

Strategic Environmental Assessment for the proposed Boegoebaai Port, SEZ and Namakwa Region

BACKGROUND INFORMATION DOCUMENT (BID)



Prepared by CSIR
July 2024



Background context

Green hydrogen¹, and its derivative products (e.g., green ammonia and green methanol), provide an opportunity to decarbonise the South African energy economy, generate new revenues, create jobs and skills, and facilitate a Just Energy Transition². As part of South Africa's ambition to become a player in the globally emerging green hydrogen market, a substantial programme of greenfield infrastructure has been proposed in the Northern Cape consisting of three components:

1. A new breakwater port at Boegoebaai, dry and liquid bulk berths, and multi-purpose terminals.
2. A mixed-use Special Economic Zone (SEZ) located in the region adjacent to the proposed Boegoebaai port.
3. An expansive regional renewable energy (wind and solar PV) generation and transmission infrastructure.

The need for a Strategic Environmental Assessment (SEA)

Green hydrogen production, at the scale envisaged in the Northern Cape, will be a diverse and multifaceted process with many direct and indirect impacts, both positive and negative. All programme components, including their interconnected transport corridors, will require substantial areas of land surface, as well as other resource intensive inputs, all proposed in a sparsely populated but ecologically sensitive region. Existing, and potentially competing, land uses in the region include conservation, agriculture, fishing, tourism, mining, and other subsistence livelihoods.

A SEA has been initiated through a collaboration between the South African National Energy Development Institute (SANEDI), Northern Cape Economic Development Trade and Investment Promotion Agency (NCEDA), and Transnet National Ports Authority (TNPA). The Council for Scientific and Industrial Research (CSIR) has been appointed to undertake the SEA.

SEA purpose

To develop an integrated decision-making framework to guide the planning of the proposed Boegoebaai port, Special Economic Zone, and wider Namakwa region in a sustainable manner.

SEA objectives

1. Assess the social and ecological sensitivity of local and regional receiving environments.
2. Classify spatial regions, based on multiple criteria, as being more, or less, suitable for future development.
3. Identify strategic-level constraints, opportunities, cumulative impacts, and strategic management actions.
4. Provide an integrated decision-making framework and suite of tools, to guide project developers, practitioners, and policymakers.

What is an SEA?

A SEA is a knowledge-policy tool used to guide sustainability planning at different spatial scales. It encompasses several approaches, methods, and processes, all aimed at assessing the opportunities and risks of proposed development programmes and policies.

While SEAs are heterogenous in their scope and their chosen methods, good quality SEAs are always:

- ***Sustainability-focused.***
- ***Coproduced by users.***
- ***Inter- and transdisciplinary.***
- ***Scientifically credible.***
- ***Useful for decision-making.***

*It is also important to recognise what an SEA is **not** –*

- ***A mega Environmental Impact Assessment (EIA).***
- ***A public relations exercise.***
- ***A rubber stamp.***

¹ There are many different definitions and perspectives on the concept of "green". Here, we use the term in the narrow sense, meaning a product developed where upstream production facilities are supplied by renewable energy.

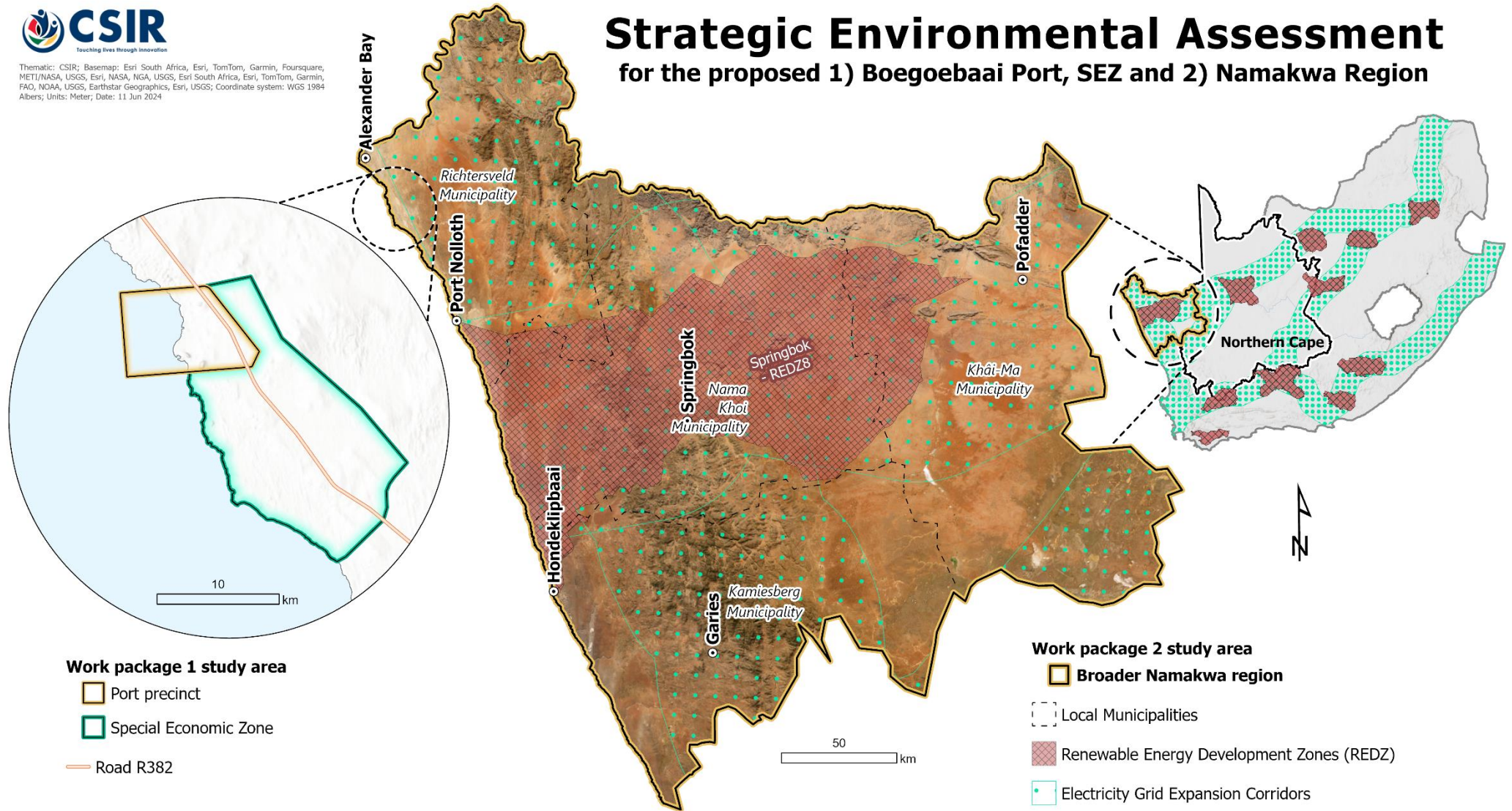
² The Just Transition is a South African policy framework for managing the shift from a high-carbon, to a low-carbon, economy in a manner that is socially equitable and inclusive.

Project study area



Thematic: CSIR; Basemap: Esri South Africa, Esri, TomTom, Garmin, Foursquare, METI/NASA, USGS, Esri, NASA, NGA, USGS, Esri South Africa, Esri, TomTom, Garmin, FAO, NOAA, USGS, Earthstar Geographics, Esri, USGS; Coordinate system: WGS 1984 Albers; Units: Meter; Date: 11 Jun 2024

Strategic Environmental Assessment for the proposed 1) Boegoebaai Port, SEZ and 2) Namakwa Region



Work package 1 study area

- Port precinct
- Special Economic Zone
- Road R382

Work package 2 study area

- Broader Namakwa region
- Local Municipalities
- Renewable Energy Development Zones (REDZ)
- Electricity Grid Expansion Corridors

Project scope

The SEA has two outputs:

1. **Boegoebaai Port and Special Economic Zone (Work Package 1):** Local-scale SEA report concerned with assessing the sensitivities of the receiving environment around the proposed port and Special Economic Zone.
2. **Namakwa Region (Work Package 2):** Regional-scale SEA report covering the main sustainability issues associated with an expansive Northern Cape Green Hydrogen economy covering parts of the Namakwa District, delineated by the Richtersveld, Nama Khoi, Kamiesberg and Khâi Ma Local Municipalities.

It should be noted that the SEA process will be undertaken at a strategic-level and cannot replace the requirements for project-level Environmental Impact Assessments (EIAs), which need to be undertaken in the future.

Project governance and stakeholder engagement

To ensure that the SEA engages with interested stakeholders and incorporates their views and perspectives, an elaborate governance and stakeholder engagement strategy has been developed consisting of the following groups and tools:

- **Project Steering Committee (PSC)** consisting of the project partners (SANEDI, NCEDA and TNPA) and CSIR concerned with the delivery of the Work Packages, on scope, brief and within budget.
- **Working Group (WG)** consisting of various experts and organisations with an interest the Northern Cape, its social-ecological system and future development prospects.
- **Independent expert teams** who are appointed to contribute expertise to the SEA in various capacities.
- **Comment windows** during which the public can engage and provide input to the SEA outputs.
- **Public briefings** where SEA introductions and draft findings will be presented.
- **Website** which will host information and project outputs, made accessible to anyone.

How can I get involved?

To register as a stakeholder, please fill out the online registration form on the SEA Project Website at <https://www.csir.co.za/boegoebaai-port> or contact us via email - ems@csir.co.za / post - Attention: CSIR Environmental Management Services, P.O. Box 320, Stellenbosch, 7600.

Boegoebaai Port and SEZ SEA (Work Package 1)

considers local-scale issues, including:



- Marine Ecology & Biodiversity



- Terrestrial Ecology & Biodiversity



- Birds & Bats



- Heritage



- Surface and Groundwater



- Sustainable Port Planning



- Coastal Livelihoods

Namakwa Region SEA (Work Package 2)

considers regional-scale issues, including:



- Terrestrial Ecology and Conservation Planning



- Regional Planning, incl. human movement & infrastructure



- Socio-economics

****This is a provisional list of issues and will be updated during the SEA.**