PROJECT: KNOWING CIRCULAR ECONOMY IN BLACK SEA BASIN

ACRONYM: BSB-CIRCLECON

Project Ref.BSB1021

T1. PROMOTE CIRCULAR ECONOMY

A 1.2-Regional Studies of the State of Art

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1. ABBREVIATIONS and GLOSSARY OF TERMS

5T	Municipal Institution "Grant office "ODESA 5T"
BSB	Black Sea Basin
CE	Circular Economy
CEWG	Circular Economy Working Group
EGTC	European Grouping of Territorial Cooperation
EEA	European Environment Agency
ICSPRA	International Centre for Social Research and Policy Analysis
SDG	Sustainable Development Goal
SEEA	System of Environmental-Economic Accounting
SEVE	Greek Exporters Association
S.O.	Specific Objective
SMM	Samsun Metropolitan Municipality
VFU	Varna Free University
UNEP	UN Environment Programme
UNSD	United Nations Statistics Division

2. SCOPE OF THE DOCUMENT

The purpose of this document including methodology on data collection on Waste Management and Circular Economy issues and interviews with stakeholders/experts is to prepare a joint methodology for elaboration of a regional State of the Art analysis in the field of Waste Management and Circular Economy. The aim is to describe in detail in quality and quantity terms the current situation of waste management and circular economy issues, especially, waste collection – waste treatment - waste recycling – waste reuse - main environmental challenges in each area — soil, area and water pollution status - general people behavioural patterns related to waste.

In order to harmonize the professional content at project level, the development of a shared methodology, for the preparation of the study on regional/national level of participating partners, was prepared and agreed upon within the partnership. The methodology for the preparation of study includes template for the preparation of Regional Study as well as the template for the conduction of interviews with the stakeholders/experts.

3. INTRODUCTION

3.1   Project Summary

BSB-CIRCLECON deals with spreading the Circular Economy (CE) model in the BSB (Black Sea Basin) area. A circular economy is explained as an economy 'where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised'. Turning waste into a resource is an essential part of increasing resource efficiency and closing the loop in a circular economy. The European Commission adopted an action plan in 2015 to help accelerate Europe's transition towards a circular economy.

The projects intents to promote the EU Circular economy model, inform on waste prevention, reduction and management and establish a permanent BSB cooperation achieving long-term sustainability of its outputs and results contributing to Priority 2.2. It is in line with the Programme's Specific Objective (S.O.) 2, as it promotes coordination of environmental protection in a consortium that the quadruple helix is more than present and the partnership includes different thematic roles and expertise which complement each other in order to address the topic from Bulgaria, Greece, Turkey, Ukraine and Georgia. The structure of the activities addresses to the S.O.s of the project: The 1st S.O. is to present the case for increasing the uptake of the CE in the BSB area, the 2nd S.O. focuses on waste management, reduction and prevention and the 3rd S.O. intents to establish a permanent coordination.

New processes and tools are foreseen as to the Management that will minimize the footprint of the project reducing travelling and lowering cost. As to the Implementation GAs, the activities include innovative solutions for addressing the common needs identified and do not contain daily activities of

the applicants. BSB-CirclEcon will introduce a new way of working in the BSB area; Regarding Communication, instead of the "traditional" spending on paper, e-publications are suggested and all actions are designed to be environmental friendly Deliverables, outputs and expected results include the establishment of 1 EGTC, one multilingual educational platform leading to a University degree, 20 workshops with EU and local actors, 50 experts to be trained to CE models, 5 studies to enhance knowledge as to address the challenges, 350 organisations and companies to intensively advised, , 6 Organisations with increased capacity in Waste Management, and 1.400 persons to be informed directly. The above are directly contribute to the Programme Result Indicator "R2.2" The partnership is committed as that at least half of the personnel to be hired in the activities of the project will be women, the training will give priority to women representing the 50% out of 50 persons to be trained, all the venues for events will be accessible to persons with disabilities, all events' supplies will be from recycled only materials, the website will ensure accessibility of information for the visually impaired. BSB CIRCLECON consortium consists of 5 partners from 5 countries in the Black Sea region (Bulgaria, Greece, Turkey, Ukraine and Georgia.) and brings together regional, public and private organizations, and universities, whose specific thematic background guarantees a solid knowledge and necessary expertise by coming forward with appropriate innovative solutions. It will upgrade existing cooperation mechanisms between the target groups.

Project outputs and results are to benefit the wider community within the BSR and will have a strong social impact. All knowledge accumulated in the project will be transferred to other countries of the BSR through numerous project events, project dissemination channels and tools and European networks in which project partners participate.

3.2 Summary of the WP T1 PROMOTE CIRCULAR ECONOMY

The 1st S.O. of the project is to present in the BSB participating areas the case for increasing the uptake of the circular economy globally and the EU's role in this regard. The Implementation T1 GA addresses directly to the project's 1st S.O. The foreseen project's CEWG are intended to feature as part of an emerging toolbox which would look at how to increase the dissemination, learning and adoption process of CE from BSB actors. Key actors like local government & business support organisations will be intensively informed and follow a learning process in order to play the role of the outputs multipliers. Partners VFU, SEVE, 5T, ICSPRA and SMM will introduce a new way of regional working, the CEWGs – Circular Economy Working Groups. These CEGWs will be a series of high-level technical meetings, two in each partner area to promote and set the basis for implementing policies under the broad banner of circular economy. These missions aim to build bridges between the European institutions and the project's beneficiaries and stakeholders. CEWGs members will be experts from EU DG ENV, DG AGRI, DG REGIO and DG NEAR as well as experts from the partners and the academic society. The desk shall focus on regulatory framework and governance at local, regional and national level, main authorities involved, and research and development activities carried out in each partner territory, main features of waste management, pollution/litter assessment, the role of entrepreneurship and the behavioural patterns of people. The challenge is inform and motivate anyone in the area on waste prevention, waste re-use, the everyone's responsibility against the environment and future generations and familiarize them with the model of Circular Economy and its benefits. The same partners will order regional assessments, studies that will examine and present the current situation of Waste Management and Circular Economy status. The above mentioned activities will provide essential input in order these partners to carry out 10 Workshops as to Inform Key Actors on the appropriate policies to be adopted and the potential interventions.

The timetable of activities is planned according two major parameters: a) the logical sequence of the intervention b) the capacity of beneficiaries to carry out multiple tasks. Respecting the above the three core activities of this GA will be implemented as follows:

1.1-CEWG workgroups will start as to September 2021 and will be concluded by the end of 2021.

1.2-Regional Studies: The common methodology provided by VFU will be developed immediately after the project's award. It is expected to be delivered by the end of May 2021 ; tendering procedure will follow by the 5 partners (months June-Sept 2021); so the studies will be carried out starting from September with deliverables deadline the end of the year.

-As CEWG and Studies deliverables and reporting will exist by January 2022, Workshops to Inform Key Actors will be held from February 2022 till May 2022.

The total duration of T1 is expected to be 13 months, starting on April 2021 and ending on May 2022.

WP responsible partner: VFU

Involved partners: Greek Exporters Association, European Regional Framework for Cooperation, Municipal Institution "Grant office "ODESA 5T", International Centre for Social Research and Policy Analysis, Samsun Metropolitan Municipality

Output T 1.1: Local Policies on CE

10 meetings: The introduced by the project CEWGs – Circular Economy Working Groups consists a new way of working. These CEGWs will be a series of high-level technical meetings, two in each partner area to promote and set the basis for implementing policies under the broad banner of circular economy. These missions aim to build bridges between the European institutions and the project's beneficiaries and stakeholders. CEWGs members will be experts from EU DG ENV, DG AGRI, DG REGIO

and DG NEAR as well as experts from the partners and the academic society. The CEWGs work will establish institutional coordination and joint planning between 5 eligible regions and EU. As this will be combined a) with training of 50 experts, b) the toolkit that around 350 organisations will be advised c) the enhanced knowledge to address the problems, the project is likely to lead to improved regional plans and policy making. The workshops will offer in-depth discussion and exchange on good practices' specific resources and requirements for transfer and implementation (structural, staff, financial, political and legal framework conditions). 5 studies presenting the main findings in a series of environmental challenges related to the Programme's Specific Objective 2.2. The studies will be officially submitted to all submitted to all competent/relevant regional and national authorities dealing with Environment, Waste, Pollution, River/Marine litter. The 5 studies will be by force transferred to other organisations in each territory and to the respective ROPs regional managing authorities In "INFORM KEY ACTORS" Workshops, Participants will be informed as well as they will benefit of increased knowledge in the field of CE, where project partners will present the knowledge, data, priorities and good practices gathered and will exchange views, share problems, bring together ideas for future development and build relationships with each other. At least 350 different organisations will participate in the workshops having the experience of getting up-to-date knowledge and state-of-the-art analysis of Circular Economy, Waste Management and Pollution/Litter challenges in each participating region. 10 reports presenting best practices identified as well regional findings and recommendation s for further adoption. The reports will be officially submitted to all competent/relevant regional and national authorities dealing with Environment, Waste, Pollution, River/Marine litter.

Output T.1.2 Increased Awareness

More than 1400 are expected to participate in CEWG and IKA Workshops. The participants will represent/regional/local public authorities, sectoral agencies, infrastructure and (public) service

providers, interest groups including NGOs, higher education and research, education/training centers, business support organisations and enterprises & SMEs. These participants will be engaged in: -Policy meetings (ECGW)

-Acquiring information about major environmental challenges in all 5 participating regions -Be informed on available good practices

 -Acknowledge local and international findings and recommendation s reports

-Participate in exchange of problems solving, ideas generating and solutions findings sessions This output consists of a significant number of well-informed persons that constitute the cornerstone of further dissemination of CE, the basis for development of local policies and the multipliers of the project's outcomes.

Composition of activities within WP

Activity A.T 1.1 *CEWG WORKSHOPS*

The CEWGs will introduce a new way of working in the BSB area; these groups could easily continue and expand their work in more regions without any significant obstacle; EU DG missions are institutionally supported by Brussels or relevant EU Delegations, the financial costs of the meetings are tiny and insignificant and furthermore, these work groups could lead to continuous know how transfer and improved local policies. The CEWGs work will establish institutional coordination and joint planning between 5 eligible regions and EU competent authorities. Two workshops in each region/country will be organized by each partner (except ERFC). One with the participation of National/Regional/Public Authorities, infrastructure-public service providers and NGOs representing public/consumers. The other will focus on local and regional Academic Organisations, Business Support Organisations, SMEs and training centers. CEGWs will be a series of high-level technical meetings, aiming to promote and set the basis for implementing policies under the broad banner of circular economy. CEWGs members will be

experts from EU DG ENV, DG AGRI, DG REGIO and DG NEAR as well as experts from the hosting partners and the relevant participants. EU experts will present the main CE principles and latest reviews, outline the coherence with ENI and BSB strategies and exhibit good practices and policies. The local representatives will have the opportunity to get details about the EU priorities in each of the participating countries. The workshops will offer in-depth discussion and exchange on good practices' specific resources and requirements for transfer and implementation (structural, staff, financial, political and legal framework conditions).

Deliverable of WP A.T. 1.1 10 meetings reports and 5 (1 per region) reports.

Delivery date: December 2021

Activity A.T1.2 Regional Specific Study

All partners (except ERFC) shall produce a regional State of the Art analysis in the field of Waste Management and Circular Economy. The aim is to describe in detail in quality and quantity terms the current situation of waste management and circular economy issues, especially, waste collection – waste treatment - waste recycling – waste reuse - main environmental challenges in each area — soil, area and water pollution status - general people behavioral patterns related to waste. At present, there is a number of regional data & studies which are not comparable; therefore BSB_CIRCLECON addresses this issue by establishing a common basis for the implementation of data base common methodology for data collection which will be used by all partners in order to allow comparison of results and also the integration of information into expertise in the regions for the project. In this respect, the State of the Art Analysis shall be pay attention to identification of existing documents and relevant stakeholders/experts; analysis of existing documents and interviews with stakeholders/experts in order to get information and data about the current situation of Waste Management and Circular Economy in

each area. The methodology and specifications will be developed by VFU and will be common for all partners as to insure compatibility of results and comparability of data.

Deliverable of WP A.T. 1.2.1 5 Regional studies on Waste Management & Circular Economy Potential
Delivery date: December 2021

Activity T1.3 INFORM KEY ACTORS

The beneficiary in each country, based in the knowledge that he gained from CEGW meetings and Studies, (Activities 1.1 and 1.2) will carry out two informational workshops one for Local & Public Authorities & NGOs and Consumers and the other for Business and Academia with at least 70 participants in each workshop. These 10 work events 2 in each country, will increase the awareness of key-actors and decision makers; There will be 10 workshops, 2 in each country, with at least 70 participants per workshop, total 700 individuals from at least 350 different organisations. this pool of multipliers of knowledge increases the long term effects of the project as the knowledge obtained by 700 experts will be diffused and replicated. Participants will be informed as well as they will benefit of increased knowledge in the field of CE, where project partners will present the knowledge, data, priorities and good practices gathered and will exchange views, share problems, bring together ideas for future development and build relationships with each other. Each workshop will be divided in 4 sessions: 1) ECGW local reports presentation, 2) local Study Presentation, 3) other partners' / countries' ECGW and Studies presentation 4) discussion and Q&A session. International partners will livestream into the workshops held in the other 4 countries and, by the end of all workshops, each country would have been broadcasted to all the participants in all 5 workshops. The potential transferability of particular good practices will be discussed with the participants. In this respect, workshops will offer in-

depth discussion and exchange on good practices' specific resources and requirements for transfer and implementation.

Deliverable of WP A.T. 1.3.1 10 Workshops reports
Delivery date: May 2022

4. Concepts of circular economy and waste management and availability of data

"Waste management" and "circular economy" incorporate several concepts from environmental studies as well as from social sciences, from notion of waste collection, waste treatment, waste recycling, waste reuse, to major environmental challenges. In order to operate with the same concepts and ease the preparation of the Regional Study, you will find on the following pages the explanation of the key concepts (definitions, measurements).

Circular Economy (CE) is a sustainable alternative to the traditional linear (take-make-dispose) economic model, reducing waste to a minimum by reusing, repairing, refurbishing and recycling existing materials and products. According to the latest independent Circularity Gap Report 2021, our global economy is only 8.6 % circular, wasting 91.4 % of all we use.

Circular economy is trying to respect environmental limits by increasing distribution of renewable or recycled resources and reducing the consumption of raw materials and energy. Thus, both the emissions and resources wasting will be reduced. Also, concepts such as eco design, distribution, reuse, repair,

recycling of products and materials will play an important role in maintaining the use and value of products, components and materials. Moreover, waste management is part of the transition towards a circular economy, which was launched by the European Commission in 2015. The Action Plan for a Circular Economy sets up a concrete action plan that covers the whole life cycle of a product: from production and consumption to waste management and the secondary materials market.

There is no single or internationally agreed upon definition of a circular economy. But the definitions used by countries, international institutions and NGOs have many common elements. In all definitions the notion of material circularity is key. The definitions also tend to include reduced demand for certain natural resources and the materials and products derived from them.

Statistics on waste and material flows often serve as a starting point for measuring the CE, but their quality and scope are insufficient for supporting CE policies. What is needed is information that reflects all aspects of the material life cycle and of circular business models, including product design, production patterns, and consumption patterns. This is to be complemented with socio-economic information (use of economic instruments, public procurement, employment, costs, expenditure, value added), information on innovation and technology development, information on the sharing economy, and information on the international and trade dimensions of the transition towards a circular economy (global value chains, trade in second-hand goods, end-of-life products, secondary materials and waste).

In the *In – Depth Review of measuring the Circular Economy*[1] *th*e types of statistics to be used and integrated with each other for measuring CE include (non-exhaustive list):

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a) Demographic and social statistics such as labour (employment), Income and consumption (of households);

 b) Economic statistics - Economic accounts (value added); Business statistics (number of enterprises, revenue); Trade (second-hand trade)'; Prices; Labour costs; Science, technology and innovation

c) Environment and multi-domain statistics - Environment statistics and SEEA (material stocks and flows, product life-spans, waste, secondary raw materials, etc.); Information society; SDGs.

Measuring progress and producing reliable statistics on the CE entails a number of challenges. First, CE is a cross-cutting concept whose scope is not easy to delimit in statistical terms. Second, CE strategies and policies cover many aspects that are more difficult to capture statistically and whose measurement relies on different statistical sources, including official statistics and other data sources. Third, the cross-cutting nature of CE policies calls for information that can easily be inter-linked and combined, hence the need for coherent classifications and statistical frameworks.

There are number of organizations that collect statistical data.

European Environment Agency (EEA) does not produce the relevant statistics but uses them in combination with policy analysis to provide assessments on the circular economy which aim to support policy and decision making. Since 2016, EEA has published a series of four circular economy reports along with briefings focused on specific waste streams and materials including waste electrical and electronic equipment (WEEE), construction and demolition, plastics and textiles. EEA has also published two reports which provide an overview of the policies, approaches and targets of 32 European countries on circular economy initiatives in a broader resource efficiency context.

EEA has developed a conceptual framework for the circular economy which can be applied at the European, national or local levels, as well as to specific sectors or materials. In the 2016 circular economy report[2], EEA identified the key characteristics and main enabling factors of a circular economy and also proposed metrics for measuring progress. In the 2019 circular economy report[3], EEA analysed available knowledge and identified knowledge development needs across these key characteristics and enabling factors. The latest country level analysis[4] revealed that there are widely differing approaches and degrees of development regarding indicator frameworks. This can be partly explained by the absence of a broadly accepted framework for monitoring circularity.

EEA in partnership with the Italian Institute for Environmental Protection and Research (ISPRA) are taking forward an initiative called the Bellagio process which aims at building consensus on 'What to Monitor' and use best-practice examples as well as innovative ideas to identify shared principles on 'How to Monitor'. These principles will then form the basis for further developments around indicators and monitoring frameworks in support of the European Green Deal.

Eurostat publishes and maintains a Monitoring Framework for the Circular Economy[5] and it was first published in 2018. Eurostat produces most but not all of the indicators in the monitoring framework. Some indicators are sourced from other services of the European Commission. Few indicators are based on SEEA and there is potential for more SEEA-based indicators. The monitoring framework is a

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[2] EEA Report No 2/2016. Circular economy in Europe. Developing the knowledge base.
3 European Sustainable Business Federation, "Circular Economy Update. Overview of Circular Economy in Europe", 2019, https://ecopreneur.eu/wp-content/uploads/2020/09/Ecopreneur-Circular-Economy-Update-report-2019.pdf
[4] Ibid
[5] Website "EU Circular Economy monitoring framework":
https://ec.europa.eu/eurostat/web/circulareconomy/indicators/monitoring-framework

dashboard of indicators and sub-indicators, structured in 4 areas: a) production and consumption; b) waste management; c) secondary raw materials; d) competitiveness and innovation.

Eurostat developed the indicator circular material use rate (also called circularity rate). This is one of the indicators in the EU Monitoring Framework for the Circular Economy. This indicator measures the share of secondary raw materials in the total use of materials in the economy. The mapping is done at the level of the four broad groups of flows in material flow accounts: biomass, metals, non-metallic minerals, fossil fuels. However, it has insufficient breakdown detail to identify e.g. plastics, glass, paper, etc. Eurostat considers the circularity rate a good attempt to integrate sources.

Eurostat also produces estimates of material footprints. They are based on SEEA (material flow accounts in raw material equivalents) and input-output modelling. Material footprints represent the amount of material extractions required to produce the products demanded by final users. Eurostat publishes EU-wide estimates, including product breakdowns, in its online database[6].

Eurostat also makes available a compilation tool for countries wanting to produce their own material footprint estimates[7]. Material footprints are widely recognised as highly relevant for the circular economy, but they are not part of the EU monitoring framework because of insufficient data availability and certain controversy about the input-output modelling methodology. Eurostat also publishes footprints of air emissions and energy.

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[6] Eurostat database: https://ec.europa.eu/eurostat/data/database, data code env_ac_rmefd
[7] Eurostat methodology (environment): https://ec.europa.eu/eurostat/web/environment/methodology, section IO modelling and tools

Eurostat improved the product detail of manufacture statistics ('PRODCOM statistics') as to disclose 'metal secondary raw materials' and 'non-metal secondary raw materials' out of the corresponding primary raw materials. This is an important improvement to have better statistics of secondary raw materials. Data with such breakdowns are collected starting in summer 2020.

Eurostat aims to further develop the circularity rate and Sankey diagram in the next 2-3 years. Eurostat is developing an accounting approach for EU-wide waste accounts on the basis of data already available in Eurostat and produce experimental estimates of material stocks, to supplement the estimates of material flows.

Eurostat is also developing improved measures of the circular economy sector (growth, jobs, investments) based on SEEA. These measures would improve the quality of the corresponding indicators in the EU monitoring framework.

In addition, Eurostat maintains several data collections about waste. First, there is a data collection every second year on waste statistics (waste generation and treatment) according to Regulation (EC) 2150/2002, with breakdowns by waste categories, hazardousness and economic activity. Secondly, there is an annual questionnaire on municipal waste jointly with OECD. Finally, there are data collections on several waste streams: packaging waste, waste electric and electronic equipment, end of life vehicles and batteries.

OECD has several work streams related to the monitoring of waste, materials and resource productivity. Work specifically dedicated to the transition towards a circular economy started in 2017, building on earlier work on sustainable materials management and the 3Rs.

Some of the regularly collected statistical data include: waste through a section of the OECD state of the environment questionnaire; expenditure for waste management through the questionnaire section on environmental protection expenditure; economic instruments related to waste and materials management, through the OECD Policy Instruments for the Environment (PINE) database; and through a questionnaire on environmentally related tax revenue accounts; compilation of official accounts on stocks of mineral and energy resources, which are used to calculate reductions of non-renewable resources in those countries; continued development and calculation of indicators. Selected waste and material flow indicators are included in the OECD Core Set of environmental indicators and in the OECD set of green growth indicators; development of guidance on measuring material flows and resource productivity. This is done in cooperation with Eurostat and UN Environment.

Most OECD data and indicators are accessible on the OECD statistical platform and disseminated through the OECD data portal and the interactive online Environment at a Glance platform[8]

UNECE/FAO Forestry and Timber Section currently also collect data and works on forest and circular economy. They collect data on recovered post-consumer wood and also produce the Joint Wood Energy Enquiry (JWEE), which includes figures on volumes of wood energy produced from recovered wood. These questionnaires are the basis for exploring the issue of wood-based value chains in a circular economy.

UN Environment Programme (UNEP)'s work on measuring the circular economy is focused on global material flow accounts and the areas that link to SDGs where UNEP is the custodian, namely, the following: SDG 8.4.1 and 12.2.1 on domestic material consumption; SDG 8.4.2 and 12.2.2 on material

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[8] Website "Environment at a Glance – OECD Indicators": http://www.oecd.org/environment/environment-at-aglance/

footprint; SDG 12.1.1 on Sustainable Consumption and Production mainstreaming; SDG 12.3.1 on food waste; SDG 12.4.1 on chemical and waste conventions; SDG 12.4.2 on hazardous waste; SDG 12.5.1 on recycling; SDG 12.6.1 on corporate sustainability reporting; SDG 12.7.1 on sustainable public procurement; SDG 12.c.1 on fossil fuel subsidies; and SDG 17.7.1 on investment in environmentally sound technology.

UNEP is supporting OECD in their research agenda on demand-based measures and with UNSD, UN-Habitat and other partners and experts to promote the work on waste statistics.

UNEP has worked with governmental officials, experts, UN colleagues and One Planet Network partners to develop, pilot test and collect data on SDG 12.1.1 on SDG 12.1.1 on Sustainable Consumption and Production (SCP) mainstreaming and SDG 12.7.126 on sustainable public procurement (SPP).

United Nations Statistics Division (UNSD) has been collecting waste statistics through the UNSD/UNEP Questionnaire on Environment statistics since 1999 from over 160 countries and areas not covered by OECD and Eurostat in their data collection. Both data collection processes are well coordinated, and the questionnaires are fully compatible using identical definitions and classifications. Given the importance to provide waste statistics for international reporting, including for the SDG indicators (12.3.1 on food waste, 12.4.2 on hazardous waste, and 12.5.1 on recycling), several modifications have taken place in, and additional variables have been added to, the UNSD/UNEP Questionnaire in the most recent data collection rounds.

5. Guideline for performing Regional Study of the State of Art in each project partners country including methodology on performing the study and interviews with stakeholders/experts

5.1 Assessing the Current State of Art

5.1.1 Geographical scope

The geographical area included in the Regional Study of the State of Affairs corresponds to the geographical area of the Black Sea Basin Programme (BSB), as represented by the Project Partners: Bulgaria, Greece, Turkey, Ukraine and Georgia.

5.1.2 Language

The regional studies will be prepared in English.

5.2 Components of the regional study

The aim of the Regional Study of the State of Art is to synthetize the findings concerning circular economy and waste management the BSB, in particular in the participating countries/regions in the

project. It enables regional project partners to elaborate evidence-based strategies to deal with the impact of circular economy. The report also presents the available local datasets, respectively statistical data collected nationwide and/or on regional level (NUTS II). It presents the environmental challenges as well as the policy framework.

The study will synthetize the findings of the following activities:

- Secondary analysis of quantitative data, available on the NUTS 0 and/or NUTS II level;

- Qualitative research based on interviews with institutional actors;

The study focuses explicitly not only in research but much more in exchange of experiences and mutual learning.

For the preparation of Regional Study, please see the following annexes to this document:

Annex 1: Template regional study

Annex 2.1: Guide for interviews

5.3 Areas of desk-research

Within the BSB-CIRCLECON project, it is important that all implementing partners cover the same areas of interest and involve the same type of actors present on those areas as the object of examination.

Your desk research should contribute to the general presentation of your country/region and in particular of your national/regional development in relation to circular economy. As there is no specific related statistics, please use the existing statistics e.g. a} production and consumption; b) waste management; c) secondary raw materials; d) competitiveness and innovation statistics.

What we are especially interested in, is the short portrait of your national/regional framework in the field. The general presentation of the country/region should include review of the national legislation on circular economy, major institutions relevant from the perspective of circular economy, European directives reflected in the national legislation, circular economy national action plan, regional legislation/institutions dealing with the issue.

The description of regional development should also highlight the main challenges faced by the region related to circular economy, etc.

Areas recommended for desk-research:

● **Legislative framework**

Under the legislative framework, the PPs should elaborate and present national framework for circular economy:

- Legislation related to energy

- Legislation related to economy

- Legislation related to environment

- Legislation for innovation, science and technology and the role of circular economy within them

● **Strategies, action plans for circular economy on national and/or regional level**

In case that there are no specific strategies or action plans for circular economy on national and/or regional level, please take into account the existing documents in the field of: waste

management, recycling, regional innovation strategy, etc. circular economy role in those documents.

- **Introduction of the environment of the region**. Mapping of different actors, business support organisations, presentation of types of organizations, their roles and objectives.
- **Introduction of the regional administration and state institutions**. Presenting the structure of the systems with respect to circular economy. Presenting financial incentives offered by public administration, analysis of services.

Please put special attention to the following:

Is there a specific circular economy related policy, strategy, action plan on national and/or regional level?

Are there specific instruments/measures introduced for circular economy on national/regional level and how successful they are?

Set of data, publications which could be involved in desk research for example can be found at:

https://ec.europa.eu/eurostat/web/circular-economy/indicators/monitoring-framework for each EU member state.

Data that is included consists of indicators covering 4 areas:

1. **Production and consumption** comprises four indicators:

- Self-sufficiency of raw materials for production in the EU;
- Green public procurement (as an indicator for financing aspects);
- Waste generation (as an indicator for consumption aspects)
- Food waste.

2. **Waste management** comprises two indicators:

- Recycling rates (the share of waste which is recycled);
- Specific waste streams (packaging waste, biowaste, e-waste, etc.).

3. **Secondary raw materials** comprises two indicators:

- Contribution of recycled materials to raw materials demand;
- Trade of recyclable raw materials between the EU Member States and with the rest of the world.

4. **Competitiveness and innovation** comprises two indicators:

- Private investments, jobs and gross value added;
- Number of patents related to recycling and secondary raw materials as a proxy for innovation.

Statistics collected by OECD, UNEP and UNSD can also be used.

Please, use *A new Circular Economy Action Plan For a cleaner and more competitive Europe* *as* a reference as well. [9]

Below you will find sources of data that are collected nationally and could be used in the description of the regions.

a) Demographic and social statistics such as labour (employment), Income and consumption (of households);

b) Economic statistics - Economic accounts (value added); Business statistics (number of enterprises, revenue); Trade (second-hand trade)'; Prices; Labour costs; Science, technology and innovation;

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[9] European Commission, 2020, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. *A new Circular Economy Action Plan For a cleaner and more competitive Europe*, COM(2020) 98 final

c) Environment and multi-domain statistics - Environment statistics and SEEA (material stocks and flows, product life-spans, waste, secondary raw materials, etc.); Information society; SDGs.

 Interim relevant data of the National Central Statistical Office

1. National Central Statistical Office's regional statistics available for the public
2. Annuals of National Statistics
3. Annuals of regional or urban Statistics
4. Research of data and statistics related to waste management

Note: The statistical data and data from other secondary sources should be gathered in October and November 2021. The chapter, related to it should be finished by December 2021.

5.4   Interviews

Administrative sources of data, however, are not suitable for ensuring all information necessary for the implementation of the project; it is therefore recommended that data unavailable in the required local details and /or information describing the subjective characteristics of the issues in review should be collected in forms of qualitative interviews of data collections. The interviews should be performed with the institutional actors dealing with circular economy issues. The list of actors to be included will be provided by VFU in June 2021.

For the interviews, please see Template for Regional Study, Annex 1.

The interviews will be held with the institutions, related to the environmental protection and business development. The list will be prepared by the VFU and circulated to the PPs, who will insert the details of the interviews to be held.

The representatives of relevant institutions engaged in dealing with circular economy issues should be interviewed. In the table below you will find the stakeholders to be interviewed.

STAKEHOLDER	TYPE	DESCRIPTION
Non-Institutional Regional Authority	OBLIGATORY	Representative of regional non-institutional body or other regional level decision maker who has an overall perspective on the development and the policies focusing on environment, energy, economy, technology.
Institutional Regional Authority	OBLIGATORY	Minister, secretary or other high official in charge of or involved in shaping the national/regional policy.
Business Support Organization Representative	OBLIGATORY	Incubator, business park, technology park, co-working space as well as Chambers of Commerce, Chamber of Crafts, Regional Development Agencies etc. Institutional actors of this type are particularly important in the supporting set-up of businesses as well as supporting their growth, transfer of research findings into the market etc.
Regional/National/International NGO Representative	OBLIGATORY	NGOs dealing with environmental issues.

The detailed description on how the interviews should be conducted is in the Annex 2.1 Guide for interviews. In includes the questions to ease the conduction of interviews.

The provisional list of stakeholders will be provided by VFU by the end of June 2021 (see Annex 2.2). The project partners will compile the list with relevant institutions and contact data and will start arranging dates for interviews. Data should be filled in Annex 2.2 List of stakeholders (Excel).

The minimum number of interviews with institutional actors is between 8 and 12.

Based on each conducted interview a summary table should be prepared with condensed description of outcomes as in the Annex 2.3 Individual interview Summary template.

The interviews should be conducted by November 2021. The duration of single interviews is approximately 30 minutes.

Upon completion of all the national interviews, each partner needs to provide **one summary of the interviews in a single document** following the template in Annex 2.4 Interview findings summary template.

The list of stakeholders will be prepared by VFU. In the list you will insert the institution and contact data of the person that should be interviewed. The interviews should be conducted in November at latest. The Reports linked with the interviews should be submitted in December. The results of interviews are also part of the Regional Studies.

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6. TIMELINE

Year	2021							
Deliverable/Month	May	June	July	Aug	Sept	Oct	Nov	Dec
1. Methodology and Guideline	■							
2. Organizing tenders for regional studies in every partner country		■	■	■				
3. List of institutions for interviews		■	■	■				
4. Conduction of the studies					■	■	■	
5.Conduction of interviews					■	■	■	
6.Regional Studies								■

Annex 1: Template for Regional Studies

Annex 2_1: Guide for Interviews

Annex 2_2_List of stakeholders

Annex 2_3 Individual interview summary template

Annex 2_4 Interview findings summary template

7. **BIBLIOGRAPHY**

European Commission, 2020, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. *A new Circular Economy Action Plan For a cleaner and more competitive Europe*, COM(2020) 98 final

EEA, 2016. Circular economy in Europe. Developing the knowledge base. Report No 2/2016.

Economic Commission of Europe, 2020. "In-Depth Review of Measuring the Circular Economy", 22 September 2020

European Sustainable Business Federation, "Circular Economy Update. Overview of Circular Economy in Europe", 2019, https://ecopreneur.eu/wp-content/uploads/2020/09/Ecopreneur-Circular-Economy-Update-report-2019.pdf

PACE, 2021. Circularity Gap Report 2021

PROJECT: KNOWING CIRCULAR ECONOMY IN BLACK SEA BASIN

ACRONYM: BSB-CIRCLECON

Project Ref.BSB1021

T1. PROMOTE CIRCULAR ECONOMY

A 1.2- Template for performing Regional Studies of the State of Art in each project partners` country including methodology of the Regional Study and interviews with stakeholders

BSB-CIRCLECON

TEMPLATE FOR THE Regional Study of the State of Art

Varna Free University "Chernorizets Hrabar"

May, 2021

Version 0.1 Draft

> The template has been elaborated by VFU to help the production of methodologically uniformedstudies concerning the processes and effects of the circular economy in the Black Sea basin. The reports will be elaborated by project partners involved in the project.
>
> Partners` experts are kindly requested to write their reports based on the following specifications and the provided template.

I.   INTRODUCTION

The aim of the Regional Study of the State of Art is to synthetize the findings concerning circular economy and waste management the BSB, in particular in the participating countries/regions in the project. It enables regional project partners to elaborate evidence-based strategies to deal with the impact of circular economy. The report also presents the available local datasets, respectively statistical data collected nationwide and/or on regional level (NUTS II). It presents the environmental challenges as well as the policy framework.

The study will synthetize the findings of the following activities:

- Secondary analysis of quantitative data, available on the NUTS 0 and/or NUTS II level;

- Qualitative research based on interviews with institutional actors;

The study focuses explicitly not only in research but much more in exchange of experiences and mutual learning.

II.   METHODOLOGY

The Regional Study of the state of art will be carried out by the contributing partners in the 5 participating countries.

- Length: Country Reports should be as concise as possible. They should be at most 20-30 pages in total.

- Deadline: The draft versions of the country reports shall be submitted by 10th ofDecember, 2021 to activity 1.2 leader VFU. VFU will react on these draft versions and after possible final modifications the final versions shall be submitted by 25th ofDecember, 2021.

- References. A separate sheet or annex will be provided for references

- Language: the report will be written in English. Executive summary should be translated into each national language

- Period of reference (statistical analysis etc.): 2010-2020

TEMPLATE FOR REGIONAL STUDY

BSB-CIRCLECON

Activity 1.2:

**BSB-CIRCLECON
Regional Study in [name of theregion, country]: processes, effects and challenges**

[Name of Authors]
[Name of Institution(s)]

[Month Year]

Contents

Executive Summary (1.5-2 pages)

The Executive Summary should summarize the key findings of your regional study and messages that were considered as the most relevant ones by stakeholders. It should be organized according to the main sections of the regional study.

1. **Introduction (max. 1 page)**

The <u>main aim</u> of the study should be enlisted. Describe also the structure of the report, indicate the <u>reference period</u> covered by your analysis, shortly enumerate the main methods used and highlight the importance of your work performed for further work.

Insert your text here.

2. **Methods (1-1.5 pages)**

In this section, explain how the study was produced. It should also be enlisted persons and institutions who contributed to the study. What kind of methods were used?

- *Quantitative methods – secondary analysis of existing sources – provide a short overview of them*
  - *Official statistics collected at national level and Eurostat*
  - *Previous Studies in the field of circular economy, waste management, etc. on national/regional level*

- *Qualitative methods*
  - *Interviews with relevant stakeholders, semi-structured interviews*

Insert your text here.

3. **General presentation of the country/region(8-10 pages)**

- *Review of the national legislation on circular economy of the country/region [insert tables and graphs here]*
- *Major institutions relevant from the perspective of circular economy [policy framework]. How the national legislation reflects the European directives on circular economy?*
- *Are there some regional legislation/institutions dealing with the issue?*
- *Is there a circular economy national action plan?*

Insert your text here.

4. Circular Economy in quantitative perspective (4-6 pages)

- *Please, use country`s statistics. Describe the circular economy in terms of a) production and consumption; b) waste management; c) secondary raw materials; d) competitiveness and innovation statistics.*

- *Please, use also relevant regional statistics to describe the situation on the regional level.*

5. Regional challenges connected to circular economy (2-4 pages)

Please summarize the results of the interviews with experts and institutional actors, concerning circular economy.

Here you should outline the institutional structure and present the relevant actors concerning circular economy, their role and responsibilities in environmental issues, in particular circular economy

- What do they see as the main regional challenges concerned with circular economy?

- Can you name any obstaclestheyconnect with circular economy?

- What are the different challenges of the project partners 'regionin the context of the BSB?

- Special regional level policies, strategies, services or programs related to circular economy.

6. OUTLOOK, CONCLUSIONS and RECOMMENDATIONS (1.5 - 2 pages)

This chapter should include conclusions drawn from the study regarding the possible future of circular economy.

- Major challenges in the country/region

- Are there any specific services/programmes that you would mention as a good practice?

Insert your text here.

7. REFERENCES

Please list all references referred to including data sources.

Insert your references here.

Reference examples:

- **Book, one author, multiple editions:**

Hawking, S. W. (1998). A brief history of time: From the big bang to black holes (10th ed.). New York: Bantam Doubleday Dell Publishing Group.

- **Ebook, online only:**

Tyler, G. (n.d.). Evolution in the systems age. Retrieved from http://www.onlineoriginals.com/showitem.asp?itemID=142&action=setvar&vartype=history &varname=bookmark&v1=1&v2=46&v3=2

Journal article, three authors, with a DOI:

Fernández-Manzanal, R., Rodríguez-Barreiro, L., & Carrasquer, J. (2007). Evaluation of environmental attitudes: Analysis and results of a scale applied to university students. Science Education, 91(6), 988–1009. doi:10.1002/sce.20218

ANNEX 1: Table with interviews with institutional actors

Activity 1.2

Guide for interviews with stakeholders

The interviews with stakeholders should be carried out by each participating country in BSB-CIRCLECON project. This activity represents an exploratory research concerning the patterns of, as well as, variations in circular economy/waste management development in PPs regions. While for the project it is interesting to assess how the principles of circular economy are embedded in the regional development, the main focus of the project is in deriving conclusions about the state of art of circular economy and the current situation in each project partner region in the BSB (especially Bulgaria, Georgia, Greece, Turkey and Ukraine). The aim of the interviews is fourfold:

(1) To establish not only how the region is performing, but also which role do the circular economy play in it, how it is comprehend and reflected by the policy. This includes mapping, evaluation and benchmarking of the current situation as well as the evaluation of potential obstacles faced on regional level and assessment of instruments and measures to overcome them. This focus should be taken into account in the selection of interviewees as well as in the questions asked during the interviews.

(2) To reveal local discourses concerning circular economy. In this respect, it is important to find out how the decision makers see circular economy development of the country/region. Namely, the role of circular economy and related regional gaps should be assessed, as well as measures to be undertakento overcome it.

(3) To map the existing policies (measures and activities) focusing on circular economy in terms of production and consumption; waste management; secondary raw materials; competitiveness and innovation. On the one hand, this project is concerned with concrete measures, activities, projects or permanent programmes run by relevant stakeholders. On the other hand it should be assessed whether the interviewed stakeholders think that they have the institutional capacities to alter (or affect) the behavior of people and in particular their decision to become more sustainable oriented.

(4) To find out what kind of data are collected and used by the actors to measure circular economy. An insight should be gained into possible data sources and data availability (e.g. waste management statistics etc.). The project should establish what kind of data the regional level stakeholders would need in order to better cope with gaps on regional level.

The selection of stakeholders to be interviewed

The representatives of relevant institutions engaged in dealing with circular economy (and each of the areas: production and consumption, waste management, secondary raw materials, competitiveness and innovation) should be interviewed.

The following categories should be included:

STAKEHOLDER	TYPE	DESCRIPTION
Non-Institutional Regional Authority	OBLIGATORY	Representative of regional non-institutional body or other regional level decision maker who has an overall perspective on the development and the policies focusing on environment, energy, economy, technology.
Institutional Regional Authority	OBLIGATORY	Minister, secretary or other high official in charge of or involved in shaping the national/regional policy.
Business Support Organization Representative	OBLIGATORY	Incubator, business park, technology park, co-working space as well as Chambers of Commerce, Chamber of Crafts, Regional Development Agencies etc. Institutional actors of this type are particularly important in the supporting set-up of businesses as well as supporting their growth, transfer of research findings into the market etc.
Regional/National/International NGO Representative	OBLIGATORY	NGOs dealing with environmental issues.

In each country, at least one obligatory stakeholder should be interviewed (**minimum 8 interviews in total**). However, partners are strongly encouraged to attempt to conduct additional 4 interviews, making it a total of **12 interviews per country**.

In order to decide the optimum number of interviews per country please follow responses of interviewees and once you observe that they are consistent enough, reaching the point of **saturation** (similarities and repeating of answers from interviewee to interviewee) which suggests that additional interview would not gain new insights, it is time to stop the process.

Duration of the interview should be a **minimum 30 minutes.** For each interviewee, a partner should prepare the **individual interview summary in English** (see template). After collecting all interviews and creating all summaries, partners should prepare **interview findings summary**(see template).

Guidelines for the interviews

*Each interview with a stakeholder should include **seven major themes**. Within the major themes, the concrete questions may be altered according to the situation of the region and the profile of the institution represented by the interviewed person. The themes are the following:*

1. The description of the organization and interviewed person

2. The perspective on the regional developmental pathways in the area of environmental issues and circular economy: past, present and future

3. Challenges, policies, projects and programmes related to circular economy, and in particular waste management

4. Data on circular economy/waste management/recycling in the country (existent and possible data sources/data bases, data needs)

5. Perspective on how circular economy matters in the action field of the organization

6. Organizational engagement (how the organization the interviewed person represents is affected by circular economy challenges)

7. Recommendations

1.   The description of organization and interviewed person (suggested questions)

Please tell us shortly about your institution (agenda, structure, financing, partners, competitors, etc.)

Please tell us shortly about your position (since when are you at this position and what your main function is)

Does your position give you enough room for initiation/development/implementation of new measures or services, and cooperation with professionals from other fields and similar institutions?

2.   The perspective on the regional developmental pathways in the area of environmental issues and circular economy: past, present and future

How would you characterize your region compared to other BSB countries? Is it well developed? Less developed? Is it innovative? Is it implementing some initiatives in the field of circular economy?

Do you think that developmental differences will widen or will narrow in the next 5 years in the BSB region?

What do you think about the developmental prospects in your region?

Please give us a short overview on how the region has been developing in the last few years related to circular economy?

What do you expect to be the development in the future?

Should there be more instruments developed for circular economy? In what area?

3.   Challenges, policies, projects and programmes related to circular economy

Does national culture encourage introduction of circular economy principles?

What are the needs of your region in that direction?

How would you describe legal framework for circular economy? Is that one of the top national priorities?
Are there special programmes, measures for introduction of circular economy principles?

Which support is most important for that? Financial resources and specific financial instruments, people's attitude or other.
How many governmental/municipal programmes are in place? Are the governmental/municipal programmes successful?
Are the youth encouraged to follow sustainable behaviour?
Are there any specific programmes for circular economy?
Are there any specific services that you would mention as the good practice?

4. Data on circular economy/waste management/recycling in the country (existent and possible data sources/data bases, data needs)

In your region and in your country who collects data concerning circular economy?
What kind of data is collected (missing)?
Do you cooperate on a regular basis/occasionally with statistical offices and other institutions relevant for data delivery and exchange?

5. Perspective on how circular economy matters in the action field of the organization

Please give us a short overview on how circular economy play a role for your institution?
What do you see as the main challenges concerned with circular economy?

6. Organizational engagement (how the organization the interviewed person represents is affected by circular economy challenges)

From your institutional perspective, what kind of challenges connected to circular economy should be faced?
What kind of programs, projects are run by your institution connected (even if partially) to circular economy?
Please give us a short overview of particular case how your institution is engaged in supporting circular economy.

7. Recommendations
What kind of projects, programs, initiatives would be necessary to encourage circle economy in your region?

Interview questions

Organisation:	
Interviewee (name and position)	
Date and place:	
Type of stakeholder:	

1. The description of the organization and interviewed person

2. The perspective on the regional developmental pathways in the area of environmental issues and circular economy: past, present and future

3. Challenges, policies, projects and programmes related to circular economy, and in particular waste management

4. Data on circular economy/waste management/recycling in the country (existent and possible data sources/data bases, data needs)

5. Perspective on how circular economy matters in the action field of the organization

6. Organizational engagement (how the organization the interviewed person represents is affected by circular economy challenges)

7. Recommendations

Note: Please plan to have a summary of at least 100 words per section!

INTERVIEW FINDINGS SUMMARY TEMPLATE

Upon completion of all the national interviews, each partner needs to provide **one summary of the interviews in a single document** following the template below.

The summaries need to reflect upon all critical information, and should be concise and short, i.e. **no longer than 2-3 pages.** The 8-12 finished interview findings summaries will be part of the Regional Study of the State of Art (due: Dec 2021) and the interview findings summaries will also help standardise stakeholder input.

By looking at each interview, please summarise the following:

- **Number of interviews** (including both number of invitations sent, and number of actual interviews conducted)

- Types of **stakeholders reached** (and numbers)

- Brief **description** of organizations interviewed and interviewees

- List of most **critical challenges** with regards regional developmental pathways in the area of environment.

- Summarize **challenges, policies and programmes** related to environmental issues and waste management.

- Examples of **good practice cases** coming from the interviewed organizations (Please also comment on whether or not good practice cases are easily identifiable by the interviewees or not. If there is a lack of such examples, make this clear in the summary).

- List of **recommendations**

- Any other comments

- Your **critical assessment** of the interview process (i.e. impressions from interviewee's availability and responsiveness, attitudes towards research and innovation project management problems, etc.)

Please do consider the following tips when preparing your summaries. This summary is critical, and all partners need to provide one, in addition to the interview reports. Please ensure the summaries reflect only information found in the interviews, not anything else you may have come across during your desk research within WP A1.2 activities.

Summaries should not be written in a conversation form. They **can** be structured as **bullet points** for each of the questions above. If you do use bullet points, make sure each bullet point is comprehensively written, with full sentences, clear references to subjects and objects (i.e. so that it is possible to determine to whom "it" or "they" refer to). Do not feel compelled to only have a single sentence for each bullet point. Even though single sentences can be sufficient for a particular bullet point, in all likelihood bullets would better provide a clear description, within a paragraph.

As a separate annex, please include a list of all interviewees (name, position, organisation), along with the dates the interview was conducted for each (you can use the general list **excel template**). Please provide other evidence that the interview took place, such as an e-mail confirming the acceptance of the interview.