Africa B.V. is committed to ensure that our resources, organisational strategies and processes are aligned with the goals and objectives as set out in this policy, in order to satisfy our stakeholder's needs.

Bertrand BOUVET

General Manager

TEEPSA/1/POL/HSE/01.01

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Figure 2-2 - TEEPSA HSE policy

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In this regard, TEEPSA operates in accordance with the following:

- Safety, Health, Environment and Quality Charter (Total S.A. 2014).
- Total Group Health Policy (Total, 2010).
- Health, Safety, Societal and Environmental Requirements for Industrial Projects (Total, 2014).

2.5.4.2 Code of Conduct

Furthermore, TotalEnergies is committed to upholding a number of global policies and principles on its projects. These include the Voluntary Principles for Security and Human Rights, the International Labour Organisation Conventions, United Nations Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights, Partnering Against Corruption Initiative and sustainable performance reporting, amongst others.

The TotalEnergies Charter of Principles and Guidelines regarding Indigenous and Tribal Peoples sets out its commitment to respect the culture, values and lifestyle of the local communities, and contributes to their economical development while carrying out its business. As such, TotalEnergies endeavours to honour the principles of the charter together with applicable legal standards, while dealing with Indigenous and Tribal Peoples.

2.5.5 TOTALENERGIES SUSTAINABLE PERFORMANCE

One of the major difficulties of the twenty-first century is to save the planet threatened by climate change while allowing the bulk of humanity to overcome poverty. Energy, in this way, is inextricably linked to the key global concerns of sustainable development. TotalEnergies' mission is to provide as many people as possible with more affordable, more accessible, and cleaner energy. Energy, as a supporting component of societal evolutions, is a crucial resource for economic, social, and human growth, which is today confronted with two challenges: (1) meeting the energy needs of an evergrowing global population, and (2) decreasing global warming. TotalEnergies' objective in becoming a leading energy company is to help meet that challenge responsibly, in line with its support of the United Nations Sustainable Development Goals (SDG) since 2016. Main pillars of this strategy are introduced below. For further information on TotalEnergies' commitments, refer to its website (https://totalenergies.com/system/files/documents/2023-03/Sustainability_Climate_2023_Progress_Report_EN.pdf).

Energy transition: TotalEnergies' ambition is to be a global player in the energy transformation. To build long-term value for its shareholders, TotalEnergies' objective is to develop it into a broad energy company by profitably increasing its energy production, primarily from liquefied natural gas (LNG) and electricity, the two fastest expanding energy sectors. In the next decade until 2030, TotalEnergies' sales of oil products are expected to diminish by almost 30% and its sales mix will become 30% oil products, 5% biofuels, 50% natural gas and 15% electricity, primarily of renewable origin. As a result, oil will account for no more than 30% of its total sales, compared to 53% in 2019.

Sustainable value creation: TotalEnergies' model of value creation is based on integration across the energy value chain, from exploration and production of oil, gas and electricity (including renewables) to energy distribution to the end customer, and including refining, liquefaction, petrochemicals, trading, and energy transportation and storage. This integrated business model enables TotalEnergies to capitalise on synergies among the various businesses, while responding to volatility in feedstock prices. With this integration of its operations across the entire value chain, TotalEnergies can manage the bottom of the cycle more effectively and capture margins when the

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market improves. This transition will cement the durability and resilience of TotalEnergies' value creation model and bolster its ambition of getting to Net Zero (net zero emission).

Climate and carbon neutrality ambition: TotalEnergies supports the objectives of the Paris Agreement, which calls for the reduction in greenhouse gas emissions and its goal of limiting the average rise in planetary temperatures to well below 2°C from pre-industrial levels. TotalEnergies also supports the objective set out in the Paris Agreement of achieving global carbon neutrality – i.e., net zero emissions, which is the balance between GHG emissions and anthropogenic removals in the form of sinks and reservoirs, such as forests, carbon capture and storage facilities.

TotalEnergies has set an ambition of reaching carbon neutrality (net zero emissions) by 2050 in Europe, from the production to the use of the energy products sold to its customers (Scopes 1, 2, 3 as defined by the GHG Protocol) and the objective of 60% or more reduction in the average carbon intensity of energy products used worldwide.

Preservation of the Environment: TotalEnergies considers the respect for the environment to be a priority and, therefore, strives to minimise the footprint of its activities by controlling its energy consumption, its emissions in natural environments (water, air, soil), its residual waste production, its use of natural resources and its impact on biodiversity. Prevention and management of accidental pollution risk are covered by a strong policies framework. In 2020, TotalEnergies set itself a new biodiversity ambition to coincide with the preparation of the United Nations' global biodiversity plan, which is based on four core principles, including voluntary exclusion zones on more sensitive areas such as UNESCO World Cultural Heritage sites and Arctic sea-ice regions. Regarding the "circular economy", since 2017, TotalEnergies has focused on waste reduction and valorisation (i.e., increase in the value of), including developing polymers from recycled plastics. In addition, in January 2022, TotalEnergies set a new target for the freshwater resource protection for 2030. The ambition of the Company is to reduce by 20% its freshwater withdrawal in water stress area between 2021 and 2030.

Business ethics: TotalEnergies operates in many different countries with disparate and complex economic, social and cultural environments, where governments and civil society have especially high expectations of TotalEnergies as an exemplar. Within this context, TotalEnergies strives to act as an agent for positive change in society by helping to promote ethical principles in every region where it operates. Accordingly, TotalEnergies is committed to respecting internationally recognised human rights wherever it operates. TotalEnergies is also fully committed to fighting corruption and has adopted a policy of zero tolerance in that area.

Stakeholder Engagement: Transparency is an essential factor in building a trust-based relationship with stakeholders and ensuring that a company or project is on a path of continuous improvement. Dialogue with TotalEnergies external stakeholders is essential for the company to conduct its business responsibly and integrate the long-term challenges of sustainable development in the company's strategy and policies. This dialogue informs TotalEnergies' decision-making, by, in addition to specific studies, helping it identify the non-technical risks and impacts of its operations, including the Human Rights component and, more generally, by providing greater insight into changing societal patterns and expectations. TotalEnergies' financial / non-financial reporting is published in a Universal Registration Document

https://totalenergies.com/sites/q/files/nytnzg121/files/documents/2023-03/TotalEnergies URD 2022 EN.pdf)

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