



Africa Blue Economy Strategy

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Preface



The African continent is endowed with massive aquatic and marine resources including oceans, seas, rivers and lakes with potential for blue economy growth. The continent has 38 coastal states and a number of island states such as Cape Verde, Sao Tomé and Príncipe, Mauritius, Seychelles, Madagascar and the Comoros. Among these island states are Small Island States (SIDS) that are vulnerable to climate change and extreme weather events. Collectively African coastal and island states encompass vast ocean territories of an estimated 13 million km². These water bodies and wetlands are certainly of strategic importance to the continent and provide opportunities for fisheries, aquaculture, shipping, coastal tourism, offshore oil and gas energy mobilization and other blue economy related activities.

African Union (AU) recognizes the inherent challenges faced by its member states in realizing the full benefits from the various sectors of the blue economy; notably, the increasing menace of illegal fishing in the Exclusive Economic Zones (EEZ). This has resulted in massive loss of valuable catch conservatively estimated at \$10 billion USD annually. Sea piracy and illegal drug trafficking are serious challenges in the blue economy sector as these incidences of piracy pose a real threat not only to the safety of vessels and their crew but also to the economies of affected countries particularly in the Gulf of Guinea and South West Indian Ocean. Pollution through dumping of toxic wastes as well as indiscriminate discarding of single use plastics and environmental randomness also undermine the realization of Africa's Blue Economy Growth. It is now common knowledge that climate change and climate variability are already imparting on Africa's aquatic systems and food production overall. Underpinning these challenges are significant institutional and governance challenges that continue to constrain the ability of AU member states to effectively formulate and implement policies relating to growth of the relatively new blue economy concept. Moreover, many member states' environmental laws and policies are from the older generation when issues of the blue economy and climate change were absent from the development agenda.

The African Union recognizes these challenges and thus established a clear vision for the continent as encapsulated in the various pan African instruments and declaration; notably the Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS), the 2050 African Integrated Maritime Strategy (AIMS); 2016 Lomé Charter and above all the Africa's blueprint and master plan for transforming Africa into the global powerhouse of the future "Agenda 2063". African Union Agenda 2063 is the enduring pan African vision focusing on realising an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the global arena.

No doubt, the Sustainable Blue Economy Conference in November 2018 of Nairobi, Kenya was an eye opener to the challenges and opportunities for blue economy growth in the world, not least in Africa. The Nairobi Conference unravelled and made explicit the complexities involved in promoting sustainable blue economy development and therefore created impetus for the ongoing proliferation of initiatives around the world and within Africa. Africa's leaders committed to developing the Africa's Blue Economy Strategy following the Nairobi Conference. This commitment was premised on the rationale to develop a framework that would provide guidance or be a reference document to our AU member states, regional economic communities (RECs) and other regional institutions for the coherent formulation of national as well as regional blue economy strategies. As a testament to the commitment of African Union to exploit and fully tap the potential of Africa's aquatic resources, the African Union Commission (AUC) expanded the portfolio of the Department of Rural Economy and Agriculture (DREA) with the tasks to coordinate the development of blue economy growth in Africa and the African Union Inter-African Bureau for Animal Resources (AU-IBAR) was charged with the specific tasks to coordinate the formulation of the Africa Blue Economy Strategy.

I am delighted to note that the Africa Blue Economy Strategy, that has been developed, is comprehensive, all-inclusive and incorporates best international standards and practices in blue growth development as well as tailored to the needs and aspirations of the continent. The strategies for harnessing the opportunities in the diverse blue economy components are well articulated and informed. As clearly enunciated, the purpose of the AU initiative is to provide guidance to the AU member states and regional institutions for the development

of an inclusive and sustainable blue economy. Such an economy becomes a significant contributor to transformation and growth. This is possible through advancing knowledge on marine and aquatic biotechnology, environmental sustainability, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport, the management of fishing activities on these aquatic spaces, and the exploitation and beneficiation of deep sea mineral and other resources.

I am confident that this Africa Blue Economy Strategy has all it takes to significantly advance inclusive, integrated and sustainable socio-economic transformation of this continent. This is necessary for the present generation and those that will come after us. The Africa Blue Economy Strategy will foster strategic direction, prudent and effective utilization of our aquatic resources endowments for Sustainable Blue Economy Growth. In this regard, I wish to respectfully urge the AU member states and regional institutions to seize the opportunities presented by this Strategy for coherent formulation of their national and regional strategies as a significant step towards fulfilling the aspirations of our continent expressly enshrined in African Union Agenda 2063.

Let me take this opportunity to express my profound appreciation to the six consultants and the diverse categories of experts and stakeholders that contributed to the realization of this brilliant piece of work. My gratitude is also conveyed to the European Union and the African Union member states for the financial support towards the formulation of the Strategy. Lastly but not the least I wish to thank my staff at the Department of Rural Economy and Agriculture (in particular AU-IBAR) for the unrelenting effort to produce this document within a very tight schedule.

H.E. Ambassador Yosefa Sacko

Commissioner for Rural Development and Agriculture



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Acronyms

AfCTA	African Continental Free Trade Area Agreement
AIMS	African Integrated Maritime Strategy
AU	African Union
AUDA-NEPAD	African Union Development Agency/New Partnership for African Development
BE	Blue Economy
CBD	Convention on Biological Diversity
CC	Climate Change
DARBE	Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment
EEZ	Exclusive Economic Zone
EPA	Economic Partnership Agreement
FPV	Floating photovoltaic
GDP	Gross Domestic Product
IGAD	Inter-Governmental Authority on Development
IOC	Indian Ocean Commission
IORA	Indian Ocean Rim Association
IUU	Illegal Unreported and Unregulated Fishing
LME	Large Marine Ecosystem
MCS	Monitoring Control and Surveillance
MSP	Marine Spatial Planning
NAPA	National Adaptation Plan of Action
NDC	Nationally Determined Contributions
PFRS	Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa
PIDA	Programme for Infrastructure Development in Africa
PPP	Public-Private Partnership
R&D	Research and Development
REC	Regional Economic Committees
REDD+	Reduced Emissions from Deforestation and Land Degradation in Developing Countries
SADC	Southern African Development Community
SAPFA	Strategic Action Plan on Fisheries and Aquaculture

SDG	Sustainable Development Goals
SIDS	Small Island Developing States
SSA	Sub-Sahara Africa
STI	Science Technology and Innovation
TFE	Twenty feet Equivalent
UN	United nations
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
WSA	Watershed Approach

Foreword



There is a growing momentum to harness and utilize all the potential resources of the oceans, seas, rivers and lakes for the socio-economic emancipation of the African continent. The continent has a vantage geographical location being adjacent to some of the highly productive Oceanic and Sea environments such as the Atlantic Ocean, Indian Ocean, Red Sea and the Mediterranean Sea. These aquatic ecosystems present abundant opportunities for the African Union member states to participate in sustainable ocean (blue) economy by harnessing the potentials for improving productivity of the ocean environment, job creation, strengthening food and nutritional security, wealth creation opportunities and environmental sustainability toward sustainable blue economy development. The highly productive network of rivers and lakes, many of which are transboundary like; Lake Victoria, Lake Tanganyika, Lake Chad, Nile River, River Congo etc. also present avenues for blue economy growth in Africa.

Given the complexities associated with the governance of these water bodies and wetlands, a paradigm shift from the business-as-usual (or traditional ways of doing things) approach is needed to be able to fully amass the associated benefits in a sustainable manner for socio-economic emancipation and industrialization in Africa. However, despite the potentials benefits and opportunities associated with these aquatic resources, the resources of the oceans and inland waters are under serious threats due largely to governance and capacity issues as well as climate change and extreme weather events.

The Africa Blue Economy Strategy has been formulated to stand the test of time and is designed to guide and support the AU member states and regional institutions to effectively address the critical challenges to blue economy growth. Accordingly, the Strategy therefore lays out the priority actions for initiating actions to harness this potential and to maximize opportunities for a more evolved and effective blue economy in Africa. Noting that the blue economy has diverse components, the strategy focusses on five critical blue economy vectors, considered as thematic areas as follows;

- i. Fisheries, aquaculture and ecosystems conservation
- ii. Shipping, transportation and trade
- iii. Sustainable energy, extractive minerals, gas, innovative industries
- iv. Environmental sustainability, climate change and coastal infrastructure
- v. Governance, Institutions and social actions

The Africa Blue Economy Strategy is therefore a popular version consolidated out of the detailed thematic area reports that are annexes to the Strategy.

Importantly, the formulation of this Strategy recognized and took into consideration other African Union related instruments including the Africa Integrated Maritime Strategy (AIMS2050), Lomé Charter, and Policy framework and reform strategy for fisheries and Aquaculture in Africa etc. It is surmised that the implementation of all of these various AU instruments needs to be coordinated and harmonized to ensure realistic and sustainable impact on the African population. The Strategy also underscores that the governance and coordination of blue economy development is a cross-cutting area of intervention and thus a deliberate attempt is made to identify a nexus aimed at establishing mechanisms for coordinating the various blue economy components.

Thus in view of the multifaceted nature of blue economy concept, during the process of formulation of the Africa Blue Economy Strategy, collaboration was sought with sister AU Agencies including the Departments of Trade and Industry, Energy and Infrastructure, Division of the Environment of DREA and African Union Development Agency (AUDA)-NEPAD as well as development partners such as United Nations Economic Commission for Africa (UNECA), Intergovernmental Authority on Development (IGAD), Southern African Development Community (SADC). The Strategy also benefited from substantial experts' inputs from stakeholders in Africa and beyond who brought in both experiences and international perspectives to bear on the quality of the eventual product – The Africa Blue Economy Strategy.

Prof. Ahmed El-sawalhy

Director/Head of Mission, AU-IBAR

Acknowledgements

My profound gratitude goes to Her Excellency Ambassador Yosefa Sacko for her vision and foresight in initiating the process for the formulation of a Blue Economy Strategy for Africa immediately following the Global Sustainable Blue Economy Conference in Nairobi, Kenya 2018. I also wish to express appreciation to the Director of DREA, Dr. Godfrey Bahiigwa for the support and facilitating the process, the AUC Departments of Trade and Industry, Energy and Infrastructure and AUDA-NEPAD for their collaboration during the formulation of this Africa Blue Economy Strategy.

The technical collaboration of the Government of Seychelles during the formulation of this Africa's Blue Economy Strategy is also duly acknowledged. I wish to thank the consultants who prepared the Strategy; lead consultant Professor Pierre Failler for coordination and consolidation of the thematic areas; the thematic areas consultants Dr. Patrick Karani (Environmental sustainability, climate change and coastal infrastructure); Mr. Hachim El-Youbi (Governance, institutions and social actions); Dr. Asmerom Gilau (Sustainable energy, extractive minerals, gas and innovative industries); Dr. Hashali Hamukuaya (Fisheries, aquaculture and ecosystems conservation) and Mr. Serigne Diop (Shipping, transportation, trade and enforcement). I wish to sincerely thank the European Union and the AU member states for the financial support towards the formulation of this Strategy. Furthermore, on behalf of the African Union, I wish to express my deep sense of appreciation to the Kingdom of Norway for the commitment and financial support to blue economy development in Africa.

I also wish to express gratitude for the support of the AU-IBAR staff, in particular Dr. Mohamed Seisay, Senior Fisheries Officer and Mr. Kennedy Oroko, Planner, for technical supervision of the process of formulation of the Strategy. The invaluable contribution of the experts who participated in the stakeholders' consultative meeting is very much acknowledged and appreciated.

Prof. Ahmed El-sawalhy

Director/Head of Mission, AU-IBAR

Executive Summary

The Africa Blue Economy Strategy was developed following the Sustainable Blue Economy Conference that took place in Nairobi, Kenya in 2018. The African leaders at that Conference urged the African Union (AU) to work with relevant stakeholders to develop Africa Blue Economy Strategy. Such a Strategy would guide sustainable development and the utilization of aquatic resources in Africa. The Africa Blue Economy Strategy was endorsed by the 3rd session of the Specialized Technical Committee on Agriculture, Rural Development, Water and Environment in October 2019.

The African Union has identified blue ocean economy development as a priority goal towards achieving the aspiration on 'A prosperous Africa based on inclusive growth and sustainable development within the context of the Africa Union Agenda 2063. Consequently, the African Union Inter-African Bureau for Animal Resources (AU-IBAR), which is a technical office of the Department of Rural Economy and Agriculture of the African Union Commission, was charged with the specific responsibility to support the development of the Africa Blue Economy Strategy.

The Africa Blue Economy Strategy is consolidated based on the following five detailed thematic technical reports that are annexes to this Strategy:

1. Fisheries, aquaculture, conservation and sustainable aquatic ecosystems
2. Shipping/transportation, trade, ports, maritime security, safety and enforcement
3. Coastal and maritime tourism, climate change, resilience, environment, infrastructure
4. Sustainable energy and mineral resources and innovative industries
5. Policies, institutional and governance, employment, job creation and poverty eradication, innovative financing

Vision:

The Vision of the Africa Blue Economy Strategy is an inclusive and sustainable blue economy that significantly contributes to Africa's transformation and growth

Purpose:

The objective of the Africa Blue Economy Strategy is to guide the development of an inclusive and sustainable blue economy that becomes a significant contributor to continental transformation and growth, through advancing knowledge on marine and aquatic biotechnology, environmental sustainability, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport, the management of fishing activities on these aquatic spaces, and the exploitation and beneficiation of deep sea mineral and other resources.

The Africa Blue Economy Strategy outlines the key drivers of change that are shaping Africa Blue Economy development; strategic and technical challenges to blue economy development and identified priority areas of intervention for sustainable blue economy development in Africa.

The process for formulation of this Strategy has involved desk research studies on the thematic areas, field visits by consultants to collate lessons and best practices on issues related to blue economy development to 13 AU member states (Djibouti, Egypt, Ethiopia, Ghana, Kenya, Mauritius, Morocco, Namibia, Senegal, Seychelles, South Africa, Tanzania (including Zanzibar) and Togo). The consultants developed draft thematic areas reports based on the outcomes of desk research and the field missions. To ensure an inclusive approach in the formulation process, a Stakeholders' Consultative Workshop was organized, which comprised of 125 delegates, on the 30-31 August 2019 in AU-IBAR Office in Nairobi, Kenya. The purpose of this workshop was to critically review and improve the thematic areas. The stakeholders provided valuable inputs for the completion of these five thematic reports.

The Strategy is aimed at supporting and providing guidance to African Union member states and regional institutions for coherent formulation of their national and regional blue economy strategies that would promote socio-economic transformation and growth.

African Blue Economy Context, Outlook, Vision and Challenges

Context and Outlook

Current African Strategies and initiatives

The concept of the Blue Economy (BE) integrates into a new approach the economic exploitation of the resources of oceans, lakes, rivers and other bodies of water and the conservation of aquatic ecosystems. It represents a basis for rational and sustainable use and conservation of natural resources (both renewable and non-renewable) and their natural habitats.

As such, BE is part of a number of African and global policies and initiatives, including the African Union's Agenda 2063; the 2014 Africa's Integrated Maritime Strategy (2050 AIMS); the 2014 Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS); the 2015 UN Agenda 2030 (Sustainable Development Goals, SDGs); and the 2016 African Charter on Maritime Security and Safety and Development in Africa (Lomé Charter). They are elaborated in a more detailed manner as follows:

Agenda 2063 - The strategic framework for the socio-economic transformation of the continent over the next 50 years refers specifically to the Blue and Ocean Economy as the Goal 6 for accelerated economic growth especially for the priority areas of Marine Resources and Energy; and Ports Operations and Marine Transport. The Goal 7 also addresses BE by having priority areas such as Sustainable natural resource management and Biodiversity conservation; Sustainable consumption and production patterns; Water security; Climate resilience and natural disasters preparedness and prevention; Renewable energy that are integral to BE Development in Africa.

PFRS - The document provides guidance to transition of African fisheries to productivity, sustainability and profitability with options for enhanced regional collaborative management of shared resources. The PFRS enables African

governments to develop appropriate fisheries-exploitation arrangements and aquaculture development, two key BE sectors, with accompanied fiscal reforms that should result in the sustainable generation of benefits at the community level as well as creating wealth throughout the value chain.

AIMS 2050 - The Strategy has been conceived as a tool to address Africa's maritime challenges for sustainable development and competitiveness. It aims to foster more wealth creation from Africa's oceans, seas and inland water ways by developing a thriving maritime economy and realizing the full potential of sea-based activities in an environmentally sustainable manner. Some BE sectors and components (conservation, research, education and governance) are outlined in the strategy but they are largely limited to the maritime and marine areas while the BE strategy will also adequately deal with inland water bodies. Extractive mineral, oil and gas, innovative financing mechanisms have not been taken into account in the AIMS 2050 as well as the issue of ecosystem services such as blue carbon and their uses for climate change mitigation and adaptation that is currently a top priority of the AU.

SDG 14 - Being part of the Sustainable Development Goal 14 (SDG 14) on Life below Water, African coastal States have endorsed the achievement of a series of targets by 2030 from which most of them relate to a better exploitation of the sea, preservation of the environment and prevention of pollutions and other harmful changes resulting from human activities. All African States are furthermore working towards the accomplishment of the SDG6 dedicated to clean water and sanitation in direct linkage with the Continental dimension of the BE.

Lomé Charter - The Charter refers to the security and safety of the BE. It aims at preventing and curbing national and transnational crime, especially terrorism, piracy and armed robbery against ships, as well as all forms of trafficking at sea. It also aims at protecting environment in general and particularly maritime environment in coastal and island states, as well as strengthening cooperation in the field. The Charter commits signatories to creating national, regional and continental institutions to promote maritime security and safety.

BE sectorial activities are also mentioned in more specific continental policy instruments such as the 2009 African Mining Vision, the 2010 (revised) African Maritime Transport Charter and the 2019 African Continental Free Trade Area (AfCFTA) for the move of goods and services among AU member States with no restrictions. BE natural components are, on their side, included in the 1969 (revised in 2017) African Convention on the Conservation of Nature and Natural Resources. They are also embedded into the 3 regional seas conventions (Abidjan, Nairobi and Jeddah) that provide a regional legal and coordinated framework that strengthen country capacity to protect, manage and develop their coastal and marine environment. BE Research component is today mainly represented within the African Space Agency due to the importance of the remote sensing observation of oceans and water bodies in the context of climate change and within the framework of development of Africa Centres of Excellence in Fisheries and Aquaculture in Africa initiated in 2018.

The BE is furthermore receiving a dedicated attention by AUDA-NEPAD (African Union Development Agency/New Partnership for African Development) with the current elaboration of the Blue Economy Programme that aims to guide the Agency's support to African Union Member States and Regional Economic Communities (REC). Some RECs, such as IGAD and SADC, are presently, alongside with other organisations such as IOC (Indian Ocean Commission) and IORA (Indian Ocean Rim Association), developing their own BE strategy. African SIDS are also engaged, with the SAMOA Pathway, in the process of development of their ocean-based economies.

Africa Today and at the Horizons 2030 and 2063

African BE sectors and components generate today a value of USD 296 billion with 49 million jobs. It is projected that by 2030, figures will be respectively USD 405 billion and 57 million jobs while in 2063 estimates would respectively be USD 576 billion of value created and 78 millions of jobs¹ (see figure below). The number of jobs would correspond to about 5% of the active population in 2063.

The main driving sectors of the BE are tourism, both in term of value added and jobs created; the mineral sector, and the Oil and Gas that have a strong contribution to the value added but a low participation in the job creation process. The fishery sector will remain stable, with a high number of people employed while the aquaculture will continue to grow in next decades. Port and shipping will grow at a constant rate. The value of blue carbon and other ecosystem services generated by coastal, marine and aquatic ecosystems will progressively increase as conservation efforts expand. Education and research will follow the same pattern due to a growing demand for knowledge, especially in the area of deep-sea mining, offshore exploration and climate change mitigation and adaptation. A more detailed presentation of each category of BE follows the graphs.

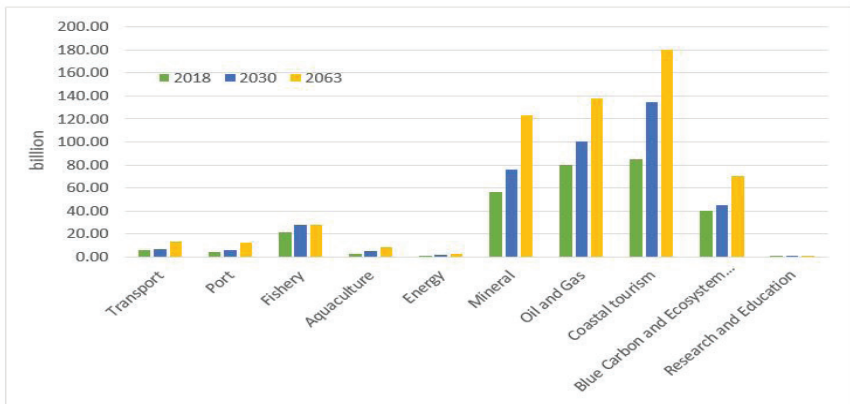


Figure 1: Value created by BE sectors (value added) and components (value of services)

¹ See Technical Reports (Annexes) for details.

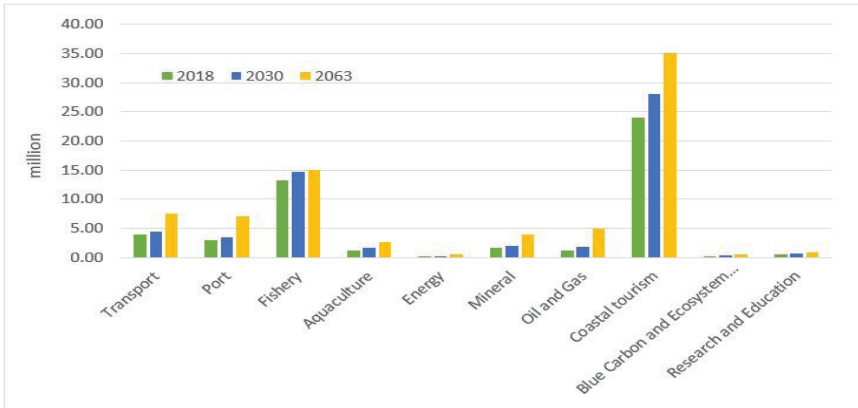


Figure 2: Employment generated by BE sectors and components

Port and shipping - Although Africa still has a relatively small impact in international trade (3% of world volumes), African shipping follows the upward trend in the world. As a result, traffic in African container ports has grown at an average annual rate of 8% over the past 5 years, compared to a global 5% change. The traffic in the African harbours should exceed 2 billion of tons by 2063 versus 500 million in 2018. The increased port traffic will be done thanks to the modernization of the ports that can progressively accommodate the latest generation of large ships (more than 21 000 TFE). The creation of sub-regional maritime shipping companies, of cabotage companies and the development of transport corridors with the application of freight rates will furthermore allow African shippers to transport their cargoes at reasonable costs.



Fishery - The capture fisheries production, currently standing at 10 million tonnes, is expected to remain fairly constant throughout 2063 due to, inter alia, overfishing, overcapacity and poor governance. The total gross value-added of the fisheries in Africa is estimated at USD 21 billion or 1.26% of the GDP (USD 1.9 trillion) of all African countries. Marine artisanal fisheries contribute the most at USD 8.1 billion, followed by marine industrial fisheries and inland fisheries at USD 6.8 billion and 6.3 billion respectively. In 2018, the fisheries sector employs about 13 million people of which 7 million were fishers and 6 million were processors. More than half of the fishers are employed in inland fisheries and the largest share of processors work in marine artisanal fisheries.



Aquaculture - The African aquaculture sector records the fastest growth in the world between 2006-2018, averaging 10% or more and is expected to partially fill the growing fish supply-demand gap up to 2063. The value of aquaculture is estimated at USD 2.77 billion. Despite huge potential, the growth is confined to fewer countries with Egypt accounting for nearly 70% (1.37 million tonnes) of the total 1.98 million tonnes while Nigeria ranked second with 300 thousand tonnes. In 2018, there were about 1.2 million aquafarmers across the continent, an increase from 920 thousand in 2014.



Sustainable blue energy - Blue energy penetration has already started in many African countries such as Ghana (Wave Energy), Mauritius (FPV) and Offshore wind projects. Considering Ghana's electricity contribution to GDP of about 1.5% as our reference and assuming that progressively the share of the BE will be 5% of the total energy contribution in 2030 and 7% of the total energy contribution in 2063 the GDP contribution of the blue energy could reach about USD1.6 billion and USD2.3 billion, respectively.

Ocean mining - Deep-seabed and seawater mining are the new frontier with huge potential. The value of top sea-bed mining minerals such as diamond, gold, cobalt, zinc and copper in Africa could reach a value added of about USD 6 billion. On the other hand, if African countries exploit about 2% of the market value from seawater mining of 10% of global production from seawater potential, it is worth about USD 50 billion of value added. This gives a combined value added of about USD 56 billion. It could reach about USD 76 by 2030 and USD 123 by 2063.

Oil and Gas - In 2018, the total GDP contribution of oil and gas in the major producing countries such as Angola, Congo. Dem. Rep., Cote d'Ivoire, Equatorial Guinea, Ghana, Mozambique, Nigeria and South Africa is about USD 80 billion. By 2030 and 2063, the value added could reach about USD 100 billion and USD 140 billion, respectively.

Coastal tourism - In 2018 the sector contributed USD80 billion, about 3.4% of the GDP at annual growth rate of 1.3% over the last decade. The sector has potential for expansion and growth as most areas are yet to be exploited. The contribution to employment in 2018 was estimated at 24 million jobs in Africa at annual growth rate of 5.6% compared to global average of 3.9%. This provides potential opportunity for economic development. In 2030 the value added generated by the coastal tourism should exceed 100 billion with 28 million people employed while in 2063, it should generate 138 billion of value added with an employment figure of 35 million. The strong development of the continental tourism will boost the demand for tourism services and infrastructures. The development of eco-tourism will contribute to the conservation of ecosystems and reduce the ecological footprint.



Blue Carbon and other ecosystem services - Blue Carbon is part of a Blue Economy with an opportunity to develop coastal wetland projects to mitigating climate change. The planning of blue carbon conservation projects and evaluating how ecosystems can be more effectively included within existing policy frameworks, carbon financing mechanisms such as Reducing Emissions from Deforestation and Land Degradation (REDD+) and other UNFCCC mechanisms are essential to restoring and protecting marine ecosystems. There is also a great opportunity for Nationally Determined Contributions (NDCs) for adapting and mitigating climate change in existing frameworks for carbon offsets referred to as carbon credits. Coastal protection, biomass production, water purification, etc., are among the most important ecosystem services delivered by aquatic ecosystems. Their current value is estimated to the average monetary

value of carbon sequestration of about USD 130 000 per km² of mangrove, salt marshes and sea grasses. At the scale of Africa, the value is estimated at USD 40 billion in 2018 annually with a potential growth to USD 45 billion in 2030 to USD 70 billion in 2063 with an effective protection and restoration of coastal, marine and freshwater ecosystems.

Research and Education - Both are key pillars of the development of BE in Africa. Currently, the main research and education activities are linked to fisheries and aquaculture with a huge gap of expertise in renewable energy, deep-sea mineral exploitation, oil and gas as these sectors are research driven by international companies with low connections to African education and research institutions. The growing importance of BE sectors and BE component such as Blue Carbon is currently pushing the development of new educational programs in pilot countries such as South Africa, Seychelles, Mauritius and Ghana. The current trend will be maintained until 2063.



Key Drivers of Change

The following set of drivers are shaping the development of the African BE:

African population growth and demand - With an estimated population of 1.6 billion in 2030 and almost 3 billion in 2063 compared to 1.2 billion in 2018, the need for goods and services is expected to multiply by 2.5. Supply chains will have to adapt: while production and delivery of services will grow, as well, import would increase massively leading to a constant augmentation of port traffic.

Regional/international Economic integration - AfCTA, EPA, Chinese Trade Pacts and other trade agreements will concur to ease the move of goods and services within the African continent and between Africa and other continents such as Europe or China. The flow of merchandise will increase, inducing an expansion of the maritime and waterways transport.

Nationally Determined Contributions - Since the Paris Agreement in 2015, NDCs are submitted every five years to the UNFCCC secretariat. The next round of NDCs will be submitted by 2020 and every five years thereafter. In this context, NDCs should thus be framed as an essential component of the Blue Economy in adaptation and mitigation measures in carbon capture and storage. Progress towards 'low carbon' economies, climate resilience and creating economic and livelihood opportunity and options blend with NDCs that drive strategies to fulfilling SDGs agenda by 2030 and AU agenda by 2063.

Environment and biodiversity protection - Africa recognizes a number of conventions (CBD, Regional Sea Conventions, etc.) that make adaptation investments with significant mitigation dynamics. Conservation investments will be increased in the future to contribute to enhancing the carbon sink function of the watersheds and water catchment resources as well as improving the pollution status of African coasts regarding chemicals and plastics. Healthy blue ecosystems that are linked to environmental management and biodiversity protection will benefit from these measures. Capacities of various national ministries and regional institutions to undertake projects across the country and region on Reduced Emissions from Deforestation and Land Degradation plus conservation (REDD+) will further contribute to the enhancement of blue ecosystems.

Sustainable Blue Energy for Addressing Energy Demand - Energy demand is on a steep rise and one of the clearest drivers is population growth and the ongoing electrification efforts are outpaced by rapid population growth. By 2030, the total primary energy demand in Sub-Sahara Africa (SSA) is expected to grow by 30% and it is expected that renewable energy technologies could supply about 22% of Africa's total final energy consumption by 2030. In order to meet the increasing energy demand and achieve Africa Union's 2063 objectives, unlocking the huge untapped potential and integrating sustainable blue energy resources in the national energy mix is important.

Ocean Mining for Meeting Global Demand and National Economic Development - Mining is the single largest industrial activity in SSA, contributing significantly to fiscal revenues and GDPs. Moreover, it has the potential for large local impacts that can foster change in local economies. As the demand for minerals is globally increasing, deep-seabed and seawater mining is becoming an attractive frontier to meet the demand, which could substantially contribute to the national economic development.

Innovative Industries for Accelerating Economic Development Benefits - The application of innovative industries in all sectors of blue economy in general and sustainable blue energy and ocean mining in particular could substantially expedite the creation of prosperous Africa based on advanced technologies.



Large companies and Countries transport strategies - To cope with the increase in traffic described above, African countries are putting in place strategies. These include the modernization of ports to allow them to accommodate the latest generation ships, the development of transport infrastructure in the framework of the PIDA project and consultations for the creation by private operators of sub-regional cabotage companies.

Vision

The Vision of the BE Strategy is ***an inclusive and sustainable blue economy that significantly contributes to Africa's transformation and growth.***

Purpose of the African BE strategy

The objective of the BE Strategy is to guide the development of an inclusive and sustainable blue economy that becomes a significant contributor to continental transformation and growth, through advancing knowledge on marine and aquatic biotechnology, environmental sustainability, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport, the management of fishing activities on these aquatic spaces, and the exploitation and beneficiation of deep sea mineral and other resources.

Challenges

Challenges arising from the current environment status, future prospects and vision are both strategic and technical.

The main ***strategic challenges*** are:

Blue Governance - Notwithstanding the progress made to date on many fronts, significant institutional and governance challenges remain, constraining the ability of Member States to effectively formulate and implement policies relating to growth of the relatively new blue economy concept in Africa alongside with policies in favour of environmental protection and the health improvement of

ecosystems. An effective Policy and regulatory framework is needed to secure investments in sea exploration as well as a sound Policy for innovation, transfer of technology and adaptation to encourage inventors. This should be in place for strengthening of the institutional capacities of key national and regional agencies and organizations for the effective implementation of blue economy related functions. It would also entail capacity enhancement and incentivization of those entities and structures that are related to the key sectoral aspects of the blue economy, among others.

Economic and social -. Most coastal and lake communities in Africa are poor, less educated, lack capacity and are impoverished, having few rights of tenure over resources of their livelihoods and often excluded from the decision-making process. Member States should direct their poverty eradication efforts towards the integration of these communities into the BE development process. This will empower coastal and waterways communities and make them gain more access and control over the basic conditions that determine their well-being.



Nutritional - Exports of food products must not be done at the detrimental of nutrition for the local population. Out of the 55 AU Member States, at least 35 States are operating on a fish production deficit and highly dependent on imports. The global and continent-wide demand for seafood, driven by factors such as population growth, preference for fish as a diet of choice for health reasons, the growing affluent middle-class and growing demand for aquaculture products will continue to increase. Africa must, therefore, produce and trade enough fish to meet its nutritional requirements and only allocate the excess to export.



Environmental - Climate change and climate variability are already impacting on Africa's aquatic systems and food production overall. Member States need to initiate activities for building resilience and reduce the vulnerability of the communities to climate change and variability to ensure food and livelihood security. For instance, ecosystem services must be integrated into the National Action Plan for Adaptation (NAPA) and the Member States are urged to working in collaboration with regional and international partners and specialised institutions for synergies and complementarity. Healthy ecosystems are critically important for living aquatic resources to survive. In that regard, deep-sea mining, oil and gas

and energy production should be developed following a rigorous compensation scheme in place (avoid, reduce, compensate). Furthermore, countries must adhere to national, regional and international pollution instruments, standards and practices, especially regarding chemical products and plastics.



The main **technical challenges**, that are cross-cutting to all BE sectors and components, are as follows:

Assessing the Blue Potential - While the oil and gas sector is subject to continuous exploration research, Blue Energy and mineral potential is now currently assessed. Knowing the potential of sustainable blue energy and their monetization is needed to drive investment in an expedited manner. Moreover, there are numerous new and emerging territories where too many unknowns inhibited the development initiatives. Additionally, detailed baseline assessment that provides status and potential of mineral resources are required.

Accounting BE activities and components for better governance - The accounting of the BE activities and components is not done in a unified way. Data needs to be collected from various sources to provide an overall picture of the contribution of BE to value addition and job creation. A proper national accounting system should be set-up to centrally record annual changes of BE sectors and ecological components. With the implementation of the NDC, the

green and blue accounting will become a cornerstone for the assessment of the CC actions.

Maritime spatial planning (MSP) and better coordination and synergy - In recent years, dozens of Member States have initiated the MSP process as part of their national developmental programs. It is essential to balancing sustainable use and conservation imperatives and mitigate conflicts and create synergies amongst the users, particularly during this time of the BE initiative. Member States are therefore urged to institutionalise MSP to allocate specific spaces for BE activities and Blue ecosystems conservation to secure long term private and public investments.

Integrated and prospective approach to marine ecosystems - Integrated ocean management brings together all relevant government bodies, sectors and stakeholders for more effective, inclusive and sustainable management. Member States should consider institutionalising Large Marine Ecosystem (LME) and Watershed Approach (WSA) for the assessment of the changing state of the ecosystem using a suite of indicators, namely, productivity, fish and fisheries, pollution and ecosystem health, socio-economics and governance. The LME approach and WSA will furthermore enhance the regional management of resources and ecosystems.

Increasing safety and security through an integrated maritime surveillance - The security of EEZs of Member States is of paramount importance to develop and guarantee the sustainability of their blue economy, which affects different maritime sectors. Piracy is a serious problem as it poses a real threat not only to the safety of vessels and their crew but also to the economies of affected countries. The African Member States need to collaborate by coordinating their monitoring, control and surveillance (MCS) operations and share information timely to ensure freedom of navigation at sea, curb Illegal Unreported Unregulated (IUU) fishing, illicit trafficking, piracy and maritime criminality. The regional approach through joint operations through the RECs and LME commissions could be the most effective way of addressing this challenge.



Value addition - Most Member States still export unprocessed products and raw material (fish, minerals, oil, etc.) that can benefit from being processed. It is time to support the investments in value-added products to enable optimum profit/gains from the aquatic and mineral products and create needed employment and earnings from foreign currency. There is a need to transfer appropriate technology to the Member States to meet the processing, packaging and marketing requirements. There is also a necessity to develop tourism activities with high level of value added by introducing eco-tourism packages into the coastal tourism current offer.

Table 1. Summary of Areas of intervention:

Blue Economy constitutes the Goal 6 of the Agenda 2063 and Goal 14 of the UN Agenda 2030. The areas of intervention initially focused on Marine resources and Energy as well as Ports Operations and Marine Transport have been expanded in two directions: cross-cutting and sectorial ones.

Blue governance and institutional changes is a cross-cutting area of intervention that includes, within the three objectives presented in the table below, the quest for Coherence and Innovation including for Blue Financing; development of capacities; Coordination and spatial Planning; Gender, youths and vulnerable people inclusiveness; conflict resolution; Democratization of BE and the Awareness building and Communication; and Transparency and Accountability.

Areas of Interventions	Strategic objective
Blue Governance and Institutional change	To Strengthen Institutions for Policy Environment and Governance to coordinate African BE
	To have the African BE accelerate the Economic Transformation
	Africa assumes leadership for financing BE development

The specific areas of intervention concerning the transport, the fishery and aquaculture, the energy, mineral resources, oil and gas, coastal tourism and ecosystem services. They are presented below with their affiliated strategic objectives.

Areas of Interventions	Strategic objective
Shipping	Carrying cargoes of African countries at reasonable rates
Port	Modernisation of African ports
Fishery and aquaculture	Optimising conservation and sustainable fisheries and aquaculture resources use while minimising conflicts with other blue economy sub-themes
	Achieving full wealth-generating potential for fisheries and aquaculture sector to optimally contribute to the blue growth
	Ensuring sustainable social, economic, environmental and equitable outcomes and human rights whilst safeguarding natural capital and blue investment

Areas of Interventions	Strategic objective
Energy	Unlocking the sustainable blue energy potential (Technical Aspect) Creating conducive regulatory environment for the development and application of sustainable blue energy
Mineral and Oil and Gas	Meeting the growing demand of mineral resources and oil and gas for economic prosperity
Innovative Industries	Harnessing the potential of innovative industries through R&D
Coastal tourism	Developing an Integrated and Sustainable Tourism
Blue Carbon & other Ecosystem Services and Resilience	Promoting the integration of blue carbon and ecosystem services into CC policies and Coastal and Aquatic policies Ensuring Environmentally sustainable and climate resilient economies and communities

In the set of tables below, each area of intervention is specified with a set of strategic objectives and attached targets. The details of the interventions, actions or activities for each target are presented in the detailed thematic areas reports (Annexes 1 to 5).

Shipping and port - The main concern of Africans is to be able to transport their cargoes at reasonable costs. To get there, sea freight rates have to be stabilised and ports modernised.

Area of Intervention	Strategic Objective	Interventions
Transport	Carrying cargoes of African countries at reasonable rates	Control sea freight rates and other transport costs and encourage the creation of sub-regional navigation companies
Port	Modernisation of African ports	Construction of new ports and modernize the existing ports

Fishery and aquaculture - The conservation of aquatic resources and the valorisation of captures and aquaculture production with an equitable share of the benefits are driving the development of these food production sectors.

Area of Intervention	Strategic Objective	Interventions
Fishery and Aquaculture	Optimise conservation and sustainable fisheries and aquaculture resources use while minimising conflicts with other blue economy sub-themes	<p>Establishing institutional coordination mechanisms to harmonised fisheries and aquaculture activities with other blue economy themes</p> <p>Promote conservation and sustainable management of aquatic resources</p> <p>Establish regional and sub-regional cooperation in the blue economy themes</p>
	To achieve full wealth-generating potential for fisheries and aquaculture sector to optimally contribute to the blue growth	<p>Develop small-scale fisheries whilst minimising the negative impacts of other blue investments</p> <p>Promote inclusive blue value chain incorporating fisheries sustainable aquaculture, ornamental fisheries and tourism sector</p> <p>Achieve a responsible and equitable fish trade and marketing including inclusive inter-regional and cross border fish trade</p> <p>Attract and promoting private-public-partnership (PPP) sectors investments and financing for fisheries and aquaculture in order to realise the full potential of the blue growth</p> <p>Accelerate the development of fisheries and aqua fish processing and storage capacities within BE-related industries</p> <p>Maximise benefits from high seas fisheries</p>

Area of Intervention	Strategic Objective	Interventions
	Ensuring sustainable social, economic, environmental and equitable outcomes and human rights whilst safeguarding natural capital and blue investment	<p>Develop communication strategies about blue growth as well as create awareness and develop human capacity</p> <p>Ensure security of investment of fisheries and aquaculture</p> <p>Create safe working conditions and security</p> <p>Strengthen resilience and reducing vulnerability to climate change</p> <p>Empower women and youth in fisheries and aquaculture in order to take full advantage for blue growth</p> <p>Rehabilitate and or secure threaten fishing grounds/zones, prevention of land-based pollution and degradation of aquatic environments</p>

Energy, mineral resources and oil and gas, and Innovative Industries - In order to unlock the untapped sustainable blue energy resources, make use of deep-seabed and seawater mineral resources for creating prosperous continent, and harnessing the potential of innovative industries clear objectives with concrete milestones are needed. For specific objectives, specific targets and actions are also proposed.

Area of Intervention	Strategic Objective	Interventions
Energy	Unlock sustainable blue energy potential (Technical Aspect)	<p>Increase blue energy penetration in the energy mix</p> <p>Contribute in increasing reliable, affordable and modern energy</p> <p>Assess the availability of sufficient infrastructure at (a) national (b) regional, (c) and continental level</p> <p>Power the blue economy</p>

Area of Intervention	Strategic Objective	Interventions
	Creating conducive regulatory environment for the development and application of sustainable blue energy (Policy Aspect)	<p>Reform unsustainable financial structure and create conducive energy finance instruments</p> <p>Develop sustainable blue energy master plan and policy derivatives</p> <p>Develop environmental impact assessment guidelines</p>
Mineral and Oil and Gas	Meeting the growing demand of mineral resources, oil and gas for economic prosperity	<p>Increase deep-seabed, seawater mining and oil and gas production for meeting demand and economic prosperity</p> <p>Create conducive regulatory frameworks for mineral and oil and gas exploration of deep seawater</p> <p>Promote sustainable and environmentally friendly deep-seawater exploration</p> <p>Capacity building and technology transfer</p>
Innovative Industries	Harnessing the potential of innovative industries through R&D	<p>Develop policy framework to accelerate the transfer and application of blue economy technologies</p> <p>Strengthen institutional, infrastructural and human capacity</p> <p>Promote the application of innovative industries</p> <p>Create innovative industry database and support tools</p>

Coastal tourism and ecosystem services - The development of tourism should be made from an integrated and prospective Approach that respect the Marine and freshwater Ecosystems. The blue ecosystems services should be taken into consideration into national policies in order to increase their resilience capacities and better contribute to the climate change adaptation and mitigation.

Area of Intervention	Strategic Objective	Interventions
Coastal tourism	<p>Developing an Integrated and Sustainable Tourism</p> <p>Promoting the integration of blue carbon and ecosystem services into CC policies and Coastal and Aquatic policies</p>	<p>Develop integrated strategies for sustainable tourism and infrastructures</p> <p>Include the Blue Carbon and other Ecosystem services into the NDC</p> <p>Promote nature based solution for the enhancement of Coastal and Aquatic Ecosystem contribution to Biodiversity and CC achievements</p>
Blue Carbon & other Ecosystem Services and Resilience	Ensuring Environmentally sustainable and climate resilient economies and communities	<p>Develop capacity and integrated strategies for balanced ecosystem, sustainable environmental management and enhanced resilient communities</p> <p>Develop capacity for integrated strategies to enhance regional cooperation, promote R&D, effective planning and coordinated mechanism</p> <p>Develop strategies and established linkages to infrastructure</p>

Table 2: Detailed outline of Goals and Corresponding Objectives

(Detailed targets and actions are found in the detailed reports that are annexes to this African Blue Economy Strategy)

Thematic Area 1: Fisheries, aquaculture, conservation and sustainable aquatic ecosystems in the context of Africa Blue Economy

Goals	Goal 1 Optimise conservation and sustainable fisheries and aquaculture resources use while minimising conflicts with other blue economy sub-themes	Goal 2 Achieving full wealth-generating potential for fisheries and aquaculture sector to optimally contribute to the blue growth	Goal 3 Ensuring sustainable social, economic, environmental and equitable outcomes and human rights whilst safeguarding natural capital and blue investment
Approach	African Member States led-grand initiative to unlock full potential of the fisheries and aquaculture within the blue economy space through targeted interventions, supported by multiple partners within government sectors, private sectors, NGOs, CSO, academics and development partners, and with fully support by the AU during implementation.		
Objectives	1.1. Establish institutional coordination mechanisms to harmonize fisheries and aquaculture activities with other blue economy themes	2.1. Develop small-scale fisheries whilst minimising the negative impacts of other blue investments	3.1. Develop communication strategies about blue growth as well as create awareness and develop human capacity
	1.2. Promote conservation and sustainable management of aquatic resources	2.2. Promote inclusive blue value chain incorporating fisheries sustainable aquaculture, ornamental fisheries and tourism sector	3.2. Ensure security of investment of fisheries and aquaculture
	1.3. Establish regional and sub-regional cooperation in the blue economy themes	2.3. Achieve a responsible and equitable fish trade and marketing including inclusive inter-regional and cross border fish trade	3.3. Create safe working conditions and security

Goals	Goal 1 Optimise conservation and sustainable fisheries and aquaculture resources use while minimising conflicts with other blue economy sub-themes	Goal 2 Achieving full wealth-generating potential for fisheries and aquaculture sector to optimally contribute to the blue growth	Goal 3 Ensuring sustainable social, economic, environmental and equitable outcomes and human rights whilst safeguarding natural capital and blue investment
		2.4. Attract and promoting private-public-partnership (PPP) sectors investments and financing for fisheries and aquaculture in order to realise the full potential of the blue growth	3.4. Strengthen resilience and reducing vulnerability to climate change
		2.5. Accelerate the development of fisheries and aquaculture fish processing and storage capacities within blue economy related industries	3.5. Empower women and youth in fisheries and aquaculture in order to take full advantage for blue growth
		2.6. Maximise benefits from high seas fisheries	3.6. Rehabilitate and or secure threaten fishing grounds/zones, prevention of land-based pollution and degradation of aquatic environments

Thematic Area 2: Shipping/transportation, trade, ports, maritime security, safety and enforcement in the context of Africa Blue Economy

Goals	Goal 1 Carrying cargoes from African countries for import and export at reasonable rates	Goal 2 Develop interstate trade
Approach	Form part of a dynamic partnership, both at a regional level, in close collaboration with AU member States, and at an international level, through cooperation with various institutions and development partners to create synergy and build capacities.	
Objectives	1.1 Control sea freight rates and other transport costs	2.1 Creation and development of transport corridors

Goals	Goal 1 Carrying cargoes from African countries for import and export at reasonable rates	Goal 2 Develop interstate trade
	1.2 Promote good governance of the sector	2.2 Develop sub-regional cabotage transport
	1.3 Promote the training of actors	2.3 Application of conventions and agreements on free movement of persons and goods and standards
	1.4 Ensure security and safety in the African maritime area	

Thematic Area 3: Coastal & Marine Tourism, Climate Resilience, Environment and Infrastructure in the context of Africa Blue economy

Goals	Goal 1 Environmentally sustainable and climate resilient economies and empowered communities	Goal 2 Integrated and Sustainable Coastal & Marine Tourism	Goal 3 Sustainable Tourism	Goal 4 Resilient Infrastructure, Blue Carbon & other Ecosystem Services
Approach	Integrated and Prospective Approach to Marine and freshwater Ecosystems: A Prosperous Africa, based on Inclusive Growth and Sustainable Development			
Objectives	1.1. Develop integrated strategies for sustainable environmental management	2.1. Develop integrated strategies for regional cooperation	3.1. Develop integrated strategies for sustainable tourism	4.1. Develop strategies for resilient infrastructure
	1.2. Develop capacity for climate resilient economies and communities	2.2. Develop capacity to strengthen regional institutions	3.2. Develop integrated tourism infrastructure strategies	4.2. Establish strategic linkages including infrastructure
	1.3 Ensure balanced marine ecosystems	2.3. Harmonize collaboration on transboundary matters		
	1.4. Enhance local communities' livelihoods	2.4. Enhance partnership between public and private sector		

Goals	Goal 1 Environmentally sustainable and climate resilient economies and empowered communities	Goal 2 Integrated and Sustainable Coastal & Marine Tourism	Goal 3 Sustainable Tourism	Goal 4 Resilient Infrastructure, Blue Carbon & other Ecosystem Services
	1.5. Develop a risk management framework	2.5. Promote R&D and technology transfer		
	1.6. Develop a risk management framework	2.6. Support integrated planning mechanism		
	1.7. Develop information database and dissemination mechanism	2.7. Enhance inter and intra coordination mechanism		

Thematic Area 4: Sustainable Energy, Mineral Resources and Innovative Industries in the context of Africa Blue Economy

Goals	Goal 1 Unlock sustainable blue energy potential	Goal 2 Create conducive regulatory environment for the development and application of sustainable blue energy	Goal 3 Meeting the growing demand of mineral resources for economic prosperity	Goal 4 Harnessing the potential of innovative industries through R&D
Approach	In order to unlock the untapped sustainable blue energy resources, make use of deep-seabed and seawater mineral resources for creating prosperous continent, and harness the potential of innovative industries clear objectives with concrete milestones are needed.			
Objectives	1.1. Increase blue energy penetration in the energy mix	2.1. Reform unsustainable financial structure and create conducive energy finance instruments	3.1. Increase deep-seabed and seawater mining production for meeting demand and economic prosperity	4.,1 Develop policy framework to accelerate the transfer and application of blue economy technologies

Goals	Goal 1 Unlock sustainable blue energy potential	Goal 2 Create conducive regulatory environment for the development and application of sustainable blue energy	Goal 3 Meeting the growing demand of mineral resources for economic prosperity	Goal 4 Harnessing the potential of innovative industries through R&D
	1.2. Contribute in increasing reliable, affordable and modern energy	2.2. Develop sustainable blue energy master plan and policy derivatives	3.2. Create conducive regulatory frameworks for exploration of deep seawater	4.2. Strengthen institutional, infrastructural and human capacity
	1.3. Assess the availability of sufficient infrastructure at (a) national (b) regional, (c) and continental level	2.3. Develop environmental impact assessment guidelines	3.3. Promote sustainable and environmentally friendly deep-seawater exploration	4.3. Promote the application of innovative industries
	1.4. Power the blue economy		3.4 Capacity building and technology transfer	4.4. Create innovative industry database and support tools

Thematic Area 5: Polices, Institutional and Governance, Employment, Job creation and Poverty Eradication, Innovative Financing in the Context of Africa Blue Economy

Goals	Goal 1: To Strengthen Institutions for Policy Environment and Governance to coordinate African BE	Goal 2: To have the African BE accelerates the Economics Transformation	Goal 3: Africa to assume leadership for financing BE development
Approach	Integrated and prospective approach to transformed and resilient economies: A Prosperous Africa, based on inclusive growth, sustainable development, innovation and local capacities		
Objectives	1.1. Foster coherence in policy practice and harmonisation of regulatory frameworks within and across sectors and levels	2.1. To assist MS and RECs to mainstream integrated strategies for sustainable and inclusive BE with focus on value chain enhancement	3.1. Develop innovative financing tools and enablers to implement BE strategies at national, regional and continental levels
	1.2. Capable institutions to foster inter-sectoral collaboration, implementation and accountability in delivering on Africa's blue economy goals	2.2 Mainstream relevant mechanism and framework to operationalise AfCFTA and Continental Frameworks	3.2. Initiate fiscal reform and other incentives to improve financial system and improve PPP and financing (State and non-State).
	1.3. Enhance analytical and information support system at all levels for informed decision making and reporting	2.3. Reinforce BE capacities and accelerate STI	3.3. Promote the creation of an African Blue business alliance for the health and sustainable use of African Aquatic Ecosystems

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