


Sasol leading the energy transition in Southern Africa

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GREEN ENERGY 
AFRICA™
SUMMIT 2022

a Hyve event

What you will hear today



OUR STRATEGY TO DELIVER A **DECARBONISED FUTURE**

Priscillah Mabelane

Executive Vice President
Sasol Energy Business

OUR

AMBITION

GROW SHARED VALUE WHILE
ACCELERATING OUR TRANSITION

Progress
update on key
milestones
underpinning
net zero
ambition

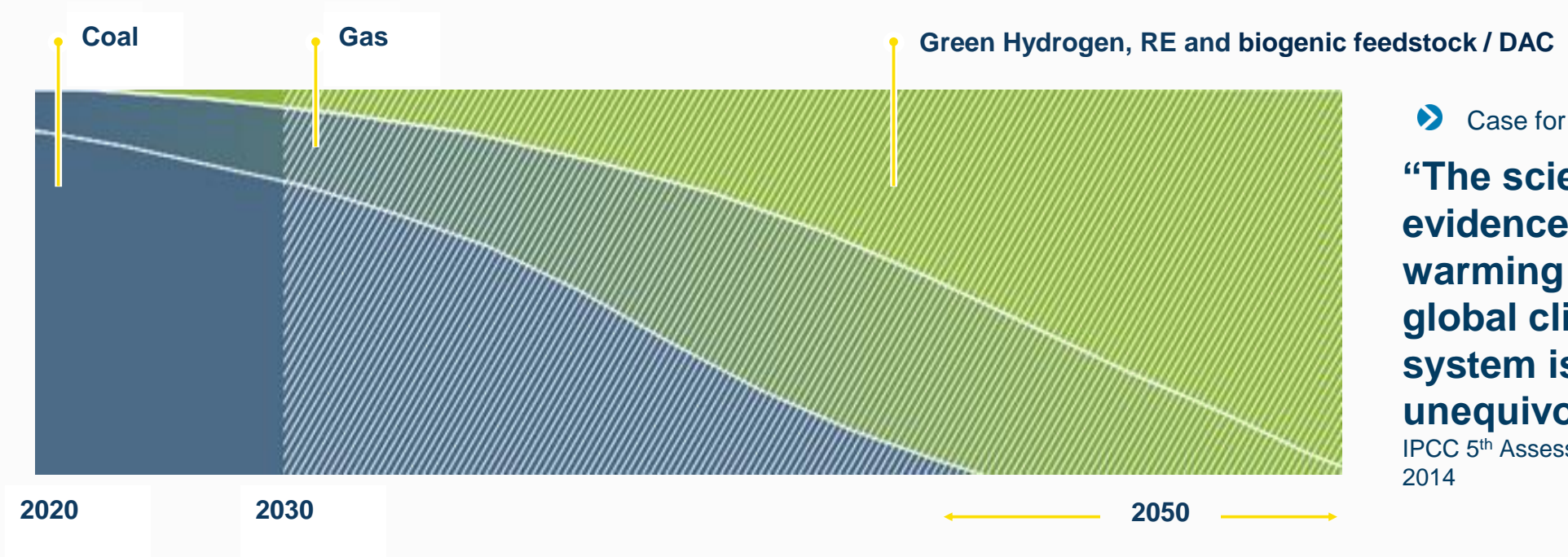
Overview of
strategic
initiatives
between Sasol
and
government

Enablers
and support
required

Transitioning to more sustainable feedstock



Gas is an important transitional energy source



➤ Case for change

“The scientific evidence for warming of the global climate system is unequivocal.”

IPCC 5th Assessment Report 2014

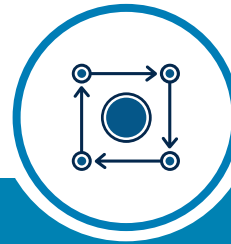
Our climate change response forms part of our **broader sustainability journey**

Underpinning our climate change ambition is our 'Reduce, Transform and Shift' approach to decarbonisation



REDUCE

our emissions through efficiency & cleaner energy sources



TRANSFORM

our operations to cleaner feedstock: gas, green H₂, sustainable carbon & CCU



SHIFT

our portfolio towards less carbon-intensive businesses and FT value pools



SUPPORTED BY ENABLING INITIATIVES AND PARTNERSHIPS

- Use of appropriate carbon offsetting as a last resort measure
- A Just Transition plan, with prioritised interventions
- A global network of research, partnerships and community initiatives to accelerate the change
- Clear communication and engagement plan with our stakeholders

Sasol has committed to **Net Zero by 2050** and **tripling our GHG reductions** target **by 2030**, well beyond what is required to achieve NDC commitment – Low carbon energy solutions are central to success of this ambition

Gas supply options for South Africa



- Sasol **continues investment in the current reserves** in order to extend the gas production plateau and extend gas supply to Mozambique and South Africa
- Sasol is also developing further **sources of gas**, including exploration and LNG supply:
 - Commercial negotiations to progress the **Matola LNG option** are on track.
 - Sasol is participating in the Transnet Richard's Bay procurement process as an offtaker and gas aggregator.
 - To further support investments for the additional gas supply options – confirmation of offtakes/market demand will be key (e.g. Sasol, power generation & large industrial).
 - Partnership between Sasol, CEF, ENH is key to drive this.

Southern Africa's competitive **advantages**

South Africa must decarbonise in the next three decades and transform itself into a low-carbon, climate-resilient, and innovative economy. This transition needs to take place **in a manner that is just and simultaneously addresses inequality, poverty and unemployment** to ensure that no-one is left behind and that our future economy is also socially resilient and inclusive.

Southern Africa's competitive advantage

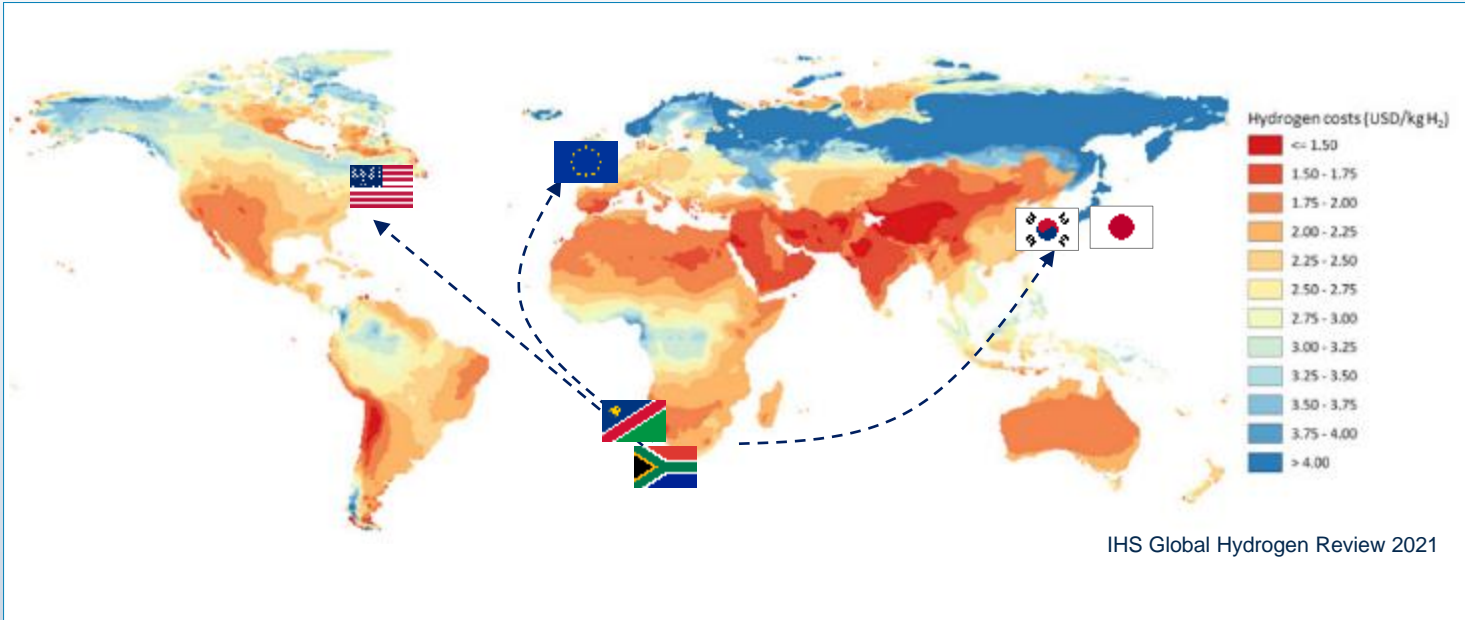
- Solar, wind, and land resources endowments
- Geographically well positioned as 'hedge' market with solid global trading partnership
- Mineral reserves & processing capabilities (70% of PGMs sourced from South Africa)
- Deep experience in FT Technology

Significance of opportunity for South Africa


- Highest wealth inequality¹ and unemployment rate
- Coal comprises ~ 80 % of the country's energy mix, and provides ~ 0.4 million jobs in the broader economy, impacting ~2 to 4 million livelihoods
- The South Africa hydrogen economy could create ~370k+ new jobs by 2050 and could add billions to the country's GDP


Potential untapped green market in excess of ~US\$194bn by 2050

- 400 million t/a** sustainable jet fuel
- 2000 million t/a** sustainable steel
- 670 million t/a** sustainable ammonia



Advantaged and differentiated FT Technology

HYDROGEN	SOURCES
 <p>Flexibility to shift to Blue / Green H₂</p>	Grey H ₂
	Blue H ₂
	Green H ₂

CARBON	SOURCES
 <p>Carbon agnostic; potential for unlimited sustainable feedstock</p>	Coal
	Gas
	Bio feedstock
	Industrial processes (CCUS)
	Direct air capture (DAC)



Sasol is **incubating local demand** and positioning South Africa as a global green H₂ export hub



Sasol is uniquely positioned to lead in green hydrogen and SAF ...



with prioritised end use cases ...



supported by strategic investment projects



We know Hydrogen

One of the largest producers of grey hydrogen ~2.5 million tpa

We know chemicals

>7.2 million tpa of chemical products sold to more than 7500 customers across 120 countries

We know fuels

One of the world's leading producers of synthetic fuels

People and Assets

Experienced in integrated value chains, complex projects, South African operations and risk mitigation

With > 70 years' experience in the production and marketing of fuels and chemicals and as a global pioneer in inventive Fischer-Tropsch (FT) Technology we can unlock green hydrogen's full potential through its derivative products, including sustainable aviation fuels

Sasol's ambition is to become a green H₂ major and lead the development of Southern Africa's green H₂ economy

H₂ Mobility

- Buses
- Heavy duty mobility
- Mining

Major Green H₂ Exporter

- Industrialisation of coastal regions
- NH₃ / MeOH for Export

Sustainable maritime fuel

- NH₃ / MeOH for Shipping

Sustainable fuels

- SAF hub
- e-Fuels for Road Mobility

H₂ for Green Steel

- Revitalise the steel industry
- Saldanha, Vanderbijlpark, New Castle

Decarbonisation of SEZs

- Micro-grids
- Power & Heat Generation

Sasolburg | Repurpose

Stimulate and anchor local demand & set up local industry value chains

- Green H₂ by 2023 | Renewable power of 60 MW | On-site production of 6 t/d
- Market: Industry (Chemical, Green Steel, Industrial process heat, Mining) | Heavy duty transport | Long-term back-up power

Secunda | Shift

Produce sustainable fuels and chemicals & become a global SAF hub

- Initial on-site H₂ production of 50,000 t/a for SAF, scaling up to 2.5 Mt/a | anchor SA as a leading SAF hub

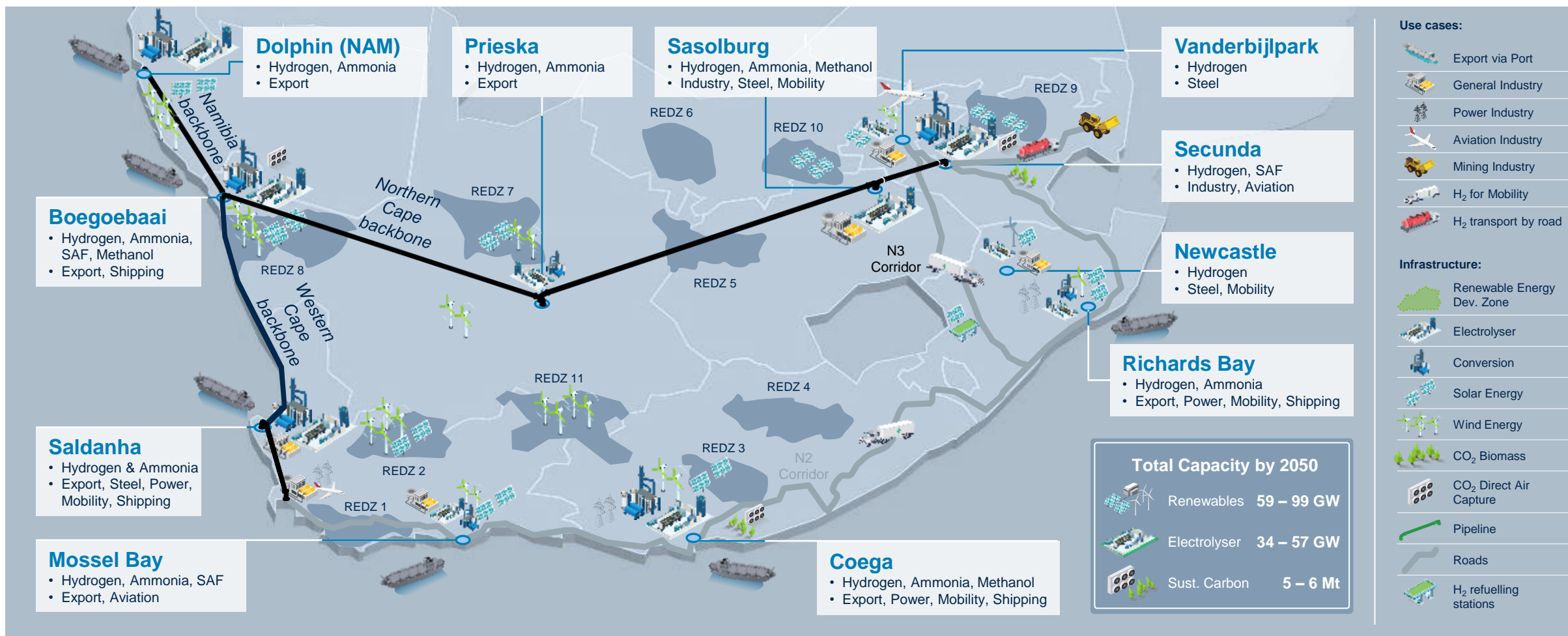
Green H₂ Export | Incubate & Grow

Lighthouse project(s) demonstrating Southern Africa's capabilities

- Initial focus on export market to enable development and scale-up with a vision of building H₂ backbone to supply inland over time

SIP designation will enable transition of existing assets and the development of mega-scale green H₂ production hubs

Southern Africa's green hydrogen landscape



Boegoebaai green hydrogen and derivatives project

Positioning for Exports | Sasol is evaluating potential for green hydrogen and derivative exports. The Boegoebaai project was announced in October 2021, governed under MOA between Sasol and the local Provincial Government

 <p>Location</p>	<ul style="list-style-type: none"> Located in the Northern Cape, 20km south of the Namibian border, it is ideally located for the export market and for accessing the Northern Cape Solar belt
 <p>SEZ & REDZ</p>	<ul style="list-style-type: none"> SEZ status provides a fiscal advantage for development in addition to regulatory enablers Supported by the presidency which has recognized Boegoebaai port as a Strategic Infrastructure Project Located within REDZ 8 supporting renewable energy infrastructure
 <p>Intent to invest</p>	<ul style="list-style-type: none"> Existing interest from Government and Industry can catalyse funding for the project Willingness to partner with SA from key offtake markets improves projects' global competitiveness

Sasol aims to explore its potential in a feasibility study

- Experience in complex projects, global brand, experience collaborating with governments, track record of delivering in local communities
- An agile modular approach is being investigated with first product <2030
- Partnerships focusing on funding, asset ownership, market access & offtake, technology and skills

Project Details:
1st 5GW concession

>9
GW RE

~5
GW electrolyser

~400
ktpa green H₂¹

~6k
Permanent jobs²

60/40
Solar/Wind

H₂, NH₃, MeOH, SAF*

*Product Slate Optionality



Key partnership areas to move at speed



Port & Grid Infrastructure

Innovative strategy required to enable rapid scale-up of the **transmission grid**.

New port infrastructure will be required for green hydrogen export.

Early planning for the green hydrogen **pipeline backbone** is key.



Partnerships

Requires coordinated effort as SA Inc. as well as inter-governmental partnerships to drive market during early stages.



Policy and Regulation

EU RED II Delegated Act as currently drafted will constrain ability for phased transition.

H₂ roadmap & commercialisation strategy enablers are required to drive implementation.



Land

Land is the key enabler for green hydrogen project developments. An inclusive land management plan that benefits the local community is crucial.



Funding & Innovative incentive schemes

Carbon tax recycling will allow for self-funding of decarbonisation initiatives.

Applicability of the SEZ benefits for green H₂ investments is important.



SEE YOU THERE

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