POLICY BRIEF //
GROWING A SUSTAINABLE OCEANS ECONOMY IN SOUTH AFRICA WHILE EXPANDING MARINE CONSERVATION

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### Key Messages

**Strategic Areas of Focus for the Marine and Coastal Sector**

1. **Unlock funding for protection** of marine (and terrestrial) ecosystems at scale, including blue carbon and soil carbon opportunities.

2. **Work collaboratively with small scale producers/fishers** to enhance sustainable oceans economy-based value chains, for example cold storage.

3. **Develop enterprises and skills** aligned to youth employment, as well as terrestrial and marine biodiversity enhancement, for example mariculture.

4. **Implement integrated approaches to marine and terrestrial protection at scale**, that support environmental, economic and social needs of an area.

5. **Develop innovative funding models**, for example conservation levies, that support economic development through environmental protection.

6. **Develop alternative livelihood opportunities** to reduce pressure on ecosystems.
Healthy oceans sustain life on earth and drive sustainable ocean economies.

Healthy oceans provide food security, sustain economic growth, provide livelihood opportunities for coastal communities and regulate the climate. South Africa’s oceans and coasts offer a huge opportunity for economic development, which could reduce poverty and unemployment; however, this must be done in a way that also conserves ocean health and coastal ecosystems, to ensure a sustainable ocean economy. So far, the country has not taken full advantage of this potential of the untapped vast ocean resource.

There is a need to protect and manage our oceans and to integrate these protections with economic development that benefits local actors. To achieve this, decision makers need to understand the full spectrum of co-benefits and costs from nature conservation to make informed decisions and understand tradeoffs.

**BOX: Blue Carbon**

Although seagrasses account for less than 0.2% of the world’s oceans, they sequester approximately 10% of the carbon buried in ocean sediment annually (27.4Tg of carbon per year). Per hectare, seagrasses can store up to twice as much carbon than terrestrial forests [1]. In South Africa, saltmarshes cover 14 700 ha and 67% of South Africa’s blue carbon is stored in saltmarshes [2][3][4].

An example: In South Australia it has been estimated that the economic contribution of seagrass habitats to secondary production in the gulf waters (including Spencer Gulf) is $114 million per year. It is estimated that the economic cost of a 16% decline of seagrass was $235 000 per year [2].

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3 billion people globally rely on fish or seafood as a daily source of protein [5]

$3-6 trillion per year of goods and services globally [6] and in South Africa provides 35% of GDP [7]

50x more carbon absorbed than the atmosphere – 30% of carbon emissions [8]

60 million people worldwide employed by fisheries sector [9]

Unfortunately, unsustainable use of oceans and coasts is undermining ocean health and long-term economic development. Despite their national importance and global significance, marine and coastal ecosystems across South Africa are being degraded at an accelerating rate. Threats occur from unsustainable development, pollution, shipping and exploitation by destructive fishing practices.
Climate-related disasters tripled in the last 30 years, which is threatening the ocean economy and ecosystem. In South Africa, climate change is affecting fish species and their availability in certain areas and storm surges have caused coastal damage.

39% of fish stocks in South Africa are of concern based on fish stocks and fishing pressure [10].

Over 95 alien marine species are in South African waters, and 56 species are invasive [4].

Marine and coastal policies and regulatory frameworks are interconnected, and user conflicts are increasing. This limits the ambitions of ocean economy objectives and the conservation of the marine and coastal ecosystems on which they depend.

Yet, there is an opportunity for coordinated management of oceans and coasts to optimise sustainable economic and environmental investment, through the review of national policies such as the National Biodiversity Strategy and Action Plan (NBSAP) and Marine Sector Plans, to name a few.

Fisheries production and aquaculture in South Africa can be enhanced by 28.5% by 2030 [9]. Studies show that fishery stocks are being rebuilt, reversing previous declines on average [11].

South Africa’s Oceans Economy Programme estimates that oceans and coasts can potentially contribute up to R177 billion to the GDP (~$400 billion) and create up to one million new jobs by 2023. Through proper planning and public-private partnerships, investment can be unlocked based on the sustainable management and protection of its natural and cultural heritage.

South Africa’s ocean policy objective is to develop the oceans economy while protecting the integrity of coastal and marine ecosystems. This could allow a shift from sectoral to coordinated management of oceans and coasts — that optimises sustainable economic and environmental investments and enhances social and ecological resilience, ultimately improving the ability of ecosystems to provide vital services to people.

**BOX: Benefits of protection**

An example of the benefits of marine protection is the Goukamma Marine Protected Area (MPA), Eastern Cape Province, South Africa. Researchers found that after ten years of being protected, the catch per unit of effort rate (a measure of the economic efficiency of fishing effort) had doubled in the MPA. In areas further away from the MPA, the catch rate remained constant, meaning the MPA led to an increase in total fish yield.

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GROWING A SUSTAINABLE OCEANS ECONOMY: SALDANHA BAY CASE STUDY

3.1 RATIONALE FOR CASE STUDY / A case study on Saldanha Bay Local Municipality, Western Cape Province, South Africa was developed to recognise the opportunities provided by the oceans economy. The oceans economy is made up of goods and services provided by marine and coastal ecosystems and activities that generate money from it [12]. The case study aimed to understand how to enhance the marine and coastal ecosystems upon which the oceans economy depends. The contribution of marine and coastal ecosystems to local industry and economic growth is significant, but their protection is not a key priority for all stakeholders - not even for some who need them to thrive over the long-term.

3.2 WHAT THE AREA HAS TO OFFER / Langebaan Lagoon is the only non-estuarine lagoon in South Africa - a body of ocean water enclosed by a barrier that does not have a river flowing into it. It is replenished by aquifers and fed by one of the most nutrient rich ocean ecosystems in the world, the Benguela Current. In 1988, the Lagoon was declared a Ramsar site - a wetland site of international importance particularly as habitat for waterfowl.

The Lagoon supports thousands of migrant birds seasonally, has rich marine fauna and is home to South Africa’s most endangered marine mollusc (Siphonaria compressa) which occurs in the eelgrass beds. It contains a significant amount of South Africa’s saltmarshes (32%) [13] and seagrasses (60%) [3].

To maintain the integrity of the marine and coastal ecosystems and manage the use of it effectively, most of the Lagoon was declared a Marine Protected Area (MPA). An MPA allows for sustainable activities to continue, such as recreational and subsistence fishing and tourism, while also protecting other zones to maintain biodiversity and healthy ecosystems in the lagoon.

The Lagoon is next to Saldanha Bay, a major producer of mussels and oysters. In 2020-21 the Port contributed R1.1 billion to the GDP and supported 1 960 jobs. The Freeport Saldanha Industrial Development Zone (IDZ), is the first Special Economic Zone (SEZ) to be located within a port and is the only sector-specific SEZ in South Africa catering to the energy and maritime industries specifically. Its location at the southernmost tip of Africa, in the largest and deepest (23m draught) natural port in the southern hemisphere means that it is the perfect place to accommodate and service a wide range of vessels. It is ideally situated to service East and West African sea traffic, providing a linkage point for both African and international markets.

MAP on the left: Marine Protected Areas in and around Saldanha Bay, the West Coast National Park and Langebaan Lagoon.
BOX: Industrial Development Zone

Between 2017 and 2022 the SBDIZ attracted over **R21 billion** in investments. The SBDIZ is considering how to integrate nature into its growth plans. The SBDIZ is one of the largest opportunities in the Saldanha Bay Local Municipality since it is still under development and could provide sustainable economic development opportunities that are environmentally sound.

3.3 WHAT THREATENS THE AREA / The increasing vulnerability of the marine and coastal ecosystems to large-scale change is due to human activities, including pollution, bottom trawling, and coastal developments. Poor management such as overfishing and freshwater abstraction threaten the Lagoon. Climate change is exacerbating these impacts and is not being adequately considered in policy, planning and development.

More than **25** alien marine species occur in the Lagoon, **90% of which are invasive** and have been brought into South Africa mostly through shipping. Most of them are contained in harbours, but many are spreading into marine and coastal ecosystems and their long-term impact is not yet fully understood.

Other threats are a low skills base, unemployment and an expanding informal sector. The unemployment rate in Saldanha Bay Local Municipality at the time of the 2011 census was **23.4%**. Threats are also caused by increasing conflicts with reduced quotas, which are largely skewed against small-scale fishers. Small-scale fishers believe that if they were included in decision-making processes on fishing rights and management of (their) marine resources, they would practice sustainable fishing and improved fisheries management.

The West Coast National Park is experiencing challenges with management of the Park. These include inadequate staff, lack of equipment and inadequate funding. Consequently, monitoring, control and surveillance activities are not adequately undertaken.

3.4 OPPORTUNITIES FOR OPTIMISING CONSERVATION AND THE OCEANS ECONOMY THAT EMERGED FROM THE CASE STUDY / The case study found that there is no explicit link between the development of South Africa’s oceans economy and conservation of marine resources in the area, but that there are many opportunities for optimising these links by implementing the following:

1. **Guide environmental policy such as the National Biodiversity Strategic Action Plan (NBSAP) and investment incentives** to align with biodiversity, environmental protection, and climate change.

2. **Enhance national targets for protection while increasing jobs and economic development**, in an interconnected way. One way to achieve this is through a seascapes approach. As defined by Conservation International, a seascapes approach builds coalitions among government, private sector and civil society to harmonise sustainable use and protection of marine and coastal ecosystems.

3. **Prioritise entrepreneurship**, for example, in waste management, tourism and renewable energy to create jobs and business opportunities that support environmentally sound blue economic development and create alternative economic opportunities that can enhance fisheries value chains or take pressure off fisheries such as aquaculture.

4. Aligning municipal growth with local development plans and growing the skills required to attract new investments and industries.

5. **Engage small-scale fishers** through conservation agreements, where incentives such as market access are provided in exchange for sustainable fishing. This could build off platforms such as **Abalobi**.
**6** Identify and unlock blue carbon opportunities through the protection of saltmarshes and seagrasses that Langebaan Lagoon holds as well as other algae and kelp species.

**7** Match ambition for economic development with ambition for protection to ensure a sustainable economy and long-term protection of marine and coastal ecosystems on which the economy depends.

**8** Explore improved financial sustainability as well as identify and secure innovative funding by integrating terrestrial and marine protected areas into the local and regional economy. For example, industry pays for protection of the marine and coastal ecosystem.

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**REFERENCES**


[5] The Financial (2020). More than 3 billion people rely on the ocean for their livelihoods. Available at: https://finchannel.com/more-than-3-billion-people-rely-on-the-ocean-for-their-livelihoods/


[11] Hilborn et al. (2020) assessed 882 fishery stocks worldwide (major stocks in the Americas, Europe, South Africa, Australia, New Zealand, Peru, Chile, Japan, the Russian Federation, the Mediterranean and Black Sea, and Northwest Africa


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**Technical Partners**

**Learning Partners**