



REPUBLIC OF SOUTH AFRICA



OCEANS ECONOMY

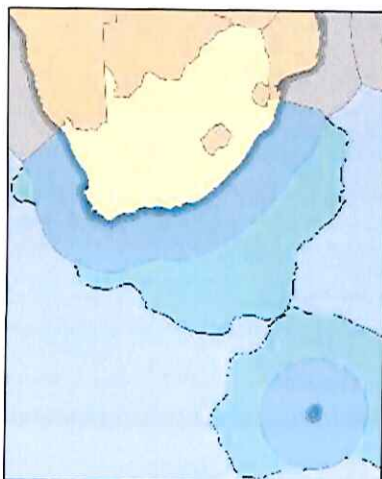
Portfolio Committee on Environmental Affairs

Dr B E E Molewa, MP
Minister of Environmental Affairs

20 June 2017

Context

- The **National Development Plan** aims to eliminate poverty and reduce inequality by 2030.
- In order to address the challenges of poverty, inequality and unemployment, Government developed the **9-Point Plan**.
- Alignment with the Medium-Term Strategic Framework.



Land Mass EEZ Extended Continental Shelf Claim

- **South Africa has a vast ocean space** with huge untapped potential and can contribute to address these challenges:
 - 1.5 million square kilometres and a coastline of 3900 kilometres (including the sub-Antarctic islands).
- The current contribution of the ocean to the **GDP is R54 billion (2010 study)**, creating **316 000 direct jobs**.
- The oceans has potential to increase the **GDP contribution** to between **R129 and R177 billion** with over **1 million jobs** being created by **2033**.



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

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).

OCEANS ECONOMY IMPACT

Operation Phakisa: Oceans Economy commenced with operational work after the October 2014 launch. Overall progress to date includes:

- Government has unlocked investments amounting to approximately R 7.323 billion in the Oceans Economy.
- Over 6 952 jobs have been created in the various sectors.



(Investments and jobs figures are currently being updated)

OPERATION PHAKISA: OCEANS ECONOMY FOOTPRINT



There are opportunities:

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



Marine Transport and Manufacturing

High Impact Indicators

GROWTH TARGET: GDP contribution of R129 bn to R177 bn by 2033 with 800 000 to 1 million jobs created

MARINE TRANSPORT & MANUFACTURING

Status (2010)

GDP contribution of R7 bn
No. of jobs: 6 000

2019 Target

GDP contribution of R14 -23 bn.
No. of jobs: 40 000 - 50 000

DOT, DTI, DPE, DHET, DEA, DIRCO, NT, DOL, DST, EDD, DOW

Challenges

1. Port infrastructure
2. Regulatory environment
3. Skills and capacity
4. Market growth

Key Interventions

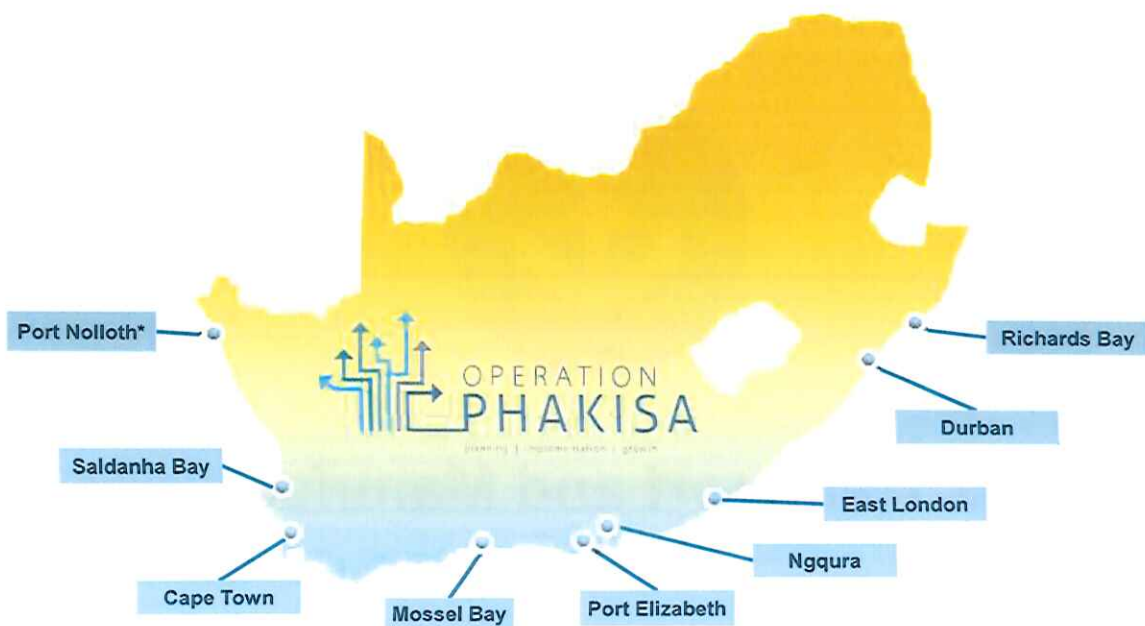
A Infrastructure and operations	B Skills and capacity building	C Market growth
<ol style="list-style-type: none"> 1 Create supportive funding and revenue model 2 Establish purpose-built oil and gas port infrastructure by appointing facility operators – Saldanha Bay 3 Align on implementation of government policy 4 Prioritise Transnet and TNPA funding allocation towards marine manufacturing 5 Maintain and refurbish existing facilities 6 Unlock investment in new and existing port facilities 7 Implement a Strategic Prioritised Project – Richards Bay 8 Implement a Strategic Prioritised Project – East London 	<ol style="list-style-type: none"> 9 Train 2,550 TVET College graduates on an 18-month workplace-based experiential learner programme in scarce and critical trades over the next 5 years 10 Create dedicated OTs for the MTM sector (professional, trades, operators and seafarers) 11 Establish trade RPL, CBMT or centres of specialisation in Saldanha Bay and Richards Bay 12 Train 18,172 learners as artisans, semi-skilled workers and professionals over the next 5 years 13 Increase usage of ESSA system and targeted career awareness services as a high-value recruitment tool for MTM 14 Increase capacity to develop skills for ~1,200 ratings and ~720 officers per year 	<ol style="list-style-type: none"> 15 Create and implement a public procurement and localisation programme 16 Develop a strategic marketing campaign and value proposition for target markets 17 Propose inclusion of a preferential procurement clause in the African Maritime Charter 18 Support local registry of vessels through incentives and legislation of using SA-flagged ships for cargo and coastal operations (based on UN Conference on Trade and Development and African Maritime Charter guidelines)

i. TNPA – Transnet National Ports Authority
ii. ESSA – Employment Services of South Africa
iii. TVET – Technical and Vocational Education and Training

iv. RPL – Recognition of Prior Learning CBMT – Competency-based Modular Training



SOUTH AFRICA HAS EIGHT MAJOR COMMERCIAL PORTS WITH OPPORTUNITIES FOR ECONOMIC GROWTH



* Port Nolloth may be developed as a major commercial port



MARINE TRANSPORT AND MANUFACTURING HIGHLIGHTS

- Major investments had been in **port infrastructure development** and **marine manufacturing**, in particular boatbuilding.
- **Infrastructure Development:**
 - Port of Durban:
 - Refurbishment of outer dry dock caisson.
 - Floating Dock, ship-repair facility.
 - Tender awarded for Cruise Terminal in Port of Durban.
 - Port of Port Elizabeth:
 - Refurbishment of the slipway and Lead-In Jetties.
 - Commissioning of the 90 Ton Boat Hoist.
 - Port of Cape Town:
 - Fuel Storage Facility.
 - Cruise Terminal tender in Port of Cape Town.
 - Boatbuilding infrastructure.
 - Port of Saldanha:
 - Construction of the Offshore Supply Base (one of three projects)
 - Construction on the development of the Sunrise Energy Liquid Petroleum Gas (LPG) Facility.
- Request for proposals have been issued for infrastructure development in the respective ports.



MARINE TRANSPORT AND MANUFACTURING HIGHLIGHTS

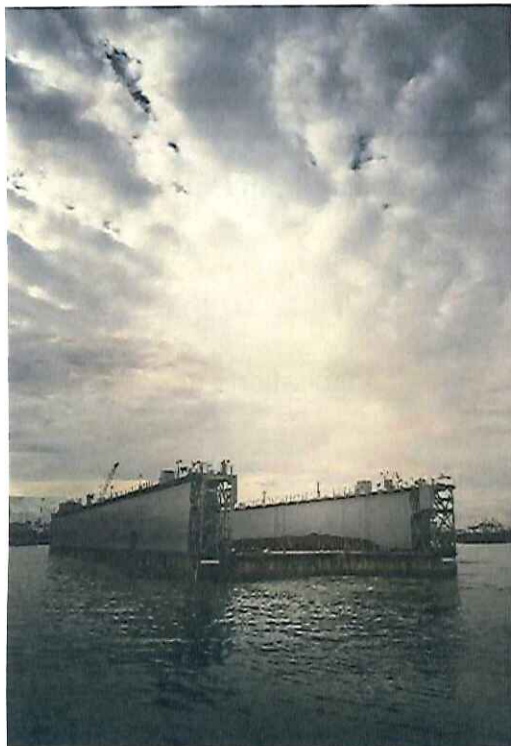
- **Manufacturing - boatbuilding**
 - Building of Nine Tugboats for Transnet National Ports Authority – Six (6) have been produced thus far.
 - Workboat ferries tender for the Navy.
 - Two Offshore diamond mining vessels that are now operating from Port Nolloth.
 - National Research Foundation's Research Vessel tender.
- ✓ **Other Highlights:**
 - Draft Maritime Transport Policy – approved by Cabinet; consultations under way.
 - Four ships registered on South Africa Ships register.



PORT OF DURBAN: DRY DOCK CAISSON



THE DORMAC SHIP-REPAIR FACILITY AT THE PORT OF DURBAN



SOUTHERN AFRICAN SHIPYARDS – TUGBOATS MANUFACTURING - PORT OF DURBAN



DORMAC FLOATING DOCK FACILITY





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



BURGAN CAPE TERMINALS FUEL STORAGE FACILITY – PORT OF CAPE TOWN



PORT OF SALDANHA -



Offshore Oil and Gas

High Impact Indicators

GROWTH TARGET: GDP contribution of R129 bn to R177 bn by 2033 with 800 000 to 1 million jobs created

OFFSHORE OIL & GAS EXPLORATION

Status (2010)

GDP contribution of R4 bn (oil and gas refining)

2019 Target

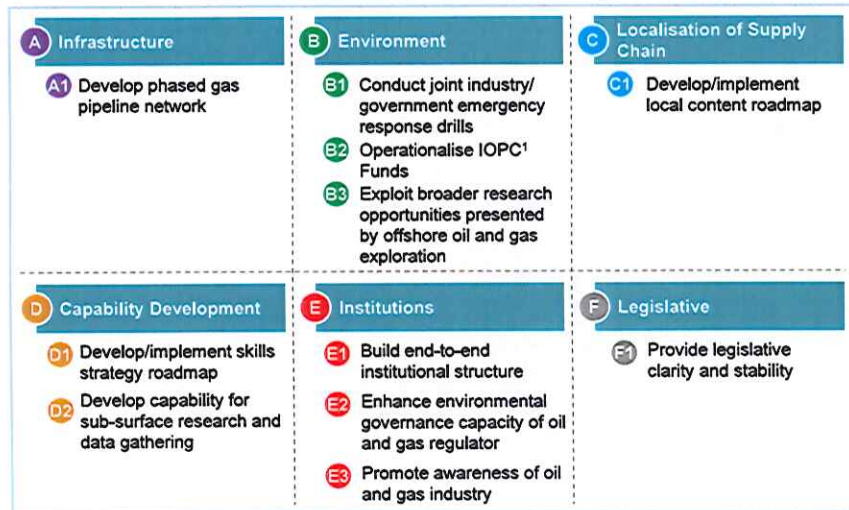
N/A
Aspiration: To drill 30 exploration wells over 10 years

DMR, DOE, DEA, DHET, DIRCO, NT, DTI, DST, EDD, DOL

Challenges

1. Infrastructure
2. Environmental impacts
3. Local supply chain
4. Institutional arrangements
5. Legislative clarity

Key Interventions



PHAKISA 148



OFFSHORE OIL AND GAS EXPLORATION HIGHLIGHTS

The Department of Environmental Affairs, Department of Energy and Department of Public Enterprises have entered into a **co-funding agreement to fund the Strategic Environmental Assessment for the phased gas pipeline network.**

Currently 14 Exploration Rights in place; 6 Production Rights; 2 Technical Co-operation Permits.

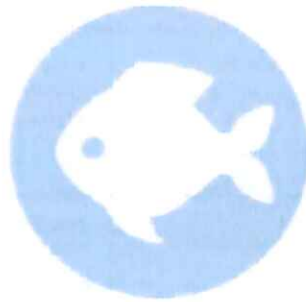
Joint industry-government emergency response team and the Incident Management Organisation (IMO) established.

The International Oil Pollution Compensation (IOPC) Fund is being operationalized – all matter shave been resolved.

The South African Marine Research and Exploration Forum is established jointly with industry.

The Petroleum Agency of South Africa (PASA) had been transfered to the Department of Mineral Resources in order to establish an **end-to-end institutional structure one-stop shop.**

Finalisation of the Mineral Petroleum Resources Development Amendment Bill before Parliament, will increase investor confidence in the oil and gas sector.



Aquaculture

High Impact Indicators

GROWTH TARGET: GDP contribution of R129 bn to R177 bn by 2033 with 800 000 to 1 million jobs created

AQUACULTURE

Challenges

1. Insufficient primary infrastructure
2. Research and Development fragmented
3. Lack of access to quality inputs
4. Lack of inclusivity
5. Unsupportive legislative and regulatory environment
6. Limited access to land and sea
7. Access to finance
8. Small pool of skills and knowledge
9. Limited accessibility to markets

Status (2010)

GDP contribution of R0.7 bn
No. of jobs: 2 227

2019 Target

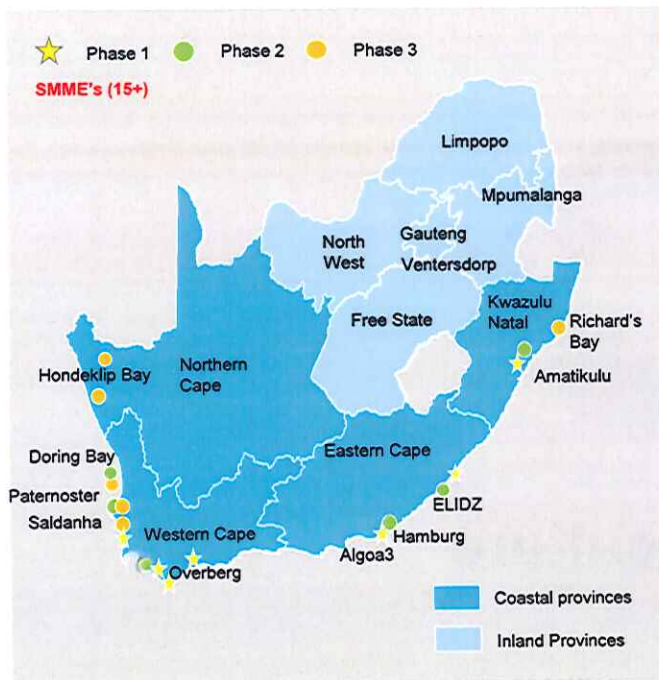
GDP contribution of R3 bn.
No. of jobs: 15 000

DAFF, DEA, DST, DHET, DPW, DRDRL, DSB, DIRCO, DTI, NT, DPE, DSBD, DOW, DOH, DOL

Key Interventions



LOCATION AND SPECIES OF 24 ORIGINAL AQUACULTURE PROJECTS



Original 24 Projects

- ★ Hatchery expansion- Paternoster- Oyster
- ★ Expansion- Hamburg cluster- Oyster
- ★ Expansion - Roman Bay – Abalone
- ★ Expansion - Abagold
- ★ Expansion - HIK Abalone
- ★ Expansion - Amatikulu - Ornamentals
- ★ Expansion - Wild Coast Abalone - Abalone
- New- Wild coast abalone ranching cluster - abalone
- New- Hamburg cluster - Kob
- New- Saldanha Molapong Cages - Trout and Salmon
- New - Amatikulu - Kob
- Expansion - Marine Growers - Abalone
- Expansion - Doring Bay Abalone - Abalone
- Expansion- Saldanha Blue Ocean Mussels - Mussel
- Expansion- Saldanha Bay Oyster Company - Oyster
- New- Richards Bay Sea Cage Farming - Dusky Kob
- New- Diamond Coast Abalone Ranching - Abalone
- Expansion - DST Abalone Hatchery
- Expansion - Jacobsbaai Sea Products - Abalone

5 projects moved onto business opportunities

Venterdorp catfish, ADZ Venterdorp, Algoa Bay Yellowtail, Oceanwise ELIDZ and Southern Atlantic

AQUACULTURE PROJECTS HIGHLIGHTS

Aquaculture focus area exceeded expectations - **thirty six (36) aquaculture projects.**

Ten projects in production phase with Private sector investment of R338 million and Government investment of R106 million - 521 realised and committed jobs. The projected increase in production related to investment is 2901 tons – a 175 tons increase in the first year of Operation Phakisa (94% of target).

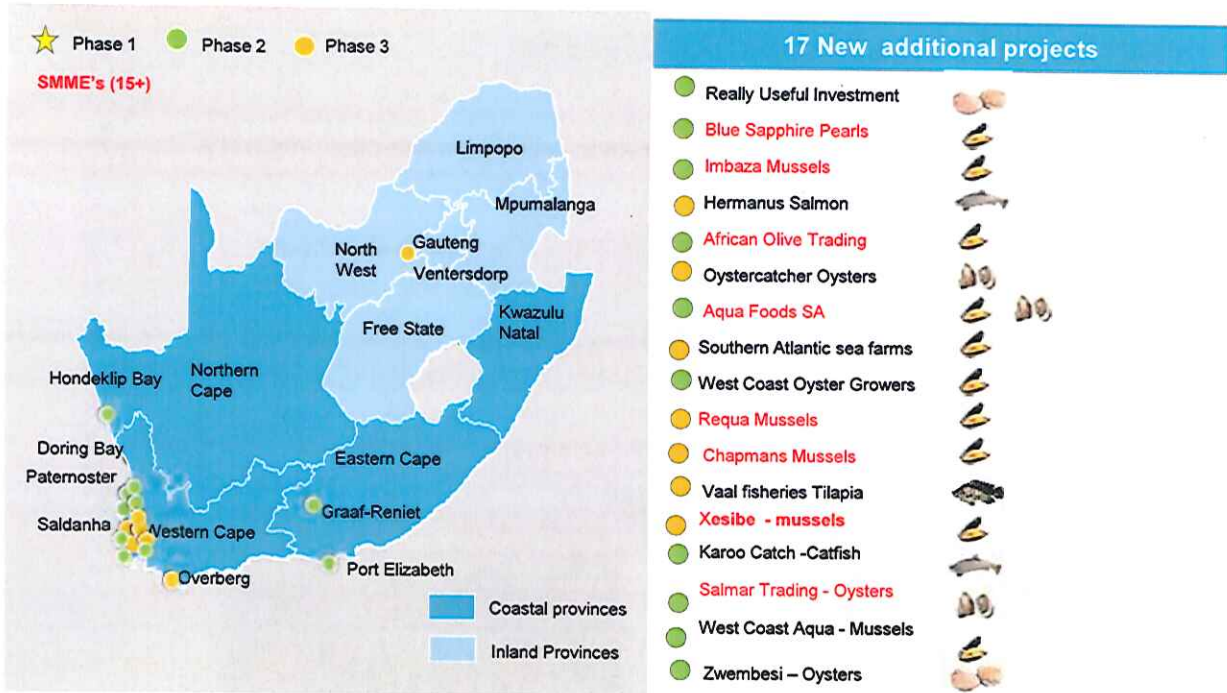
Richard's Bay sea cage kob farming with the deployment of the first four cages.

Hamburg kob farming (Eastern Cape), employing 21 people with the capacity to produce 20 tons of dusky kob per annum.

Siyazama Trust has already sold its first harvest to the Cape Town Fish Market at the V&A Waterfront in Cape Town.



LOCATION AND SPECIES OF 17 NEW AQUACULTURE PROJECTS



Highlights



HAMBURG – KOB FARM IN EASTERN CAPE

Project Highlight

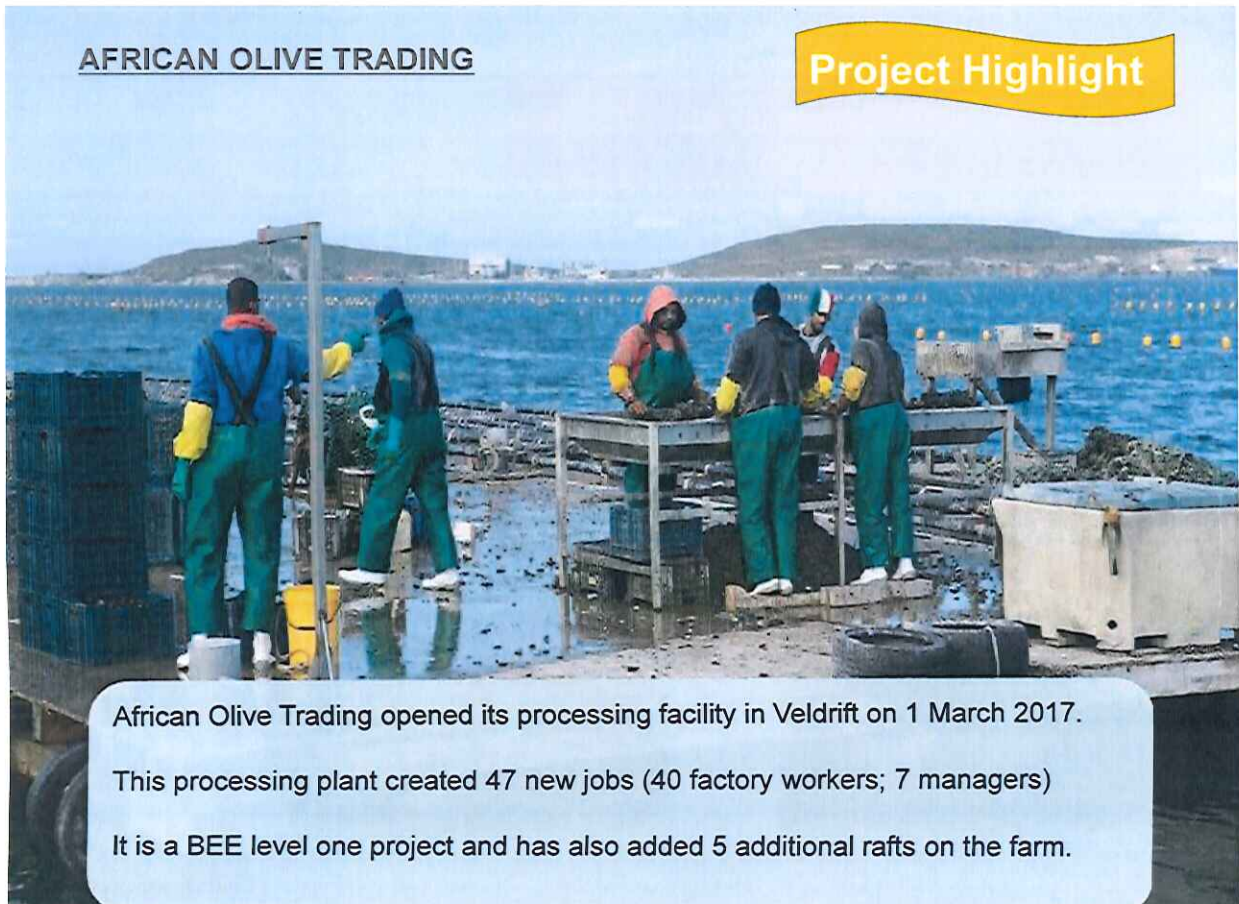
Since Operation Phakisa this DAFF driven project has:

- 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.



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.

MARINE GROWERS

Project Snapshot

Marine Growers is a Level 2 B-BBEE Abalone Farm in Gansbaai
- Owned by Premier Fishing and produced around 100 tons of abalone.

Environmental Authorisation to expand to 300 tons.

Pioneered the use of solar power on abalone farms and now recuperates over 50% of its power consumption through solar energy.



AQUACULTURE PROJECTS HIGHLIGHTS

The Aquaculture Bill is currently before NEDLAC.

The Strategic Environmental Assessment for Aquaculture is in its second phase with the first level screening being analysed.

The **Aquaculture Interdepartmental Authorisations Committee** is operational.

working towards reducing timeframes for **authorisations from 830 days to 240/360 days.**

The issuing of long-term (15-year) leases for Aquaculture facilitates investor confidence and grow the sector.

Department of Agriculture, Forestry and Fisheries (DAFF) and the NRCS (National Regulator for Compulsory Specifications) entered into an agreement to certify fish and fish products. The SANS (South African National Standards) for bivalves have been finalised and gazetted in April 2016, an important step in order export the product.





Marine Protection Services and Ocean Governance

High Impact Indicators

GROWTH TARGET: GDP contribution of R129 bn to R177 bn by 2033 with 800 000 to 1 million jobs created

MARINE PROTECTION SERVICES & OCEAN GOVERNANCE

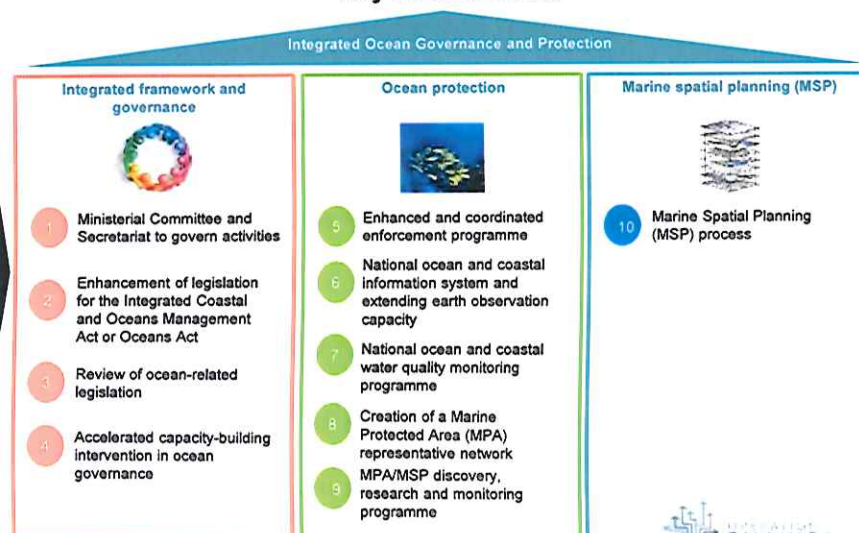
Status (2010)	2019 Target
N/A	N/A

DEA, DOD, DHA, DAFF, DHET, DIRCO, NT, DST, DOH

Challenges

1. Uncertainty of roles & responsibilities
2. No institutional framework
3. Coordination of departments and enforcement
4. Lack of adequate skills
5. Need to improve compliance monitoring
6. Limited human and financial resources
7. Multiple information sources
8. Un-surveyed oceans - information

Key Interventions



MARINE PROTECTION SERVICES AND OCEAN GOVERNANCE HIGHLIGHTS

Integrated Ocean Governance and Protection

Integrated Framework & Governance



1. Oceans Economy Secretariat

- Established to ensure support to implement the Oceans Economy.

2. Draft Marine Spatial Planning Bill

- Intention to introduce the bill into parliament was published on 28 March 2017.
- Call for submission of written comments to the DEA portfolio committee was also subsequently published on 28 May 2017 and the last date for submissions is 19 June 2017.

Marine Spatial Planning



10. National Framework on Marine Spatial Planning

- The National Framework on Marine Spatial Planning has been approved by the Minister and has been gazetted on 26 May 2017.
- The development of regional and sub-regional Marine Spatial Management Plans has to follow suite as initial activities of implementation of the Framework.

MARINE PROTECTION SERVICES AND OCEAN GOVERNANCE HIGHLIGHTS

Integrated Ocean Governance and Protection

Ocean Protection



5. Enhanced and Coordinated Enforcement Programme

- Joint operations undertaken in KZN during the period 01-22 June 2017.
- Notably is: confiscations of: 3000 units of black mussel, 2x 4x4 Vehicles, 4x cell phones, A recovery of a homemade rifle with 6 rounds, 6 case dockets registered, 8 fines issued, 5 arrests with 12x pre-compliance notices served.

6. Ocean and Coastal Integrated Management System

- beta version (test version) is accessible by project staff and will be demonstrated at the annual user workshop in October 2017.
- The Integrated Vessel Tracking (IVT DeST) is exceeding expectation and is already used to assist with some activities of Initiative 5: (Enhanced and Coordinated Enforcement Programme) which include vessel tracking and early warnings.
- The Harmful Algal Bloom HAB (HAB DeST) preliminary site for Beta version was released to DAFF and Aquaculture community. This DeST will allow for early warnings for the Aquaculture and Rock Lobster industries



Small Harbours Development

High Impact Indicators

GROWTH TARGET: GDP contribution of R129 bn to R177 bn by 2033 with 800 000 to 1 million jobs created

SMALL HARBOURS DEVELOPMENT

Status (2010)	2019 Target
N/A	GDP contribution of R6 bn. No. of jobs: 12 100

Challenges

1. Infrastructure in disrepair
2. Lack of maintenance, safety and security measures
3. Lack of investment
4. Lack of cohesive legislative and regulatory framework
5. Authority for Small harbour development

Key Interventions

<div style="background-color: #ADD8E6; padding: 2px; margin-bottom: 5px;">Institutional</div> <ul style="list-style-type: none"> ▪ Establishment of a Small harbours Development Unit. 	<div style="background-color: #ADD8E6; padding: 2px; margin-bottom: 5px;">New small harbours</div> <ul style="list-style-type: none"> ▪ Proclamation of new small harbours – harbour infrastructure, aquaculture, tourism.
<div style="background-color: #ADD8E6; padding: 2px; margin-bottom: 5px;">Infrastructure</div> <p>Critical infrastructure projects identified by DPW and DAFF to be undertaken within the 13 Proclaimed Fishing Harbours during 2015/16, followed up by preventative maintenance for the same over the next three (3) years:</p> <ul style="list-style-type: none"> • Repairs and upgrade of slipways; • Shore crane replacements; • Dredging of harbour basins; • Repairs to wooden jetty's; • Removal of sunken vessels; • Security installation and operations; and • Infrastructure repairs. 	

SMALL HARBOURS AND COASTAL DEVELOPMENT HIGHLIGHTS

Pre-Lab Process:

- The Department of Public Works has undertaken an extensive Pre-Lab process of consulting with all coastal Provinces and Municipalities.
- Initial development projects have been identified in all relevant municipalities and efforts are underway to match them to investors.
- A total of 70 coastal projects have been identified across the four coastal provinces with the number continuously increasing as new projects are identified.
- DPW further intends on convening four (4) provincial Investor Conferences in each coastal province respectively during the month of August 2017.

Lab Process:

- Lab process to be finalised during 2017/18.



Coastal and Marine Tourism

High Impact Indicators

GROWTH TARGET: GDP contribution of R129 bn to R177 bn by 2033 with 800 000 to 1 million jobs created

COASTAL & MARINE TOURISM

Status (2010)

An analysis to be conducted

2019 Target

Targets to be communicated following approval.

NDT, DHA, DEA, DPW, DHET, DIRCO, NT, DSBD, DOW

Challenges

1. Lack of tourism Infrastructure – facilities
2. Inadequate / lack of primary infrastructure – access roads, electricity.....)
3. Inadequate / lack of tourism services
4. Sustainability (impact on environment and infrastructure
5. Inter-governmental coordination
6. Inconsistency in municipal bylaws

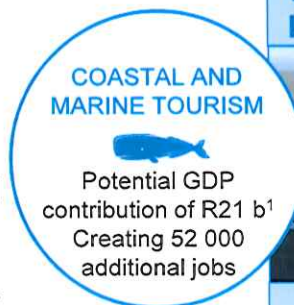
Key Interventions

Coastal and Marine Tourism Lab Focus:


- 1) Events and Routes
- 1) Beach Precinct Development and Enhancement (Infrastructure) and Tourism Safety
- 3) Regulations and Permitting
- 4) Data Collection and Research
- 5) Maritime Tourism and
- 6) Skills Development.

COASTAL AND MARINE TOURISM HIGHLIGHTS

- The Department of Tourism undertook a Lab process to develop detailed three-feet plans for marine and coastal tourism development opportunities in April/May 2016. Significant work was completed between May and December 2016 to finalise the three feet plans.
- Six key initiatives were identified:
 - 1) Marketing, Events and Routes;
 - 2) Beach Precinct Development and Enhancement (Infrastructure) and Tourism Safety;
 - 3) Regulations and Permitting;
 - 4) Data Collection and Research;
 - 5) Maritime Tourism; and
 - 6) Skills Development.



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 - HIGHLIGHTS

- The Coastal and Marine Tourism Lab had been completed.
- The implementation plans has been presented and supported by the Economic cluster to proceed to Cabinet for approval.
- Department has engaged and agreed with other departments on issues related to integration as follows:
 - Department of Arts and Culture – on creative industries and cultural heritage. Department of Agriculture, Fisheries & Forestry – Aquaculture
 - Department of Environmental Affairs – working together on issues related to permitting and licences for Boat based whale watching, White Shark cage diving and criteria for site identification for off road vehicles
 - Department of Water & Sanitation – on activities related to inland water ways
- Details of these integrated initiatives are included in the final submission to Cabinet
- Work is under way to support the Volvo Ocean Race to take place in Cape Town in November 2017, working with Victoria and Alfred Water Front, SAMSA and other stakeholders.



Skills Development and Capacity Building

SKILLS DEVELOPMENT AND CAPACITY BUILDING - HIGHLIGHTS

- A comprehensive skills needs audit for the Aquaculture sector has commenced.
- 12 placements for Aquaculture at DAFF for 2017
- 462 Apprenticeships recorded for Marine Manufacturing
- 581 Artisans trained
- 885 people trained on different skills programmes
- College of Cape Town providing Marine Engineering Workshop Training (9-months) for 40 CPUT students from Feb 2017
- Current enrolments at CPUT and DUT – 121 students and 388 students respectively
- Roadmap for cross-sector maritime research, innovation and knowledge management concluded; implementation by SAIMI underway
- 726 cadets enrolled on the National Cadet Programme since 2011
- Call for the DST/NRF/SAIMI Research Chair in Petroleum Geosciences and Engineering went out at the end of January 2017; closing date is 14 March 2017. Process underway to facilitate the establishment of 2 additional Research Chairs.
- SAIMI in the process of establishing a skills Working Group for Coastal and Marine Tourism.

CPUT: Cape Peninsula University of Technology; SAIMI: South African International Maritime Institute; NRF: National Research Foundation; DST: Department of Science & Technology; DUT: Durban University of Technology



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CHALLENGES

- Global and local economic climate has impacted on private sector investments.
- Lack of funding and partnerships in the private sector impacted on further and new investments.
- The low oil prices had a negative impact on the oil and gas sector and slowed down investments in this sector.
- The finalisation of policy and legislative instruments to attract investments.
- Lack of placement opportunities for experiential learning following training, especially seafarer and artisanal training.



**Thank you
Ngiyathokoza
Ke a leboha
Ke a leboga
Siyabonga
Ndo livhuwa
Enkosi
Ngiyabonga
Dankie**

