



# National Circular Economy Framework & Guide for Entrepreneurs for Cabo Verde

Country report





## **Table of Contents**

In	trodu	iction	. 47
1	Poli	cy framework	. 48
	1.1	Establish regulations for the country's Circular Economy	. 48
	1.2	Educate through awareness and education campaigns	. 48
	1.3	Improve material stock management	. 49
	1.4	Restore and better manage the use of natural flows	. 50
	1.5	Incentivise businesses	. 50
2	Guid	de for entrepreneurs	. 51
	2.1	Creating a new CE business	. 51
	2.2	Transitioning to a CE business	. 54
	2.3	Circular Business models for entrepreneurs	. 55
3	Ann	exes	. 58
	Anne	ex 1: Types of laws and policies in Cabo Verde relating to CE	. 58
	Anne	ex 2: Existing awareness raising initiatives and campaigns towards CE in country	. 59
	Anne	ex 3: Examples of companies doing CE related activities in waste management	. 59
	Anne	ex 4: Key sectors to foster CE and related stakeholders and entities supporting a CE	. 60
	Anne	ex 5: Key examples of companies in Cabo Verde operating under CE business models	. 61

#### Introduction

Circular economy (CE) has been on the rise across the globe due to a growing concern about resource extraction rates and pollution arising from production processes under the linear economic model. The CE is "an industrial system that is restorative or regenerative by intention and design" (EMF 2013). The CE goes beyond recycling and waste reduction as it aims to value waste and keep materials in circulation for as long as possible. It is about extracting higher value from fewer resources by increasing productivity and efficiency, and moving from ownership to access of products, creating a sharing mindset allowing to reduce consumption thanks to increased efficiency of asset use. For island states, the CE is highly relevant due to their vulnerability to climate change and pollution but also due to the reliance of countries on import of most products consumed. 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 for economic growth.

The objective of the report is to present a national policy framework and guidelines for entrepreneurs. Through collaboration with local experts and government officials, local agencies and international foundations, an understanding of the current situation has been established in the review report. Possible approaches and actions have now been identified to move forward. These actions are gathered within the present document. Thanks to policy instruments and various green incentives made throughout the past decade, Cabo Verde has been working to create and develop the foundations for moving towards the effective implementation of an ever more solid and real circular economy. Involvement from the civil society and the private sector has additionally increased the understanding of the concept of a circular economy and cornerstones have been laid within the society.

The document is divided into two parts. First, it presents a policy framework to foster CE and respective suggested legislative implementations for Cabo Verde. To facilitate the connection between authorities and policies and the private sector it is important to guarantee a common understanding and the comprehension 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 as it aims to value waste and keep materials in circulation for 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 the 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 Cabo Verde with a circularity target, as well as the transition toward more sustainable business practices for established companies will be included and offer step-by-step advice along the way. This will allow to close a gap of informality within different sectors and better involve authorities and businesses in the common quest toward a circular economy.

### 1 Policy framework

The framework to lay out possible paths moving forward based on the particularities of Cabo Verde and feedback from the local expert participating in this work. Acting upon present circumstances in place legislation will be promoted to develop a circular economy further while aiming to identify additional opportunities to expand the economy and improve aggregate efficiency of materials.

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

**National Policy goal:** The government needs to adopt a statement committing to a circular economy and fill the legal gaps. A number of legal texts exist in the country but they are not harmonised to address CE (See Annex 1).

**Rationale:** There is some interaction between industry and authorities for common action. The government made its target for a circular economy known and offered a clear indication on how to follow through with it. In Cabo Verde, the polluter pays principle (PPP) is established in the National Strategic Plan for Waste Management (PENGeR). It is controlled and monitored by the National Environment Department (DNA). The industry is responsible for the financial burden of the pollution costs. Cabo Verde has in place the Extended Producer Responsibility (EPR) along the supply chain to prevent extensive pollution and reduce the impact on PPP. EPR and PPP are generally recognised in the legislation about waste management. Despite their existence, they are not developed enough to provide a CE basis and reduce different forms of pollution and in particular marine pollution.

**Specific actions needed:** To achieve the national policy goal, it is suggested that the country adopts a declaration or an umbrella legislation that promotes integration of actors and harmonisation actions towards a CE. Commitment to the CE could be integrated into existing blue economy policies of the country. There is also a need to adopt specific legislations that are currently missing to foster a CE. These legislations include texts on recycling.

#### 1.2 Educate through awareness and education campaigns

**Mobilising actors for the CE:** To achieve a CE in Cabo Verde, it is essential to increase literacy on CE at all levels, especially in key sectors of the blue economy. The Concept of CE is still new at the national level, but the population and governmental departments are aware of what the CE can provide.

**Rationale:** There are efforts from the government, civil society or private companies to sensitise population through agencies

Specific actions needed: To achieve the above goal, examples of specific actions needed include:

- Continue awareness campaigns in place engaging society at large.
- Build collaboration between large industrial partners and authorities.
- Reintroduce school campaigns to raise awareness within youth.
- Increase interaction with companies to introduce them to circular economic models and make them understand the necessity of it.

There is also a need to support and replicate existing initiatives and other educational activities in place at the level of government, businesses and the population. In Cabo Verde, awareness campaigns about the CE are very recent and can be seen in the sectors of tourism, agriculture, fisheries, services and communication (see Annex 2).

#### 1.3 Improve material stock management

#### **1.3.1** Collection and sorting system

**Optimising Waste value:** To improve waste management processes currently in place, it is recommended to optimise existing collection and sorting systems. This is also acknowledged in the report on Marine plastic under the AIODIS project. While waste is collected, it is not done uniformly across the country. Waste sorting procedures are not efficient and do not allow an efficient valorisation of waste.

**Rationale:** Waste is collected daily in most of the localities through containers and kerbside collection. Collection and transport of waste are the responsibility of the municipality. However, there is no waste sorting system in place.

**Specific actions needed:** From the above it is then necessary to increase collection points, establish sorting procedures and introduce a treatment site that is more sustainable than landfill. Another important step in this process is to support existing companies doing collection and sorting and replicate nationally. There are currently no companies that responsibly collect and sort waste.

#### 1.3.2 Waste treatment facility

**Improving efficiency of waste treatment sites:** Addressing processes at waste treatment facilities represent a key step towards achieving circularity. To do so, the country needs to increase efficiency of current facilities and introduce more sustainable sites like landfill with gas congestion, incineration with energy recovery, waste sorting and cleaning sites, recycling stations. Existing facilities do not allow valorisation of waste and do not achieve their goals of reducing waste.

**Rationale:** The government has started discussion to improve and replace current landfill sites. Options to open incineration plants, landfill with anaerobic congestion, recycling plants are being evaluated by the authorities. Missing efforts include implementing waste sorting, increasing waste collection, reducing littering and introducing recycling.

**Specific actions needed:** To achieve circularity, existing solutions include implementing high efficiency recycling and biogas creation. For Cabo Verde, options include upscaling existing companies treating waste with circular motives and creating new ones. Current companies that have existing waste valorisation processes do not exist (See annex 3).

#### 1.3.3 Dumping and littering

**Reducing pollution through improved waste management:** For the country's blue and circular economy, reducing waste and related pollution at all levels and especially in the ocean is paramount. There is currently a low level of industrial pollution and accumulation of waste from littering in cities and on beaches.

**Rationale:** In Cabo Verde, the PENGeR establishes anti-dumping and littering. Related legislations and fines are in place. A body of control is in place and operated by the public sector and responsible for monitoring company waste streams. Industrial dumpsters are supervised by the municipality and the National Environment Department.

**Specific actions needed:** For Cabo Verde, the solution lies within supporting existing program for industrial waste monitoring and a subsequent penalty system. The country could better monitor industrial waste and establish fines, introduce material use understanding across sectors such as tourism, fisheries or agriculture.

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

**Managing natural resources:** To achieve a sustainable use of natural resources within a CE, Cabo Verde needs to upscale and further support existing initiatives. They aim at regenerating natural flows especially in the blue economy sectors such as fisheries, tourism, oil and gas exploration and bioprospection. Cabo Verde has in place various biodiversity and blue economy related strategies aiming to increase environmental protection of marine and coastal ecosystems. While there is a wide range of environmental texts, there are also high levels of biomass extraction through fisheries for example.

**Rationale:** There are agencies and research centres in place responsible for the monitoring of natural resources such as fish stocks, forest abundance, wildlife preservation and water pollution. As a follow-up on existing monitoring efforts of natural resources, there are extensive controlling efforts like implementation of resource use permits.

**Specific actions needed:** Available solutions include increasing protection of EEZ, reinforcing monitoring of existing MPAs and areas-based management, and increasing restoration activities. A first step for Cabo Verde could be to improve existing monitoring practices and capabilities. Building better knowledge on the use of natural resources will provide evidence for future resource extraction decision-making. To address regeneration of natural flows, a parallel step is to support and upscale existing activities such as fishery closures during breeding seasons, locally managed marine areas and MPAs.

#### 1.5 Incentivise businesses

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

**Rationale:** The public sector has limited awareness of private sector initiatives and efforts toward a circular economy and does not monitor circular business practices with the optimum frequency. The government has encouraged green and circular economy related aims within businesses by supporting them financially through tax reductions and operative advice. The existing governmental monitoring of business practices and the understanding of circular efforts allows there to be grouping of companies according to equipment, material use and production practices to allow for a closed loop or industrial collaboration.

**Specific actions needed:** To promote the adoption or transition to a CE business, the government needs to improve structural and financial support to businesses including through:

- The creation of a circular economy office within one or several of the government departments
- The creation of company grouping according to business activity, material use, equipment requirements and proximity to improve material use and infrastructural efficiency while reducing supply chain and waste treatment costs by sharing them among a group of firms
- Undertaking a dialogue with industry to create valorisation of waste materials
- Support existing tax relief systems such as the eco-tax, tax benefits according to environmental practices or a 3-5 years starting period complete tax-free or reduced
- Cutting repair and refurbish value-added tax to encourage reuse businesses

Existing initiatives of tax reductions, sectoral funds and operative advice need better promotion amongst businesses. Increasing the number of partnerships between the government and the private sector will also be key to advance the circular economy of the country.

#### **2** Guide for entrepreneurs

To implement a circular economic model within businesses and across sectors through synergies both governmental and private sector efforts are required to create the right environment. Since private sector actors are able to decide and act quickly, companies can be the driving power toward a local circular economy. Businesses are currently in the position where they can drive the change by taking initiative and transition toward circular economic practices and influence governmental decisions on the matter to follow accordingly.

In order to engage businesses in efforts to achieve a circular economy, it is necessary to provide them with guidelines on how to set up and transition toward a circular production cycle. Through consultation of local experts and governmental officials this document pinpoints to existing good practices as well as barriers and opportunities for a circular economy. Feasible solutions and possible stakeholders to become involved in the process have been identified and the guidelines are designed to create discussion across sectors to form synergies and break the linear economic model. Identifying and pointing out possible company collaborations as well as step-by-step guidelines for sustainability seeking businesses are starting points towards the final goal of protecting maritime resources and reducing ocean pollution.

The guidelines can help start-ups as well as existing companies to establish business models that allow for more efficient resource management while phasing out waste creation and thereby counteract maritime pollution at its source. The guidelines offer upcoming entrepreneurs advice to set up their business and identify the main modalities of implementation for a circular economy. For existing businesses, the guidelines include step-by-step council on how to transition toward sustainable production and system processes that are associated with a circular economy. The guidelines conclude with in-depth solution proposals and opportunities for companies to pick up upon 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 improved resource management, reduced waste generation and diminished maritime pollution.

#### 2.1 Creating a new CE business

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

Identify the company's mission must embody its essence and reason for being. The vision comes as the way the company is envisioned in the mid-long term. Objectives of the company derive from the founders' goals (personal and professional motivations) and should tackle environmental and social challenges, and to satisfy customer needs.

For a CE business, these three elements should refer to one of the CE principles: (1) preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows, (2) optimise resource yields by circulating products, components, and materials at the highest utility at all times in both technical and biological cycles, and (3) foster system effectiveness by revealing and designing out negative externalities.

In Cabo Verde, the tourism, fishery, agriculture, manufacture and communication sectors have been identified as key sectors. They offer the most impactful and far-reaching opportunities to reduce maritime and land pollution and introduce circularity in Cabo Verde.

#### 2.1.2 Identify key stakeholders and customer segments

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

To promote a CE in Cabo Verde, it is essential at this stage to include stakeholders like governments, civil society organisations promoting CE, institutions like the Ellen MacArthur Foundation. To identify key stakeholders, entrepreneurs should target main suppliers, intermediaries, processing associates as well as customers and public partners of interest. In the above identified sectors of tourism, fishery, agriculture, manufacture and communication some key stakeholders are essential (Please refer to Annex 4).

#### 2.1.3 Develop the value proposition

CE businesses create environmental value by tackling circularity and environmental challenges (that is a key driver for 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 across the board and involve customers and stakeholders in the process of designing and delivering the value proposition (through co-creation).

In Cabo Verde, addressing the following issues can offer a good value proposition: marine pollution, excess waste generation, missing waste responsibility, extensive resource extraction and lack of locally accessible material inputs.

#### 2.1.4 Identify the modalities of implementation

#### 2.1.4.1 Key activities and resources

Key activities define what we must do in order to define and offer a value proposition to a specific customer segment. They include problem-solving (such as consulting or counselling), production (manufacturing etc), platform/network/sale, and supply chain management.

Activities within CE businesses should include those proposed in the different business models (in section 4 of these guidelines).

Key resources represent all the elements and aspects that are essential for making the business work properly. They include human resources, physical assets, intellectual resources, financial resources and natural resources. For the latter, a special focus should be on the use of recycled materials, sustainable or renewable resources as input materials.

Entrepreneurs also need to consider incoming legislative changes in Cabo Verde such as potential laws on recycling. At this stage it can also be helpful to enquire for possible governmental support like tax reduction, investment subsidies and specific funds per sector.

#### 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 based or co-creation.

To properly establish the different types of relations with customers, doing a customer journey map of the particular segment of customers can be useful. A map is an oriented graph that describes a user's journey by representing the different touchpoints that characterise his/her interaction with the service or product.

You will also have to distinguish between the way (channels) to get the customer's attention and how to establish and maintain a close relationship with them. Channels include all means of communication and distribution to reach customers and deliver a value proposition to them.

For CE businesses in Cabo Verde, it is possible to explore existing initiatives towards sharing economies, introduce take-back options for customers to return products and help materials stay within company while exploiting options to continue to interact with customers.

#### 2.1.4.3 Cost structure

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

Within a CE, it is useful to explore potential costs linked to niche CE areas and identify cost savings arising from CE practices such as equipment sharing, recycled material purchases or supply and transport costs from abroad.

#### 2.1.4.4 Revenue streams

The business must have an accurate idea of the importance of each revenue stream and which one best matches a particular customer segment and channel. Streams might include asset sale, usage fees, subscription fees, licensing, etc.

#### 2.1.5 Test the product or service

Before fully implementing the modalities above, the entrepreneur needs to test key variables:

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

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

To test the circular product or service, the business can mobilise existing platforms for entrepreneurs and green products such as MT Segredo or Biosfera (please refer to Annex 4 for more details).

#### 2.1.6 Mobilise tools for implementation

When the business model is validated, implementation of the modalities presented above can be facilitated by various tools. **First** is establishing a financial plan with income statements, balance sheets and cashflow projections, and a funding plan identifying traditional investors and banks as well as other funding mechanisms such as crowdfunding, financial cooperatives, micro-credits, ethical banks. **Second** is having a legal management plan to choose the best-fitting legal form according to the needs and business model. **Third** is setting a roadmap to foresee the progress of the business from year 0 to the medium and long-term. **Fourth** is to have an operation and management plan which dictates how operations are performed and managed by staff and by assigning roles and responsibilities and setting a schedule. Tools used need to be adapted according to the CE business model adopted.

To find the appropriate tools, entrepreneurs can refer to existing governmental departments (Please refer to Annex 4 for more details).

#### 2.1.7 Measure impacts and improve

Effectively measuring environmental and social impacts is essential to CE businesses. In addition to measuring how the business is doing regarding the achievement of objectives and mission, environmental indicators are needed to assess environmental performance. Environmental indicators should be used such as water consumption, material use, waste generated per service or product, or other CE related indicators. Constantly improving the business is key to achieve the circular economic objectives. Common areas of improvement include levels of participation of stakeholders, communication and marketing to incentivize customers, improve environmental performance, ensure green procurement and increase environmental awareness amongst the public.

#### 2.2 Transitioning to a CE business

#### 2.2.1 Map your impact and set priorities

Learn how to bring together an internal "sustainability team" to set objectives, define targets, review your environmental impact and decide on priorities. In this process, you need to evaluate impacts regarding natural flow use and material stock management. In Cabo Verde, key environmental impacts of the economic sectors include marine pollution, waste generation and loss of biodiversity.

#### 2.2.2 Choose indicators and understand data needs

Identify indicators that are important for your business and learn about what data should be collected to help drive continuous improvement. To assess the circularity of your business, you can use CE related indicators such as: use of renewable energy, greenhouse gas intensity and energy intensity, intensity of your residuals, releases into the air and water.

#### 2.2.3 Measure inputs used in production

Identify how materials and components used into your production processes influence environmental performance. Businesses can also measure CE related performance including: material consumption, resource extraction, renewable energy consumption, waste generation, import of inputs, non-renewable materials, restricted substances, recycled or reused materials. Businesses can check the availability of recyclable materials and monitor availability of waste materials/recycled materials as inputs into production process.

#### 2.2.4 Assess the operations of your facility

Consider the impact and efficiency of the operations in your facility. Residual waste generation and excess material that can be phased out and managed more efficiently going forward (e.g. water consumption, energy intensity, greenhouse gas generation, emissions to air and water, waste generated). Efforts to improve production and material use efficiency toward circularity while reducing waste creation must be ongoing.

#### 2.2.5 Evaluate your products

Identify factors such as energy consumption in use, recyclability and use of hazardous substances that help determine how sustainable your end product is. Businesses can use CE related indicators such as: recycled/reused content of your products, recyclability of your products, renewable materials used in your products, Non-renewable materials used in your products, restricted substances contained in your products, energy consumption in using your products, greenhouse gas emissions from the use of your products. You can also evaluate the possible incentives to recycle and engage customers to return products to possibly keep materials in cycle.

#### 2.2.6 Understand your results

Learn to read and interpret your indicators and understand trends in your performance. Businesses can focus on CE related indicators that align with business models suggested.

Entrepreneurs and businesses can refer to existing governmental departments and companies that can provide assistance in this process such as the National Environment Department.

#### 2.2.7 Take action to improve your performance

Choose opportunities to improve your performance and create action plans to implement them. CE businesses should focus on CE related indicators that align with business models suggested, and stay up to date with new arising sustainable opportunities and drive ongoing progress by pinpointing areas of improvement or non-circular practices.

#### 2.3 Circular Business models for entrepreneurs

#### 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 local supplies at a maximum

- 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 no companies that currently operate based on an entirely circular design.

#### 2.3.2 Optimal material and resource use

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

- Understand 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

There are very few companies that optimised resource use by functioning with renewable and recycled materials as input (Please refer to Annex 5 for key examples).

#### 2.3.3 Value recovery

This CE model relies 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

There are very few companies that maximise the utility and value of some of their materials within their production cycle and reach higher production process efficiency leading to a minimized waste creation (Please refer to Annex 5 for key examples).

#### 2.3.4 Collaborative economy

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

- Group businesses that use similar materials to share transport supply costs and open channels to trade materials between firms
- **Foster cooperation**; exchange good practices and learning experiences between companies to accelerate transition toward circularity
- **Introduce a sharing economy**: collaborate with other businesses to build expensive infrastructure or purchase equipment to improve efficiency of usage (ex; cooling units, trucks, sorting site, ...)

There are currently no companies that operate on the basis of a collaborative economy and exploit all potential side products and collateral uses that accrue during their production. Additionally, equipment and material sharing are not maximised through industrial networking.

### 3 Annexes

## Annex 1: Types of laws and policies in Cabo Verde relating to CE

	Environmental protection/ Biodiversity Conservation	<b>√</b>	Act No. 86/IV/93 defining environmental policy (1993)\ Decree No. 7/2002, protecting endangered species of flora and fauna National Biodiversity Strategy and Action Plan (ENPAB) (2000) National Plan for Environmental Education 2013-2022 (PNEA) (2014)		
Renewable Flow Management	Fisheries management	✓	Decree-Law 53/2005 defining the Policy on Sustainable Exploitation of Fisheries Resources  National Plan of Action to prevent, prohibit and eliminate illegal, unreported and unregulated fishing activity (IUU PAN) for the period 2015-2018		
wo M	Forestry management	<b>✓</b>	Strategy for Agro-silvopastoral and Environmental Development in the Maio Island (2018)		
vable Flo	Protected Areas	<b>✓</b>	Decrees on the management of protected areas (2003, 2006) National Strategy and Business Plans of Cabo Verde's Protected Areas (ENAP - 2015-2024)		
Renev	Water management	<b>✓</b>	Decree-Law 75/99 defining the regulation regarding the production, distribution of drinking water and the collection, treatment and reuse of liquid effluents (1999)  National Plan of Action for Integrated Management of Water Resources (PAGIRE) (2010		
	Renewable Energy	<b>✓</b>	National Action Plan for Renewable Energy (PNAER) Period [2015-2020/2030]		
Stock Management	General waste management	<b>✓</b>	Decree-Law No. 56/2015 establishing the general regime for prevention, production and management of waste (2015) Decree-Law No. 26/2020 approving the Legal Regime for Urban Waste Management Services (2020)		
lanag	Solid waste management	~	Decree-Law No. 32/2016 approving the National Strategic Plan for Waste Management (PENGeR) for the period 2015-2030		
<b>≥</b>	Recycling	Χ			
Stoc	Plastic Bag Ban/ Phase out	<b>✓</b>	Law No. 99/VIII Prohibiting the production, importation, distribution into the market and use of conventional plastic bags for packaging (2015)		

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

CE aspect addressed	Initiative name	Description of activity	Website/Contact
Waste reduction	Environmental education program of Quercus CV	Awareness campaigns on tv, through the radio and at schools and restaurants	quercuscv@gmail.com
Production efficiency	Simili	Plastics Reuse and Transformation, S. Vicente	https://www.facebook. com/similicaboverde
Waste reduction	Kabungosurf school	Sensitisation and education of tourists and children in the preservation, cleaning and reuse of rubbish on beaches and slopes. Tarrafal de Santiago.	https://www. facebook.com/ kabungosurfschool
Regenerating natural flows/Recycling	Biosfera	Protection of the environment, with a particular focus on marine ecosystems and their associated fauna.	https://www. biosfera1.com/
Waste reduction	Câmara Municipal do Sal	Cleaning campaigns on the island's beaches	http://www. camaramunicipaldosal. info/

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

CE aspect	Company name	Description of activity	Website
Collection	Câmara Municipal do Sal	Cleaning campaigns on the island's beaches	http://www. camaramunicipaldosal. info/
Collection	Cavibel	Compacting the PET in the hotels, then sending it to the beach here and delivering it to a partner for recycling, but the partner was unable to take the project forward	https://www.eccbc. com/en/contact/cape- verde
Sorting	N/A	N/A	N/A
Treatment	Águas de Ponta Preta	Treatment of waste water to be reused for irrigation and other public cleaning	http:// aguaspontapreta.cv/
Recycling and disposal	MT Segredo	Transformation of plastic into tiles	https://www. facebook.com/ azulejosmtsegredo

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

Key sector for CE	Identified key stakeholders	Relevance of the stakeholder	Entities that can support CE	
Agriculture	Parque Natural do Monte Gordo (https://pt-pt.facebook. com/Parque-Natural-Monte-Gordo-137151123144445/)	Ensure efficient use of natural resources	Pró Empresa proempresa@ proempresa.cv	
Communication	Quercus CV	Communication/ awareness raising plan	Funds for the environment  www.maa.gov.cv  anas@anas.gov.cv	
	Ministry of Culture and the creative industry (https://www.governo.cv/)	Provides support and deliver various licences		
	Sítio Agro-ecológico João Varela (sajovcvorganicos@gmail.com)	Works on efficiency in the use of natural resources	Social sustainability fund	
Fisheries	IMAR (Instituto do mar I.P)  Ministry of marine economy	Monitors the fish stocks  Coordinate sustainable use of marine resources across sectors and issues licenses	for tourism	
Manufacture	CAVIBEL (https://www.eccbc.com/en/ contact/cape-verde)	Compacting the PET in the hotels, then sending it to the beach here and delivering it to a partner for recycling, but the partner was unable to take the project forward		
	Ministry of Industry, Trade and Energy (https://www.governo.cv/)	Delivers permits and licences		
Tourism	Hotel Odjo d'Agua (www.odjodagua_hotel.com)	A 40-room hotel unit on the island of Sal, addressing several environmental concerns		
	Spinguera ecolodge (http://www.spinguera.com)	A rural ecolodge, open for almost 14 years, which is 95%w powered by renewable energy (wind and photovoltaic).		
	National Environment Directorate www.maa.gov.cv	Department responsible for all environmental issues.		
	anas@anas.gov.cv			

## Annex 5: Key examples of companies in Cabo Verde operating under CE business models

Business model	Name of the company	Activity	Address/Contact
Circular design	N/A	N/A	N/A
Optimal material and resource use	Tinenê factory	Turning Glass bottles into sand for construction	Situa-se em Ribeira Julião, Estrada Sul S. Vicente.
Value recovery	ECOPET	Collection and recycling of PET bottles	Ecopet Cabo Verde Facebook page ecopet.cv@ gmail.com
Collaborative economy	N/A	N/A	N/A