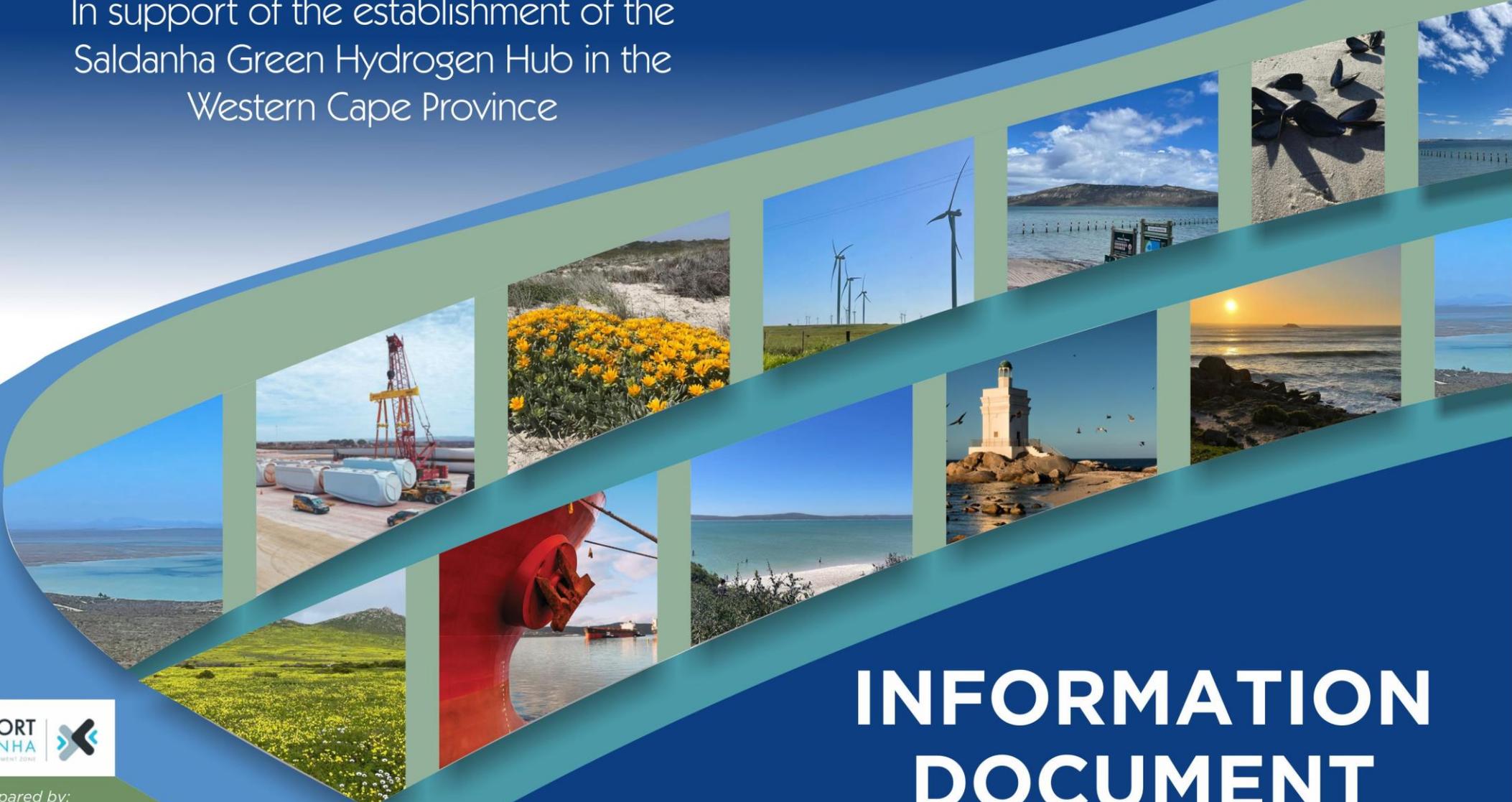


West Coast Green Hydrogen Master Plan (Phase 1)

In support of the establishment of the
Saldanha Green Hydrogen Hub in the
Western Cape Province



Prepared by:
Council for Scientific and
Industrial Research (CSIR)



INFORMATION DOCUMENT

MAY 2025

Purpose of this Document

This Information Document provides background information regarding the Green Hydrogen (GH2) Master Plan for the Saldanha Bay and wider West Coast region, an overview of the scope and objectives of the Master Plan and explains how you can participate in the process, receive information and share your views.

What is the purpose of this Master Plan?

This Master Plan for GH2 development is to provide a comprehensive, strategic framework that outlines the long-term vision, objectives, and steps needed to develop, produce, and implement GH2 as an energy source that reduces dependence on fossil fuels. This plan is to guide the growth of the GH2 sector in a way that is coordinated, efficient, and sustainable.

Background

Freeport Saldanha was established at Saldanha as a special economic zone (SEZ) and customs-controlled area dedicated to the maritime, energy, logistics and engineering industries. As part of South Africa's ambition to position itself as a key player in the global GH2 market, Freeport Saldanha is envisioned as a central hub for GH2 production and export. The development of the Saldanha Hydrogen Hub is a flagship initiative under the Western Cape Government's "Supporting Scale" strategy. The proposed hub is expected to leverage Saldanha Bay's strategic location, its access to renewable energy resources, potential for midstream hydrogen processing, and its strong import-export capabilities underpinned by significant port infrastructure. Moreover, the hub could contribute to the objectives of the Western Cape's Energy Resilience Programme by supporting the accelerated deployment of large-scale renewable energy and harnessing GH2 potential to enhance grid stability. Freeport Saldanha, under the leadership of the Western Cape Government, has initiated the development of the West Coast GH2 Master Plan. The Council for Scientific and Industrial Research (CSIR) has been appointed to provide multi-disciplinary technical and scientific support for Phase 1 of the Master Plan.



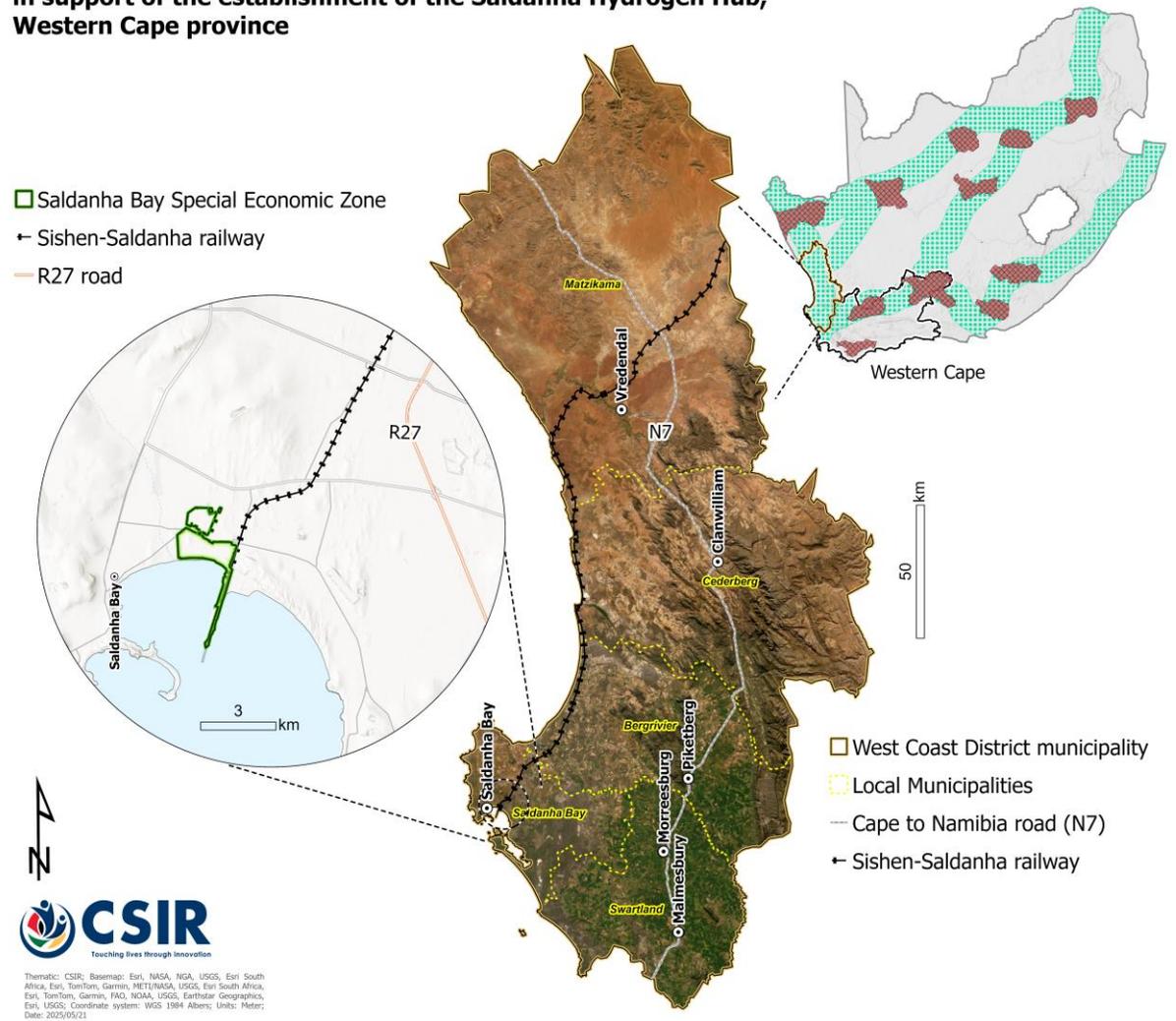
Need for the Master Plan

Large-scale GH2 production is expected to generate a range of direct and indirect impacts. The Saldanha Bay region may hold substantial GH2 potential owing to its existing industrial infrastructure and proximity to major international shipping routes. On the other hand, land constraints and ecological sensitivities may limit opportunities to scale up production and supporting infrastructure.

Realising this opportunity requires a strategic roadmap that outlines infrastructure needs, regulatory frameworks, and potential synergies with local industries. The West Coast GH2 Master Plan intends to create an enabling investment environment and stimulate job creation by defining sustainable, bankable common-user/public infrastructure projects, along with the institutional, regulatory, and environmental frameworks to support private sector investment in the Saldanha Hydrogen Hub and surrounding region.

The project will unfold in phases. Phase 1 is exploratory, focused on identifying key opportunities and constraints, with the intention of providing more detailed capacitation, planning and technical studies in Phase 2.

West Coast Green Hydrogen Master Plan in support of the establishment of the Saldanha Hydrogen Hub, Western Cape province



The development of the Master Plan is being guided by objectives based on the following themes:



How can I get involved?

For Phase 1 of the Master Plan, a targeted stakeholder engagement approach comprising of Project Steering Committee meetings and two Working Group sessions has been adopted.

Working Group members are identified and selected based on their industry knowledge, technical expertise, and familiarity with the region’s energy and infrastructure landscape. Their input will play a crucial role in ensuring that the Master Plan is grounded in practical insight, aligned with market realities, and reflective of local opportunities and challenges.

This collaborative approach aims to build a strong foundation for a comprehensive and actionable Master Plan, while also fostering early alignment among key stakeholders.

Should you wish to find out more about the Master Plan, you are welcome to email the project team at ems@csir.co.za

A Stakeholder Communication Plan has been developed to guide stakeholder engagement during Phase 1 of the Master Plan comprising the following groups:

- **Project Steering Committee (PSC)** consisting of Master Plan partners (Freeport Saldanha, SANEDI, DSTI, Wesgro, Western Cape Government, GIZ, IDC, TNPA and Eskom) and the CSIR concerned with the delivery of the Work Packages
- **Working Group (WG)** consisting of various experts and organisations with an interest in the West Coast District, its social and ecological systems and future GH2 development prospects.

ENVISAGED TIMELINE

