

Green Hydrogen

Harambee Prosperity Plan | Pillar 2 | James Mnyupe

Namibia - EU Collaboration





Why Green Hydrogen?

Brussels



SCDI Vision

Development of the Southern Corridor Development Initiative

Sep 2020 UNGA75

H.E. The President of Namibia
Launched the Harambee
Prosperity Plan II

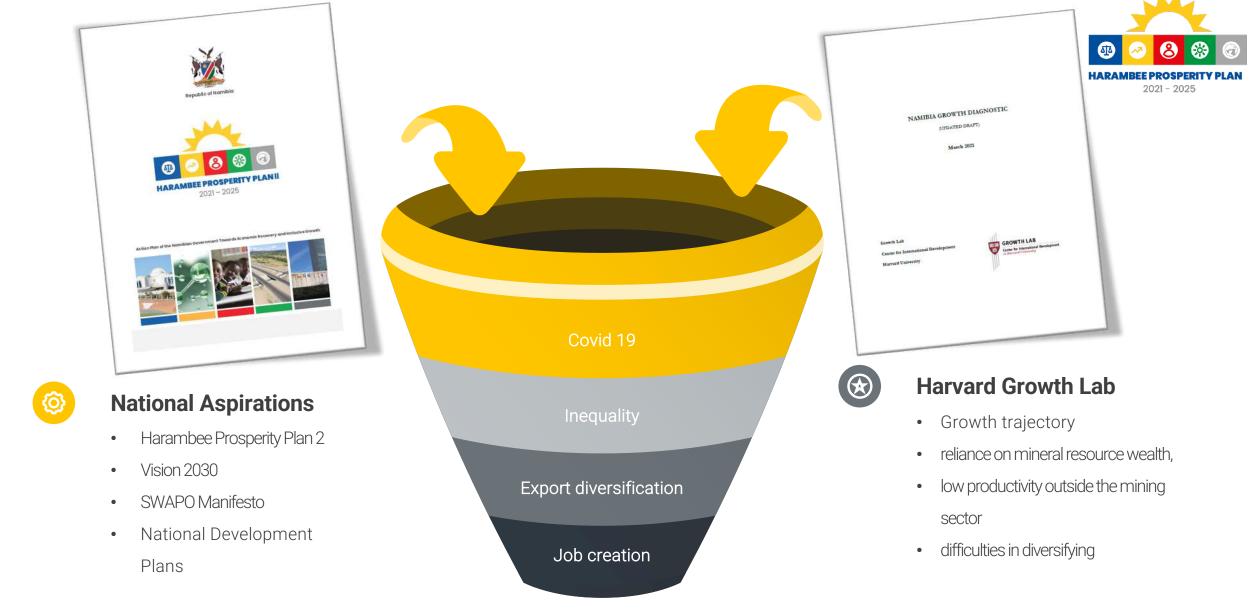












Economic Recovery Plan

Goal 3: Complimentary engines of growth



SCDI Overview

Overview of the SCD

Export to

Europe

Legend



Special Economic Zone



H Global !han/awab conservancy (CSP)



Dolphine Site



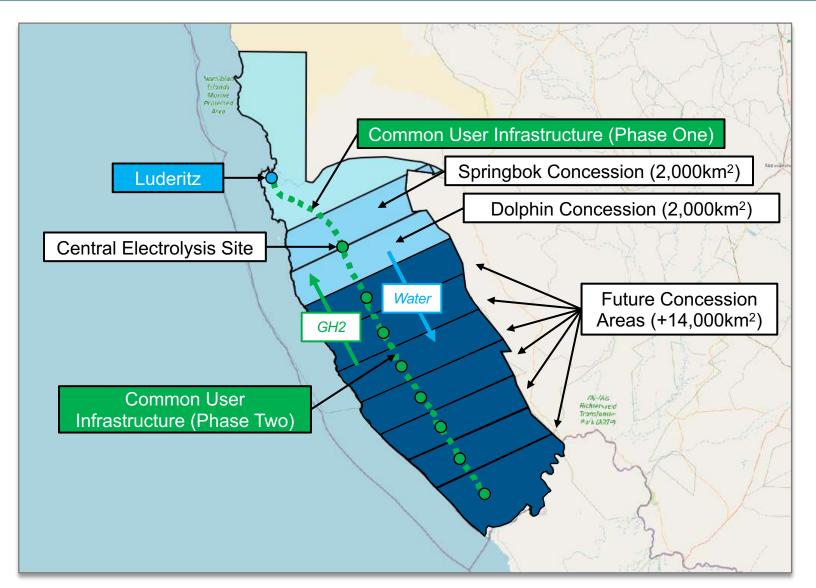
Springbok Site



Windhoek **Export to** SAPP Keetmanshoop Tangiskope Agriculture **Rosh Pinah** Oranjemund Green Zinc

Namibia's first GH2 mega-project will unlock 'CUI' for future projects





Common User Infrastructure ("CUI") Corridor



Green Hydrogen Gas Pipelines

Water Pipelines



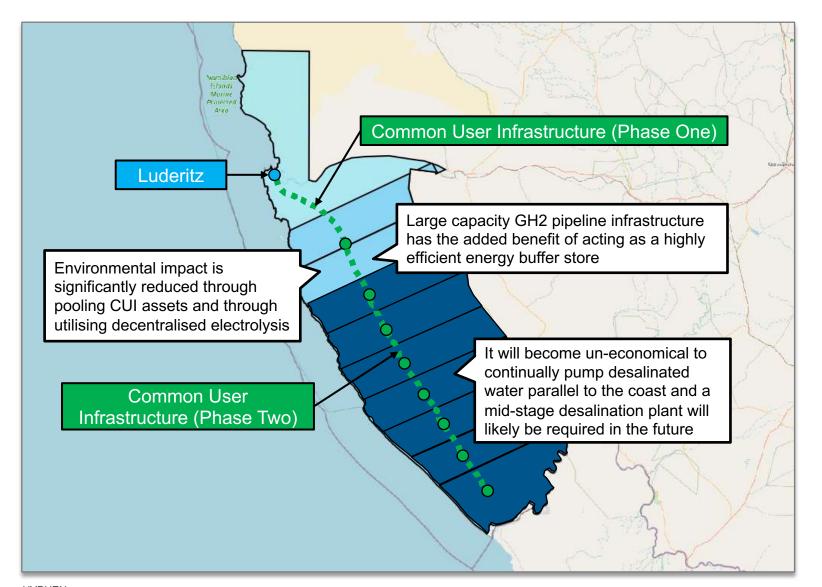


Transmission Lines

HYPHEN

Namibia's first GH2 mega-project will unlock 'CUI' for future projects





SCDI Common User Infrastructure ("CUI") Approximate Cost

Green Hydrogen Gas Pipeline

Length: ~400km Diameter: 1,400mm

Peak flow: 3m GH2 tons p.a.

Cost: EUR 3,500m

Water Pipeline

Length: ~400km

Diameter: 1,200mm

Peak flow: 200 ML p.d.

Cost: EUR 1,200m

Transmission Lines

Length: ~400km

Size: 2x 400kv

Cost: EUR 600m

HYPHEN

We will develop a (green) copper H₂ pipeline trade with Zambia granular vision for the by hydrail Export port Domestic demand center Desalination plant Namibian and regional Infrastructure to fuel heavy-duty Interconnection with Angola Main cities trucks, open pit mining trucks, and (EUGlobalPartnership) hydrogen ecosystem hydrails H2 trains (TransNamib) Railways Project Transmission lines Initial thinking - to be developed further with you H2 buses Existing Transmission lines H2 trucking along planned logistics corridor Valley 4 Kunene Valley 3 Otjozondjupa (EUGlobalPartnership) Otjiwarongo Hybrid renewable production Solar PV synfuel production using (Solar PV + on-shore Wind) cement industry CO2 emissions as will feed electrolysis plant feedstock for export towards Walvis H₂ Mining and ammonia production New port trucks near the new port facility Windhoek Valley 2 Karas Hybrid renewable production (Solar Swakopmund PV + on-shore wind) will feed NH₃ export electrolysis plant and ammonia for Synfuel logistics export from Luderitz and Oranjemund ports connected by a H₂ pipeline (Hyphen project) Walvis Bay port (Namport) NH₃ and synfuel

export

We will build on existing plans to further refine and detail out the concept for ecosystem clusters within Namibia, reflecting natural synergies and existing assets Valley 1 Erongó
Solar PV power production with electrolysis, ammonia and terminal for synfuels for export from Walvis Bay port

Luderitz port

RE to South Africa

H₂ to South Africa

CO₂ from South Africa

Regional integration enables scalability & cost effective African GH2

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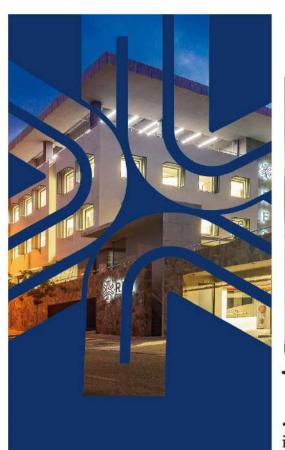
MAIN STORY

Namibia, South Africa in Green Hydrogen partnership talks



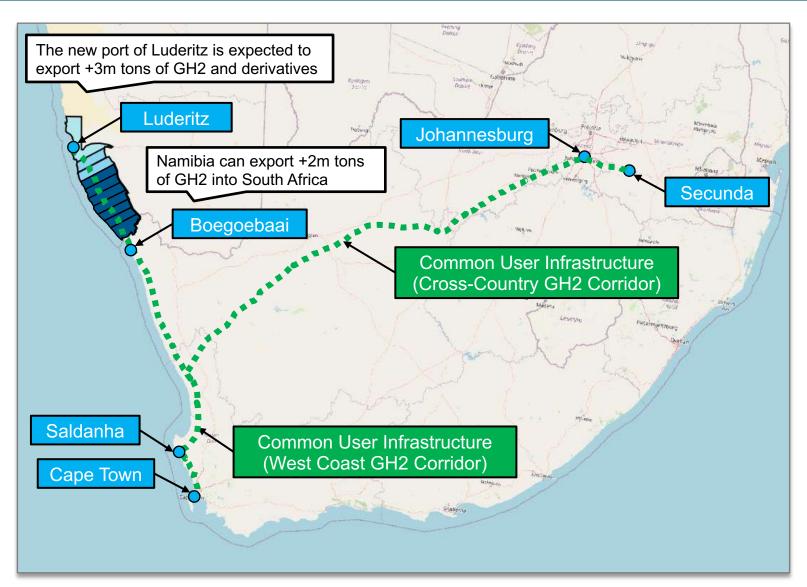
Tamibia and South Africa are exploring the possibility of a partnership in the development of green hydrogen initiatives, including the joint development of a

The partnership between Namibia and South Africa is a significant step in the development of green hydrogen in Africa, as the two countries have the potential to become major players in the industry. With investment and collaboration, the green hydrogen industry in Africa has the potential to bring about economic growth and address energy emergencies.



Regional integration enables scalability & cost effective African GH2





Regional Common User Infrastructure ("CUI")



Green Hydrogen Gas Pipelines

Transmission Lines



Namibia has the aspiration to fully unlock the world class GH2 potential of the SCDI National Park. The country will be able to export green molecules and excess electricity into South Africa via CUI corridors

HYPHEN 1

Regional integration enables scalability & cost effective African GH2



EU eyes Namibia's rare metals

Funding the SCDI

Namibia is implementing a holistic approach for strengthening financing policies and institutions

Central Security Deposit

The Government is at advanced stages of developing a central securities depository to support the clearing of bonds

SDG Namibia One Fund

The Namibian Government is launching a \$ 1 billion blended financing infrastructure fund

Sustainability Bond

Funding of the SCDI using various bonds: Sustainable, Green and Social Bonds – secured €500 million from EIB

Multi -Listing

The proposed bond will be listed in various strategic markets in 2023/4



Green Opportunities



Visit www.gh2namibia.com





€ 30 million

Namibian Green Hydrogen and PtX Pilot Projects Programme



€ 5 million

Terms of reference Preparation of a Synthetic Fuels Strategy and Roadmap for Namibia



Min 200 Scholarships

Namibian Youth For Green Hydrogen (Y4GH2) Scholarship Programme

