

# SCOPING REPORT NON-TECHNICAL SUMMARY

EIA for Exploration Well Drilling in Block 5/6/7 off the South-West Coast

#### 1. PROJECT BACKGROUND AND OVERVIEW

TotalEnergies EP South Africa Block 567 (Pty) Ltd (TEEPSA) currently holds an Exploration Right over Block 5/6/7. Since the first granting of the Exploration Right, two seismic surveys have been undertaken. Based on an analysis of acquired seismic data, TEEPSA is proposing to drill up to a maximum of 5 wells within an area of interest to further explore for hydrocarbons in the Block.

Before the proposed project can commence, TEEPSA requires approval (called "Environmental Authorisation") from the Department of Mineral Resources and Energy. As part of the process of applying for Environmental Authorisation, an Environmental Impact Assessment (EIA) process must be undertaken. SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed to undertake and manage the EIA process.

#### 2. LOCATION OF EXPLORATION DRILLING AREA

The area of interest for drilling is 10 000 km² in extent and is located offshore roughly between Cape Town and Cape Agulhas, approximately 60 km from the coast at its closest point and 170 km at its furthest, in water depths between 700 m and 3 200 m (Figure 1).

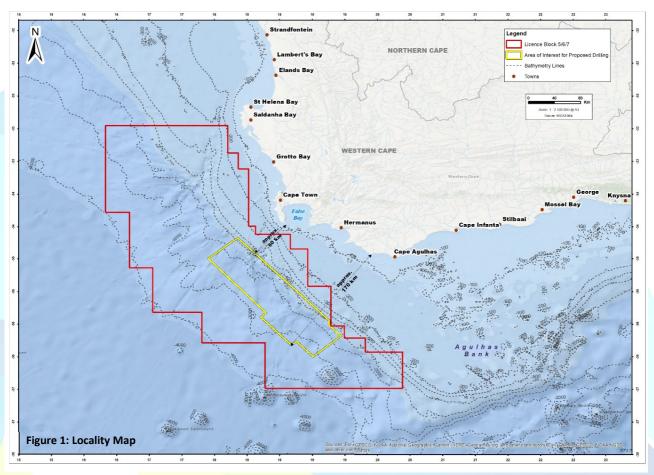
#### 3. HOW CAN YOU BE INVOLVED IN THE EIA?

SLR has compiled a draft Scoping Report, which is currently available for review and comment. This Non-Technical Summary (also available in Afrikaans and isiXhosa) is being distributed as a basis for notification and comment to ensure all potential environmental and socio-economic impacts that need to be address during the EIA process are identified.

# You can be involved by:

- Reading or listening (audio version) to this Non-Technical Summary (which is available via email or WhatsApp). Full report is also available for review on the SLR website and at various libraries.
- Attending public meetings. Please contact SLR for the specific details.
- Sending comments, questions or concerns to SLR.
   For comments to be included in the final Scoping Report, they should reach SLR by no later than 20 June 2022.

SLR's contact details (including Tel., SMS, WhatsApp and website details) are provided at the end of this document.





#### 4. PROJECT'S NEED AND DESIRABILITY

South Africa, like the rest of the world, is vulnerable to climate change. There is thus global concern of the need to reduce carbon emissions and achieve carbon neutrality by 2050. However, the rapid transition to carbon neutrality presents a potential risk to economic growth and sustainable development. As such, South Africa has committed to a "just" transition in achieving net-zero emission and a climate resilient society, whereby the need to reduce emissions is balanced with the need to grow the economy and create jobs. In this regard, South African Government policy currently promotes the use of natural gas as part of the energy mix up to 2030 to serve as a transition to a carbon-neutral goal and provide the flexibility required to complement renewable energy sources.

The proposed project has no direct influence on South Africa's reliance on hydrocarbons and their contribution to the countries' energy mix. These aspects are influenced by South Africa's energy and climate change related policy, the financial costs of the various energy sources and consumer choices in this regard. These National strategic policy issues relating to energy and climate change fall beyond the scope of this exploration project EIA.

#### 5. DESCRIPTION OF EXPLORATION WELL DRILLING

## 5.1 Number, Timing and Duration

- Number of wells: Up to 5 wells, depending on success of first drilling campaign.
- Anticipated commencement: Between 4<sup>th</sup> quarter 2023 and 2<sup>nd</sup> quarter of 2024.
- Duration of drilling operation: 3 to 4 months per well.

# **5.2** Exploration Drilling Logistics

- Drilling Unit: Drilling will be undertaken using either a semi-submersible drilling unit (Figure 2) or a drillship.
- Support vessels: The drilling unit will be supported by up to three vessels and helicopter transfers.
- Logistics base: The onshore logistics base will be located at the port in either Cape Town or Saldanha.

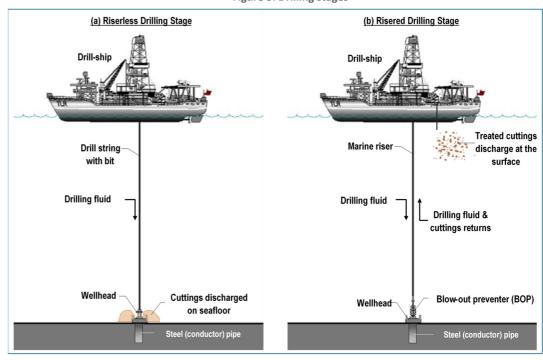
#### 5.3 Drilling Operation

- Final Drilling Site Selection: This will be based on further analysis of the seismic data and a pre-drilling seabed survey of the target area.
- Drilling Sequence or Stages: A well is created by drilling a hole into the seafloor using a drill bit, which crushes the rock into small particles, called "cuttings". Depending on the stage of drilling (Figure 3), these cuttings are either (1) discharged onto the seafloor adjacent to the hole or (2) treated on the drilling unit before discharged overboard. After the hole is drilled, steel pipes are placed in the hole and permanently cemented into place to prevent it from collapsing.
- Well Testing: Once the target depth is reached, a well may be tested (flared) if a resource is discovered.
- Well Sealing and Plugging: Once testing is complete, the well is sealed with cement plugs, tested for integrity and abandoned according to international best practices.

Figure 3: Drilling stages



Figure 2: Semisubmersible drilling unit www.africaenergycorp.com



# 6. KEY ENVIRONMENTAL AND SOCIO-ECONOMIC SENSITIVITIES

#### 6.1 Physical Environment

Major seabed features on the continental shelf of the South-West Coast near the Area of interest include: Cape Canyon, Cape Point Canyon, Protea Seamount, Mount Marek and Brown's Bank (Figure 4).

#### 6.2 Biological Environment

The South-West Coast supports a rich diversity of marine life including sensitive benthic habitats/species, plankton, fish and shark, turtles, seabirds and marine mammals (including whales, dolphins and seals).

The Area of Interest is dominated by ecosystems rated as 'Least Concern', with only marginal overlap with the 'Vulnerable' Cape Canyon habitat (Figure 5).

The approved Marine Protected Areas (MPAs) and Critical Biodiversity Area (CBAs) within the broad project area are shown in **Figure 6**. The area of interest avoids all MPAs, but has a 5.4% overlap with CBAs.

#### **6.3** Socio-Economic Environment

The project's area of influence encompasses the entire approximate coastline that extends between Saldanha Bay and Cape Agulhas and extends into the Northern Cape, Western Cape and Eastern Cape provinces.

Tourism is a central economic activity for the Western and Eastern Cape playing an important role in the economy of many of the towns along this coastal area.

Several fishing sectors operate off the South-West Coast, most of which fish inshore of the shelf break and thus inshore of the area of interest for drilling. **Table 1** shows the percentage overlap with the proposed drilling area.

Table 1: Fisheries overlap with the drilling area

| Fishing sector   | Overlap with drill area<br>(% of national catch) |  |  |
|--|--|--|--|
| Overlap  |  |  |  |
| Demersal Trawl - <b>Figure 7</b>                             | 0.27%  |  |  |
| Demersal Longline (hake) - Figure 8                          | 0.12%  |  |  |
| Large Pelagic Longline - Figure 9                            | 5.79%  |  |  |
| Tuna Pole - <b>Figure 10</b>                                 | 13.74%   |  |  |
| No Overlap   |  |  |  |
| Mid-Water Trawl  | 0%   |  |  |
| Demersal Longline (shark)                                    | 0%   |  |  |
| Small Pelagic Purse-Seine                                    | 0%   |  |  |
| Traditional Line-Fish  | 0%   |  |  |
| West Coast Rock Lobster                                      | 0%   |  |  |
| South Coast Rock Lobster                                     | 0%   |  |  |
| Squid Jig  | 0%   |  |  |
| Small-Scale Fishing  | 0%   |  |  |
| Beach-Seine and Gillnet Fisheries                            | 0%   |  |  |
| Mariculture, Aquaculture, Ranching and<br>Coastal Harvesting | 0%   |  |  |

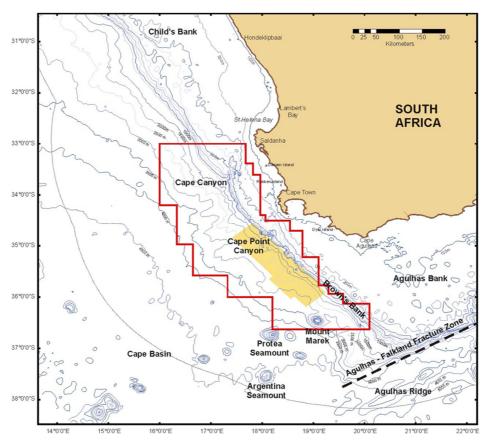


Figure 4: Seabed Features (Source: Pisces)

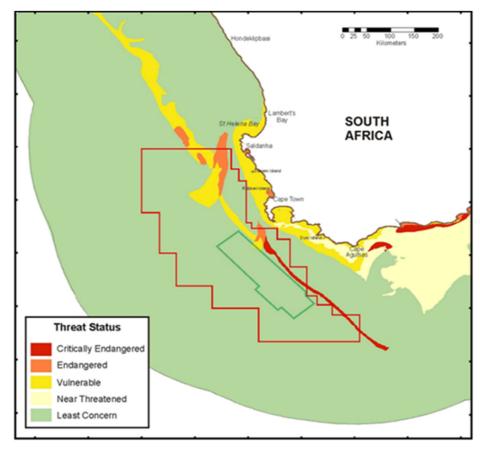


Figure 5: Ecosystem Threat Status (Adapted from Sink et al. 2019)

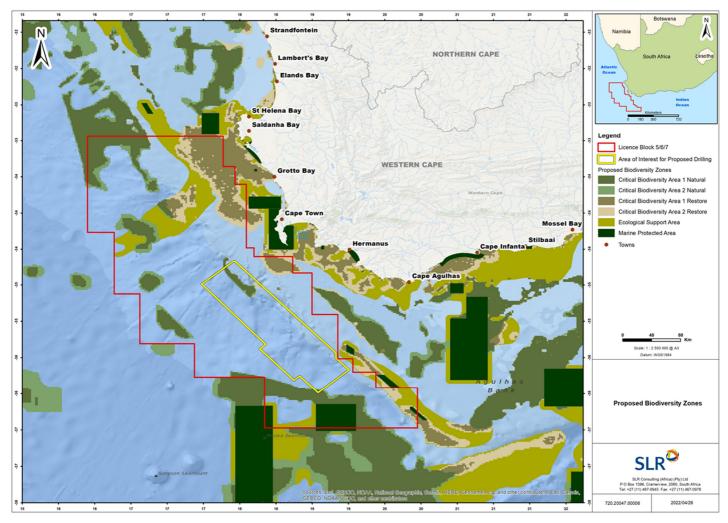
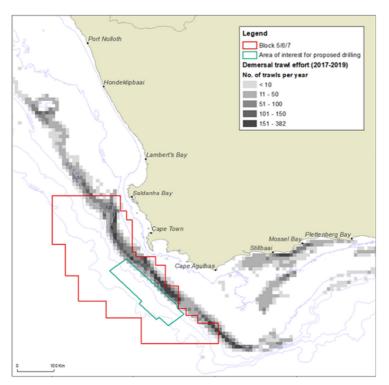


Figure 6: MPAs and CBAs (Source: Harris et al. 2022 (Version 1.2, April 2022)



| Legend | Block 56/7 | Area of interest for proposed drilling | Demersal hake longline (2018 - 2020) | Hooks set per year | - 50 000 | 50 001 - 100 000 | 100 001 - 200 000 | 200 001 - 300 000 | 300 001 - 535 000 | 300 001 - 535 000 | Saldarha Bay | Saldarha Ba

Figure 7: Demersal Trawl Effort (2017-2019) (Source: CapMarine)

Figure 8: Hake Demersal Longline Effort (2018-2020) (Source: CapMarine)

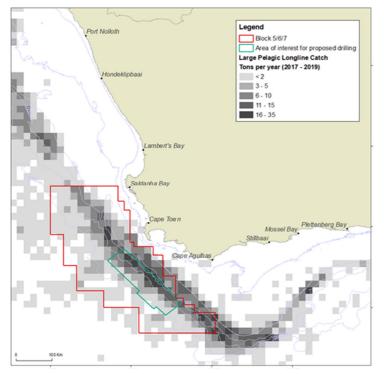


Figure 9: Pelagic Longline Catch (2017-2019) (Source: CapMarine)

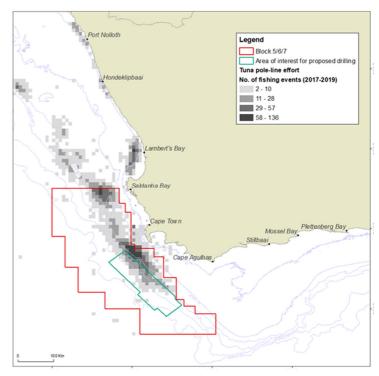


Figure 10: Tuna Pole Effort (2017-2019) (Source: CapMarine)

#### 7. IMPACT ASSESSMENT FOCUS AREA

Given the proposed activities and the sensitivities of the affected environment, several impacts of potential significance have been identified and are summarised in **Table 2**. These impacts are indicative, based on previous exploration drilling activities and will be formally assessed by the specialists during the EIA.

**Table 2: Summary of Key Potential Impacts** 

| No. | Project Activity                                      | Predicted Impacts   |  |
|-----|---|---|--|
| 1.  | Normal Operations                                     |   |  |
| 1.1 | Vessel emissions                                      | <ul> <li>Contribution to greenhouse gases<br/>(climate change).</li> <li>Reduction in local air quality and effects<br/>on health.</li> </ul>   |  |
| 1.2 | Operational discharges                                | <ul> <li>Local reduction in water quality and effects on marine fauna.</li> </ul>   |  |
| 1.3 | Discharge of ballast water                            | <ul> <li>Introduction of alien invasive species to<br/>the marine ecosystem.</li> </ul>   |  |
| 1.4 | Helicopter operations                                 | <ul> <li>Disturbance of faunal species and<br/>displacement from important feeding /<br/>breeding areas.</li> <li>Disturbance / loss of sense of place.</li> </ul>  |  |
| 1.5 | Discharge of drill cuttings                           | <ul> <li>Physical seabed disturbance.</li> <li>Smothering of benthic fauna/habitats.</li> <li>Increased sea water turbidity and water quality contamination.</li> </ul>   |  |
| 1.6 | Generation of underwater noise                        | Disturbance of marine fauna, particularly whales and dolphins.  |  |
|     |   | <ul> <li>Displacement of fish and fishing.</li> </ul>   |  |
| 1.7 | Temporary 500 m safety zone                           | <ul> <li>Exclusion of fishing activities within<br/>safety zone around drilling unit.</li> </ul>  |  |
| 1.8 | Well<br>abandonment                                   | <ul> <li>Interference with demersal trawling activities or fishing equipment.</li> </ul>  |  |
| 1.9 | Procurement of local service providers and employment | <ul> <li>Procurement of local service providers<br/>for logistics base.</li> <li>Employment of a few skilled and semi-<br/>skilled staff at logistics base.</li> </ul>  |  |
| 2.  | Unplanned Events                                      |   |  |
| 2.1 | Loss of equipment                                     | <ul><li>Potential disturbance of seabed habitats.</li><li>Collision and entanglement hazards.</li></ul>   |  |
| 2.2 | Minor spill -<br>refuelling at sea                    | <ul> <li>Immediate detrimental effect on water<br/>quality and toxic effects on marine fauna.</li> </ul>  |  |
| 2.3 | Major spill -<br>well blow-out                        | <ul> <li>Local and regional impacts on water quality, marine fauna and oiling of coastal habitats and marine fauna.</li> <li>Exclusion of fisheries from polluted areas and gear damage.</li> <li>Reduction in income for secondary and tertiary sectors that support tourism, recreational, fishing, and other coastal economies.</li> </ul> |  |

#### 8. HOW WILL THE IMPACTS BE ASSESSED IN THE EIA?

Various technical and specialist studies will be undertaken to assess the key potential impacts and identify mitigation (refer to **Table 3**).

**Table 3: Technical and Specialist Studies** 

| No. | Study  |   |
|-----|--|---|
| 1.  | Technical Studies  |   |
| 1.1 | Underwater Noise Modelling   | These studies will predict potential outputs from the proposed exploration well drilling and associated operations.  These modelled outputs will be used by the specialists to determine and assess impacts that may occur.   |
| 1.2 | Drilling Discharges Modelling                                      |   |
| 1.3 | Oil Spill Modelling -<br>unplanned event                           |   |
| 2.  | Specialist Studies   |   |
| 2.1 | Marine Ecology Impact<br>Assessment                                | These studies will involve the use and review of data relevant to identifying and assessing environmental impacts that may occur as a result of the proposed project.  Specialists will also recommend appropriate mitigation or optimisation measures to minimise potential impacts or enhance potential benefits, respectively. |
| 2.2 | Fisheries Impact Assessment  |   |
| 2.3 | Socio-Economic Impact<br>Assessment                                |   |
| 2.4 | Cultural Heritage Assessment                                       |   |
| 2.5 | Climate Change Statement<br>and Air Emissions Impact<br>Assessment |   |

### 9. WHAT WILL HAPPEN NEXT?

- Please register on the Project Database and / or submit comments by no later than 20 June 2022.
- All comments received will be addressed in the final Scoping Report.
- If the final Scoping Report is accepted, SLR and specialists will assess the potential impacts, identify mitigation measures and prepare the EIA Report.
- If you are registered on the project database, you will be notified of the next round of public engagement, including the review of the draft EIA Report.

PLEASE CONTACT SLR SHOULD YOU HAVE ANY QUERIES OR REQUIRE ANY PROJECT INFORMATION



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