



# National Circular Economy Framework & Guide for Entrepreneurs for Guinea-Bissau

Country report





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#### Introduction

Circular Economy (CE) has experienced a worldwide take-off due to a growing concern about resource extraction rates and the pollution resulting from production processes within the framework of the linear economic model.

CE is "an industrial system that is restorative or regenerative by intention and design" (EMF 2013). It is about extracting higher value from fewer resources by increasing productivity and efficiency. It fosters moving from ownership to access to products, creating a sharing mindset allowing to reduce consumption through increased efficiency of asset use. For island states, a CE is highly relevant due to their vulnerability to climate change and pollution but also due to the reliance of countries on imports for most consumer products. The Indian Ocean Commission has therefore secured funding from the World Bank to support the SWIOFish regional project and increase efforts to set up a circular economic model for the supply and production chain to reduce downstream marine pollution. The CE Project's aim for each AIODIS country is to foster a circular economy and protect the environment and natural assets while aiming at economic growth.

The present report's objective is to showcase a national policy framework and guidelines for entrepreneurs. Thanks to collaboration with local experts and government officials, local agencies and international foundations, an understanding of the current situation has been attained in the review report. Possible approaches and actions have now been identified to move forward. These actions are gathered within the present document. Guinea-Bissau already has key elements to move towards CE, thanks to policy instruments such as environmental legislation and references to marine pollution and waste management in policies. There are also the various green incentives that have been introduced over the last decade. Meetings have also been held to identify stakeholders for a circular economy and the efforts to engage different players provide a valuable starting point. The involvement of civil society and the private sector has also helped to improve the understanding of the circular economy concept and to lay its foundations within society.

The document is divided into two parts. First, it presents a policy framework aiming to foster CE and suggests legislative implementations for Guinea-Bissau. To facilitate the connection between authorities and policies and the private sector, it is important to guarantee a common understanding and an agreement on how to proceed, with the goal of a circular economy in mind. The second part of this document then presents CE guidelines for entrepreneurs. Implementing a CE goes beyond recycling and waste reduction. It aims to value waste and keep materials in circulation as long as possible. It encourages extracting higher value from fewer resources by increasing productivity and efficiency. Therefore, to move towards a circular economy it is crucial to involve local businesses and the private sector in order to facilitate collaboration, implementing respective practices along the path within production, distribution and treatment facilities. The guidelines for entrepreneurs are linked to the policy framework and legislative suggestions made during the first phase. Explanations on how to set up a business in Guinea-Bissau with a circularity target, as well as the transition towards more sustainable business practices for established companies will be included and step-by-step advice is offered along the way. This will allow to consider better the various informal sectors and to better engage the authorities and businesses in the common pursuit towards a circular economy.

#### 1. Policy framework

The framework lays out possible ways forward to reach a CE based on the particularities of Guinea-Bissau and on updates from the local expert party to this work. Acting upon present conditions, legislation will be adopted to develop a circular economy while aiming further to identify additional opportunities to expand the economy and on the whole improve materials' efficiency.

#### 1.1 Establish regulations for the country's Circular Economy

**National Strategic Objective:** The government needs to adopt a declaration of commitment to the circular economy and close the legal gaps. A number of legal texts concerning the environment and waste management exist in the country but they are not harmonised to address CE (see Annex 1).

Rationale: There is already an interaction between industry and the authorities for joint action towards CE. The government has, through project documents in the field of CE submitted to its partners, notably UNDP-GEF, made its circular economy objective known and offers a clear indication on how to follow up. In Guinea-Bissau, the Polluter Pays Principle (PPP) is established in the National Strategic Plan for Environmental Management. There is a control and monitoring by the Ministry of Environment and Biodiversity. The public sector is responsible for the financial burden of pollution costs. Guinea-Bissau has not implemented Extended Producer Responsibility (EPR) throughout the supply chain to prevent widespread pollution and reduce the impact on the PPP. EPR and PPP are not generally recognised in waste management legislation. Despite the existence of PPP, it is not sufficiently developed to provide an CE basis for reducing various forms of pollution and in particular marine pollution. In Guinea-Bissau cyclical political instability also hinders the implementation of waste management policies and strategies, for example: the implementation of the Decree on the prohibition of the use of plastic bags is difficult at national level. Successive governments have, however, been concerned with integrating sustainable management of natural resources and the environment into their programmes and policies. In this context, a number of important documents have been elaborated and approved, such as the Basic Law on the Environment (Law n°01/2011).

**Specific actions required:** To achieve the above objective, it is suggested that the country adopts a declaration or framework legislation that promotes the integration of players and harmonisation actions towards a CE. The commitment to CE could be integrated into the country's development policies. There is also a need to adopt specific legislation that is currently not in place to favour of CE. These pieces of law include texts on recycling and a law on the PPP and the EPR.

#### 1.2 Educate through awareness and education campaigns

**Mobilising players for CE:** To achieve it in Guinea-Bissau, it is essential to increase awareness of CE at all levels, especially in the key sectors of the blue economy. The concept of CE is still new at the national level, the population and government departments are not aware of what CE can bring.

**Rationale:** There are limited efforts by the government, civil society and private companies to raise awareness despite the fact that all are sensitive to the adverse effects of waste and pollution on the environment and on human life.

**Specific actions Required:** To achieve the above objective, some examples of specific actions required are :

- Strengthened collaboration between major industry partners and authorities.
- Continued existing awareness campaigns involving society as a whole.
- Reintroduction of school campaigns to raise awareness among young people.
- Increased interaction with businesses to introduce them to circular economy models and make them understand the need for them.

There is also a need to support and replicate existing initiatives and other educational activities in place at government, business and public levels.

In Guinea-Bissau, awareness campaigns on CE are very recent and can be seen in a limited way in the main sectors of the economy: agriculture, agro-industries, tourism and fisheries, natural resources management, energy and transport (see Annex 2).

#### 1.3 Improve material stock management

#### 1.3.1 Collection and sorting system

**Optimising the value of waste:** In order to improve the waste management processes currently in place, it is recommended that existing collection and sorting systems be upgraded. This is also recognised in the report on marine plastics in the AIODIS project. Although waste is collected, this is not done in a uniform manner throughout the country. Waste separation procedures are not effective and do not allow for efficient waste recovery.

**Rationale:** Waste is collected daily through containers, home collection and curbside collection, which is dependent on the municipality due to the lack of a national system. Waste collection and transport is the responsibility of the municipality but despite the different collection systems, no municipality undertakes efforts to sort the different materials.

**Specific actions required :** From the above, it is then necessary to increase collection points, improve sorting procedures and introduce a more sustainable treatment site than landfill.

An important step in this process is to support existing companies that collect and implement sorting on a national scale. There are currently no companies that collect and sort waste in a responsible manner (see Annex 3).

#### 1.3.2 Waste treatment facility

**Improve the efficiency of waste treatment facilities:** tackling the processes applied in the waste treatment facilities represents a key step towards circularity. To that end, the country must upgrade its present facilities' efficiency and introduce more sustainable solutions such as landfills with gas congestion, incineration with energy recovery, waste sorting and cleaning plants, recycling stations. Most of the present installations do not allow waste-to-value recovery and do not achieve their objectives in terms of waste reduction.

**Rationale:** The government has initiated discussions to improve or replace existing landfills. The authorities are currently evaluating the possibilities of opening incineration plants, anaerobic landfills and recycling plants, but these discussions - which have been going on for several years - have not yet produced any results. There is a willingness at all levels (government, private sector, civil

society, NGOs, students, youth associations, community-based organisations, military/police, general population), but due to governmental political instability, the materialisation and continuation of efforts are difficult. Efforts to implement waste separation, increase waste collection, reduce littering and introduce recycling are undertaken but limited.

**Specific actions required:** To achieve circularity, existing solutions include the implementation of high efficiency recycling and the generation of biogas.

For Guinea-Bissau, options include the creation of new businesses and the support and development of existing businesses that process waste with circular motives. Existing enterprises with waste recovery processes exist and provide a basis for future efforts (see Annex 3).

#### 1.3.3 Dumping and littering

**Reducing pollution through a better waste management:** For the country's blue and circular economies, the reduction of waste and related pollution is primordial at all levels and, notably, in the ocean. There is currently a significant level of industrial pollution and waste accumulation from litter in cities and on beaches.

**Rationale:** In Guinea-Bissau, the government has established an anti-sludge and anti-litter policy. However, the corresponding legislation and fines are not enforced. A control body is in place and managed by the public sector to monitor the waste streams of companies. Industrial dumpsters are not currently monitored by the municipality.

**Specific actions required:** It becomes clear that the country needs to better monitor industrial waste and establish fines and introduce an understanding of the use of materials in sectors such as tourism, fishing or agriculture.

For Guinea-Bissau, the solution is to support existing initiatives and create an industrial waste monitoring programme and subsequent penalty system.

#### 1.4 Restore and better manage the use of natural capital

**Natural resources management:** To achieve sustainable use of natural resources within a CE, Guinea-Bissau needs to further develop and support existing initiatives. These aim to regenerate natural flows, particularly in blue economy sectors such as fisheries, tourism, oil and gas exploration and bioprospecting. Guinea-Bissau has set up various biodiversity and blue economy strategies aimed at increasing environmental marine and coastal ecosystems protection. While there is a wide range of environmental legislation, there are also high levels of biomass extraction through fishing for example.

**Rationale:** There are a limited number of agencies and research centres responsible for monitoring natural resource flows and stocks. Existing activities include wildlife preservation and water pollution control by the Ministry of Environment and Biodiversity. As an extension of existing natural resource monitoring efforts, there are limited control efforts, such as the implementation of resource use permits.

**Specific needs required:** Available solutions include increasing protection of EEZ through MPAs, reinforced monitoring of existing MPAs and areas-based management as well as increasing restoration activities.

A first step in Guinea-Bissau would be to improve existing monitoring practices and capacities. The acquisition of better knowledge on natural resource use will provide evidence for future decision-

making on resource extraction. To address the recovery of natural flows, a parallel step is to support and develop existing activities such as mangrove restoration or marine protected areas.

#### 1.5 Incentivize businesses

**Putting businesses at the centre of CE:** Increasing the involvement of businesses and entrepreneurs is a stepping stone to achieving circular and blue economy activities. Businesses and entrepreneurs are not aware of the opportunity that CE represents. Those who are already involved in CE activities are not well supported.

**Rationale:** In Guinea-Bissau, the public sector has little awareness of private sector initiatives and efforts towards a circular economy and does not monitor circular business practices. The government has encouraged green and circular economy objectives within companies by supporting them financially through tax breaks, but more sustained efforts are limited due to lack of collaboration.

The lack of government control on business practices and understanding of circular efforts do not allow for the clustering of businesses based on equipment, material use and production practices, to establish the closed loop system or industry collaboration.

**Specific actions required:** In order to promote transition to a green business, the government should provide structural and financial support to businesses, including the following measures:

- Set up a circular economy office within one or more of the government departments.
- Create clusters of companies based on activity, material use, equipment needs and proximity to improve material use and infrastructure efficiency while reducing supply chain and waste treatment costs by sharing them among a group of companies.
- Engage with industry to create value from waste.
- Introduce a system of tax relief such as a 3 to 5-year start-up period that is completely tax free or reduced.
- Reduce value added tax for repair and refurbishment activities to encourage reuse businesses.

In Guinea-Bissau, existing initiatives such as tax rebates also need to be better promoted to businesses in order to facilitate access to support and encourage a transition to a circular economy

## 2. Guide for entrepreneurs

To implement a circular economy model within companies and across sectors through synergies, public and private sector efforts are needed to create the right environment. As private sector players are able to decide and act quickly, businesses can be the engine of a local circular economy. Businesses are currently in a position where they can lead the change. By taking the initiative and adopting the transition to circular economic practices, they can also influence government decisions in this area.

In order to engage businesses in efforts to achieve a circular economy, it is necessary to provide them with guidelines on how to implement and transition to a circular production cycle. Through consultation with local experts and government representatives, this document highlights existing good practices as well as barriers and opportunities for a circular economy. Feasible solutions and stakeholders who can be involved in the process are identified. Guidelines are proposed to create a discussion between sectors to form synergies and break the linear economic model. The identification and highlighting of

possible collaborations between companies as well as step-by-step guidelines for companies seeking sustainability are starting points towards the ultimate goal of protecting marine resources and reducing ocean pollution.

The guidelines can help start-ups as well as existing businesses to establish business models that allow for more efficient resource management while phasing out the creation of waste and thus combating maritime pollution at its source. The guidelines provide prospective entrepreneurs with administrative advice on how to set up their business and identify the main ways to implement a circular economy. For existing businesses, the guidelines include step-by-step advice on how to make the transition to sustainable production and system processes that are associated with a circular economy. The guidelines conclude with in-depth solution proposals and opportunities that companies can take up and implement in their ongoing quest for sustainable processes. Based on the content of this document, companies will be able to make relevant progress leading to better resource management, reduced waste generation and less marine pollution.

#### 2.1 Creating a new CE business

#### 2.1.1 Establish the mission, vision and objectives of the company

The mission of the company should embody its essence and purpose. The vision is the way in which the company is envisaged in the medium and long term. The company's objectives are derived from the founders' goals (personal and professional motivations) and should address environmental and social challenges and satisfy customer needs.

For a CE enterprise, these three elements must refer to one of the CE principles: (1) preserving and enhancing natural capital by controlling finite stocks and balancing renewable resource flows; (2) optimising resource efficiency by circulating products, components and materials to their maximum utility at all times through technical and biological cycles; and (3) promoting system efficiency by revealing and eliminating negative externalities

In Guinea-Bissau, the tourism, fisheries, agriculture and industry sectors have been identified as key sectors. They offer opportunities with high and deep impacts to reduce marine and land pollution and introduce circularity in Guinea-Bissau.

#### 2.1.2 Identify key stakeholders and customer segments

This step involves identifying and prioritising the stakeholders that will play an important role in achieving the project's objectives. Stakeholders include the team (co-founders and employees), partners, beneficiaries (those who benefit from the value generated by the project) and customers. Customers are at the heart of the business model as they buy the services or products. The main impact of the project in society must be intrinsically linked to the local community and cover a local demand that must be met. Another task is to develop a good understanding of the potential customer base (customer identification and profiling) and the existing market around it (market assessment).

To promote CE in Guinea-Bissau, it is essential at this stage to include stakeholders such as governments, civil society organisations promoting CE, institutions such as the Ellen MacArthur Foundation. To identify key stakeholders, entrepreneurs should target key suppliers, intermediaries, processing partners as well as customers and public interest partners. In the tourism, fisheries, agriculture and industry sectors identified above, some key stakeholders are essential (see Annex 4).

#### 2.1.3 Develop the value proposition

CE companies create environmental value by addressing the challenges of circularity and the environment (which is a key factor in their existence) through their business solutions and operations. They create social value by empowering their stakeholders (including employees, suppliers, communities and future generations) and meeting the needs of their customers.

To achieve this, it is suggested to create strong collaboration at all levels and to involve customers and stakeholders in the process of designing and delivering the value proposition (through co-creation).

In Guinea-Bissau, the problem(s) of marine pollution, lack of waste responsibility and extensive resource extraction are key challenges that will provide a good value proposition.

#### 2.1.4 Identify the implementation modalities

#### 2.1.4.1 Key activities and resources

Key activities outline what needs to be done to define and deliver a value proposition to a specific customer group. These activities may include problem solving (such as consultancy or advice), production (manufacturing, etc.), platform, network or sales and supply chain management.

Activities within CE enterprises should include those proposed in the different business models (in section 4 of this guide).

Key resources are all the elements and aspects that are essential for the proper functioning of the business. They include human resources, physical assets, intellectual resources, financial resources and natural resources. For the latter, particular attention should be paid to the use of recycled materials, sustainable or renewable resources as raw materials.

Entrepreneurs should also consider upcoming legislative changes in the country, such as EPR laws. At this stage, it may also be useful to find out about possible government support, such as tax breaks, investment grants or sector-specific funds.

#### 2.1.4.2. Customer relationships and channels

Different types of relationships can be established with customers, such as personal assistance, self-service, automatic service, community or co-creation.

In order to correctly establish the different types of relationships with customers, it can be useful to draw up a customer journey map for the concerned customer group. A customer journey map is an oriented graphic that describes the journey of a user by representing the different contact points that characterise her/his interaction with the service or product.

It is also necessary to distinguish between the way (channels) to get the customer's attention and the way to establish and maintain a close relationship with her/him. Channels include all means of communication and distribution to reach customers and deliver a value proposition.

For CE companies in Guinea-Bissau, there is an opportunity to explore existing initiatives for sharing economies, introduce take-back options for customers to return products and help materials stay with the company, while exploiting options to continue interacting with customers.

#### 2.1.4.3. Cost structure

It is important to carefully classify costs (fixed and variable) so that the company can analyse and improve its performance.

Within a CE, it is useful to explore potential costs related to CE niches and to identify savings from CE practices such as shared equipment, purchase of recycled materials or procurement and transport costs from abroad.

#### 2.1.4.4. Revenue streams

The company needs to have a clear idea of the size of each revenue stream and which one best fits a particular customer segment and channel. These streams can include asset sales, user fees, subscription fees, licences, etc.

#### 2.1.5 Test the product or service

Before fully implementing the above, the entrepreneur must test key variables:

- The problems and needs identified should be tested by talking to experts in the field or by interviewing key stakeholders.
- The involvement of key stakeholders should be verified through various types of consultations and meetings on business objectives where several stakeholders can provide a good measure of their willingness to engage.
- Customer segments need to be validated to ascertain their needs, aspirations, gains and pains, etc.
- Focus groups, interviews, debates and conversations could be used including on social media.
- The value proposition should be tested by building a small-scale prototype or semi-functional versions of the services/products. Here, the reaction of the test participants could include the level of satisfaction, feedback and curiosity/demand for more.

Once the assumptions on the different variables have been tested and validated, the service/product should be scaled up from the prototype to the optimal market size where viability is achieved.

To test the circular product or service, the company can mobilise existing platforms for green entrepreneurs and products, such as the National Laboratory for Fisheries Certification (see Annex 4 for more details).

#### 2.1.6 Mobilise tools for implementation

Once the business model is validated, the implementation of the above modalities can be facilitated by various tools. The **first** is the establishment of a financial plan with profit and loss accounts, balance sheets and cash flow projections, as well as a financing plan identifying traditional investors and banks as well as other financing mechanisms such as participatory financing, financial cooperatives, microcredit, ethical banks. **Second**, have a legal management plan to choose the legal form best suited to the needs and business model. **Thirdly**, a roadmap is needed to plan the progress of the business from year 0 to the medium and long term. The **fourth** is to have an operations and management plan that dictates how operations are carried out and managed by staff, assigning roles and responsibilities and setting a timetable. The tools used should be adapted to the CE business model adopted.

To find appropriate tools, contractors can refer to existing government services and companies that provide assistance to businesses such as the Tourism Secretariat, the Ministry of Fisheries or of Agriculture and Rural development (see Annex 4 for more details).

#### 2.1.7 Measure impacts and improve

Effective measurement of environmental and social impacts is essential for CE companies. In addition to measuring the company's performance in achieving its objectives and mission, environmental indicators are needed to assess environmental performance. Environmental indicators such as water consumption, material use, waste generated per service or product or other CE-related indicators should be used. Continuous business improvement is essential to achieve the goals of the circular economy. Typical areas of improvement include levels of stakeholder involvement, communication and marketing to engage customers, improve environmental performance, ensure green procurement and increase environmental awareness among the public.

#### 2.2 Transitioning to a CE business

#### 2.2.1 Map your impact and set priorities

The first step is to bring together an internal «sustainability team» to set objectives, define targets, review environmental impact and determine priorities. In this process, it is necessary to assess the impacts on the use of natural flows and the management of material stocks. In Guinea-Bisssau, the main environmental impacts of the economic sectors are marine pollution and the loss of biodiversity.

#### 2.2.2 Choose indicators and understand data needs

The next step is to identify the indicators that are important for the company and the data that should be collected to support continuous improvement. To assess the company's circularity, indicators related to the CE can be used, such as: use of renewable energy, greenhouse gas and energy intensity, waste intensity, releases into the air and water.

#### 2.2.3 Measure inputs used in production

It is then necessary to identify how the materials and components used in the production processes influence environmental performance. Companies can also measure CE-related performance, including: material consumption, resource extraction, renewable energy consumption, waste generation, imported inputs, non-renewable materials, restricted substances, recycled or reused materials. Companies can check the availability of recyclable materials and monitor that of waste/recycled materials as inputs into the production process.

#### 2.2.4 Assess the operations of your facility

It is essential to consider the impact and efficiency of operations in the facility. The generation of residual waste and surplus materials that can be phased out and managed more efficiently in the future (e.g. water consumption, energy intensity, greenhouse gas production, air and water emissions, waste generated). Efforts to improve the efficiency of production and use of materials towards circularity while reducing the creation of waste must be continuous.

#### 2.2.5 Evaluate your products

Here it is essential to identify factors such as energy consumption during product use, recyclability and use of hazardous substances that help determine the sustainability of the final product. Companies can use CE-related indicators such as: recycled/reused content of products, recyclability of products, renewable materials used in products, non-renewable materials used in products, regulated substances

in products, energy consumption in use of products, greenhouse gas emissions resulting from use of products. It also aligns with CE to assess the possible incentives to recycle and encourage customers to return products to possibly keep materials in the cycle.

#### 2.2.6 Understand your results

It is important to know how to read and interpret indicators and understand performance trends. Companies can focus on CE-related indicators that align with proposed business models.

Entrepreneurs and companies can refer to existing government services and companies that can provide assistance in this process, such as the Directorate General of Energy and Industry.

#### 2.2.7 Take action to improve your performance

Finally, opportunities for performance improvement should be selected and action plans drawn up to implement them. CE companies should focus on CE-related indicators that align with the suggested business models. It is also useful to keep abreast of new sustainable opportunities as they arise. They should also make continuous progress in identifying areas of improvement or non-circular practices.

#### 2.3 Circular Business models for entrepreneurs

At present, there are no companies operating on the basis of circular economy business models. The models outlined below present important opportunities for the country and entrepreneurs to develop the circular economy as well as key areas of the blue economy.

#### 2.3.1 Circular design

This CE model relies on the following elements:

- Circular product design: use recyclable materials for goods and packaging that allow for a circular system and a maximum local supplies;
- Product/service design and provision: access over ownership and product service systems;
- Local supplies and local demand for service/good;
- Economy of functionality (rent resources rather than buy and own them)

There are few existing businesses that operate on the basis of a fully circular design.

#### 2.3.2 Optimal material and resource use

The aim of this model is to optimise the use of resources by operating only with renewable and recycled materials as inputs. To adopt this model, the following activities can be undertaken:

- Understand the value of waste materials and engage in opportunities from materials
- Buy recycled materials and reduce input material costs
- Target recyclable and sustainable materials and pioneer in industrial waste valorisation
- Introduce industrial symbiosis; internalise a maximum of production steps within the company on the same site to reduce transport costs. This also helps with waste creation as all accrues on the same site, making recycling or reusing easier since larger amounts hold more potential

- Redefine retail; skip retailers by directly interacting with consumers. Simplifies recycling practices, understanding of consumer behaviour and increases revenue
- Inspect daily practices to identify non-sustainable production practices such as use of single use plastics, equipment and garment
- Adopt a closed-loop process; use residual outputs and by-products as input for other production processes
- Set up internal target rates to increase recycling rates and encourage sorting to improve employee understanding of a circular economy and its benefits

#### 2.3.3 Value recovery

This CE model aims to maximise the usefulness and value of certain materials in their production cycle and to achieve greater efficiency in the production process, thereby minimising waste generation. It is based on the following elements:

- **Reuse and recycle:** Introduce ways to keep waste materials within the company and the production cycle; Increase material use efficiency
- Repair and recondition: produce goods and services to last (quality over quantity) and provide service to repair and refurbish products and services
- Remake products that did not meet standards and were considered waste
- Consumer awareness: inform customers of recycling and repair opportunities to incentivize closed-loop material use while explaining competitive advantage of your service/product compared to non-circular business models

#### 2.3.4 Collaborative economy

This model is based on the exploitation of all potential secondary products and collateral uses that arise during their production. Sharing of equipment and materials is maximised through strong industrial networking. To adopt this model, the following activities can be undertaken:

To adopt this model, the following activities can be undertaken:

- **grouping** together companies that use similar materials in order to share transport supply costs and open up channels for the exchange of materials between companies
- encourage cooperation; exchange good practices and learning experiences between companies to accelerate the transition to circularity
- **introduce a sharing economy**: collaborate with other companies to build expensive infrastructure or buy equipment to improve efficiency of use (e.g. cooling units, trucks, sorting site ...)

### 1. Annexes

## **Annex 1: Type of policies and laws towards circular economy**

of ws	1.Law No. 1/2011 approving the Basic Legislation on Environment (2011)
ent flo	2. Decree-Law No. 10/2011 approving the Basic Fishing Legislation (2011)
geme	3. Decree-Law No. 5/2011 approving the New Forestry Law (2011)
anag new	4. Decree-Law No. 5-A/1992 establishing the Water Code (1992)
Z Đ	5. National Framework on Biotechnology and Biosafety of Guinea-Bissau (2008)
t of	1. Environmental Law N.1/2011 defining waste and good practices of waste management
Management of stocks	2. Resolution N.22 of CMB/2010 for the management of Bissau municipal solid waste
stoc	3. Decree Law No. 2/2013 / Decree Law No. 16/2013-Prohibiting the manufacture,
Man	import, marketing and distribution of plastic bags

## Annex 2: Existing awareness raising initiatives and campaigns towards CE

Initiative's name	Description of activity	CE aspect addressed	Link / Contact
TININGUENA	NGO whose mission is to «promote participatory and sustainable development, based on the conservation of natural and cultural resources and the exercise of citizenship	Regeneration of natural flows / production efficiency	http://www. tiniguena.org
Palmerinha	NGO working in the field of environmental education and communication in protected areas and in Bissau-Guinean society	Environmental protection (regeneration of natural flows/waste reduction/energy production/recovery efficiency)	http://www. palmeirinha.org
Government	Awareness campaign on the prohibition of the use of plastic bags	Environmental protection and pollution control	
Civil society, NGOs, Women's associations, People, Students, Military/Police	Awareness and sanitation campaigns	Environmental protection and pollution control	

## Annex 3: Examples of companies doing CE related activities in waste management

CE aspect	Company's name	Description of activity
Collection	BLUFO	Private company for the collection and management of urban waste
Sorting	Initiative of the Chamber of Commerce, Industry, Agriculture and Services (CCIAS) with the municipality of Bissau	Equipment for the waste sorting centre
Treatment	Initiative of the Ministry of the Environment and Biodiversity	Creation of the Residue Centre
Recycling and disposal	Initiative of some private companies	Recycling and disposal of waste

Annex 4: Key sectors to foster CE and related stakeholders and supporting platforms

Key sector	Identified key stakeholders	Relevance of the stakeholder	Suportive platform
Agriculture	Ministry of Agriculture and Rural Development	Implementation of government policies and strategies for CE	http://www.gbissau.org
Fisheries	Authorities	Regulation of the sector	
	Fishermen	Stakeholders in the sector	
Tourism	State Secretariat for Tourism	Implementation of government policies for sustainable tourism	