Environmental Social Impact Assessment (ESIA) for Proposed Survey Activities in Block 9 and Block 11B/12B, South Coast of South Africa Draft Scoping Report Non-Technical Summary

This summary contains <u>underlined hyperlinks</u> that provide readers of the electronic version with the option to access additional information on certain aspects, if interested.

1.0 Introduction

Main Street 1549 (Pty) Ltd (Main Street) holds Exploration Right 12/3/067 over Block 11B/12B, located off the South Coast of South Africa, roughly between Mossel Bay and Cape St. Francis.

After gas-condensate was discovered at the Brulpadda and Luiperd wells in Block 11B/12B, the joint venture partners holding the Exploration Right to the Block applied for a Production Right (PR Application) and Environmental Authorisation (EA Application) to develop the gas-condensate resource. An Environmental and Social Impact Assessment (ESIA) process to assess the development of the gas-condensate resource was started under the lead of TotalEnergies EP South Africa (TEEPSA). The ESIA process included a public participation process conducted in 2022 and 2023. Some joint venture partners withdrew from Block 11B/12B in late 2024, and Main Street remains as the only applicant of the EA Application.

Main Street now proposes to initially conduct largely nonintrusive surveys of the potential production sites and pipeline routes from the deep-water field areas in Block 11B/12B onto the shelf and into the adjacent Block 9 (Block 9 is held by PetroSA). The proposed surveys include bathymetry, sonar, seafloor sampling, metocean, and Remote Operated Vehicle (ROV) surveys. The surveys are intended to provide data to inform the design and layout of subsea production facilities and associated infrastructure of any future development (which would be assessed in a separate ESIA).

The surveys area lies at least 65 km offshore (80 km from Mossel Bay), measures up to $8\,620\,\mathrm{km^2}$ (within portions of Blocks 11B/12B and 9 – Figure 1), and lies in water depths between approximately 100 m and 2 200 m.

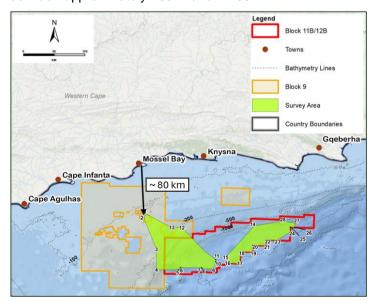


Figure 1: Locality Map

Before starting, the Operator needs to obtain permission (an Environmental Authorisation; EA) from the Department of Mineral Resources and Energy (<u>DMRE</u>). As part of this process, an ESIA must be undertaken.

Purpose of this Document

This document provides a **non-technical summary of the Draft Scoping Report** and informs you about:

- The proposed project;
- The biophysical, cultural, and socio-economic baseline environment of the project area;
- The ESIA process being followed;
- Possible biophysical, cultural, and socio-economic impacts identified, and proposed specialist input to assess these impacts; and
- How you can participate in the ESIA process.

Who are the Consultants?

SLR Consulting South Africa (Pty) Ltd (SLR) is an independent environmental consulting company and has been appointed by Main Street.



⊃ Your Role

If you are interested in this project or feel that you are affected by it, and therefore consider yourself an interested and/or affected party (I&AP), you can:

- · Register on the project database
- Get information about the proposed project
- Join meetings (see Table 4) and give your input
- Review and comment on reports (see below)

All I&AP comments will be recorded and included in the reports sent to authorities for decision-making.

How to Register and Comment

Please register on the database by scanning the QR code **or** following the link below **or** contacting SLR at the details listed below.

Please submit your comments on the report to SLR by 3 April 2025 via the contact details below.



https://forms.office.com/e/ECpD2ZLTU

SLR Contact Details

Tel: (021) 461 1118, SMS/WhatsApp: 071 586 5881

Email: 11b12bsurveys@slrconsulting.com

Website:

https://www.slrconsulting.com/publicdocuments/11b12bsurveys/

Website Data Free:

https://slrpublicdocs.datafree.co/publicdocuments/11b12bsurveys/

Post: 5th Floor, 9 Grove Exchange, 170 MainRoad, Claremont, 7700



2.0 **ESIA Process**

An ESIA is undertaken to identify and assess potential impacts of a project and decision-making. The EIA Regulations, 2014 define whether and how an ESIA must be undertaken.



3.0

Public consultation is an important part of the ESIA process and includes:

Public Consultation



- This ESIA has two phases (Figure 2): Scoping Phase: SLR gathers information about the environment and then identifies how the project might
- affect the environment and society, and how to study these impacts. This is written up in the **Scoping Report**.
- 2. Impact Assessment Phase: Specialists investigate potential impacts of the project and suggest ways to reduce negative impacts and increase positive impacts. This is written up in the **ESIA Report**.

The reports are shared with the I&APs registered on the project database, who can then comment on the findings of the reports. The reports are then submitted to the Petroleum Agency of South Africa (PASA) and the DMRE, who decides whether the project is approved and may proceed or not.

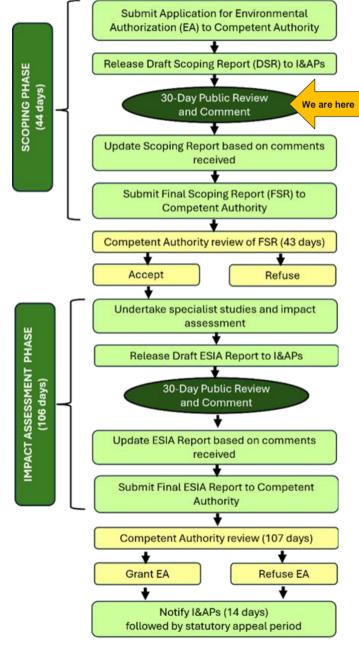


Figure 2: Key ESIA process components

- Notifying I&APs of the proposed project;
- Sharing information about the proposed project, ESIA and public participation process; and
- Responding to questions and comments on the project and ESIA findings.

I&APs can review reports and attend public meetings in each phase of the ESIA process. To get involved in the ESIA process please see Section 8.0.

4.0 **Need and Desirability**

This ESIA relates to surveys only (not the development of / production from Block 11B/12B). Planning and policy documents that guide the need and desirability of a gas development and production project are not directly applicable to such surveys.

However, as the surveys are undertaken in furtherance of a PR application, the broader need and desirability context of the development/ production project is mentioned (but would need to be considered in a separate ESIA for Block 11B/12B field development).

South Africa's policies say that we must reduce greenhouse gas emissions, while also ensuring the countries current and future energy needs are met to ensure the sustainable development of our economy and that economic growth is just and inclusive to reduce South African unemployment, poverty and inequality. As part of that approach, South African policies also promote the sustainable development for local oil and gas resources.

The need and desirability of a particular project also depends on the environmental and social impacts of the project, or its sustainability. The biophysical and socio-economic impacts of the project will be assessed during the Impact Assessment Phase of the ESIA process. The need and desirability of the project will be further assessed and updated in the ESIA Report.

For general context, energy is important for economic activity and growth, which generate income and jobs. In South Africa, fossil fuels provided almost all (94%) of the energy consumed in 2023 (coal 69%, oil 22% and gas 3%), and other sources provided 6% (renewables 4% and nuclear 2%). In the world, fossil fuels also provided almost all (82%) energy consumed in 2023 (coal 27%, oil 32% and gas 23%), and other sources provided 18% (renewables 8%, nuclear 4% and hydropower 6%).

Oil and gas are likely to be an important source of energy in South Africa (and the world) for some time, even with intense efforts to develop alternative low-carbon energy sources: new renewable, nuclear or hydro-electricity generation must increase a lot to replace the energy currently produced by fossil fuels, and electricity cannot at the moment replace oil and gas in all sectors (e.g. transport and some industrial uses). South Africa currently imports almost all oil and gas used in the country.



5.0 Project Description

Main Street is applying for approval to conduct bathymetry, sonar, seafloor sampling, metocean, and ROV surveys in portions of Blocks 11B/12B and 9. Main Street want to better understand the seafloor composition



and currents in the area where pipelines and other infrastructure might be laid for any future development which future development would be subject to a separate and further ESIA. Each of the surveys can take up to 5 months.

The project will store and load / offload materials, equipment, staff and fuel at an existing port along the south coast.

5.1 Bathymetry and Sonar Surveys

Bathymetry and sonar surveys may use different technologies, such as single-beam echosounders (SBES), multi-beam echosounders (MBES), side-scan sonar (SSS), sub-bottom profilers (SBP) and ultra-high resolution seismic surveys (UHRS). The surveys use sound / pressure waves in the water made by instruments that are on the survey vessel, towed behind the survey vessel or on an autonomous underwater vehicle (AUV). These surveys make detailed maps of the seabed that show e.g. depth, slopes, sediment types and obstacles.



Figure 3: Example of a survey vessel

5.2 Seafloor Sampling

These surveys use grab sampling and coring to collect samples of the sediment from the ocean floor. The tools are lifted overboard from the vessel to the seafloor. The samples are brought back to the vessel and tested to understand the characteristics of the sediment on the seabed. This helps understand how and where underwater infrastructure would need to be placed and anchored on the seabed.

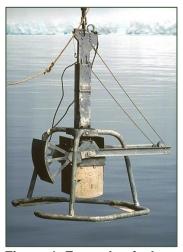


Figure 4: Example of a box corer tool

5.3 Metocean Surveys

Metocean surveys collect data about the marine environment, like weather and ocean conditions. They measure currents near the seabed using buoys. This information is important for designing and planning offshore facilities because it shows the conditions the infrastructure will face. Knowing these conditions helps determine the safe limits for installing and operating underwater systems like pipelines and equipment.

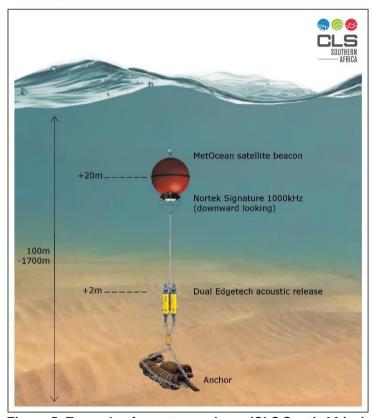


Figure 5: Example of a metocean buoy (CLS South Africa)

5.4 ROV Surveys

These surveys use cameras, sonar, and sensors on an ROV (an unmanned submarine operated from a vessel) to take pictures and videos of the seafloor. ROV surveys provide information about underwater ecological sensitivities and hazards.



Figure 6: Example of an ROV (wewolver.com)



6.0 Receiving Environment

Understanding the existing environment helps SLR and specialists understand the nature of possible project impacts, and what needs to be studied in the Impact Assessment Phase.

6.1 Physical Environment

Based on current understanding, Blocks 9 and 11B/12B have a mix of rocky reefs and areas with thin sediment layers. In the north, there is a thin layer of loose sand over dense clay. To the northeast, there are sandy areas on the outer shelf and edge, while the west has hard sediments. Beyond 1 000 m deep, the seafloor has loose sediments. Along the eastern half of the South Coast, the seafloor is mostly rocky reefs (Figure 7). The oceanography of the South Coast is almost totally dominated by the warm Agulhas Current.

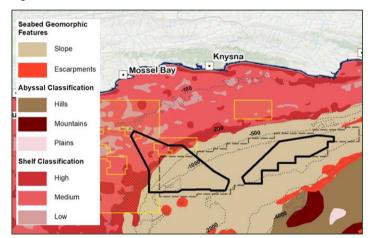


Figure 7: Seabed Characteristics

6.2 Biological Environment

Benthic (seabed) plants and animals differ depending on factors such as the type of ocean floor, water depth and other environmental conditions.



The seabed habitats on the Agulhas Bank support a variety of invertebrates. Soft mud sediments support worms, small crustaceans, mollusks, and sea stars. Sandy areas also support sea pens, sponges, and deep-water rock lobsters.

Rocky habitats support sponges, black corals, rock lobsters and other sea life. The communities in deeper reef areas and canyons are different from those in shallower areas, and are typically characterised by lower biodiversity.

Demersal fish (those that live and feed on or near the seabed) off the South Coast include steenbras, bream, spotted grunter, kob, snoek, musselcracker, red roman, etc.

Pelagic species (those that live and feed in the open water) include:

 Plankton – Phytoplankton (tiny plants) and zooplankton (tiny animals) are most common in areas closer to the sea surface and during summer on the central and eastern Agulhas Bank.

The area east of Cape Agulhas between the shelf-edge and the cold-water ridge is a spawning ground for many commercially important fish stocks, such as hake, kingklip, pelagic and squid. Most of the eggs and larvae remain on the Agulhas Bank, but some are carried to the West Coast or out to sea.

- Fish Important fish species that migrate and spawn along the South Coast include elf, geelbek, yellowtail, kob, seventy-four, strepie, and Cape stumpnose. The inshore area of the Agulhas Bank is a key nursery for young fish like elf, garrick, geelbek, and carpenter.
- Turtles Some turtles may occasionally be found in the project area, most likely Leatherback turtles.
- Seabirds Seabird colonies and visiting seabirds on the Agulhas Bank rely on small fish in the productive waters. They feed close to shore, but gannets and kelp gulls may go further offshore. Many pelagic seabirds feed on fish stocks in the Southern Benguela and Agulhas Bank. They are most abundant offshore during their nonbreeding season in winter.
- Marine mammals Species include southern right whale, bryde's whale, humpback whale, sei whale, sperm whale, beaked whales, common dolphin, bottlenose dolphin, risso's dolphin, orca, pilot whale, and cape fur seal.

The survey areas lie almost entirely in areas categorised as *'Least Concern'* (Figure 8) and do not overlap with <u>Marine Protected Areas</u> (MPAs). The western survey area overlies a small portion of the Kingklip Corals EBSA (Figure 9) and a portion of a Critical Biodiversity Area (CBA) (Figure 10).

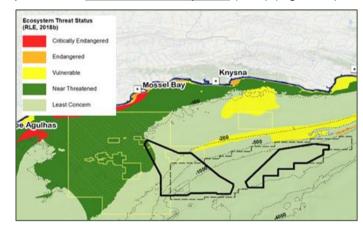


Figure 8: Benthic ecosystem threat status

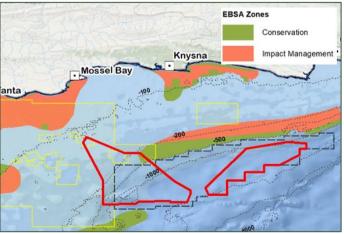


Figure 9: EBSAs



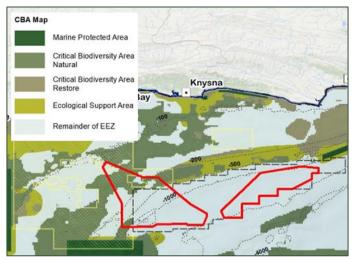


Figure 10: MPAs, CBAs and ESAs

6.3 Fishing Activity



Small-scale fisheries typically operate up to ~15 km from the coastline (the project is more than 65 km offshore).

The proposed survey areas overlap with some demersal trawling (Figure 11) and large pelagic longline fishing grounds (Figure 12).

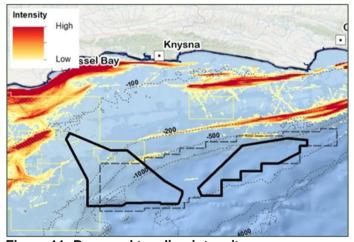


Figure 11: Demersal trawling intensity

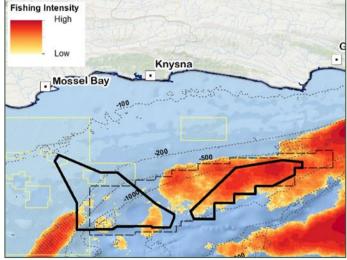


Figure 12: Pelagic longline fishing intensity

6.4 Socio-Economic Environment



Many communities on the South Coast suffer from high poverty, limited education opportunities, poor access to services and few job opportunities.

Tourism and fishing are important economic activities for many communities on the South Coast.

7.0 Impact Assessment

7.1 Identified Potential Impacts

During the Scoping Phase SLR compared project activities with the existing environment and identified several potential impacts (see Table 1). These impacts will be assessed by specialists, with input from I&APs, in the Impact Assessment Phase (Section 7.2).

7.2 Assessment of Identified Impacts

Specialists will study and assess the key potential impacts and identify measures to reduce negative impacts to acceptable levels and enhance any benefits (positive impacts) (Table 2).

Table 1: Summary of potential key impacts

Potential Key Impacts			
Marine Ecology Impacts			
Behavioural disturbance of marine fauna			
Injury to marine fauna			
Smothering and disturbance of benthic fauna (sampling			

- Fisheries Impacts
- · Changes in catch due to behavioural change in fish
- Displacement of fishing vessels

footprint)

· Loss of income from any disruption of fisheries

Socio-economic Environment Impacts

- Deterioration of shore-based community health and safety
- · Income and skills training for workers
- Income from local procurement and spending
- State income from taxes and levies
- · Health impacts from atmospheric pollution
- · Contribution to GHG emissions
- · Deterioration of cultural heritage links to the sea

Table 2: ESIA specialist studies

Study	Purpose			
Technical Studies				
Underwater Noise Modelling	These studies predict how far noise may travel in the sea. These distances are used by other specialists to assess the potential ecological, fisheries and social impacts of the project.			
Specialist Studies				
Marine Ecology and Fisheries	These studies will use relevant information (including the model outcomes above) to identify and assess potential impacts of the proposed project on specific receptors.			
Maritime Heritage				
Socio-Economic				



Study	Purpose		
Intangible Cultural Heritage	Specialists will also recommend measures to reduce negative impacts		
Air Quality	and improve benefits of the project.		
Climate Change			

8.0 Way Forward

Your participation in the ESIA process is important. How you can participate is explained below.



8.1 Register as an I&AP

Please register as an I&AP if you are interested in the project or feel that you may be affected by it. You will receive updates and information about the ESIA process, including notification when reports are available for review and of meetings. You can request SLR to remove you from the ESIA database at any time. Registering does not mean you support or oppose the project.

Please share this information with other people who may wish to register as an I&AP.

8.2 Attend Meetings

Stakeholders are invited to attend the public open days (see Table 4) where you can learn more about the project and provide your feedback. I&APs can attend at any time during open day hours to view project information and talk directly to the ESIA team.

If you want to attend the online (virtual) meeting please register on the registration link below to receive the meeting link (see Table 4).



8.3 Review Information and Submit Comments

The following documents are available on SLR's <u>website</u> and/or data-free website:

- Non-Technical Summary (this document) in English, Afrikaans and isiXhosa;
- Audio recordings of the Non-Technical Summary in English, Afrikaans and isiXhosa; and
- Full draft Scoping Report.

Hardcopies of the draft Scoping Report and/or Non-Technical Summary are also available at various public libraries / locations (see Table 3).

Please submit any comments on the draft Scoping Report by no later than 3 April 2025. All comments will be included and responded to in the final Scoping Report, which will be submitted to PASA / DMRE.

Table 3: Hardcopies of documentation

Hardcopies of draft Scoping Report and Non- Technical Summary	Hardcopies of Non- Technical Summary
 Kwanonqaba Library Knysna Tourism Offices Plettenberg Bay Public Library St. Francis Tourism & Municipal Offices 	 Still Bay Library Mossel Bay Library Transnet Port of Mossel Bay George Public Library Jeffreys Bay Public Library Newtown Park Library

SLR looks forward to your registration as an I&AP and receiving your comments on the draft Scoping Report. Should you have any questions please contact SLR.

SLR'S COMMITMENT REGARDING THE PROTECTION OF PERSONAL INFORMATION (POPI):

By being registered on the project database, you authorise SLR to (1) retain and use your Personal Information as part of a contact database for this and/or other ESIAs, (2) contact you regarding this and/or other ESIA processes, (3) disclose the database to other authorised parties for lawful purposes, (4) process it for lawful purposes, and (5) include correspondence received in ESIA Reports. SLR will not process your Personal Information, other than as permitted or required by ESIA processes or as required by Law or public policy. SLR will use reasonable, appropriate security safeguards in order to protect Personal Information, and to reasonably prevent any damage to, loss of, or unauthorised access or disclosure of Personal Information, other than as required for ESIA processes or as required by any Law or public policy. You may request for your Personal Information to be deleted from the project database or comments to be excluded from ESIA Reports at any time by contacting SLR. However, you understand that SLR (and any authorised parties) may not be able to delete or destroy it for legal or public policy reasons. SLR will provide you with the reasons.

This is a non-technical summary of the draft Scoping Report, which contains a lot more detail. If in doubt, information in the draft Scoping Report will prevail.



9.0 Frequently Asked Questions

Some questions that I&APs might ask at this stage are listed below. The EAP will provide responses to all questions and comments submitted during the Scoping Phase.

Question	Answer			
How many jobs will be created?	Surveys involve highly technical offshore work, most of it is done by specialised offshore contractors. The project will make use of port services, local contractors where available and local goods and services (travel, accommodation, etc) to supply project.			
How does the	Fishers must report their catch to the Department of Fisheries, who check that fishing is sustainable. The specialist uses the most recent data from the Department of Fisheries to identify key fishing grounds, and also compares it with data from previous years. This provides a very good baseline to determine where fishing takes place and how much fish is caught.			
specialist know where we fish?				
What is the impact of the project on fishing?	Fishing remains very important to many coastal communities - how the project might affect it will be carefully assessed. Here are some ways the project might affect fishing:			
	Fish may avoid an area around the survey vessel during of survey activity. If this affects areas where fish breed, feed, or where fishers usually go, the specialist will assess the impact and ways to reduce or avoid the impact.			
	Fishing vessels have to avoid the survey vessel (as any other vessel) but can fish in any other part of the survey areas. Other ships can also pass through the survey area.			
Does the project affect coastal areas?	This is not expected – survey areas are more than 65 km away from the coast.			
Do I&APs need to give an opinion or agree to the project?				
Tip	These views and comments are recorded and submitted to the Competent Authority together with the ESIA reporting, so that the Competent Authority has access to all the comments submitted during the ESIA process.			
`	I&APs do not have to voice an opinion or agree to the project.			

Table 4: Public Open Day Venues, Dates and Times

Town	Venue	Date	Public Open Session Time
Mossel Bay	D'Almeida Community Hall	10 March 2025	15:00-19:00
George	Conville Community Hall	11 March 2025	15:00-19:00
Knysna	Hornlee Community Hall	12 March 2025	15:00-19:00
Plettenberg Bay	New Horizons Community Hall	13 March 2025	15:00-19:00
Storms River Village	Tsitsikamma Village Inn	14 March2025	15:00-19:00
Kareedouw	Kagiso Heights Hall	15 March 2025	10:00-13:00
Jeffreys Bay	Pellsrus Community Hall	17 March 2025	15:00-19:00
St Francis Bay	Sea Vista Community Hall	18 March 2025	15:00-19:00
Online (Virtual)		20 March 2025	09:00-12:00

Registration to Attend Online (Virtual) Meeting

Please <u>click here</u> (https://events.teams.microsoft.com/event/3120a80d-17e4-459a-a2a8-58b630724b19@109cec53-a877-42eb-93e8-b9f5c282ba38) or scan QR Code to **complete the required form** to register to attend the online public meeting.



