



FREEPORT SALDANHA

INDUSTRIAL DEVELOPMENT ZONE





Freeport
Saldanha

Saldanha
Bay

R27

N7

N1

Paarl

Cape
Town

N2

FREEPORT
SALDANHA
INDUSTRIAL DEVELOPMENT ZONE



WELCOME TO

- **1st South African Special Economic Zone to include a port.**
- Building and operating a **marine and energy services and engineering centre.**
- Strategically located within the **deep-water port** of Saldanha Bay.
- Easy **access to logistics** by sea, land, rail, and air access.
- Situated on the West Coast, **60 nautical miles** north-west of Cape Town



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Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA



Western Cape
Government

BETTER TOGETHER.

Special Economic Zone

Provincial Owned Entity

Our mandate is to stimulate investment, industrial growth, job creation, skills development and regional competitiveness

Marine Sector

Activities includes

- Marine services hub
- Boat building & repair
- Vessel decommissioning
- Offshore supply base



PHOTOGRAPH 20. SOUTHERN PRECINCT CHARACTER

Energy Sector

Activities includes

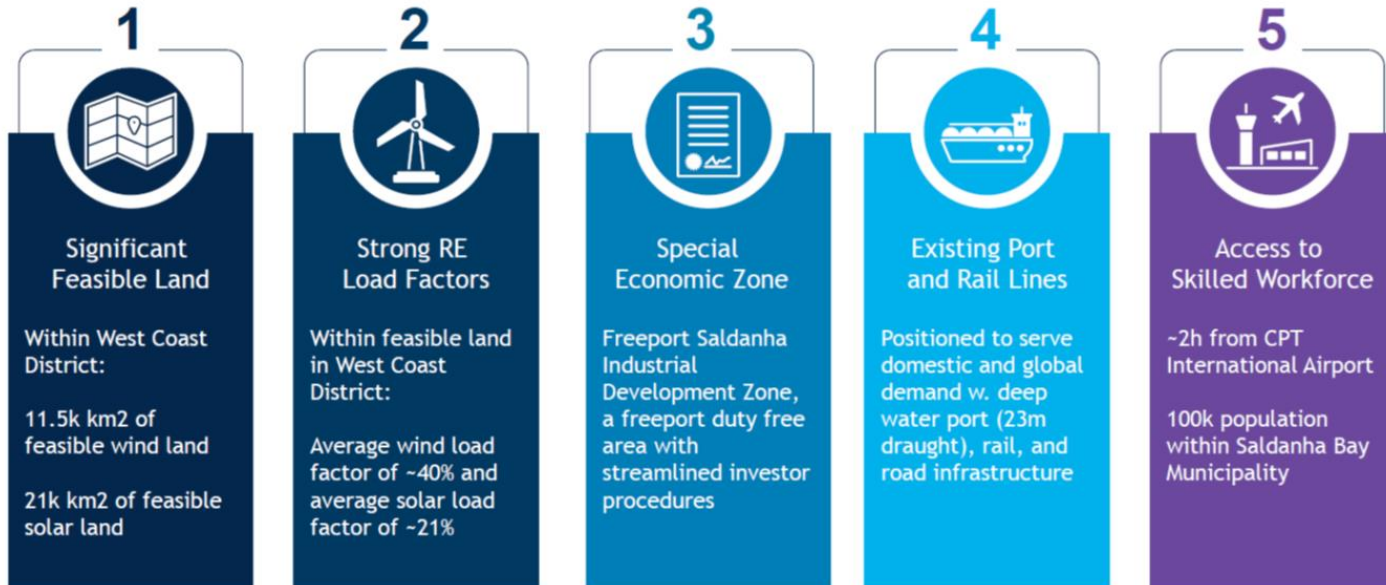
- Bulk fuels storage
- Manufacturing hub
- Services hub
- Integrated logistics facility



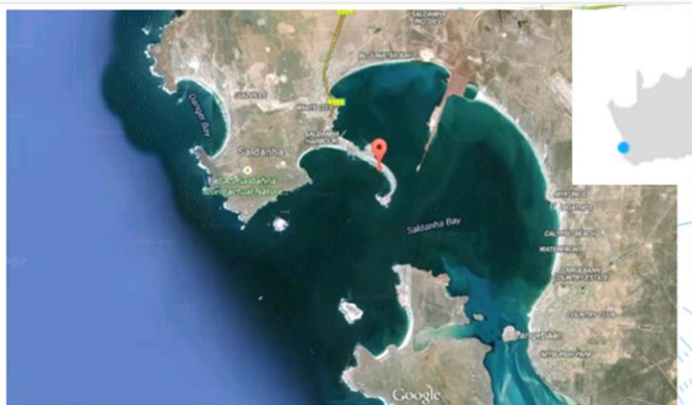
PHOTOGRAPH 19. NORTHERN PRECINCT CHARACTER

GH2 Opportunity

Saldanha Bay well positioned as a hub for green hydrogen and low-carbon industry



1ST WESTERN CAPE GH2 CLUSTER



Activity/Entity	Saldanha Bay
Transnet: bunker fuel	504 kt/y
Transnet: port equipment	unknown
ACSA ground vehicles	0.0558 kt/y
PRASA MetroRail	6.6-11.0 kt/y
AMSA Saldanha Works	104 kt/y
MyCiti BRT	1.2 kt/y

Source: EU-SA Partner for Growth. Jan 2022. *Powerfuels 2: Stimulating domestic hydrogen consumption opportunities in South Africa*

- Potential local inland demand consumption.
- Potential “at borders” refueling demand - Bulk carriers account for ~77% of ships ⁽¹⁾.
- No pipeline delivered bunkers are available.
- One of the largest ore exporting, deep water, ports in Africa, supported by a dedicated rail link which connects to Sishen & Kolomela Mines in the Northern Cape, and the Freeport Saldanha SEZ.
- Saldanha Bay Municipality holds an EA for a 25MI Seawater Reserve Osmosis Desalination Plant; range ~10km from Port.
- High RE potential from solar & offshore wind.
- CSIR study concluded H2 exports could be cost competitive at US \$3/kg before 2030.*
- Potential off-takers incl AMSA, MyCity Bus, port equipment & ground vehicles.**

GH2 Markets

Green Iron & Steel

Shipping Fuels

Mobility

Exports

Logistics Gateway

Manufacturing Hub



Green Shipping Initiatives

South Africa as a Green Shipping destination

Lead: Global Maritime Forum

Initiated by: P4G Getting to Zero Coalition Partnership

Participants: Private & Public sector

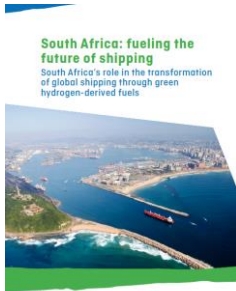
Dates of study: 2021, 2022

Scope: Strategic Oppns in South Africa

Progress: Final reports can be accessed here:



[URL #2022](#)



[URL #2021](#)

Green Bunker Fuels

Lead: World Bank

Initiated by: Presidential Climate Commission

Consultants: PRDW, MTBS, CSIR

Dates of study: Nov '22 – Jun '23

Next milestone: Tech Workshop 3 May

Scope: Saldanha as green bunkers location

Progress: Prelim technical report ready 3 May

Technical Development: Saldanha Bay

Port of Saldanha - Site location

Potential Port Development Areas:

Site	Availability
Option 1	Land has CBA Status and requires off-site land to be obtained before development
Option 2	Operational rights are expired/revoked, for a 30-year commission the design, construct and operate as an offshore supply berth
Option 3	Would require extensive infrastructure development, high likelihood the site will be constrained by critical infrastructure projects
Option 4	Land is available for leasing and has no critical environmental constraints
Option 5	Land is available and has no critical environmental constraints, but is not within the signed off lease footprint of the Freeport

- Site Selection:**
- Option 1 is the most promising site
 - Option 4 should also be considered despite size constraints. Could potentially offer supplementary land to Option 5
 - Option 5 is still worth considering, despite the CBA off-site requirements
 - There is also potential to extend SEZ boundary if necessary



30 May 2023 | The Feasibility Study to Produce Decarbonisation Bunker Fuels in South Africa



Maritime Decarbonisation Workgroup (Taskforce 6)

Lead: CSIR

Initiated by: Dept of Transport

Participants: FS, TNPA, CSIR etc.

Inception: July 2022

Scope: Taskforce group focused on Maritime Decarbonization through Renewable Energy workstream. It forms part of the Maritime Industry Transport Development Task Force Network.





Green Shipping Corridor Consortium

Lead: Global Maritime Forum

Initiated by: Industry

Partners: Anglo American, Tata Steel, CMB, VUKA Marine, Freeport Saldanha and ENGIE

Inception: Nov '22

Progress: Launch Consortium March '23

Next milestone: Developing TOR of study

Scope: Explore the options for developing a maritime green corridor for the zero-emission shipping of iron-ore between South Africa and Europe.

[Home](#) > [CleanFuel](#) >

Maritime, mining, and energy majors to create a green corridor for iron ore

TRANSITION

March 22, 2023, by Jasmina Ovicina Mandira

A new consortium comprising UK-based mining company Anglo American, Tata Steel, CMB, VUKA Marine, Freeport Saldanha, and ENGIE plans to explore the options for developing a maritime green corridor for the zero-emission shipping of iron ore between South Africa and Europe.

Clean Tech Marine Incubation

Lead: Energy Investment Village (EIV)

Initiated by: Saldanha Innovation Campus

Inception: 2022

Next milestone: EIV 2023, Apps close May 23

Cohort of 2022:

- **SeaH4** – Biofuels from farmed algae
- **ImpactFreeWater** – wave energy technology
- **Oceanergy** – Kite Hydrogen Ships



Green Voyage 2050 Project

Lead: DOT, SAMSA

Initiated by: IMO & Government of Norway

Participants: Public & Private Sector

Inception: January 2023

Next milestone: Identifying South African Pilot Projects

Scope: Transform the shipping industry towards a lower carbon future



Risks of the Green Hydrogen Sector

- SA factors:
 - **Energy Crisis:** How can GH2 markets complement SA's energy crisis?
 - **Competitiveness:** Can SA produce internationally cost-competitive GH2?
 - **Urgency:** How can SA respond with urgency & produce as an early mover?
 - **Policy & Fiscal Support:** Will the SEZ incentives (or other) extend to GH2 production?
 - **Co-location:** RE & GH2 production vs co-location of GH2 production & export infrastructure? How many GH2 activities can fit safely within the SEZ? Where to locate which one first? This may require extension of SEZ boundaries.
 - **Inclusiveness:** Justice and inclusion in the GH2 value chain? How can we make sure that citizens' livelihoods and wellbeing is safeguarded and improved?
 - **Infrastructure:** Does the Port's plans allow for GH2 activities? Mechanism? Timing? How do we plan for common-user/shared infrastructure between pilot and mega-scale projects? And with SBM?
- Global factors:
 - **Off Take Guarantees & Financing:** Who is going to set the 1st mover off take price & risk? How?
 - **Standardisation:** Electricity grids are not 100% green. Does the zone and ports need to be 100% green? Leeway for global south countries?
 - **Inclusiveness:** Justice and inclusion in the GH2 value chain?
 - **Sustainability:** Design circularity from get-go? Trade-offs on project requirements?
 - **Climate Risk:** How to incorporate climate risk in spatial planning?

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