ACTION PLAN

WITH MEASURES TO STIMULATE THE IMPLEMENTATION OF THE CIRCULAR ECONOMY IN THE AGRO-INDUSTRIAL AND FOOD TECHNOLOGY SECTORS

INTERREG EUROPE

Project Acronym: SinCE-AFC
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MUNICIPALITY OF DEVNYA

2021

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I. ENERAL INFORMATION

This Action Plan aims to identify and plan activities, also taking into account the good practices of the project partners, targeting small and medium enterprises (SMEs) of the agri-food chain, through which to improve different policies (local municipal and regional) so as to engage them in the circular economy. Identify the measures to be integrated, their timeline, work steps, responsible persons, costs (if any) and funding sources. Identify appropriate horizontal governance and funding mechanisms.

These actions will lead to a balanced and sustainable development, for economic growth, increase in employment, income, limit depopulation of the municipality's population, improve the quality of services, transport, infrastructure, environment and development of all economic sectors.

The development of the plan is based on the principles of transparency, partnership with citizens, heads of institutions, enterprises (businesses), transparency in the implementation of planning, financing, programming, monitoring and evaluation to achieve the objectives in the municipality and complementing the funding from state (municipal) public sources with a major participation of EU funds and public-private partnership.

The planning of measures and activities will lead to improved cooperation between all actors in the agri-food sector involved in production, processing, packaging, distribution and final consumption, to work in a coordinated way to better adapt to the circular economy.

Small and Medium Enterprises (SMEs) especially in rural areas face challenges in implementing various measures and innovations to implement circular economy models enhancing their competitiveness. Local and regional policies should accordingly support the dissemination of new and innovative solutions and business models that lead to the desired results and will facilitate their access to new markets, while protecting the environment. The SinCE-AFC (Strengthening SME Entrepreneurship in the Circular Economy of the Agri-Food Chain) project aims to provide support at local and regional level to involve SMEs in the agri-food chain sector in the implementation of various measures

and awareness raising in the circular economy. To achieve this goal, the SinCE-AFC project brings together 9 partners representing 7 regions from 7 EU countries, involving local and regional authorities influencing regional and national policies (development instruments), to exchange useful experiences and good practices and to improve their capacity in making and implementing policies that promote the adoption of methodologies and innovative business models leading to the implementation of different types of measures and methods to achieve a circular economy and increase their competitiveness. Consider and improve the role of municipal administration as an accelerator of the creative business ecosystem by stimulating entrepreneurial ideas.

POLICY CONTEXT

Operational Programme "Innovation and Competitiveness" /OPIC/ is the main instrument of the operational programmes in Bulgaria, providing companies in the country with the opportunity to implement and develop different types of innovations, aiming to improve the competitiveness of SMEs from all sectors /except primary production of agricultural products and marketing of such/ at local, regional and national level.

OPIC has been successful in achieving its objectives, but the impact of OPIC measures on enhancing the productivity and export potential of SMEs is limited compared to other sectors. It is important to note that this Action Plan responds to the needs of SMEs, but the measures that are included would benefit all SMEs in Bulgaria, regardless of the region as a whole, as they all face the same challenges.

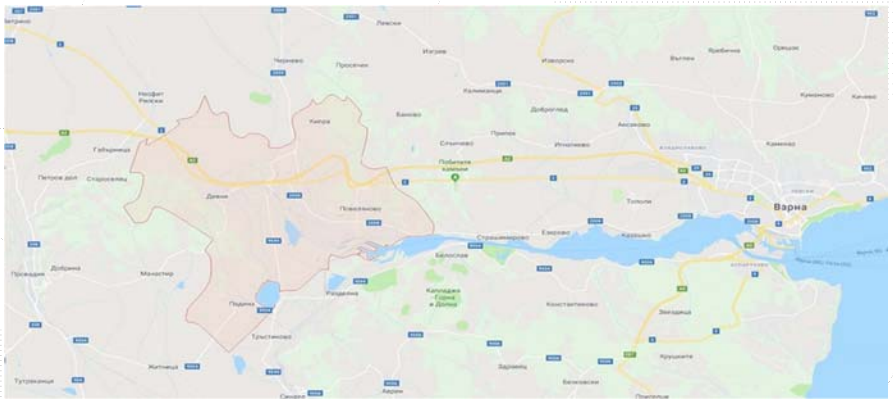
The Rural Development Programme is another programme that would benefit SMEs in the implementation of different models and practices, as it focuses entirely on the agricultural sector and could provide a set of means to finance the implementation of the desired models and practices

General information about Devnya municipality and the region
The municipality of Devnya is located in North-Eastern Bulgaria, about 35 km from the Black Sea coast. The territory of the municipality is 121,052 km2. The municipality consists of three settlements - the town of Devnya (municipal centre), the village of Kipra (town hall) and the village of Padina.

According to the Unified Classification of Territorial and Administrative Units (ECATTE), there are 3 settlements within the municipality, as follows:

Town Devnya	Region: BG33	Altitude, m: up to 49 including
village of Padina	Region: BG33	Altitude, m: up to 50 - 99 including
village of Kipra	Region: BG33	Altitude, m: up to 100 - 199 including

The town of Devnya was formed in 1969 after the merger of the villages of Reka Devnya, Devnya and Povelyanovo. Devnya was proclaimed an independent municipality in 1979, with the town of Devnya and the village of Kipra as its constituents. The village of Kipra is located 8 km and the village of Padina respectively 9 km from the town of Devnya.



1. ANALYSIS OF THE ECONOMIC AND SOCIAL SITUATION OF THE DISTRICT

1.1. GENERAL CHARACTERISTICS/PROFILE OF THE DISTRICT;

Devnya is situated in a small valley, surrounded on all sides by low limestone hills, representing the last slopes of the Balkan Mountains and the Dobrudjan Plateau, open only to the east to the Beloslav Lake and from there to the sea. According to the ETAT, the town of Devnya is a Category 3 settlement, while the village of Kipra and the village of Padina are Category 7 settlements.

1.1.1. GEOGRAPHICAL AND CLIMATIC FEATURES

Climate

The climate is temperate-continental, with prevailing northwesterly and easterly winds. The specific valley topography predisposes to frequent inversions and fogs due to the presence of polluting sources.

Relief

The relief of the municipality of Devnya is typical for the region, mostly lowland (below 200 m above sea level), low altitude, with distinct landforms from the northeast, north and west.

1.1.2. Natural resources

Natural ponds

Natural reservoirs in the Devna municipality are part of the Beloslav Lake, r. Devnenska and the river. Provadiiska. Lake Beloslavskoye is the boundary of the territory of the municipality of Devnya in the area of the "Port Varna-West". The river Devnenska flows into the river Plavadenska. Provadiska, which in turn discharges into Lake Beloslavskoe. The main part of the outflow of the Devnenska River is formed by the Devnenska springs (more significant are: Adata, Martsiana, Karadipsiz, Ludetina). The Provadiska River flows through a settling basin into the Beloslav Lake, and in its vicinity, as tributaries it receives: the Padina tailings channel and the Devnenska River.

Devna springs

In the northern parts of the Devna Valley are located the famous Devna springs, which are captured and used for water supply. They are part of the reserves of the Eocene and Malm-Valanjin aquifers. The water is hydrocarbonate-calcium and hydrocarbonate-chloride-sodium, soft and medium hard. The flow rate of the Devne springs is between 2500 - 3500 l/s. They supply water to the town of Devnya and the village of Kipra and the settlements along the Varna - Devnya main water pipelines stage II and stage III to the town of Varna. Varna

Mineral resources

Devnya municipality is poor in mineral resources. On the territory of the municipality of Devnya are distributed only non-ore minerals: marls, limestones and peat. Mergels (from the Horstrivian horizon) are exposed and developed in the quarries 'Belyte Mogili', 'Lozenskoe dere', 'Sinur Alcha'. Limestone quarries

have been developed for use by the cement industry - they make up the Big Kairyak and Little Kairyak heights.

Mineral raw materials

Mineral raw materials on the territory of the municipality of Devnya are distributed only non-ore minerals: marls, limestones and peat. Mergels (from the Horstrivian horizon) are exposed and developed in the quarries 'Beliite mogili', 'Lozenskoe dere', 'Sinur alcha'. Limestone quarries have been developed for use by the cement industry - they make up the Big Kairyak and Little Kairyak heights. The suitability of lime extraction in shaft kilns has been established for their use for the above purposes. Aggregates for construction (sand and gravel) are available in the Sini Vir, Marziana deposits. In 2001, both deposits were leased to Escana AD, Varna, for a period of 35 years.

Soils

Devnya municipality has almost 2% of the fertile soils in the district, about 5% of the rich soils, but at the same time the poor soils are about 10% of those in the district.

The predominant soils are carbonate and typically chernozems. Leached chernozems, which are characterised by high natural fertility, are widespread in some places in the north-west of the territory. A significant area in the north-west is also occupied by poorly productive shallow soils which are unsuitable for agricultural crops. In the central parts of the territory, delluvial-fallow soils with a relatively good humus content are common. In the extreme north-eastern and eastern areas, grey forest soils are common. Peaty-swampy soils are widespread in part of the Industrial Area South.

- Elements of the national ecological network - Protected natural areas and protected areas under NATURA 2000

On the territory of the municipality of Devnya are located and fall both partially and fully protected areas.

Biodiversity and protected areas. NATURA 2000 protected areas account for 1.87 %. Under the Habitats Directive, there is one protected area in the territory of the municipality of Devnya - "Pobiti Kamani" (Broken Stones).

1.2. Economy and competitiveness;

Devnya is an economically highly developed region. Industry is of decisive importance in the structure of the municipal economy and is developed in the

following areas: production of soda, fertilizers, heat, building materials, sugar, etc. The main factors determining the state of the municipal economy are:

- macroeconomic situation;

- the strategic position of the municipalities of Varna, Devnya and Beloslav, identified as a growth area and the development of the region as a national transport and logistics hub, linking European Corridors 7 and 8 with TRACECA - Euro-Asian Corridor 8;

- the development of socio-economic relations with the bordering municipalities - Provadia, Suvorovo, Beloslav;

- the established production facilities and technical infrastructure.

Industry

Devnya - the valley of great chemistry - so in the recent past was called Denvya. Today, industrial enterprises continue to operate in the territory and are major employers in the area.

The economic development of the municipality is determined by the development of the main structurally determining enterprises on its territory. The municipality of Devnya is developing as an industrial municipality with a strong chemical industry.

One of the largest chemical industrial complexes in the country has been built and operates on the territory of Devnya Municipality. The enterprises are mainly located in two industrial zones:

Industrial zone "North": "Devnya cement" JSC, "Martsiana" quarry, "Eskana" JSC.

Industrial zone "South".

Devnya is an economically well developed region. Industry is of decisive importance in the structure of the municipal economy and is developed in the following areas:

- production of soda, fertilizers, heat, building materials, etc.

The production capacities and technical infrastructure have been built in a specially formed production zone in the north-eastern part of the town.

Agriculture crop production animal husbandry

Almost 100% of the agricultural land in the municipality is privately owned. Crops such as wheat, maize, barley, sunflower, etc. are grown.

Livestock farming is mainly developed in the private sector.

Source:Regional Directorate "Agriculture", Varna

Agriculture accounts for a small percentage, this is due on the one hand to the large industrial enterprises located in the municipality and on the other hand to the lack of large areas of arable land.

Forestry

Forestry activities are carried out by state forestry.

Suvorovo, including the municipalities of Suvorovo, Devnya and Valchi dol. The above-mentioned territorial enterprises are subordinated to the Northeast State Enterprise, which manages the state forest territories in the Varna region.

The total managed forest area amounts to 28 068 ha, with deciduous forest predominating. Due to the small share of forests on the territory of the municipality of Devnya, the timber processing and logging industries are not structurally determining.

Employment,

Employment in the municipality is tied entirely to industry, making the working age population highly dependent on them and in a changing economic environment. On the other hand, the share of graduates in the municipality is lower than in the district, which hinders their development and competitiveness on the labour market. Also, due to the small number of enterprises on the territory of the municipality, the inclusion of young people in employment and gaining experience/internship, combining it with education, is very difficult and rather requires moving to other settlements for inclusion in employment.

Unemployment rate

In the first quarter of 2020, the unemployment rate was 4.6% and the employment rate for the population aged 20-64 was 73.0%, according to NSI data for the country.

3.6% is the unemployment rate in Devnya Municipality for 2019, due to strong economic opportunities over the past two years, employment in the municipality is one of the highest in 20 years. Due to the worsening global economy, we expect unemployment to rise significantly this year and next.

1.3. INFRASTRUCTURE DEVELOPMENT, CONNECTIVITY AND ACCESSIBILITY;

transport and technical infrastructure

On the territory of Devnya Municipality are developed railway, road and water transport. The transport accessibility of the municipal centre and the settlements is ensured by a very well developed network of national and local roads. The A2 Hemus motorway, the length of which on the territory of the municipality is 15.4 km, connects the municipal centre with Sofia and the regional centre of Varna. The first class road Varna - Devnya - o.p. passes through the territory of the municipality. Shumen - Ruse - Romania border (15.9 km) and a second class road (Shumen - Devnya) Novi Pazar - Vladimirovo - Dobrich - Balchik.

Railway transport on the territory of the Municipality of Devnya is an integral part of the activities of the Varna Railway Department, which is responsible for the Povelianovo station and the Devnya station, through which the Sofia-Varna railway line and the Devnya-Kardam railway line pass. The Sofia-Varna railway line is electrified and doubled, the section to Devnya station is electrified.

Povelyanovo station is the main station for passenger and freight traffic for the municipality. The stations also serve the Devnya industrial complex. A large part of the workers in the factories use Povelyanovo railway station to commute to their workplaces, and on the other hand, rail transport is preferred for the transport of solid mineral fuels, scrap, natural and chemical fertilizers, chemicals, pulp, etc.

Port:

Water transport is of particular importance for the transport activity of the municipality, represented by the built port "Varna - West", which is in line with the world developed ports.

For the most part, it ensures the transport of raw materials and finished products of the enterprises located on the territory of the municipality of Devnya.

The immediate proximity of Varna-West to the chemical plants in Devnya allows for efficient cargo handling under the direct plant-ship scheme.

The port has modern technological lines for transshipment of soda, chemical fertilizers, cement, coal, ores, phosphorites, silica sand and liquid chemicals. All shipping berths and shops are connected to the national rail network.

Air transport

At 20 km. From the municipality of Devnya on the Hemus highway is located Varna airport. The airport serves Northeast Bulgaria and provides convenient connections to major airports such as Sofia, Vienna, Istanbul, Moscow, Belgrade and Tel Aviv - a total of 102 destinations.

Varna Airport is located on the northern Black Sea coast, 8 km from the city of Varna and is a strategic site for tourism development in the region.

energy network (incl. renewables and energy efficiency),

All settlements of the municipality are electrified, most of the villages are supplied by overhead 20 kV lines, and in the town the network is wired. In general, the electricity distribution network has been reconstructed and maintained at a good level, but there are sections with impaired mechanical and electrical parameters.

In order to implement the energy efficiency policy, a project on "Construction of energy efficient street lighting" will be implemented. As part of the Municipal Energy Efficiency Programme, a site audit has been carried out for the construction of a gas transmission network to the main public, educational and hospital buildings in the town. The project is to be designed, implemented and managed.

1.4. ENVIRONMENTAL STATUS AND RISKS;

The water supply network

The water supply of the settlements of the municipality, as well as of the enterprises of the industrial zones "South" and "North" is provided by two water sources: the "Devna Springs" and the "Kamchia" dam, from which the water supply of the village of Padina is provided through the "Kitka - Varna" derivation. The water supply of "Devnenski springs" is provided by three derivations.

The water supply is mainly provided by the karst springs in the town of Martyana. Devnya, with a total flow of about 3 m3 /s, which are captured and included in three parallel water pipelines - the water pipelines "Devnya - Varna" I, II and III stage - total flow 2900 serves. Sindel, the town of. Beloslav, village of. Ezerovo, village of. Strashimirovo, Selorovo, Selorovo, Selorovo, Selorovo Ignatievo, gr. Aksakovo, village of. Kipra, s. Topoli, s. Kazashko, g. Varna, villages. Razdelna, town of. Devnya - industry.

Water from the water sources meets the BDS for drinking water. The water supply of the municipality of Devnya is carried out by the Varna Water Supply Company.

Wastewater

The sewerage network constructed in the municipality of Devnya has a total length of 25 km, including 10 km of main collector. In the town of Devnin. The percentage of the network is about 90. Part of the network needs to be replaced. The villages of Kipra and Padina have no sewerage network.

Wastewater treatment is carried out in the WWTP in Devnya. The discharge of wastewater from the wastewater treatment plant takes place into the Devnya River, which flows into the Beloslav Lake via the Provadiska River.

The WWTP was commissioned in 1975. The treatment method is biological and the treatment capacity is 15 500 cubic metres per day.

The WWTP 'Devnya' is in operation and serves the town of Devnya. Devnya, Suvorovo and Valchi dol.

Garbage collection and garbage disposal

By order of the Mayor of the Municipality of Devnya from 2017, the garbage collection and cleaning on the territory of the municipality is organized in districts covering all settlements on the territory of the municipality. It is also organized on the territory of the industrial zones.

The main industrial wastes from economic activities on the territory of the municipality are: sludge, phosphogypsum, cinders, cement dust, brine waste (chlor-alkali electrolysis), metals from repair activities, etc. There are 2 landfills for industrial waste: landfills for phosphogypsum and pyritic sludge of Agropolichim S.A. - Saya Dere; sludge dump Padina, owned by Solvay Sodi S.A.

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Noise pollution

The state of the acoustic environment on the territory of the municipality of Devnya is presented in the EIA reports of the main enterprises of the municipality.

The impact of the acoustic environment is most significant on the Povelyanovo district. No night noise measurements have been carried out. Road traffic noise is a major contributor to increased noise levels in the settlements, accounting for ~80% of the total noise load.

Air

The Municipality of Devnya has an updated program for reducing the levels of pollutants in the ambient air and reaching the permissible standards for harmful substances. Major emission sources of pollutants emitted into the ambient air are. The main sources of pollution are "Devnya", "Agropolichim" AD, Devnya. The main industrial enterprises of Devnya are "Solvay Sodi" AD, Devnya and "Devnya Cement" AD, Devnya. Devnya. As a result of the activities of these enterprises there is a potential for deterioration of the health of the population due to air pollution.

On the territory of the municipality of Devnya there is an automatic measuring station for air quality control located in the town of Devnya. Devnya ("The Springs") in the district of Devnya. "Reka Devnya".

Sources of PMF are mainly industry, domestic heating, construction activities, road traffic and wind suspension of dust in the air. The highest concentrations of PM10 are observed in the winter months, with a slight increase in the summer months (August). Seasonality is observed in car traffic and heating in winter, i.e. these influence the increase in concentrations of PM10 during the respective periods.

The studies and monitoring of air quality in the territory of Varna region show that the most polluted areas are those belonging to the municipality of Devnya. This is one of the major priorities of the municipality to tackle this problem, and options will be sought to minimise this dust background without affecting industry to a large extent, because this will negatively affect employment and the economic situation of the district.

The Municipality of Devnya has developed a "LONG-TERM PROGRAMME FOR THE INCREASE OF THE USE OF RENEWABLE ENERGY SOURCES AND BIOGROWERS IN THE MUNICIPALITY OF DEVNYA 2020 - 2030".

Strategic location

Of crucial importance for the territorial - spatial, economic, social and environmental development of the municipality of Devnya is its belonging to the defined as a growth region, including the municipalities of Varna, Devnya and Beloslav.

Within this territorial organization, the municipality of Devnya and its neighbors Beloslav and Avren have adopted the largest transport nodes: the Ferry Complex, the Port of Varna-West, the Receiving and Departure Railway Station Sindel.

The geographic location of the Municipality of Devnya favors the development of a transport and communication system serving not only national but also international infrastructure directions.

1.5 SWOT ANALYSIS

SWOT-analysis is a qualitative analytical and predictive method that defines the action of internal and external factors for the development of the territory and the possibilities for selecting an appropriate strategy to achieve the development goals.

STRENGTHS	WEAKNESSES
• - Good geostrategic position • - Good distribution infrastructure • - Presence of companies in the industrial sector • - Preservation of cultural, spiritual traditions and sites • - Well-developed educational system Presence of qualified and trained personnel in the main sectors of the economy and services • - Established transport network • - Availability of telephone and internet connections in the municipality • - Availability of sufficient buildings • sufficient building stock to meet the needs of the educational • and health systems • - Availability of large industrial • enterprises creating employment • of the population • - Presence of unique cultural and natural attractions	• - Lack of synchronization between professional training and business needs • - Decrease in the number of young and educated people who do not return after leaving to further their education and qualification in big cities and abroad • - unfavourable demographic situation - a process of overall ageing and depopulation of small settlements • - Low income levels presence of industrial enterprises which al polluters of the environment
OPPORTUNITIES	CAPS

• - European planning policy for sustainable and spatial development for the period 2021-2027. • - Availability of international and national programmes supporting energy, productive infrastructure for the period 2021-2027. • - Existence of a local development strategy • - Promotion and facilitation of procedures for the absorption of EU funds nomically developed neighbouring es and relatively favourable situation in the	• - Negative impact of the global financial and economic crisis following Covid 19 • - Deepening negative demographic processes • - Lack of innovation, low competitiveness of the economy • - Increase in social divisions atively changing climatic conditions

2. DETAILS ON THE "ACTION PLAN WITH MEASURES TO STRENGTHEN THE IMPLEMENTATION OF A CUSTOM ECONOMY IN SMES"

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This document provides guidance on how best and applicable practices from interregional cooperation can be used as a development tool with the potential to influence the achievement of project objectives. It defines the type of actions to be implemented, timeframe and participants.

SMEs have serious difficulties in implementing various circular economy measures, including a lack of knowledge about the opportunities they can exploit. Implementing circular economy systems requires considerable knowledge, and in different areas, to be able to cover different aspects of production processes. For this reason, it is also necessary to develop close cooperation with various scientific organisations and experts, and to provide financial resources for their implementation.

SMEs have serious difficulties in applying various means of circular economy, including innovation to improve their competitiveness. Local and regional policies should target and accordingly support the dissemination of innovative solutions and new business models that would lead to an increase in environmental friendliness, the introduction of different production models that do not lead to the release of environmentally harmful waste, as well as

opportunities for zero-waste technology, which would also lead to an increase in their productivity and competitiveness.

2.1. Summary

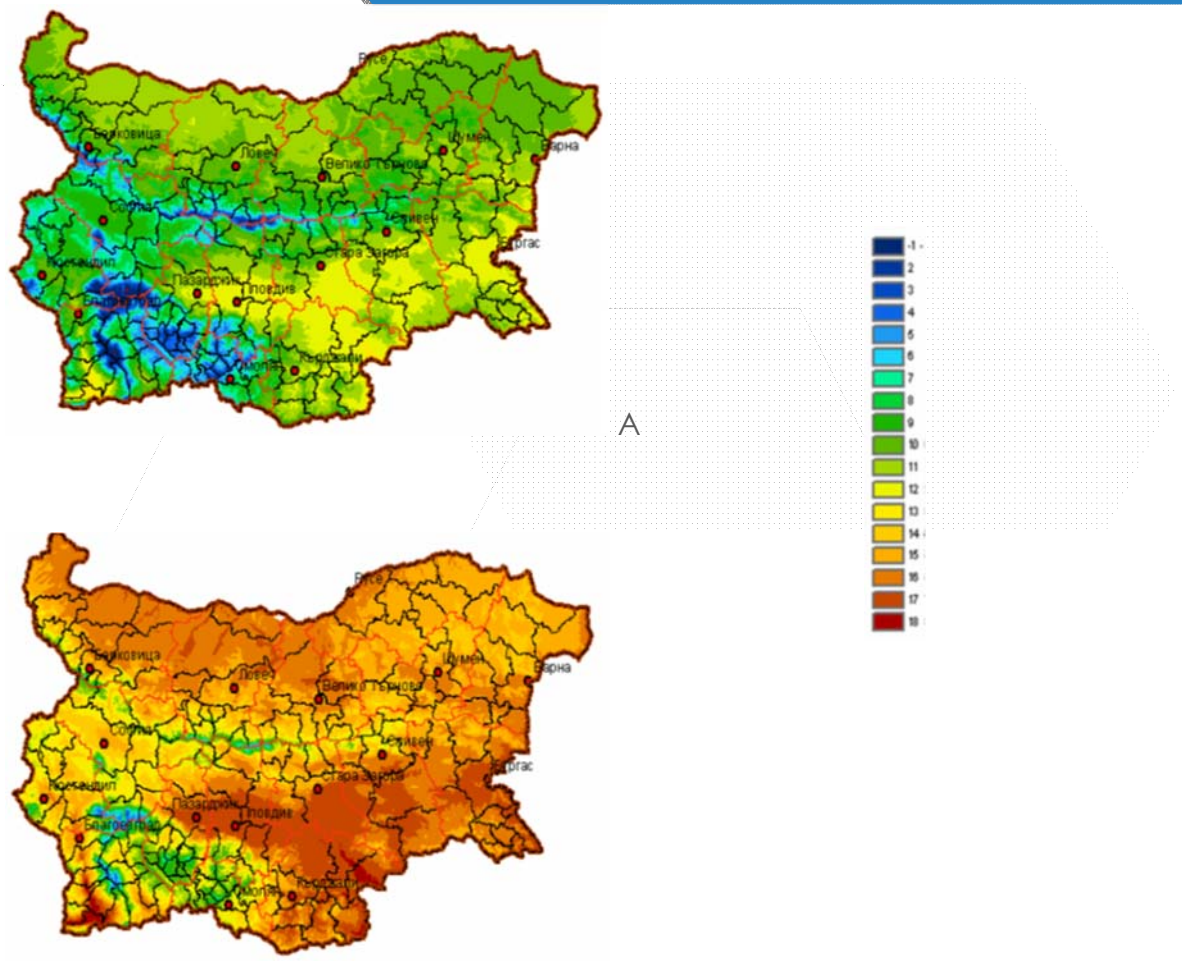
This action plan and the recommendations summarise the 4 joint meetings held so far between the project partners, as well as the 4 stakeholder meetings held so far - workshops with local stakeholders in Bulgaria with the participation of business representatives, local authorities, national institutions, representatives of private and public financial institutions, representatives of scientific and academic circles and experts from the NGO sector.

Building on the summarised materials, the Municipality of Devnya and the project expert team prepared a package of measures that aim to increase the knowledge on circular economy of SME representatives, to showcase methods for the implementation of different models and processes, to encourage the introduction of innovations in the field by SMEs and to achieve a circular economy n the sector covering the different stages of cultivation, processing and utilization.

II. ACTIVITIES AND MEASURES ENVISAGED

Bulgaria and Europe are located in a region that is particularly vulnerable to climate change, with the greatest contribution coming from rising temperature and rainfall intensity and hence the increasing frequency of climate change-related events such as droughts and floods. The risks caused by these climate change events can lead to loss of life and/or cause significant damage affecting economic growth.

Average annual temperature 1961-1990 (A); Pessimistic climate scenario for average annual temperature 2080 (B)



SOURCE: Department of weather forecasts

Relatively more frequent droughts especially in summer and autumn with weak winds create conditions for ground-level inversion and increasing atmospheric pollution concentrations.

Climate change adaptation actions range from light and low-cost measures (conservation of water resources, crop rotation, use of drought-resistant varieties, public planning and awareness raising) to costly protection and relocation measures, increasing the height of dykes, etc., including the introduction of a circular economy in the agro-industrial sector.

Circular economy

The circular economy is a model of production and consumption that minimises waste. The circular economy is a model aimed at extending the life cycle of products. In practice, this means sharing, borrowing, reusing, repairing and recycling existing materials and products for as long as possible.

When a product reaches the end of its life, the materials of which it is composed continue to be used in other ways. This is done over and over again and so minimises waste disposal.

The concept of a circular economy is built in opposition to the traditional linear model where raw materials are used, things are created from them, they are consumed and the leftovers are thrown away. This model relies on large quantities of cheap and accessible materials and energy sources.

The European Union produces over 2.5 billion tonnes of waste a year, of which only 50% is recycled. Although recycling capacity is growing, practically half of the materials used still leave the economy. The European Commission presented in March 2020 a new plan to promote a circular economy, which includes proposals for sustainable product design, waste reduction and the extension of consumer rights, including the right to repair goods. In February 2021. Parliament approved its position on the new circular economy plan in February 2021, calling for further measures to achieve environmental sustainability and carbon neutrality by 2050. Recommendations include tightening recycling requirements and binding targets for material use and reducing the environmental impact of consumption by 2030.

The Commission has also identified priority materials - including agricultural products and waste, wood and paper, plastics and metals - that would be useful to accelerate the transition to a circular economy and where EU policy has a specific role to play. Packaging, food, electronic and electrical equipment, furniture, buildings and construction were identified as priority sectors.

Why we need to move to a circular economy

Demand for raw materials and energy resources is growing, but many are limited in quantity. They are often scarce within the EU and European countries are becoming dependent on imports from other countries.

The effect on the environment should not be underestimated either - the extraction and consumption of raw materials increases energy consumption and greenhouse gas emissions. Using raw materials more wisely can help in the fight against climate change.

What are the benefits

Waste reduction, eco-design, reuse and similar measures can save EU businesses a lot of money and reduce overall annual greenhouse gas emissions. Currently, the production of materials we use in our daily lives generates around 45% of EU emissions.

The transition to a circular economy will reduce environmental pollution, alleviate raw material sourcing problems, boost innovation and competitiveness. The change has the potential to add a further 0.5% to EU GDP and create 700,000 jobs in Europe by 203.

Problems

Solutions in one specific industry or company are not enough because this neglects the need for a complete system. It would be far better if all the players in the chain joined together to change the way manufacturing is done," says Dr Nick Voulvoulis of Imperial College London. Such collective action can only be encouraged by governments, for example through market incentives for firms and households. The European Commission has already decided to tackle so-called planned obsolescence, which many manufacturers are betting on. According to Voulvoulis: "Since a circular economy requires real systemic change, I would call those countries that create the right conditions for it to happen leaders. For example, there are many countries that are successfully achieving better recycling targets. I would mention France as a leader on another occasion. In 2014. France became the first country in the world to open the door to sanctions for the widespread manufacturing practice of 'planned obsolescence' - creating products so that they are pre-designed to go bad so that consumers can be forced to replace them. The French have introduced legislation that requires manufacturers to show how long their appliances will last. Companies must also inform consumers how long spare parts will be available for the product or risk being fined up to 15 thousand euros.

Activities of interventions to improve policies in the field of regional innovation strategies by facilitating horizontal mechanisms that support and improve SME entrepreneurship in the agricultural and agri-food sectors by exploiting the opportunities of the circular economy.

1. Activity - 1 - Development and adoption of a strategy for promotion and development of the circular economy on the territory of Devnya municipality

1.1. Need for the introduction of the activity

In a dynamic and constantly evolving sector of global significance, with periodic changes in the requirements and conditions of production, it is necessary to quickly and purposefully change the regulatory framework of local and national importance, adapting it to the changed economic and regulatory framework, as well as adapting it to, the new programming period of OP "Innovation and Competitiveness" and the "Green Deal" of the European Commission. But in order to be able to implement this, it is necessary to know the problems, expectations, opportunities and requirements of the actors in this field, on the basis of which a strategy for the promotion and development of the circular economy in enterprises operating in the territory of the municipality of Devnya will be developed.

The transition from a linear to a circular economy is a significant change in the economic order. This change should cover the whole production cycle - product design, material flows, creation of proper incentives and legal structures to stimulate business ideas. Changing the mindset of consumers is essential to make these business ideas happen. This change requires the combined efforts of executive, business, financial and educational institutions. In essence, the circular economy represents a systemic change that builds long-term sustainability, stimulates business, generates economic opportunities and creates societal benefits with a neutral footprint on nature.

In economic terms, the benefits of the transition are numerous - increasing resource efficiency, reducing material costs, stimulating innovation, decoupling

economic growth from resource consumption, developing the labour market, reducing waste and its disposal costs.

As part of the European Green Deal, in March 2020 the EC published a New Action Plan towards a Circular Economy with measures to accelerate the transition to a sustainable model and the recovery of natural resources, thereby reducing the impact on the environment and society. The new Action Plan aims to: establish a framework for sustainable product policy; key value chains in the product field; a more effective waste policy focusing on prevention, reuse and recovery; and create circular patterns for the benefit of people, regions and cities.

On the other hand, by developing a modern strategy, there will be an opportunity to adapt local policies taking into account and "From farm to fork (2020)" is a strategy to build sustainable food chains to protect nature, provide healthy food and support farmers, as well as to reduce the use of chemicals, pesticides and fertilisers in growing crops. Among the main objectives of the Strategy is to reduce food loss and waste. The Commission is committed to halving per capita food waste at retail and consumer level by 2030.

Policies and impact -

Policies and impact - Currently there is no policy in place at municipal level to stimulate, develop and support SMEs to implement a circular economy, which is the main reason to focus on creating these foundations to support both the municipal administration and SMEs in this area.

The challenges for the improvement of the local policy, is related to the further development of the contributions already accumulated from OP 2014-2020 and the expiring duration of the programmes. Due to the specificities of the implementation of the 2014-2020 OPs, the difficulties for local municipalities and actors to access funding and support opportunities, the lack of a local strategic policy that creates synergies between the OPs, local policy and national strategic documents, remain issues of key importance for local administrations and SMEs.

At present, we cannot influence policies such as the Innovation and Competitiveness Operational Programme and the Rural Development Programme, as their framework has already been approved by the ministries and their respective programmes are expected to start soon. Furthermore, influencing them requires very high level decisions for which it is currently very difficult to secure support.

This activity will contribute to the impact on local policy, as it is planned to update the strategic documents for the development of the municipality - Development Plan of the Municipality of Devnya - 2021 -2027 by adding the Strategy for the promotion and development of the circular economy on the territory of the Municipality of Devnya as an additional annex to it along with point 2 of this Plan.

The Municipal Development Strategy is a program that aims to outline the main priorities and directions for development in the medium term - covering the period 2021-2027 in different perspectives - administrative, private and public. It is the basis that shows the expectations of business, population and administration, as well as the methods of influencing/achieving them.

It is developed by the municipality and adopted by the City Council after public discussion for a specified period of time. Its development is closely linked to the needs of the population, the private sector, public administration and national legislation.

Precisely, as a basis for the development of the municipality in the medium term - until 2027, influencing this policy by adding priorities and methods for the introduction of various means of circular economy is a vital mechanism without which we could not create sustainable prospects for the stimulation and development of its sector.

If we do not start by changing local policies and municipal policy priorities in this direction, we risk creating obstacles and problems in the future, as well as increasing the difficulties of promoting these processes at local and regional level.

Through the implementation of the activity, one of the main priorities has been set to create a regional policy (in the face of the creation of a municipal strategy) that aims to create synergies and coordination between the implementation of existing national policies and initiatives outlined in the Operational Programmes and other national programmes. This will allow us to focus the efforts of the local administration by improving local policies so as to encourage the development of SME cooperation and the implementation of circular economy measures.

Without a certain level of understanding of local needs and local policies in the circular economy, cooperation in all other areas will be significantly affected. Efforts in the area of strengthening cooperation with municipalities and SMEs is a key policy instrument in the field of circular economy and has led to the development of a strategy for the promotion and development of circular economy in the territory of the municipality of Devnya, which will allow the improvement of the policy at the local municipality level, as well as its subsequent update to align with the next policy instrument Operational Programmes in the period 2021-2027.

With the planned activities in the context of the new municipal strategy, we will achieve a positive impact on stakeholders, concrete pilot actions to modify the future development of SMEs in the region, a political strategy to support the additional circular economy - activities through local funding, proactive concrete measures by addressing the relevant needs and most importantly for a wide access to calls and grants based on their requirements, following the synergy between the strategic documents at local and national n

The indirect expected impact of the strategy on the policy instrument will be to promote the introduction of innovations, production processes, new technological lines, as well as to increase the participation of SMEs in operational programmes, ERDF calls, as well as other funding funds.

The strategy will be underpinned by a clear vision, determined cooperation between the municipalities in the region, and the efforts of all parties involved will lead to successful progress and attract potential sources for SMEs and administrations to develop interventions for regional growth in the

circular economy sector concerned. With the specific action 1, there will be an opportunity to influence the sector and contribute to significant policy changes in the administration thus we have addressed the already implemented policy change in Priority Annex 2 in the 2021-2027 program period and we will have a tool for policy implementation.

This strategy includes actions that provide guidance for agri-food enterprises to enter the stage of circular economy, also integrating measures for entrepreneurship, measures will help guide economic development efforts by improving the performance and productivity of the innovation system, creating favorable conditions for quality development and sustainable business growth and digital transformation in their interconnectedness and synergy.

The Action Plan also aims to influence the Territorial Cooperation Programme as well as other regional instruments for territorial development - metro and regional development policies and strategies. The development of the strategy will also allow to set objectives and targets to be coordinated with the regional administration for their inclusion in their regional development policies as well.

By introducing a strategy, it will enable us to analyse the problems and potential solutions, which will allow targeted actions to be taken to change legislation and/or introduce measures for the given sector and desired policy. Strengthen institutionalised cooperation between regional authorities and agribusiness supporters to create new business opportunities.

1.2. Measures and models to overcome and improve

The Municipality of Devnya places the circular economy as a long-term priority of its development policy. The circular economy transition strategy is the first and important step in this direction.

The planning of this activity was borrowed from the exchange of experiences and inspired by the first interregional project meeting held in Bologna and the food policy presented by the Milan City Council. The food waste reduction policy presented, together with the participation of local authorities and SMEs, NGOs and other institutions, is proven and close to the

needs and possibilities of our region and to be used and implemented in our region.

Through the development of the strategy we will have the opportunity to plan, involve partners and tailor opportunities to reorganize the operations of the enterprises so as to make use of these and new methods to introduce circular economy and reduce/reuse resources.

The European Union's general policy on circular economy is evolving and our country is aware of the challenges ahead and the duration of such a transformation of societal attitudes, economic processes and institutional priorities. The transition to a circular economy will provide the country with economic growth and a better environment. The necessary institutional, financial and human resources will be mobilised for this purpose. The strategy will cover the changed national regulatory framework, the new period of OP Innovation and Competitiveness 2021-2027, the Green Deal and Farm to Table.

The development of the strategy will help us to make a symbiosis between the strategic objectives of the municipality and the expected calls for project proposals under the OP Innovation and Competitiveness so as to achieve synergy. On the one hand, the objectives of the municipality should be defined and directed towards the introduction of a circular economy at local level, and on the other hand, companies operating in our territory should be able to use these tools to reorganise their production activities and/or processes in order to achieve these objectives.

The transition to a circular economy requires the creation of more sustainable production and consumption patterns. By developing a strategy, management is taking decisive action in this direction. The measures developed should aim to increase resource productivity and lead to connectivity in the economy by introducing new business models. 'Waste' is beginning to be seen as a 'resource' for the economy. The aim is to keep materials in production for as long as possible and to recycle them with high quality, to produce higher quality raw materials, to reduce the dependence of the country's economy on imported raw materials.

The circular economy needs a new and more active role for consumers. Consumer awareness and interest in the circular economy is crucial for the success of the transition to a circular economy. Consumers need to be provided with the most objective information possible for decision-making, including the social and environmental footprint of products Consumers also play an important role in waste prevention and recycling. The measures in the Strategy need to be geared towards an informed, responsible and active society.

The transition of production to a circular economy is assessed by a set of indicators such as resource productivity, contribution of recycled materials to raw material demand, amount of investment and value added in circular economy sectors, innovation, eco-innovation and its results, etc.

The country's resource productivity, measured as a ratio of GDP to the amount of natural resources used, is one of the lowest in the EU. The amount of resources used depends on a variety of factors, such as the structure of the economy (relatively high share of the mining industry in the country), the use of fuels for energy production, the implementation of large-scale infrastructure projects after the country's accession to the EU, as well as the predominant use of primary raw materials and resources, the use of obsolete equipment and technologies.

The development of innovation and eco-innovation in particular is a key part of the concept of achieving a Circular Economy. According to EC and Eurostat data, Bulgaria ranks second to last in the EU in terms of the eco-innovation index.

The transition to a circular economy involves changing the existing linear economic model and requires the participation of all parties involved - consumers, business and government. Everyone must recognise the need for urgent action to change the status quo and create a sustainable and environmentally friendly economy.

Society needs to start consuming in a more sustainable way, taking into account the environmental impact of the goods and services used. Without the active participation of households in separate waste collection systems, efforts

to achieve high quality recycling and the return of secondary materials for production would not work. Efforts to raise public awareness of its role in the transition to a circular economy are essential. Measures to this end should be envisaged and included in the strategy.

Businesses should drive the transition to a circular economy by developing and implementing resource-efficient solutions that make them more competitive but at the same time reduce the environmental and climate footprint of their activities. In addition to the optimisation of production processes and raw materials critical to the EU, the Strategy needs to provide for business to play a leading role in waste recycling as well as the recovery of construction and demolition waste and agricultural solid waste.

Local authorities should play a much more active role in efforts to promote circularity in the economy. As a major user of public procurement, they can set requirements for environmentally friendly goods, services and environmental management systems. Statutory instruments such as levies to promote recycling and waste recovery should be used as intended. Municipal waste management programmes for the next programming period should give clear priority to the prevention, reuse and recycling of municipal waste.

Stakeholders involved

o Regional and municipal administrative structures - they will be involved for the study and planning of the strategic framework;

o Small and medium enterprises - partnering to discuss opportunities for implementation of specific activities, related issues and funding opportunities;

o The public - partnering to discuss social engagement of the public on the topic and the strategic framework;

o Scientific and training organisations - partnering to discuss and specify models and measures for implementing circular economy activities and processes.

1.3. Expected results from the implementation of the action

Through the development and implementation of a municipal strategy it will be possible to help achieve the transformation of the economy, increase resource efficiency and increase the added value of industrial production. Consumption of some products will be replaced by services and others will become fit for longer use.

Individual industries will be linked so that they exist in symbiosis. The country will contribute to the provision of critical raw materials in the European Union. The amount of waste landfilled will be reduced to a minimum and the rest will be returned to the production cycle or recycled.

All this will be achieved by society joining forces and the state providing the necessary conditions and resources.

Resource efficiency makes economic sense. By using fewer resources in a more efficient way, Bulgaria can maintain a competitive advantage, create green growth, sustainable jobs and better protect the environment.

1.4. Proposal and next steps for the implementation of the activity

o Establish a working group and initiate meetings with stakeholders to discuss possible measures, problems and potential solutions;
o Study the legislative framework for the introduction of such activity;
o Identify funding sources for the implementation of the activity;
o Detailing the modalities for setting up measures;
o Conducting a survey among potential applicants to discuss similar measures and opportunities, potential problems and obstacles, complementing the proposed solutions.

1.5. Timeframe for implementation of the action

From July 2022 - October 2022;

1.6. Budget required to finance the action

The implementation of the activity requires funds for studies, consultations with specialists, coordination and other activities directed to external experts.

The required budget is - 6800 BGN, which will be provided through funding from the budget of the municipality of Devnya.

2. Activity - 2 - Creating a digital portal to share waste and raw materials, and to improve connectivity between companies and the science sector to implement circular economy processes

2.1. Need for the key activity

The main objective of the activity is to bring together in one place in an easily accessible version, through an online electronic portal, information in two main areas:

- Firstly, the possibility for any production (SME) that registers to publish on the portal its waste products, leftover or unusable raw materials/materials, old appliances, machinery, etc. related to their production and to search for a potential user for them.

- Secondly, for all waste/raw materials that are not interested in being re-consumed, to look for different technological solutions, models, developments, ideas, innovations to introduce circular economy in the sectors, by linking them with different scientific experts and organisations that could propose concrete solutions, partnerships, technologies, etc. that could lead to solutions for their recovery.

One of the problems that producers and processors face is the lack of sufficient experience and knowledge, as well as time to become familiar with the vast amount of information on development opportunities, new technologies, cooperation and partnership, projects, international networking opportunities. One of the main sources for the development of a given sector, as well as the economy, is the implementation of solutions required by the companies' customers and their constant development, as well as the deployment of partnership potential. This would lead to an increase in competitiveness and, from this, the companies' revenues, and in turn so they will have the opportunity to invest in improving production processes and

introducing different working models to achieve a circular economy in the sector.

Many ready-made solutions to problems sit developed in scientific organisations or in companies with development activities, but due to the difficulty of exchanging international experiences, they hardly reach in time to be implemented or funded, many international companies are open to cooperation and investment, as well as in participating in various partnership projects. In this regard, it is also necessary to promote the exchange of experiences with international organizations and the creation of partnerships from different countries to facilitate and accelerate the transition, as well as reduce the negative consequences of the transformation of the economy.

Difficulty in establishing contacts and implementing international partnerships is one of the most serious prerequisites for reducing the opportunities to implement modern technologies, exchange experiences and develop own solutions.

On the other hand, every company, scientific organisation and administration has its own partial experience and observations on processes and possibilities for implementing different measures, models or options for introducing processes or facilitating/stimulating them. Connecting these individual units and providing opportunities for sharing and discussion will enable the creation of partnerships, ideas, developments and knowledge to facilitate the transition to a circular economy and minimise the business and consumer impacts of these actions.

Good and successful business logic requires that all these processes, in one way or another, are supported and facilitated to the maximum extent possible. Sharing experiences internationally will contribute to the creation of tools not only to promote circular economy business models but also to assess potential environmental impacts.

Growing efforts to develop so-called horizontal cooperation are already yielding tangible results, characterised by the creation of initiatives, the attraction of experts, the exchange of knowledge, as well as more and more opportunities to finance ongoing and emerging ideas from internal and external resources.

2.2. Planned activities, policies and measures

Through the creation of this portal we will have the opportunity to contribute to improving local policies in the circular economy and encourage SMEs to adapt their processes to create plans and design company solutions in this area. In this way, we will be able to prepare companies to have ready solutions and ideas for the implementation of new projects to introduce processes to achieve a circular economy. Last but not least, the implementation of this platform will also support the implementation of the first activity of this plan, the development of the municipal strategy and support to local policies for the implementation of activities leading to a circular economy in SMEs at local and regional level.

This activity also aims to influence the Territorial Cooperation Programme as well as other municipal and regional territorial development instruments - metro and regional development policies and strategies. The development of the strategy will also allow to set goals and objectives to be coordinated with the regional administration for their inclusion in their regional development policies as well.

This activity will contribute to the impact on local policy, as it is planned to update the strategic documents for the development of the municipality - Development Plan of the Municipality of Devnya - 2021 -2027 by adding the activity to create a digital portal for the sharing of waste and raw materials, as well as to improve connectivity between companies and the scientific sector for the implementation of circular economy processes as an additional annex to it together with point 1 of this Plan.

On the other hand, the implementation of this activity will allow to adapt local (municipal) policies for the implementation and promotion of enterprises for the implementation of circular economy processes. The implementation of this activity will also allow us to adapt in the future the municipal strategy for the implementation of circular economy measures and its subsequent development. The formulation of local policies will also enable us to turn our experience into a basis for the use of various national and international programmes.

Linking with scientific organisations will also improve the cohesion between the scientific and practical sectors to more quickly transfer solutions from science to practice. And on the other hand, it will enable the scientific staff to

get in touch with the practical and real problems of the sectors and to seek new and adequate solutions on specific topics.

In this way it will be possible to close the circle for a faster transfer of knowledge and skills and the implementation of processes to achieve a circular economy.

Through circular economy strategies, EU countries and cities will be able to take action on food waste, eco-design, organic fertilisers, extended warranties for consumer goods, innovation and investment support. Circular economy principles are also gradually being integrated into industrial best practice, green public procurement, use of cohesion policy funds and through new initiatives in the construction, water and energy sectors.

The solution is inspired by our participation in the retreats and the sharing of experiences from projects such as:

o Stakeholder Platform for the Italian Circular Economy;

o The innovative cluster IND-AGRO-POL key participant in ECO-PARTNER;

o Applied research for the conversion of agri-food waste into biogas and by-products: Results and barriers to project implementation.

2.3. Resources required to implement the envisaged measures

- municipal administrations - participation in the creation and dissemination of the platform, transfer of knowledge and practices, funding programmes and policies;

- regional administrations - participation in the creation and dissemination of the platform, transfer of knowledge and practices, funding programmes and policies;

- scientific and non-governmental organisations - participation in the creation and dissemination of the platform, transfer of knowledge and practices, funding programmes and policies. Participation in the consultations and partnerships presented

- Industry - participation in the creation and dissemination of the platform, knowledge transfer and practices;

- Ministry of Economy - participation in the dissemination of the platform, transfer of knowledge and practices, funding programmes and policies;

- Ministry of Agriculture and Food - participation in the dissemination of the platform, transfer of knowledge and practices, funding programmes and policies.

2.4. Expected results from the implementation of the action

This type of organization of activities will lead to a significant increase in the competitiveness and potential of Bulgarian producers, but also to a significant reduction of administrative costs and risks for the companies, as it will concentrate in itself an expert staff that will take all this activity out of the companies and will know in detail the peculiarities of the relationship of other countries.

It will increase the financial capacity of companies to reinvest in improving production technologies and encourage them to introduce modern methodologies, taking account of current market trends and expected changes in market conditions.

It will reduce the risks of bankruptcy and increase opportunities for entrepreneurship, allowing smaller producers to enter the market and have a chance to get involved in the supply chain.

Europe's new circular economy framework could generate new economic profits of €1.8 trillion a year by 2030. The transition to a circular economy "calls on companies not only to maximise recycling and minimise waste, but to fundamentally re-engineer their products and services with a so-called cradle-to-cradle approach".

In Bulgaria, the transition from a linear to a circular model of the economy is in an early phase of development. The recycling rate is 2 times below the European average. At the same time, trade in recycled materials resulting from reuse and remanufacturing is more than 7 times smaller in volume. By exchanging experiences with partners from countries where the circular economy is happening, the opportunity is increased for Bulgaria's cities to become more attractive places to live, for local authorities to optimise their waste management costs and for businesses to find new profitable models for development.

Proposal and next steps for the implementation of the activity

o Establish a working group and initiate meetings with stakeholders to discuss a possible framework and scheme for establishing intermediate units;

o Study the legislative framework for the introduction of such an activity;

o Identify funding sources for the implementation of the activity;

o Detailing the modalities for organising and implementing such a workshop;

o Involving interested organisations from different countries;

o Conducting a test/pilot measure of the activity with potential applicants.

2.5. Budget required for the implementation of the activity

The budget for the implementation of the activity is related to the creation of a digital environment for the implementation of the partnership and funds of 18 500 BGN are needed and will be included in the strategic municipal planing and will be co-funded by the municipality of Devnia.

2.6. Timeframe for implementation of the action

The activity related to the creation of a dedicated platform, the time required for its implementation is from August 2022 to February 2023 inclusive.