



REPUBLIC OF SOUTH AFRICA

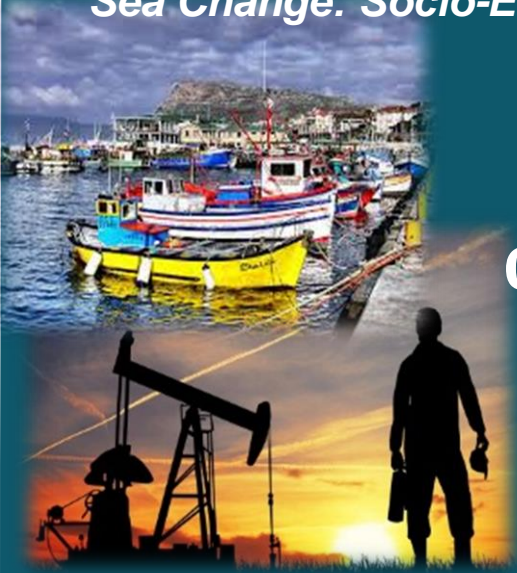


Oceans Economy and Sustainability

"Sea Change: Socio-Economic & Sustainability Goals in National Ocean Strategies"
Workshop

André Share
Oceans Economy Secretariat

10 April 2018



“States have the right to exploit their natural resources pursuant their environmental policies and in accordance with their duty to **protect and preserve** the marine environment”

.....UNCLOS

The image is a screenshot of the United Nations Sustainable Development Goals website. At the top, there is a light blue header with the text "SDG14" in large, bold, black letters. Below this, the website's navigation bar includes the UN logo, the text "Welcome to the United Nations.", and language options: العربية, 中文, English, Français, Русский, and Español. The main content area features the "SUSTAINABLE DEVELOPMENT GOALS" logo, with "GOALS" in a large, colorful font. Below the logo is a blue banner that reads "17 GOALS TO TRANSFORM OUR WORLD". A navigation menu below the banner includes links for Home, About, Goals, Partnerships, Take Action, News and Media, Social Media, and Watch and Listen. The "Goals" link is currently selected. The main content area is divided into two columns. The left column features a blue square with the number "14" in large white font, followed by the text "LIFE BELOW WATER" in white. Below this text are three white wavy lines representing water and a white silhouette of a fish. The right column contains the text "Goal 14: Conserve and sustainably use the oceans, seas and marine resources" in bold. Below this is a paragraph: "The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind." Another paragraph follows: "Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation." A final paragraph states: "Careful management of this essential global resource is a key feature of a sustainable future."



2050 Africa's Integrated Maritime (AIM) Strategy.....a comprehensive plan that aims to “foster more wealth creation from Africa’s oceans, seas and inland water ways by developing a thriving maritime economy and realising the full potential of sea-based activities in an **environmentally sustainable** manner”.



Section 24 of the Constitution enshrines the right to – the Environment

Everyone has the right:

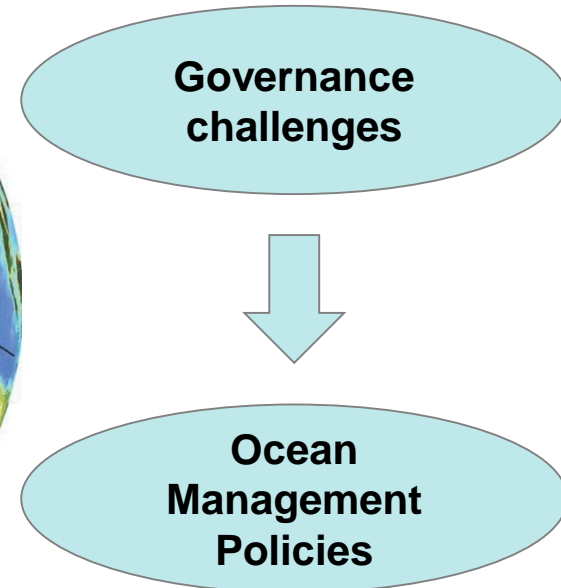
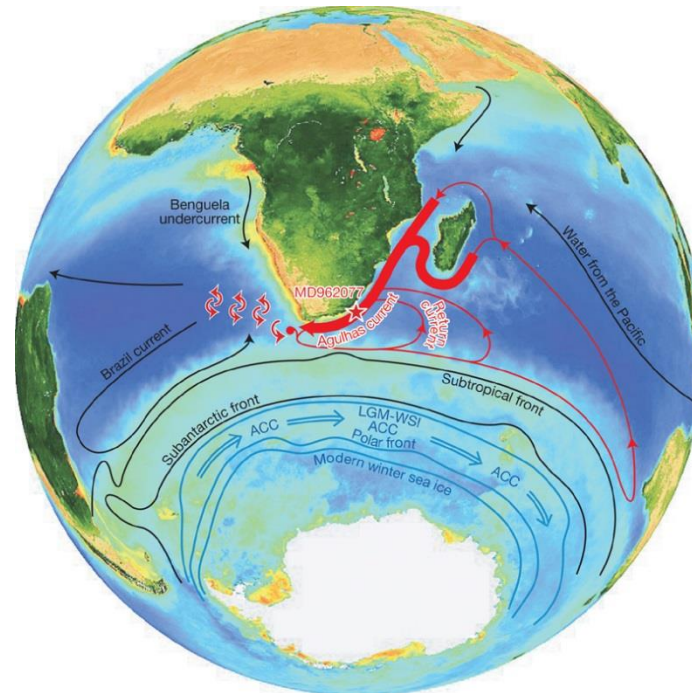
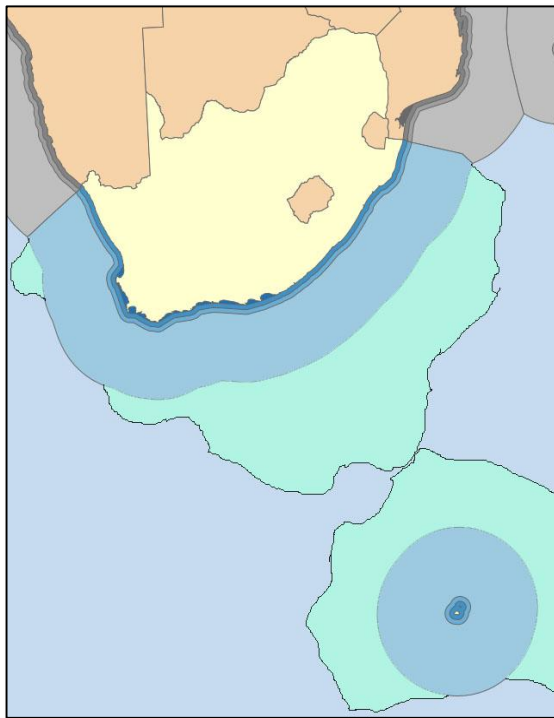
- to an environment that is **not harmful** to their health or well-being; and
- to have the environment **protected**, for the **benefit** of present and future generations, through reasonable legislative and other measures that —
- **prevent pollution and ecological degradation;**
- **promote conservation;** and
- **secure ecologically sustainable development and use of natural resources** while promoting justifiable **economic and social development.**

National Environmental Management of the Oceans

Guiding Principles

- The **sustainable use and management** of ocean resources and ecosystem services in order to benefit present and future generations.
- The **protection of biodiversity** in the ocean environment and the conservation of marine ecosystems.
- The application of the **precautionary approach** to sustainable use and conservation.
- The **prevention, avoidance and mitigation of pollution** and adherence to the polluter pays principle.
- The **strengthening of human capacity** to deal with a changing environment, including the impacts of climate change such as increases in sea-surface temperature, sea-level rise and ocean acidification.
- The **identification of opportunities** which contribute to the development needs of the poor and vulnerable within the population thus ensuring human dignity.
- The promotion of **collaboration and cooperative governance**
- The promotion of an **ecosystem and earth system approach** to ocean management.

- **South Africa is surrounded by a vast ocean space -** untapped potential providing connectivity and opportunities.
- **How do ensure integrated and sustainable management and maximise opportunities for economic growth**

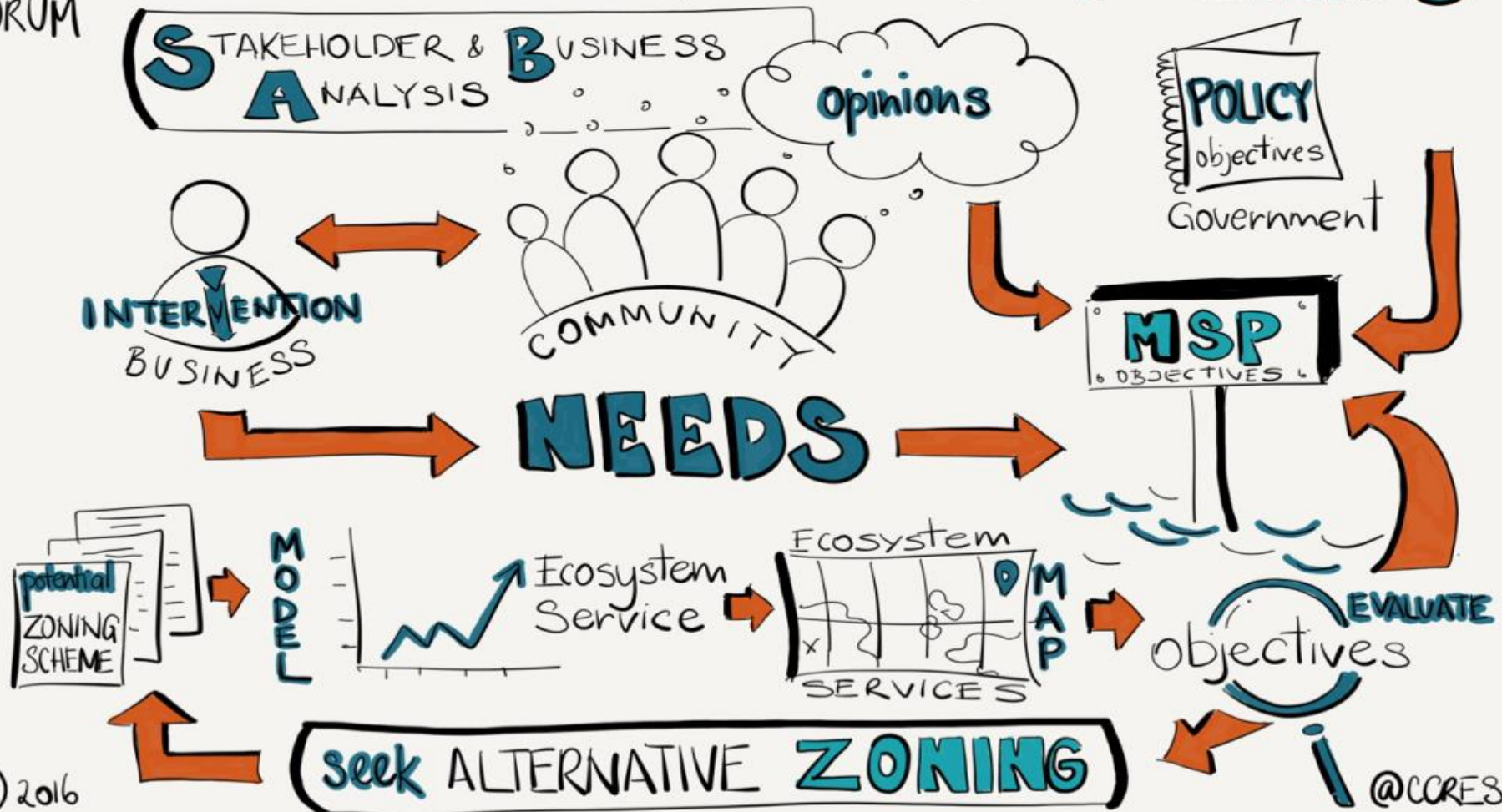


**Challenge: Knowledge / Information / Data
- importance of Research**

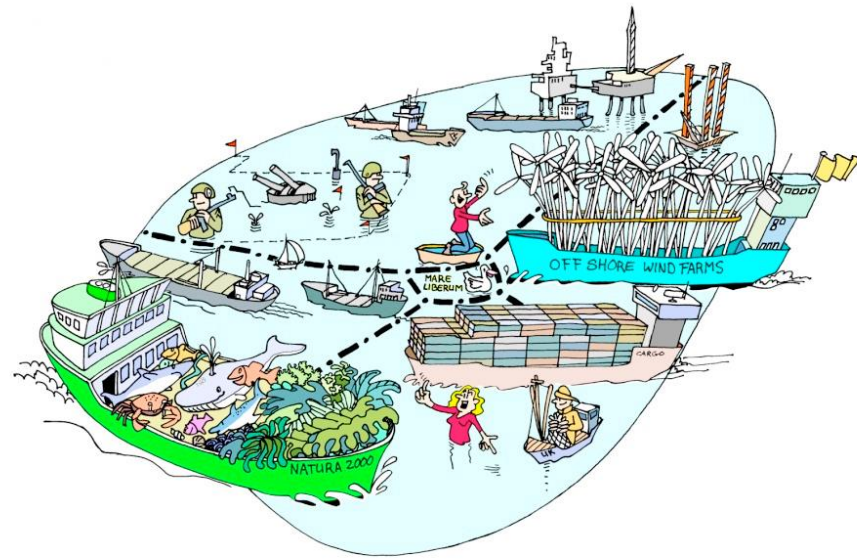
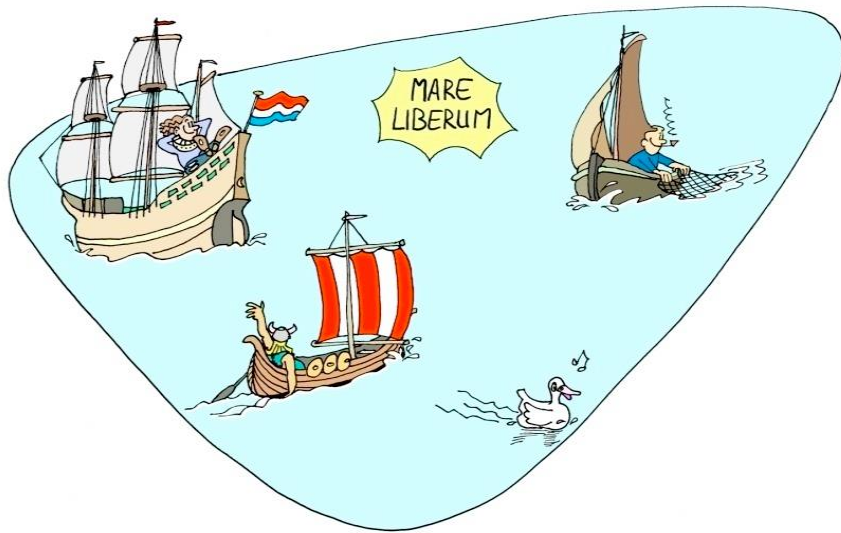
Challenge – multiple use of the ocean space

CCRES
Stakeholder
FORUM

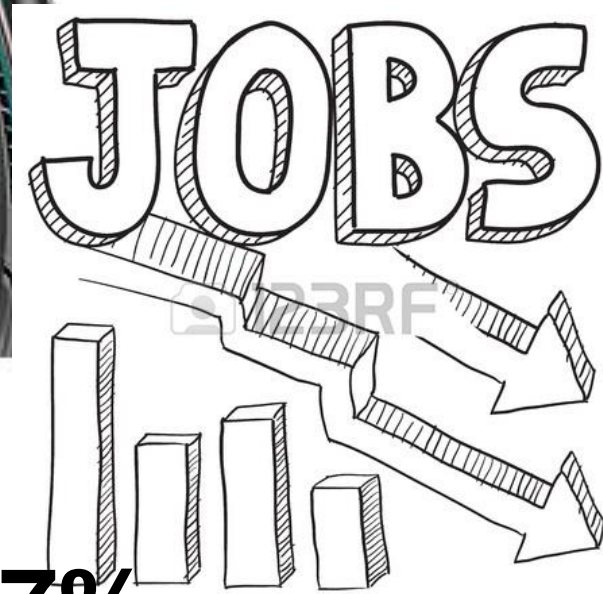
MARINE spatial PLANNING



© 2016



- **Marine Spatial Planning** - governance process of collaboratively assessing and managing the spatial and temporal distribution of human activities to achieve economic, social and ecological objectives.
- Shared vision for Marine Spatial Planning in South Africa is: **“A productive, healthy and safe ocean that is accessible, understood, equitably governed and sustainably developed and managed for the benefit of all.”**



South Africa

Unemployment Rate: 27%

Youth unemployment: approx. 52%



BALANCE??????




REPUBLIC OF SOUTH AFRICA



Unlocking the Economic Potential of South Africa's Oceans

Premised on the principles of Sustainable Development

- **Nine Sectors** were analysed for growth potential.
- Estimated **GDP contribution: R129 to R177 billion (1 million jobs) (2033)** compared to a **GDP of R54 billion (2010 study); 316 000 direct jobs.**

 Selected growth areas

| | GDP, R bn | | | Jobs, 000 | |
|------------------------------------|-----------|----------------|---------|------------|------------------|
| | 2010 | 2033 | CAGR, % | 2010 | 2033 |
| Marine transport and manufacturing | 16 | 42-61 | 6% | 15 | 40-56 |
| Tourism | 15 | 25-35 | 4% | 90 | 150-225 |
| Offshore oil and gas | 4 | 11-17 | 9% | 0.4 | 0.8-1.2 |
| Construction | 8 | 20-21 | 4% | 162 | 390-407 |
| Renewable energy | 0 | 14-17 | 25% | 0 | 0.9-1.1 |
| Fisheries and aquaculture | 7 | 10-16 | 4% | 30 | 170-250 |
| Communication | 4 | 7-10 | 4% | 19 | 35-52 |
| Desalination | 0 | 0.1-0.1 | 1% | 0 | 1.6-1.6 |
| Marine protection services | 0 | TBD | - | 0 | TBD |
| Total | 54 | 129-177 | | 316 | 788-1 004 |

OPERATION PHAKISA: OCEANS ECONOMY

DEA, DPME, DOT, DPE, DTI, DMR, DOE, DAFF, DST, DHET, DPW, DRDLR, DOL, DHA, NT, DSBD, DOD, EDD, DOW, NDT, DIRCO, DBE, DWS, Provinces

OCEANS ECONOMY FOCUS AREAS AND ENABLERS



Marine Transport and Manufacturing



Offshore Oil and Gas



Aquaculture



Marine Protection Services and Ocean

Governance



Small Harbours and Coastal Development



Coastal and Marine Tourism



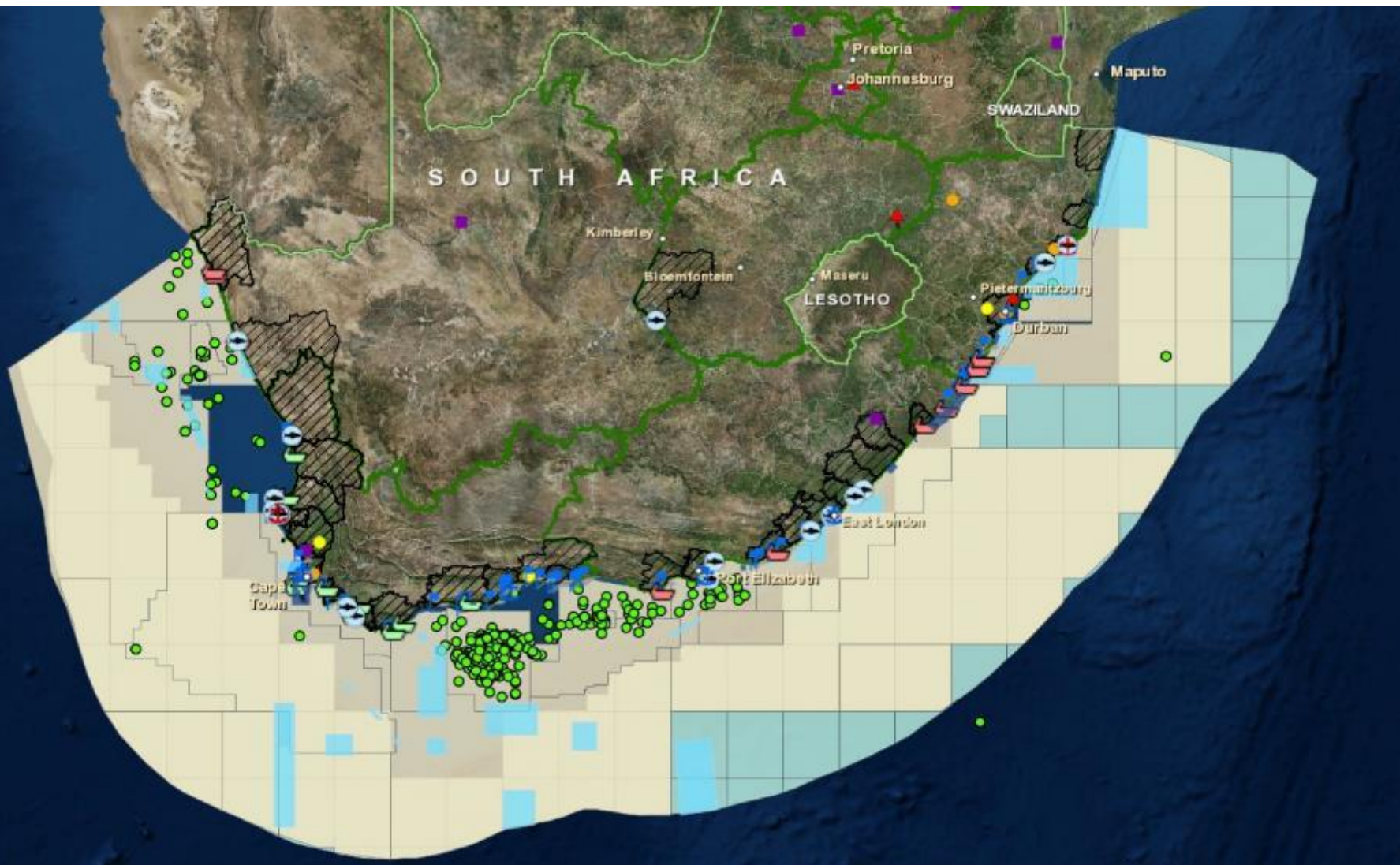
Skills Development and Capacity Building



Research, Technology and Innovation

It is estimated that the oceans economy has the potential to contribute up to R177 billion to Gross Domestic Product (GDP) by 2033 (compared to R54 billion in 2010) and create approximately 1 million jobs (compared to 316 000 in 2010).

OPERATION PHAKISA: OCEANS ECONOMY FOOTPRINT



Critical consideration:

- SMME development
- Inclusion of vulnerable groups (women, youth and people with disabilities)
- Transformation

OCEANS ECONOMY IMPACT

Total Investment: R25.5 billion
(Government and private sector)

Total Jobs: 6 535 jobs.
(excluding multipliers)

Significant investments in **infrastructure development** (ports), **marine manufacturing** (boatbuilding), **aquaculture** and **seismic surveys** in the oil and gas sector.



(Investments and jobs figures are currently being updated)



Marine Transport and Manufacturing



PORT INFRASTRUCTURE: EIGHT COMMERCIAL PORTS



Port Nolloth*

Richards Bay

Durban

Outer Caisson,
Welding Set,
Forklift, Dock
Concrete Repairs

Saldanha Bay

Offshore Supply
Base Berth

Cape Town

Recirculating
Pumps,
Traverser
Repairs Phase 1

Mossel Bay

Port Elizabeth

40 ton Slipway
and 90 ton Boat
Hoist,
Lead-in Jetties

Ngqura

East London

Switchgear,
Crane Rails

* Port Nolloth may be developed as a major commercial port





PORT OF DURBAN: DRY DOCK CAISSON



THE DORMAC SHIP-REPAIR FACILITY AT THE PORT OF DURBAN





SLIPWAY REFURBISHMENT AND LEAD-IN JETTIES AND BOAT HOIST – PORT OF PORT ELIZABETH



**REFURBISHED
SLIPWAY**



**NEW 90 TON BOAT
HOIST**



REFURBISHED 1200 Ton LEAD-IN JETTIES



MARINE TRANSPORT AND MANUFACTURING HIGHLIGHTS

TNPA and Oiltanking Grindrod Calulo Terminals has signed the Terminal Operator Agreement (concession) to fund, build, own, operate and transfer the new **Liquid Fuels Terminal at the Port of Ngqura.**



PORT OF NGQURA

BURGAN CAPE TERMINALS FUEL STORAGE FACILITY – PORT OF CAPE TOWN





MARINE TRANSPORT AND MANUFACTURING HIGHLIGHTS

TNPA awarded preferred bidder status to KwaZulu Cruise Terminal (Pty) Ltd to fund, build, operate and transfer the **Durban Cruise Terminal**.

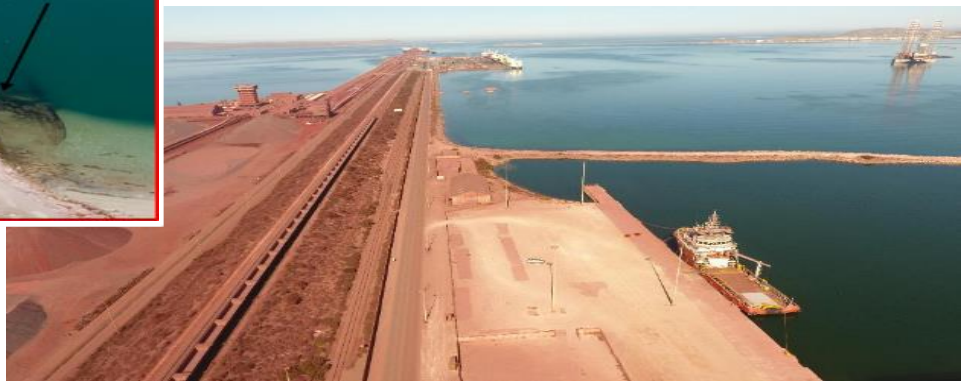
The right to fund, build and operate the **Cape Town Cruise Terminal** has been awarded to the V&A Waterfront (Pty) Ltd.



PORT OF CAPE TOWN – CRUISE TERMINAL

PORT OF SALDANHA

UPGRADE OF GENERAL MAINTENANCE QUAY



The Company SALDEHCO was appointed as a preferred bidder for Offshore Supply Base.

Construction on the development of the **Sunrise Energy Liquid Petroleum Gas (LPG) Facility** in Saldanha Bay has been completed and the Terminal is operational.

MANUFACTURING

SOUTHERN AFRICAN SHIPYARDS - DURBAN



9th Tugboat is currently being constructed

NAUTIC – CAPE TOWN



OFFSHORE DIAMOND MINING VESSELS – CAPE TOWN



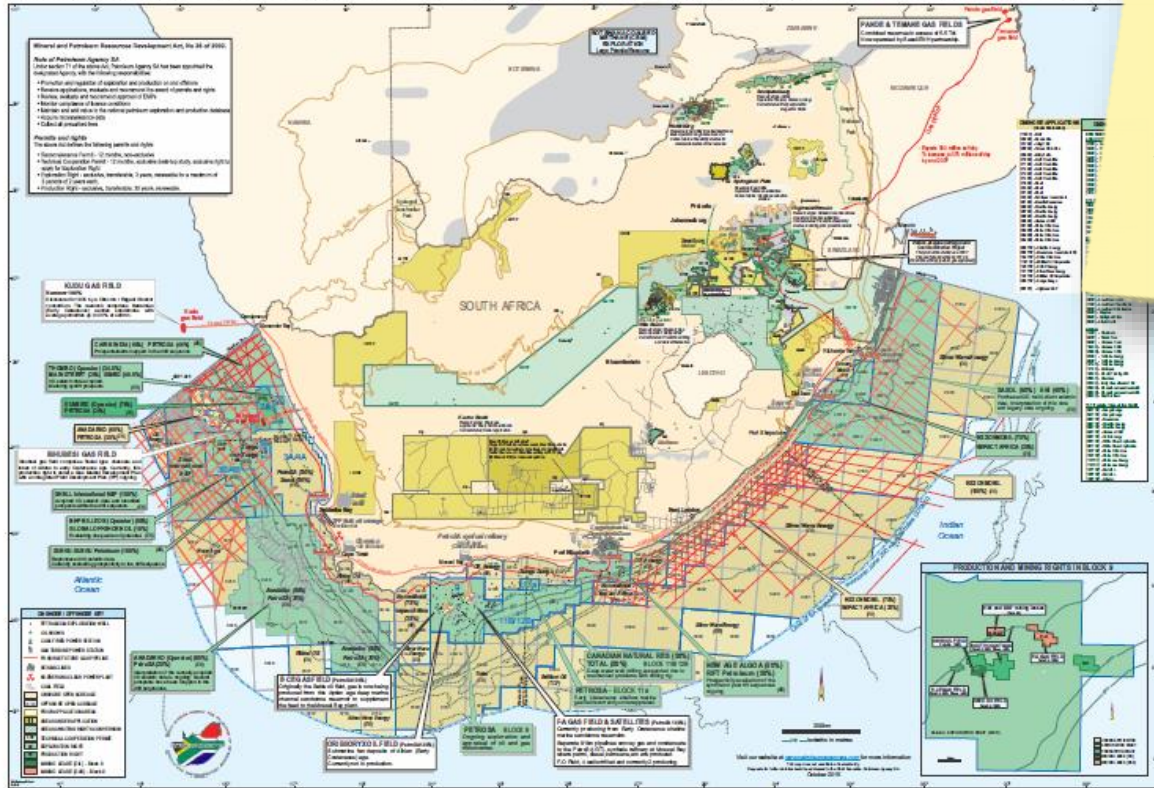


Offshore Oil and Gas



OFFSHORE OIL & GAS - POTENTIAL

PETROLEUM EXPLORATION AND PRODUCTION ACTIVITIES IN SOUTH AFRICA



South Africa has possible resources of ~9 bn barrels of oil and ~60 tcf of gas offshore, but uncertainty is high.

The aspiration is to create an environment that promotes exploration while simultaneously maximising the benefits for South Africa.



Aquaculture

LOCATION AND SPECIES OF 24 ORIGINAL AQUACULTURE PROJECTS

HONDEKLIP BAY



- New farm: DCA Ranching
- Expansion of DST Abalone Hatchery

- ★ Phase 1 (6-12 months implementation)
- Phase 2 (12-24 months Implementation)
- Phase 3 (2-4 years implementation)

SMME's (15+)

RICHARDSBAY



- New farm: Richards Bay Sea Cage Farming

AMATIKULU

- ★ Expansion of Amatikulu ornamentals
- New Farm: Amatikulu Kob (ADZ)



HAGA

- ★ Expansion: Wild Coast Abalone Farm

HAMBURG

- ★ Expansion of Hamburg Oyster farm
- New farm: Hamburg Kob



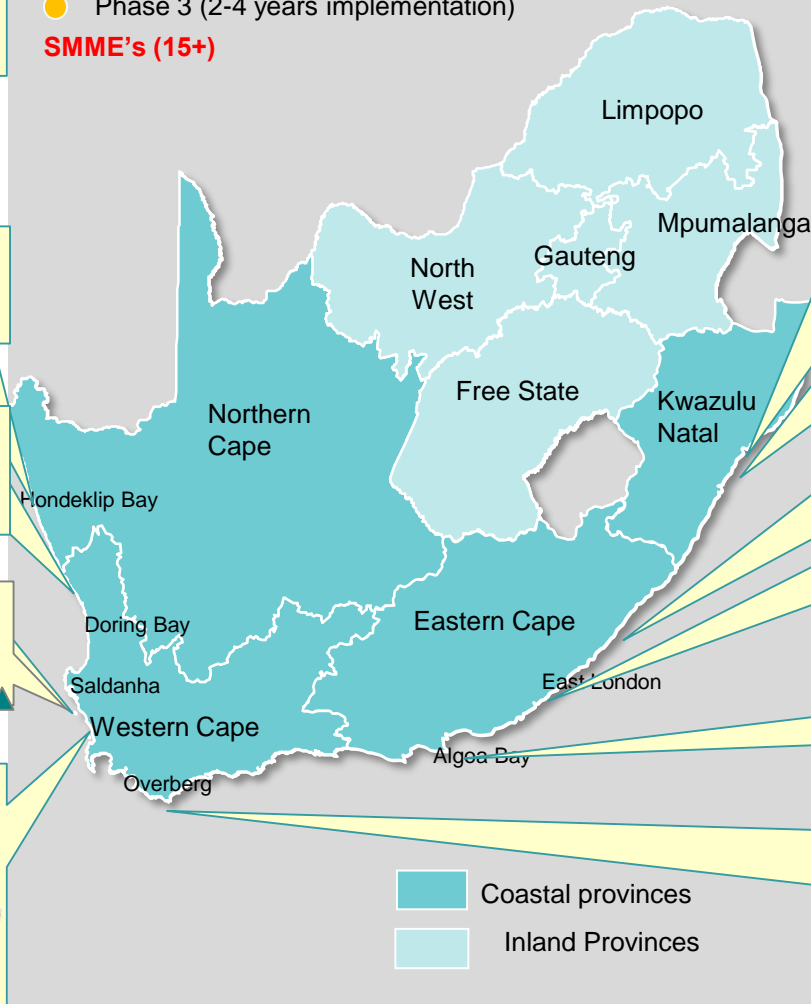
PORT ELIZABETH

- New: Wild Coast Abalone Ranching

OVERBERG



- ★ Expansion of Roman Bay
- ★ Expansion of Abagold
- Expansion of Marine Growers
- ★ Expansion of HIK Abalone



Coastal provinces
Inland Provinces

DORING BAAI



- Expansion of Doring Bay Abalone

PATERNOSTER



- ★ Expansion of Paternoster hatchery

JACOBSBAAI



- Expansion: Jacobsbaai Sea Products

SALDANHA BAY

- New farm: Molapong Cages
- Expansion of Blue Ocean Mussels
- Expansion of Saldanha Bay Oyster

5 projects removed, placed onto business opportunities

Ventersdorp Catfish, ADZ Ventersdorp, Algoa Bay Yellowtail, Oceanwise ELIDZ and Southern Atlantic

LOCATION AND SPECIES OF 17 NEW AQUACULTURE PROJECTS SINCE 2014

KLEINZEE



● Exp: Really Useful Investments

SALDANHA

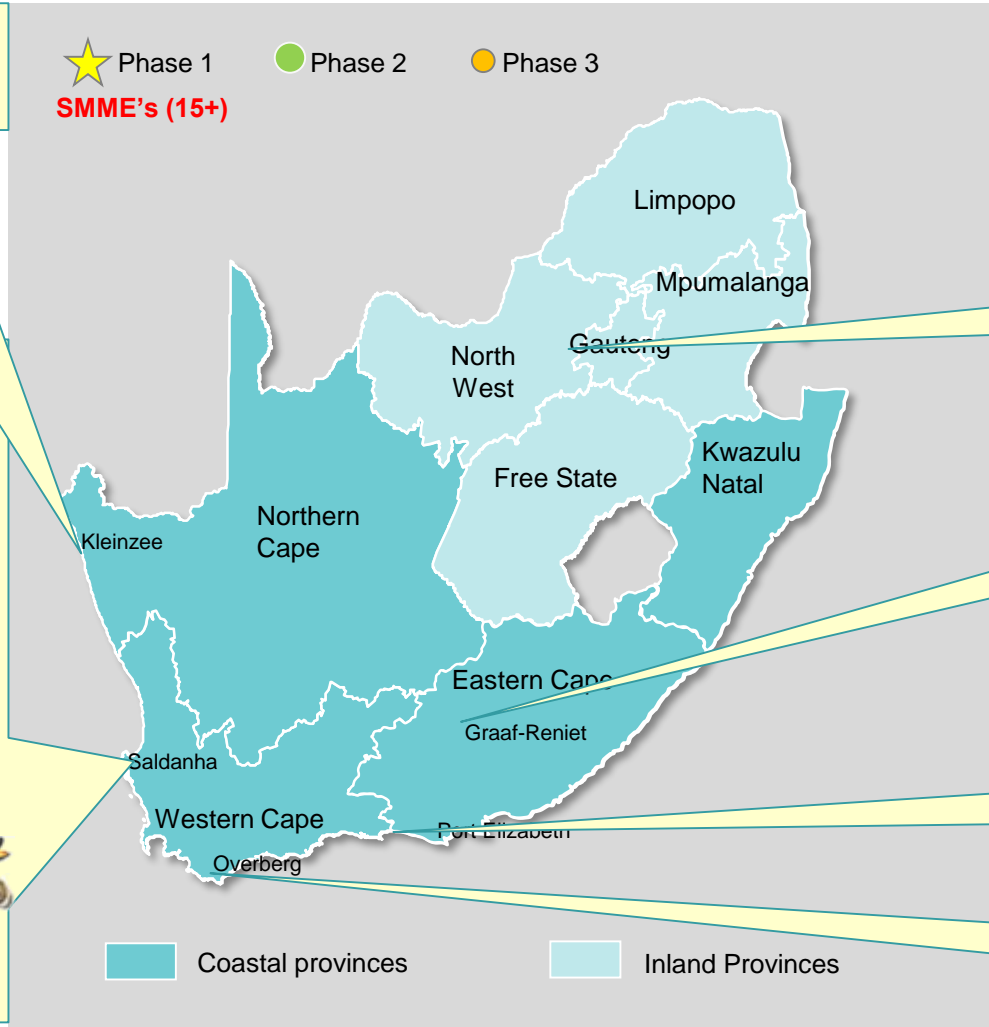
- Exp: Blue Sapphire Pearls 
- Exp: Imbaza Mussels 
- Exp: African Olive Trading 
- Exp: Aqua Foods SA 
- New: Requa Mussels 
- New: Chapmans Mussels 
- New: Xesibe 
- Exp: Salmar Trading 
- New: Oystercatcher 
- New: Southern Atlantic Sea farms 
- Exp: West Coast Oyster Growers 
- Exp: West Coast Aqua 

★ Phase 1

● Phase 2

● Phase 3

SMME's (15+)



GAUTENG



● New: Vaal (tilapia)

GRAAF RENIET



● Exp: Karoo Catch

PORT ELIZABETH



● Exp: Zwembesi (oyster)

HERMANUS

● New: Hermanus Salmon

Since Operation Phakisa this DAFF driven project has:

- Installed a new feed shed (Feb 2017).
- Appointed an implementer over three years to administer the pilot until 2019 (R9.5 million through EPWP programme)
- Hired an additional employee and sustained the 22 employees from the cooperative.
- Finalised a business plan for expansion of the farm, from pilot to commercial phase (to attract investor interests).
- Through the Syazama Trust, the farm sold its first harvest to the Cape Town Fish Market at the V&A waterfront in Cape Town.



DST/SU: KOB FARM IN RICHARDS BAY

Project Highlight

- 22 tons of first market size dusky kob harvested in Richards Bay in June/July 2017.
- Fish size ranged from 1.1 to 1.6kg
- Food safety criteria were tested and met.
- Market testing and analysis currently been done on harvested product.



AFRICAN OLIVE TRADING

Project Highlight



African Olive Trading opened its processing facility in Veldrift on 1 March 2017.

This processing plant created 47 new jobs (40 factory workers; 7 managers)

It is a BEE level one project and has also added 5 additional rafts on the farm.





Small Harbours Development

MAP OF DEPARTMENT OF PUBLIC WORKS STATE COASTAL PROPERTIES





Coastal and Marine Tourism



COASTAL AND MARINE TOURISM HIGHLIGHTS

COASTAL AND MARINE TOURISM



**Potential GDP contribution of R21,4 billion
Creating 116 000 jobs by 2026**

The Coastal and Marine Tourism Implementation Plan was approved by Cabinet in August 2017. This plan contains tourism projects integrated projects with the creative industries and cultural heritage. Opportunities include enterprise development such as local supplier development (arts and craft and beach front business), access to markets, skills development, and improved infrastructure.

COASTAL AND MARINE TOURISM LAB ASPIRATIONS

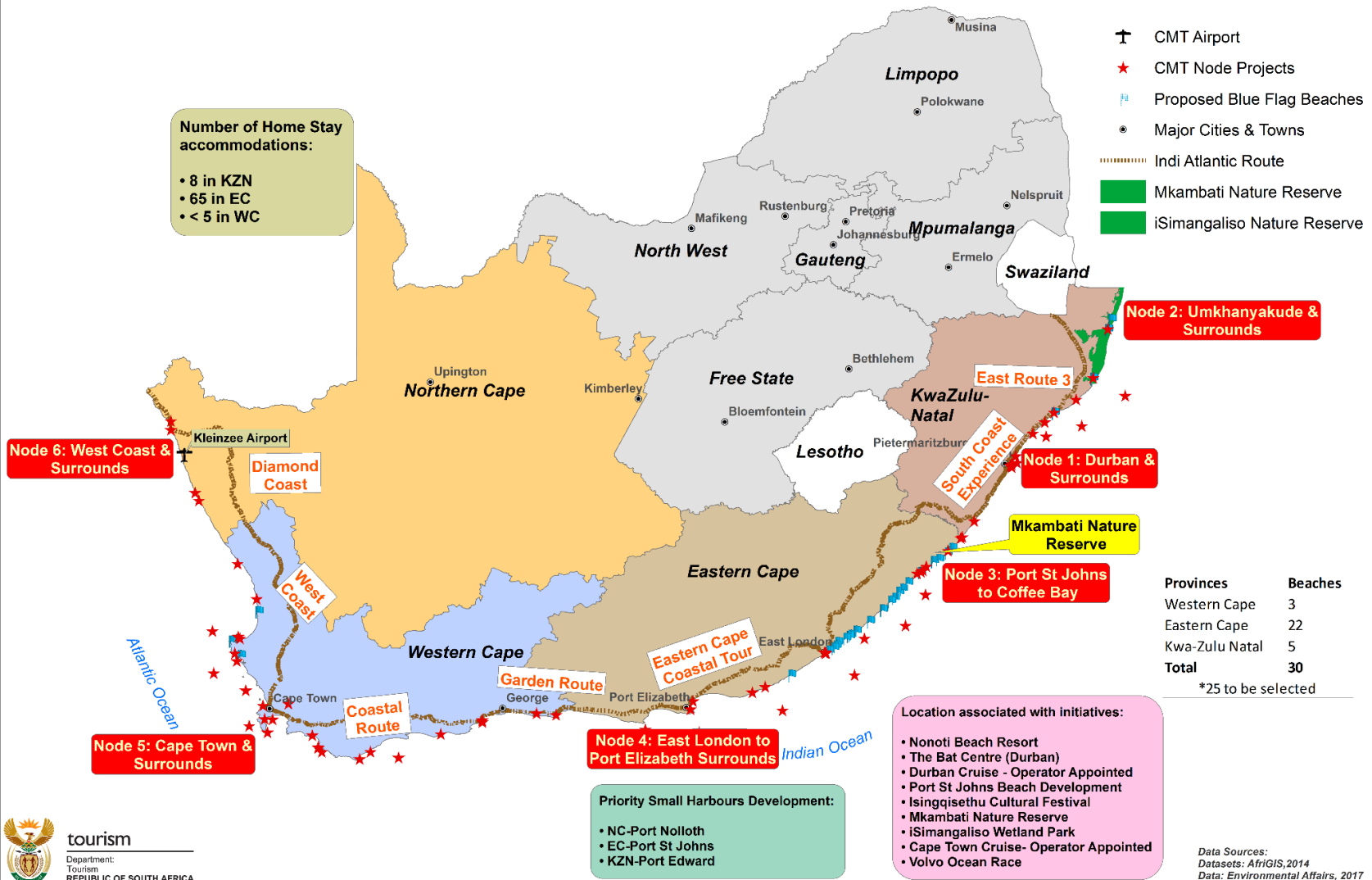


**To grow a world class
and sustainable coastal
and marine tourism
destination that
leverages South
Africa's competitive
advantages in nature,
culture, and heritage**



Coastal and Marine Tourism: Potential GDP contribution of R21.4 bn Creating 116 000 jobs by 2026

Key Coastal & Marine Tourism Nodes

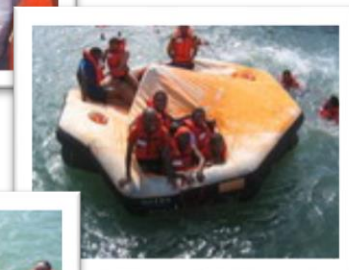


SKILLS DEVELOPMENT AND CAPACITY BUILDING

Led by Department of Higher Education and Training

The Oceans Economy is supported by a **co-ordinated, national maritime skills development plan.**

The **South African International Maritime Institute (SAIMI)** manages and co-ordinates five working groups, bringing together education and training providers, Oceans Economy Delivery Units, industry representatives and academic specialists in order to **develop an integrated national plan.**



Key aspects for successful implementation

- Formalised institutional structures and Governance arrangements.
- Cooperation / Collaboration / Coordination.
- Dedicated capacity.
- Monitoring and Reporting.
- Unblocking / Issue resolution mechanism.
- Stakeholder involvement and ownership.

Sustainability

- Focus Area: Marine Protection Services and Ocean Governance.
- Integrated environmental considerations into all Focus Areas.
- Environmental Impacts – Environmental Impact Assessments (EIAs) / Strategic Environmental Assessments (SEAs).
- Aquaculture sector: Implementation of regulations – species.
- Oil and Gas Sector: Enhancing the capacity of the oil and gas regulator; Joint industry/Government emergency response drills / Joint research.



Sustainability



Marine Protection Services and Ocean Governance

MARINE PROTECTION SERVICES AND OCEAN GOVERNANCE

Integrated Ocean Governance and Protection

Integrated Framework & Governance



Oceans Economy Secretariat

- Established to ensure implementation of Oceans Economy initiatives.

Draft Marine Spatial Planning Bill

- Draft Bill published.
- To be finalised during 2017/18

Ocean Protection



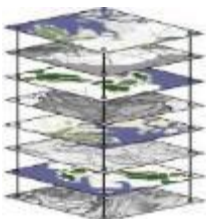
Enhanced and coordinated enforcement

- Sovereignty and marine living resources.

Marine Protected Areas

- 18 out of 22 proposed MPA's advanced.

Marine Spatial Planning



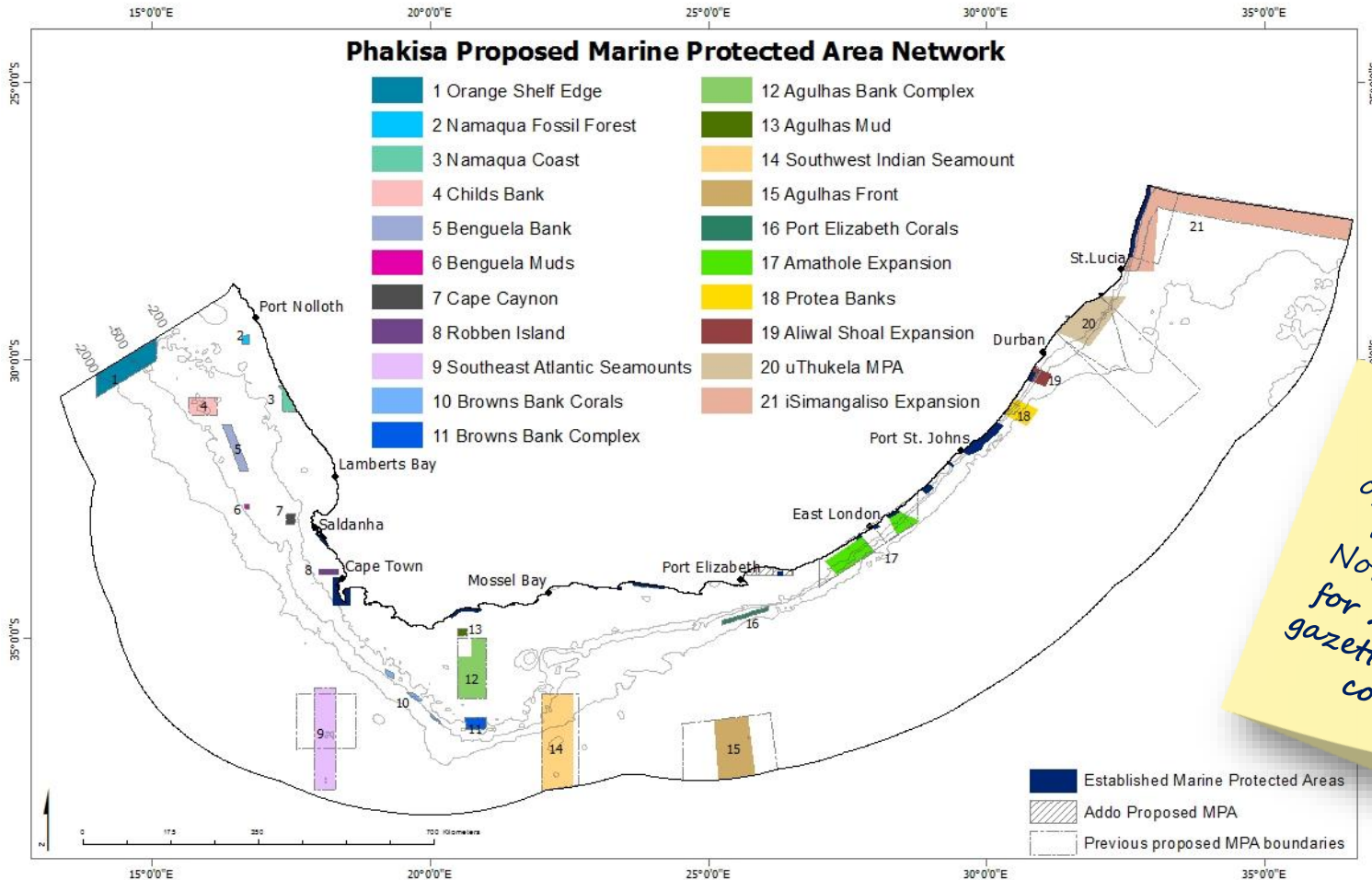
National Framework on Marine Spatial Planning

- The National Framework on Marine Spatial Planning gazetted on 26 May 2017.
- To commence development of regional and sub-regional Marine Spatial Management Plans.



MARINE PROTECTION AND OCEAN GOVERNANCE

OCEAN PROTECTION:



** Boundaries adjusted in lab as a result of consultations

MPA Network of Representative Regulations & Notices: approved & gazetted for 22 MPAs and comments.

Challenges:

- Current engagements: Fisheries and Mining sectors – trade-offs.
- Geographical scope.
- Access and opportunities / consultation.

NATIONAL OCIMS

National Oceans and Coastal Information Management System

Unlocking the potential of South Africa's oceans and coasts through information and decision-support.

[MORE ABOUT NATIONAL OCIMS](#)

[HOME](#)

[ABOUT](#)

[DOCUMENTS](#)

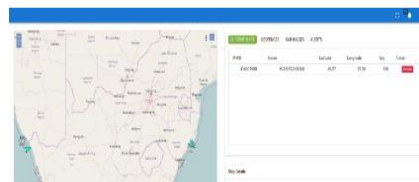
[DATA](#)

[TOOLS](#)

WHAT IS THE NATIONAL OCEANS AND COASTAL INFORMATION MANAGEMENT SYSTEM

The National Oceans and Coastal Information Management System (National OCIMS) is a locally relevant and globally cognisant technological solution that supports the ecological conservation and economic potential of South Africa's oceans and coasts through

DECISION SUPPORT TOOLS



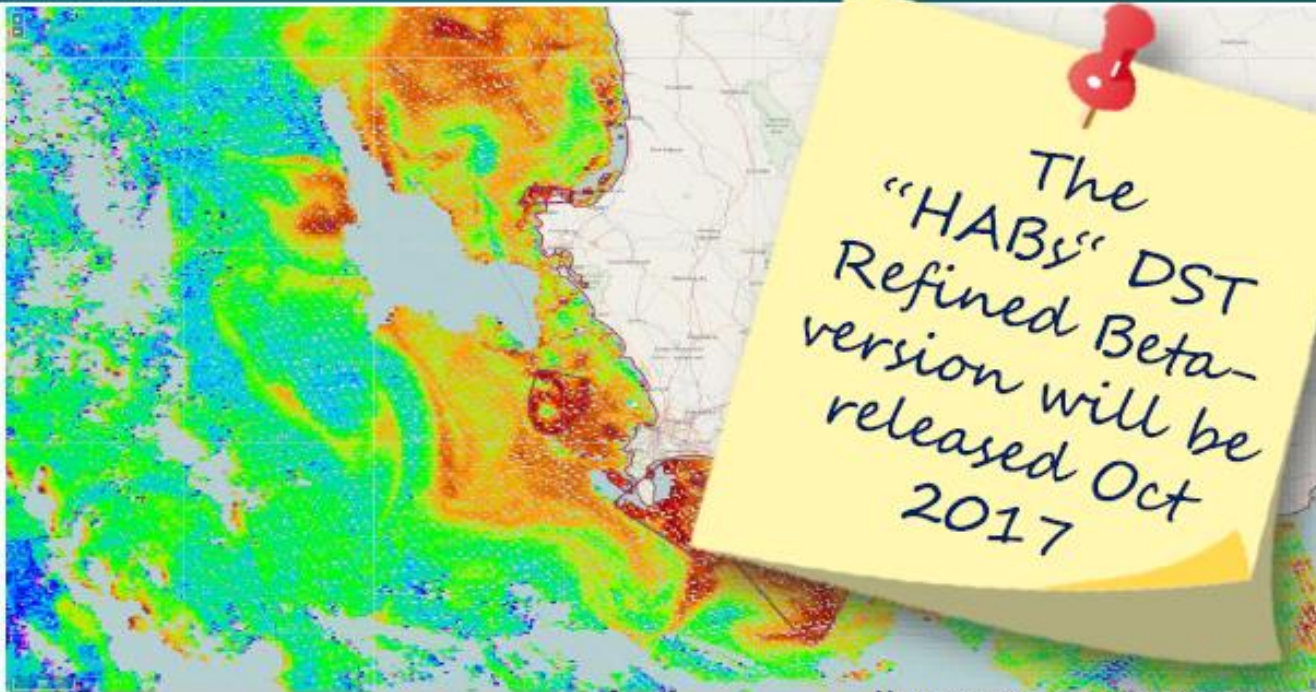
HARMFUL ALGAL BLOOMS DST: TO SUPPORT THEME 3 (“AQUACULTURE”)

NATIONAL
OCIMS

OPERATION
PHAKISA

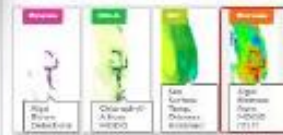
environmental affairs
Department of Environmental
Affairs

Harmful Algal Bloom Viewer



The
“HABs” DST
Refined Beta-
version will be
released Oct
2017

Harmful Algal Bloom Risk



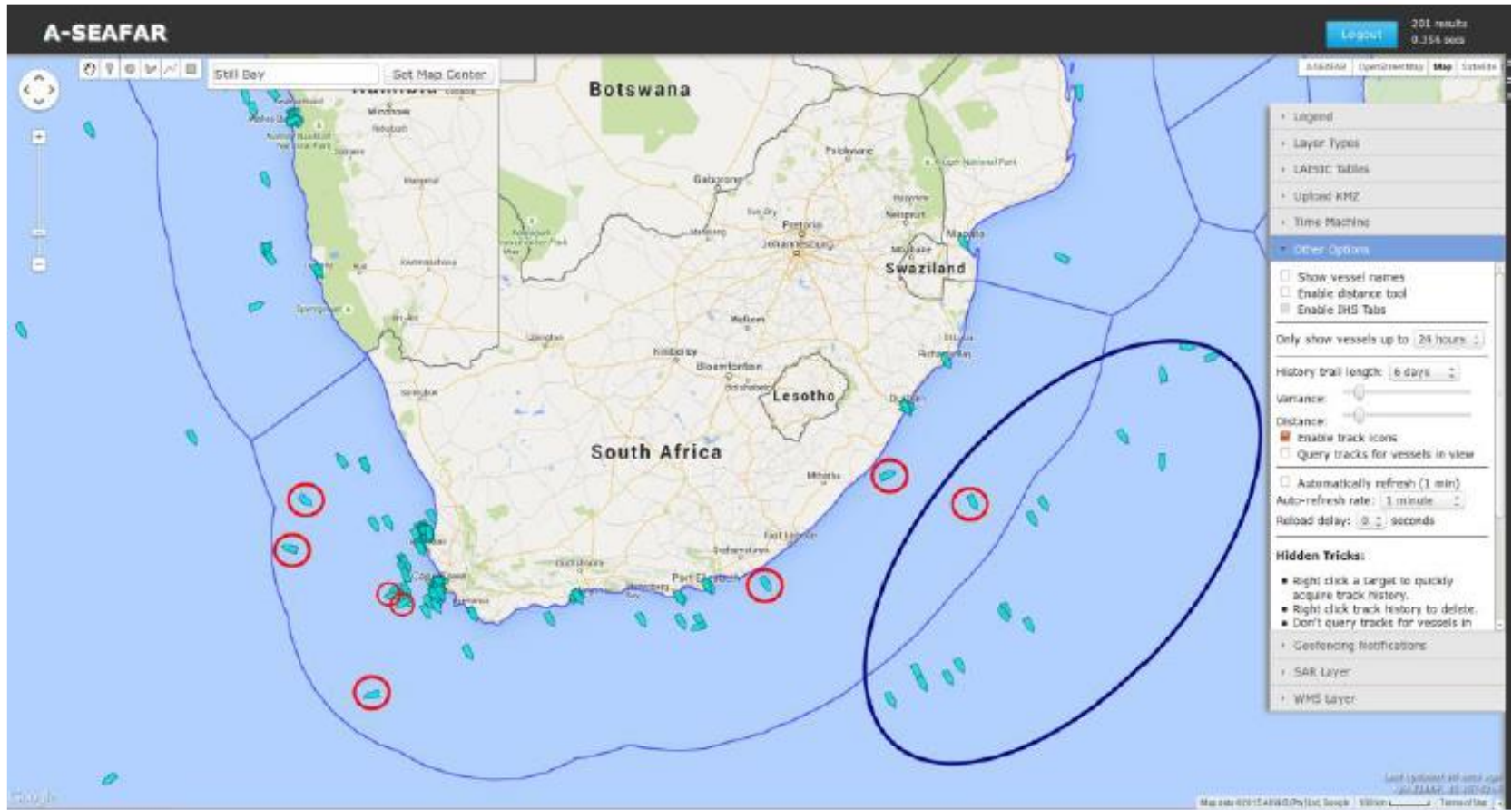
High Risk Areas: Saldanha Bay, BW Cape, Garden Estate, Algoa Bay

Time Series: Date in View: 2017-05-02

“This is a super useful tool as it gave me a two month warning for the current bloom that has entered Saldanha Bay.”

VESSEL TRACKING SYSTEM

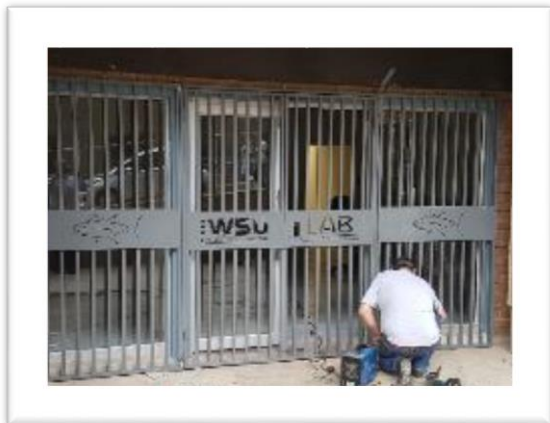
ILLEGAL FOREIGN FISHING VESSELS



MARINE PROTECTION SERVICES AND OCEAN GOVERNANCE

National oceans and coast water quality management.

- The National Pollution Laboratory (NPL) is established, hosted and operated by the Walter Sisulu University (WSU) Mthatha Campus.
- Collection and analysis of samples from the coastal provinces with sampling already extended to KwaZulu-Natal during February 2018 using the Mobile Lab Unit.



Thank you

“The sea, the great unifier, is man’s only hope. Now, as never before, the old phrase has a literal meaning: we are all in the same boat”

Jacques Yves Cousteau