

“Waste not Want not”

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African Marine Waste Conference 2017

“The Ocean Economy is Everybody’s Business”



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Changes that have impacted on the ocean economy



NELSON MANDELA BAY
MARITIME CLUSTER



"Water and air, the two essential fluids on which all life depends, have become global garbage cans."

Jacques Yves Cousteau



Uninhabited Henderson Island is covered in 38 million pieces of trash



A remote uninhabited island in the middle of nowhere has a huge plastic pollution problem. How is this possible?



Call for a Blue Economy



- The UNEP Report “Green Economy in a Blue World” (2012) called on contracting parties to intensify their efforts to curb marine pollution from land-based sources, such as mercury, persistent organic pollutants and marine litter, by adopting legally binding measures; and to reduce pollution from offshore and marine-based activities through regional action plans.



African Ministers Stress Climate-Smart Ocean Economies



At the AU conference convened in Balacaclava, Mauritius, from 1st – 2nd September 2016, **African Ministers** adopted a communiqué that emphasizes the importance of building **climate-smart ocean economies** for sustaining the lives of millions of Africans.

During the conference **participants discussed priority action areas for Africa** such as coastline integrity, fisheries and aquaculture, renewable energy, ports and shipping, tourism, marine spatial planning, low-carbon growth and long-term sustainability, natural capital accounting, the establishment of centers of excellence, the **costs of pollution and degradation**, capacity building and finance.



The Ocean Economy



- The value of the ocean's riches rivals the size of the world's leading economies, but its resources are rapidly eroding, according to a report released by WWF.
- The report, *Reviving the Ocean Economy: The case for action - 2015*, analyses the ocean's role as an economic powerhouse and outlines the threats that are moving it toward collapse.



The Ocean Economy



The intrinsic value of key ocean assets is conservatively estimated in the WWF report to be at least **US\$24 trillion**.

If compared to the world's top 10 economies, **the ocean would rank seventh** with an annual value of goods and services of **US\$2.5 trillion**.



South Africa's Ocean Economy



- The focus of the Operation Phakisa initiative is primarily to unlock the economic potential of South Africa's oceans.
- 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 Intervention Areas

1



Marine Transport and Manufacturing

2



Offshore Oil and Gas Exploration

3



Aquaculture

4



Marine Protection Services and Ocean Governance

5



Small Harbours Development

6



Coastal and Marine Tourism



Skills Development and Capacity Building
Research, Technology and Innovation

Focus Areas

Enablers

Coastal Tourism



- 82% of all nations border the world's oceans and seas.
- 80% of all tourism takes place in coastal areas.
- 60% of the world's population reside within 60 km of a coastline. This is expected to grow to 80% by 2020.
- It is estimated that coastal and marine tourism in South Africa has the potential to contribute R24 billion to GDP creating 52,000 jobs.



Vision for CMT in South Africa



“By 2030 South Africa is the premier experience-based coastal and marine tourism destination in Africa and is renowned as a top coastal and marine tourism destination globally with a unique range of experiences for all visitors”



Contribution of Coastal Tourism



- 12 out of the 15 top tourist destinations worldwide are countries with coastlines.
- Beaches in the US Coastal States generate 85% of total tourist revenue in those States.
(James R. Houston, the economic value of beaches 2009)
- Coastal and marine tourism in the Eastern Cape Province of South Africa generates 53% of total tourism *(independent research)*



Top 10 Coastlines in Length



Country	Length of Coastline
Canada	202,080 km
Indonesia	54,716 km
Greenland	44,087 km
Russia	37,653 km
Philippines	36,289 km
Africa	32,000 km
Japan	29,751 km
Australia	25,760 km
Norway	25,148 km
United States	19,924 km
GLOBAL	356,000 km



SA's Share of the Ocean Economy



- Africa has nearly 10% of the world's 356,000 km of coastline in length.
- SA has nearly 10% of Africa's 32,000 km of coastline.
- SA has nearly 1% of the world's 356,000 km of coastline in length.
- The continent of Africa has huge potential to increase its share of the ocean economy.



What is the cost of ocean pollution?



Cost of Pollution



- It is estimated that there are **5.25 trillion** pieces of plastic trash in the world's oceans.
- According to researchers plastic ocean pollution costs **\$13 billion a year**.
- The total environmental damage from plastic use is estimated at **\$75 billion a year**.
- In the US cleanup costs are staggering. California, Oregon, and Washington alone spend an estimated **\$500 million a year removing waste** from the Pacific coastline.



GAIA: An Atlas of Planet Management



*“The condition of the oceans and the ecological state of the marine environment will ultimately determine the fate of planet earth. In this regard the **four vital ecosystems** for humankind and for all marine life forms are **salt-marshes, mangroves, estuaries and coral reefs**”*

(Norman Myers, 1985)



The 4 Vital Ecosystems are Threatened



Swartkops Estuary



Estuary Waste Pollution



The Blue Economy



“The importance of the Blue Economy to humankind cannot be underestimated. Over 70% of our planet is covered by ocean, 90% of the world’s trade in goods is conducted by sea. Oceans transcend states. They connect us all to each other. And we must harness these connections for development not just for enrichment. **We also need to ensure that the benefits from economic activity in our oceans translate into real benefits for our populations”**

Blue Economy Summit 19-20 January 2014

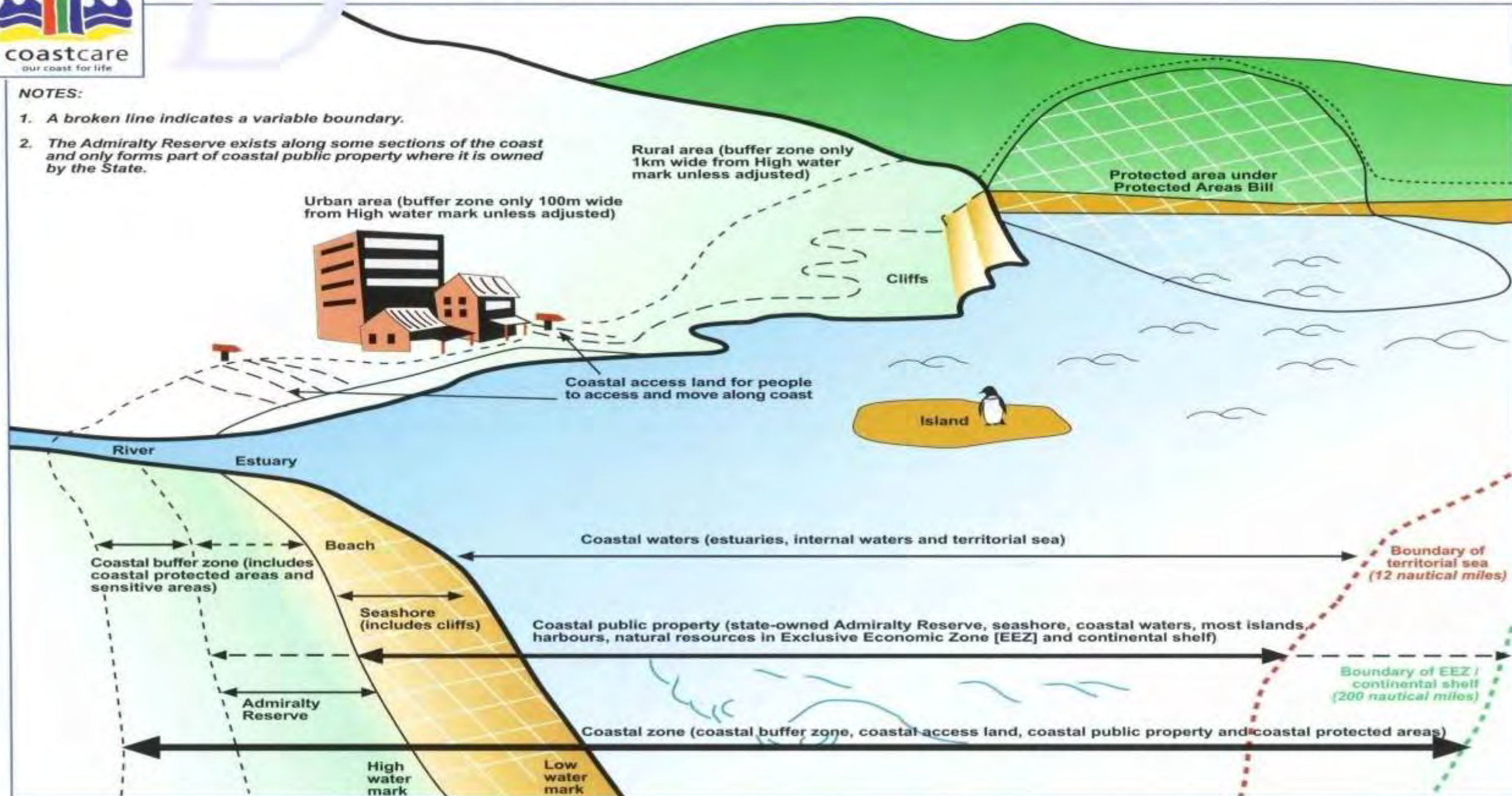




DEFINING THE COASTAL ZONE

NOTES:

1. A broken line indicates a variable boundary.
2. The Admiralty Reserve exists along some sections of the coast and only forms part of coastal public property where it is owned by the State.



Rural area (buffer zone only 1km wide from High water mark unless adjusted)

Urban area (buffer zone only 100m wide from High water mark unless adjusted)

Protected area under Protected Areas Bill

Cliffs

Coastal access land for people to access and move along coast

Island

River

Estuary

Beach

Coastal waters (estuaries, internal waters and territorial sea)

Coastal buffer zone (includes coastal protected areas and sensitive areas)

Boundary of territorial sea (12 nautical miles)

Seashore (includes cliffs)

Coastal public property (state-owned Admiralty Reserve, seashore, coastal waters, most islands, harbours, natural resources in Exclusive Economic Zone [EEZ] and continental shelf)

Admiralty Reserve

Boundary of EEZ / continental shelf (200 nautical miles)

Coastal zone (coastal buffer zone, coastal-access land, coastal public property and coastal protected areas)

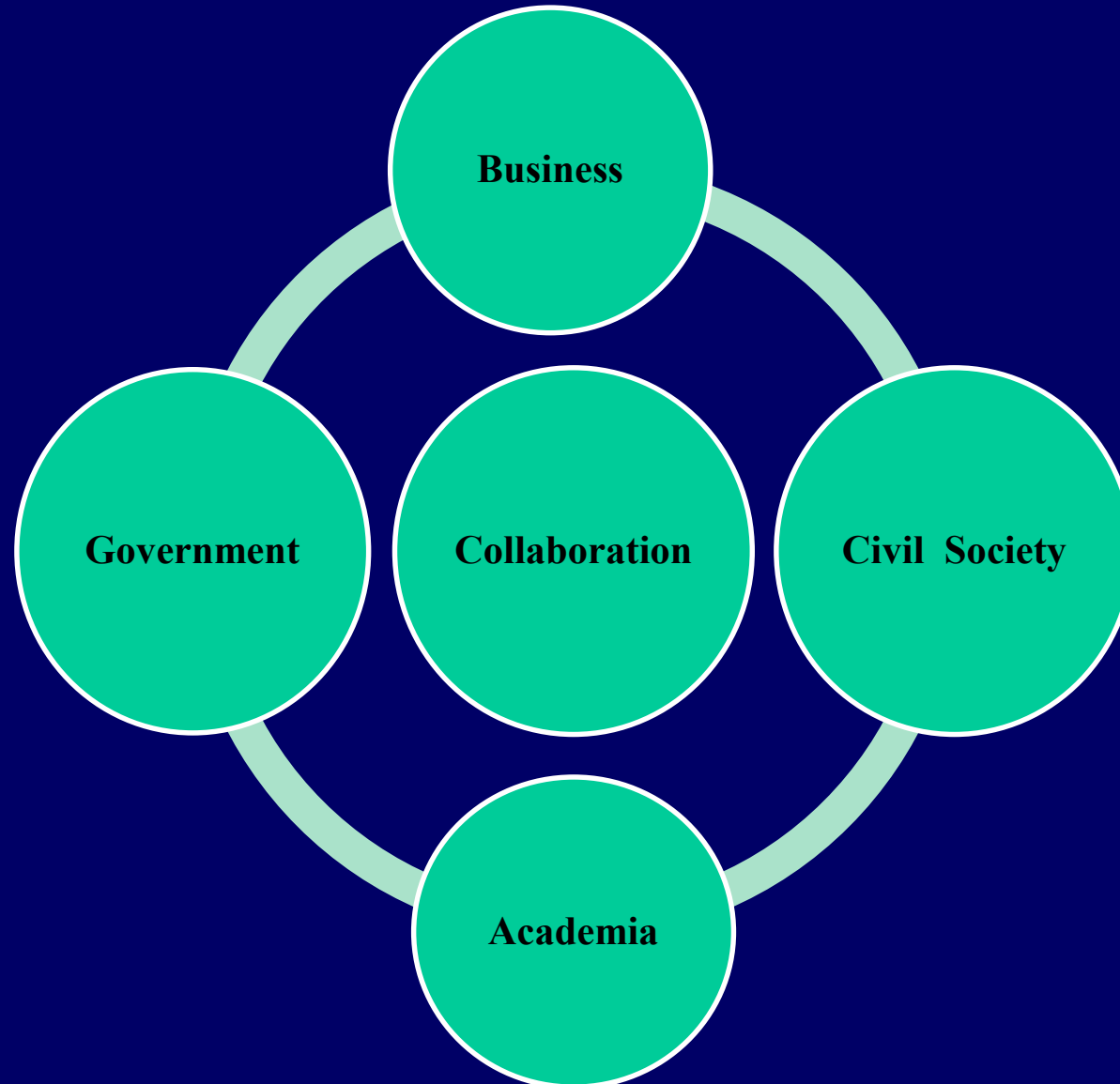
High water mark

Low water mark

Beyond Triple Helix



Adopt Quadruple Helix Model



Coastal Management Strategies



Coastal Management strategies can be divided into four main categories:

- Regulatory
- Physical
- Economic
- **Educational**



Beach Cleanup 1990



- Beach clean up Kini Bay 1990.
- Volunteers from Civil Society support a campaign to clean up the beaches.
- Tourism Port Elizabeth secured sponsorship from MNET to enable implementation.

MNET Sponsorship of beach cleanup



Plastic Waste



Public Participation Essential



WESSA Beach Cleanup 2017



Beach Cleanups can be Fun



A Sea of Plastic



Sweden Zero Waste

Population: 10 million Size: 450,300 km²



- **Wouldn't it be great if no household waste was wasted?** If each and every item of refuse was turned into something else – new products, raw materials, gas or at least heat?
- Sweden is almost there. **More than 99% of all household waste is recycled in one way or another.** This means that the country has gone through something of a recycling revolution in the last decades, considering that **only 38% of household waste was recycled in 1975.**



Recycling Stations

Today, recycling stations are as a rule no more than 300 meters from any residential area. **Most Swedes separate all recyclable waste in their homes and deposit it in special containers in their block of flats or drop it off at a recycling station.** Few other nations deposit less in rubbish dumps.



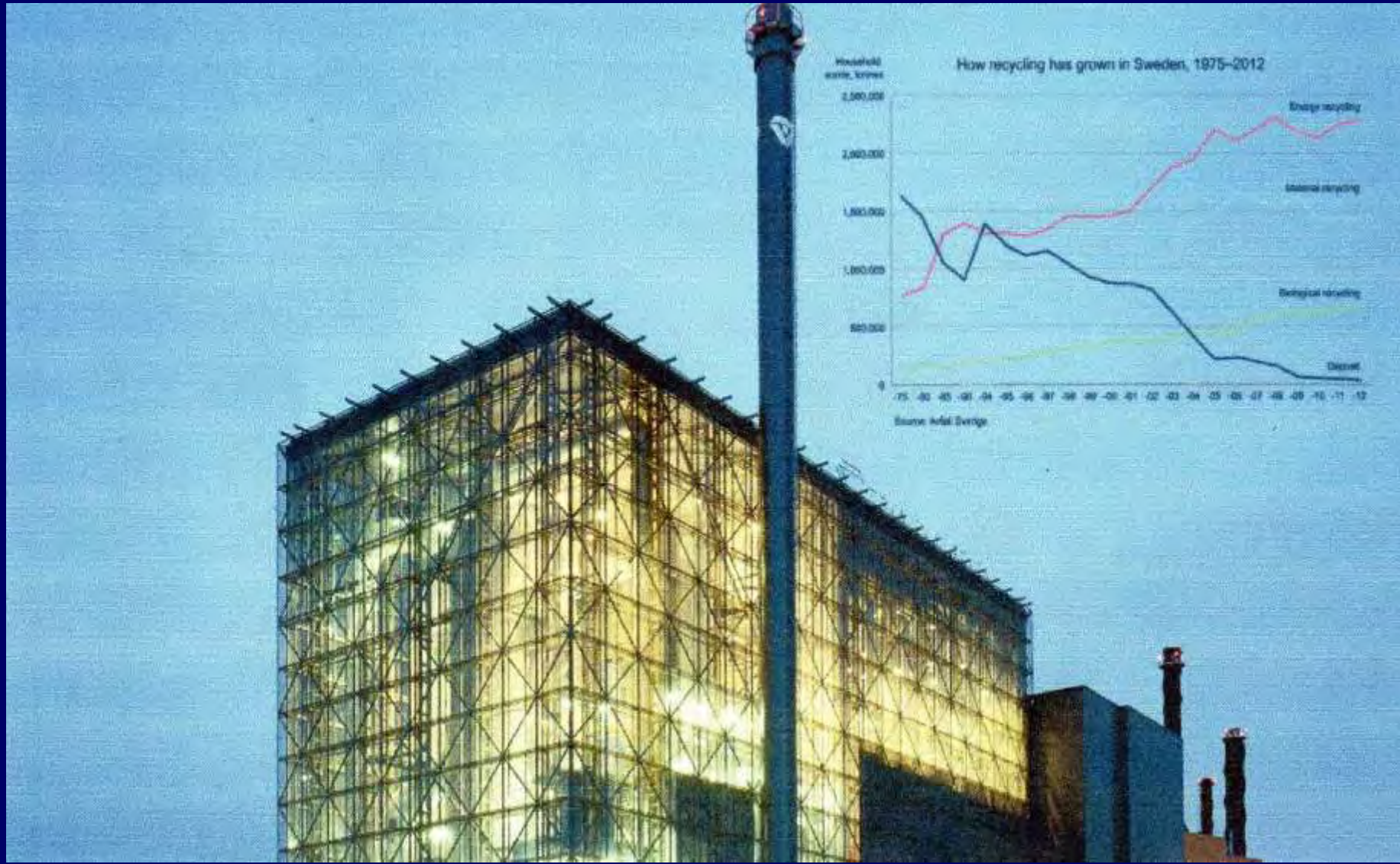
Facts about waste in Sweden



- **In 2015 nearly 2.3 million tonnes of household waste was turned into energy through burning.**
- **The same year Sweden imported more than 1.3 million tonnes of waste from, among others, Norway, the UK and Ireland.**
- The first incineration plant was set up in 1904. Today there are **32 plants.**
- **Heavy metal emissions have been reduced by 99% since 1985,** even though Sweden incinerates three times more waste today.



Incineration Plant - Waste to Energy



Companies Joining the Effort



- Some Swedish companies have voluntarily joined in the struggle. For example, H&M has begun accepting used clothing from customers in exchange for rebate coupons in an initiative called Garment Collecting.
- The Optibag company has developed a machine that can separate coloured waste bags from each other. People throw food in a green bag, paper in a red one, and glass or metal in another.



Private Sector Innovation



- Once at the recycling plant, Optibag sorts the bags automatically. This way, waste sorting stations could be eliminated.
- The southern Swedish city of Helsingborg even fitted public waste bins with loudspeakers playing pleasant music all in the name of recycling.



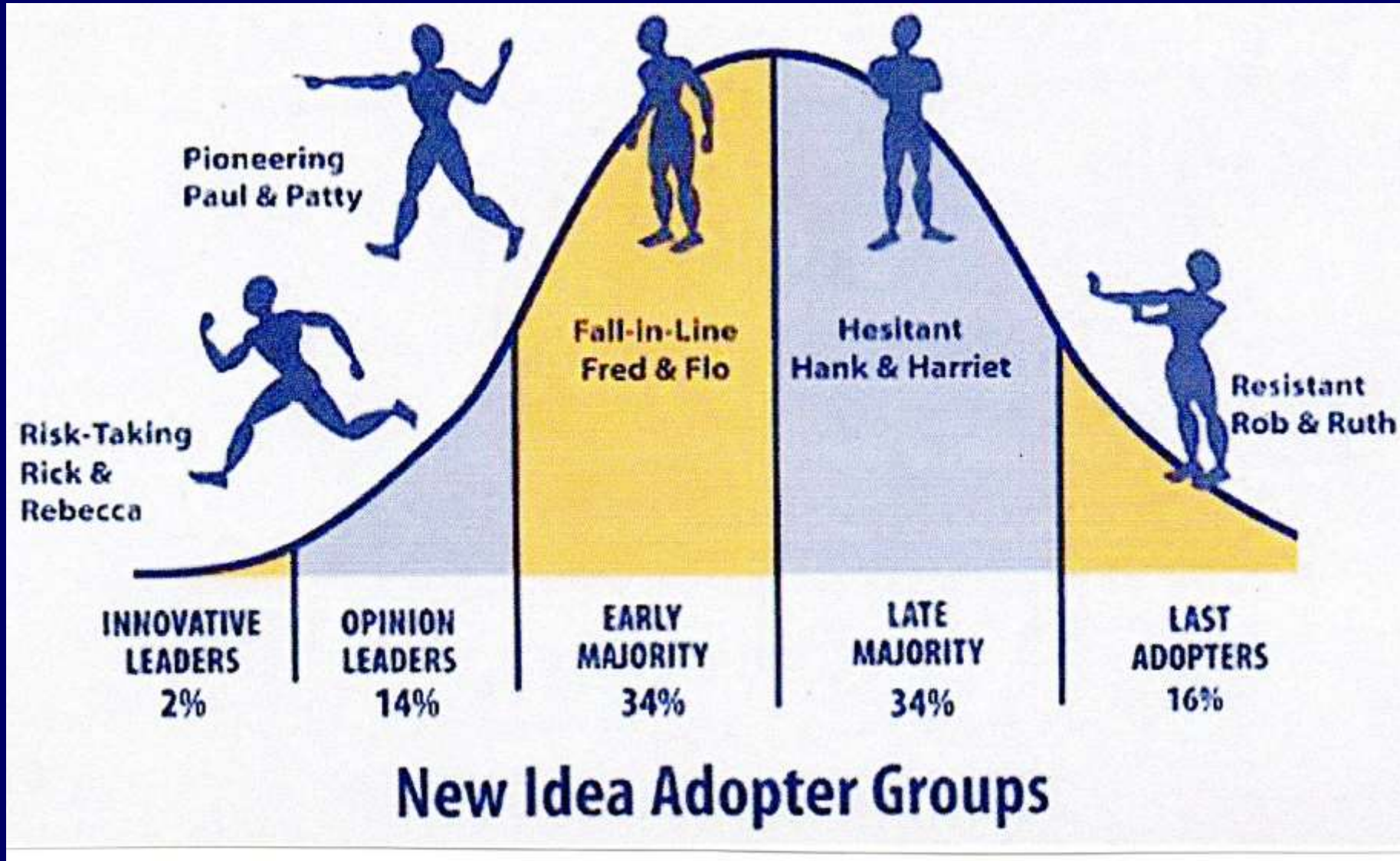
Way Forward for Africa



- We need to reward innovation.
- We need to incentivize waste collection.
- We need to publicize successful initiatives.
- We need to instil a sense of stewardship by issuing certificates of recognition to volunteers who participate in beach and litter cleanups.
- We need to target innovative leaders i.e. those companies that are trendsetters and others will follow.
- **A regional marine waste action plan for Africa**



We need to find Innovative Leaders



Green Coin Project

Greening the planet through public awareness and youth participation.



Green Pupils

- Pupils Competing amongst each other in groups
- Pupils receive green coins/vouchers (incentives), green educational tour/excursion,
- Recognition/Medals by NMB Municipality & Media





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An aerial photograph of a large, powerful ocean wave. The water is a deep, vibrant blue, and the crest of the wave is breaking into thick, white foam. The sun is visible in the upper right corner, creating a bright, shimmering effect on the water's surface. The overall scene is dynamic and captures the raw power of the ocean.

Thank You

“The Ocean Economy is Everybody’s Business”