



GRESS - GREEn Startup Support

Improve policies for SMEs' competitiveness by strengthening capacities to trigger and support formation of sustainable and competitive of green start-ups and spin-offs

Action Plan for Bulgaria



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1. Introduction

1.1 GRESS – GREen Start-up Support

The overall objective of the Interreg Europe GRESS project was to improve policies for SME's competitiveness by strengthening capacities to trigger and support the formation of sustainable and competitive start-ups and spin-offs within the green economy.

Gathering partners with a range of development levels in terms of GDP, from Poland, Greece, Bulgaria, Italy and Norway, interregional collaboration was essential for mutual learning, effective coaching and bringing innovations to the market. Partners had different experiences, approaches, and performance regarding green start-up support.

Through workshops and online tools, GRESS promoted policy learning between partners and regional stakeholders in a holistic manner; the horizontal actions created value and delivered innovation across multiple sectors. Specifically, GRESS generated input to the improvement of policy instruments and enabled scaling up of green innovation through the potential for replication of results in other European regions.

The project sought to improve five policy instruments through governance measures, new projects, and structural change. Around 26 MEUR in Structural Funds and 7 MEUR of other funds were estimated to be influenced by the project.

Partners within the GRESS consortium improved awareness of opportunities for SMEs in the green and blue economy with the view to:

- increase the number of participants at and improve the quality of training programmes for green start-ups
- attract more SMEs to participate and succeed in public procurement of green products and services
- enhance access of SMEs to risk capital outside the local region
- make cities and regions more attractive for young entrepreneurs in green sectors
- introduce improved incentive schemes for green start-ups, enhance the performance of ecosystems
- grow the number of competitive start-ups and spin-offs within the green economy and improve their chance of survival.

The current economic crisis has further exposed the need for a reconsideration of traditional economic models and approaches. With the economic crisis continuing to affect growth, and environmental challenges mounting, governments around the world are increasingly seeking

more innovative ways to promote economic activity and tackle global environmental challenges such as climate change and the scarcity of natural resources.

Green growth policies need to encourage innovation, as this can enhance efficiency in the use of natural capital and foster new economic opportunities from the emergence of new green activities.

Green innovation not only has the potential to provide efficient and effective solutions to environmental challenges, but can also contribute to making companies more competitive, and hence work towards a stronger economy. Firstly, eco-innovations can lead to increased productivity and energy efficiency, thus improving the cost competitiveness of businesses.

Secondly, the market for environmental goods and services is growing fast; a comparative advantage in such markets can therefore be an important source of economic growth. Thirdly, eco-innovation can contribute to the emergence of new business opportunities. Against this background, partners in the GRESS Project have been working since 2019.

1.2 The importance of green start-up support

Europe has ambitious goals for the future - under the Paris Agreement, the EU committed itself to become carbon-neutral by 2050 and a 55% reduction of emissions by 2030. The 25 million SMEs in Europe account for 99.8% of all firms and are both a significant source of job creation and prosperity and an engine for the green transition especially now, during the recovery period post-COVID.

SMEs and start-ups are deeply woven into Europe's economic and social fabric; they provide two out of three jobs, bring training opportunities across regions and sectors, including low-skilled workers, and support society's welfare, including in remote and rural areas. The daily challenges of European SMEs to comply with rules and access information, markets, and finance are thus challenges for the whole of Europe.

Green entrepreneurship is a business approach that considers not just profit, but also social and environmental sustainability. Green entrepreneurship is also a means to improve the management of natural resources while simultaneously ensuring that they are used in an efficient and sustainable way. Therefore, a business established according to principles of efficiency and sustainability becomes an interesting opportunity for the whole ecosystem, spurring imitation and innovation, and attracting capital and interest from relevant stakeholders.

Entrepreneurship developed according to the principles of sustainable consumption and production can help manage better scarce natural resources (water, land, energy, etc.) ensuring economic growth that is both efficient and sustainable. From this perspective, increasing the numbers of start-ups and spin-offs within the green economy is an opportunity for the whole society, promoting innovation, inspiring others to follow the same path, and

ultimately attracting interest and capital to the economic sectors that improve the environment and the economy at large. Developing an ecosystem where green start-ups and spin-offs can flourish will require also requires the creation of national, regional, and European infrastructures that can support them.

The European Union acknowledges the essential role of SMEs and start-ups during the recovery and transition phase. As part of the industrial package, its SME strategy is viewed instrumentally for implementing, among others, the Green Deal. The European Green Deal seeks to achieve climate neutrality across Europe by 2050 by encouraging the adoption of environmental practices that promote low carbon emissions, a circular economy, and economic growth that does not jeopardise our ecosystem and natural resources.

The European Green Deal recognises the key role SMEs can play in this transition towards a more sustainable future, allowing SMEs to make the most of their flexibility and position themselves in the market as leaders in eco-innovation. For SMEs to be able to continue to grow and offer a wide range of innovative and sustainable products and services, Member States need to ensure that appropriate green industrial policies are put in place to further stimulate their onboarding in this sustainable journey, such as capacity building and support for transition, reducing regulatory burden, enhanced market entrance, and improved access to finance.

1.3 State of play for green start-up support in Europe/GRESS region – base line report

There is no doubt that green business is critically important for productive, healthy and sustainable societies. As green businesses use limited amounts of (or no) fossil fuels and have low (or no) emissions, they can play a key role in combating climate change while contributing to growth and the creation of decent and green jobs. But apart from macro-level benefits, going green also makes business sense for the entrepreneur. The benefits of greener business include access to untapped markets, improved resource efficiency and cost savings, and improved productivity of staff because of a cleaner and safer working environment.

Green start-ups also play a key role in promoting structural change. While established companies generally have their strengths in improvement innovations, it is start-ups that introduce fundamental environmental innovations to the market as pioneers. In the transformation bringing us towards a climate-neutral economy, the innovative start-up teams are the main drivers of change; green start-ups predominantly rely on digital business models, making particular use of the opportunities offered by digitalisation to implement new sustainable solutions.

However, green start-ups often must struggle with particularly high barriers in many markets and are often not rewarded for their outstanding sustainability performance. In some cases, they are even disadvantaged regarding start-up promotion programmes. How this imbalance

can be remedied and how the economic and sustainable potential of green start-ups can be better utilised need to be addressed.

In view of the economic and ecological importance of green start-ups, it is essential to support this type of start-up from the outset, considering special characteristics and achievements and specific challenges visible in politics and start-up promotion programmes as well as to investors and established companies.

To identify and analyse the regional and territorial situation of the green economy (status of green growth) in the five partner territories of the GRESS project, a methodological framework was created which provides a top-down approach for the analysis of the regional business climate for green SMEs, including existing policies, support schemes and instruments, and the possible existence of strong regional markets and knowledge clusters.

This analysis served as a starting point for the exchange of experience and mutual learning process. A common template and methodology were used to ensure a harmonised approach to an activity covering territories that are very different in terms of their geography, economic and political contexts and the opportunities and capacities to realise the green economy.

The baseline document gathered the analysis of the green economy regional framework in the five GRESS project partner regions, to enable a deeper and more consolidated understanding of the existing factors and policies playing a role in fostering the sector in the five project regions.

The analysis assumed that territories are living systems continuously in evolution where diverse interests, economic drivers, social factors, and policy instruments may influence further development and valuable services for green start-ups and SMEs to develop. For this reason, a deep understanding of the existing situations in the regions was necessary as starting point for the GRESS project to pursue the objective to improve policies and reinforce SMEs' competitiveness in the green economy. In particular, the analysis focused on the diverse peculiarities of each project region in terms of existing policies at national or regional level, type of stakeholders involved, support services and innovation instruments, main start-ups economic sectors and potential for the future.

The report supported the fact that all countries consider the green economy as a driving sector for a more resilient and sustainable territorial development, and they are all positively influenced by the European policy framework stimulating and supporting the green economy. Nevertheless, fundamental differences may be found in the main green economy sectors to be fostered, the actual status of development of specific policies and instruments for the sector, as well as in the integration of European policies with more national and local policies providing strategic orientation and operative support instruments.

For instance, in some cases it was found that the national policies for innovation and green development are highly integrated with specific regional and local policies, as in the case of

Kristiansand and the Metropolitan City of Bologna. However, whereas in the first case more attention should be paid on indirect emissions and supporting scaling-up processes, in the latter case the financing instruments and support services accessed by green start-ups and enterprises at regional level are currently not specifically designed for them and a more specific focus at this regard is needed in the future.

On the contrary, Sofia municipality is trying to boost green start-ups development through acceleration programmes, even if at Bulgarian national level national policies still play a more central role and the dependency on European funds is still significant. It was also noted that the demand for more green products and services had not previously been perceived as sufficiently high and that more incentives will be provided by public institutions through the adoption of Green Public Procurement.

A general positive asset in some countries is the presence of a wide variety of actors – businesses, university and research institutions, public institutions, public service providers – having a proactive role in fostering the sector and working in close cooperation to provide green businesses with more complementary tools. The analysis also showed that more policies for the increase in green jobs were needed in most of the project territories.

The positive case studies and best practices collected played a central role in the mutual learning exchange phase of the project, through which the partners had the chance to exchange experiences with each other and to integrate the lessons learnt in the existing policy instruments addressed at local level. Indeed, interregional learning was a key success in this instance, enabled by the Interreg Europe programme, which promotes exchange of experiences among diverse European regions for them to learn from each other and build innovative policies in their territories.

1.4 Regional context of Bulgaria

Bulgaria is an Eastern-European, post-soviet country which experienced a significant economic transformation over the last three decades from planned and centralized economy focused on heavy industry to a market-based and open economy, currently an EU-member.

The GDP of the country steadily accelerates its growth rate over the past years but remains lower than the EU average in terms of GDP per capita with very high regional discrepancies. The European structural and investment funds of the EU have positive impacts on economic cohesion both between the regions of the country and between the country and other Member states.

The distribution of the GDP among the economic sectors remains steady over the last decade with agriculture accounting for 4,69%, industry with 28,44% and services with 66,87% for 2017. In a regional perspective, there are significant discrepancies between the regions meaning that the southern regions in general produce more than the northern regions. The

economic activities are centralized in the capital region of Sofia while at the same time most of the other regions fall behind with slow economic activity and demographic challenges.

The sectoral structure of the Bulgarian economy differs significantly from that of the other EU countries. Similarly to the global and EU conditions, the main driver of the Bulgarian economy are the SMEs, but the share of SMEs in high-tech, knowledge intensive services and R&D is significantly low and therefore the stimulation of entrepreneurship and start-ups in these sectors are really important. According to a SWOT analysis by the Ministry of Economy Bulgaria is ranked the last in the EU according to the priorities in the Small Business Act 2012 - "Internalization" and "Innovation" and is in the bottom also for "Environment". Productivity of the SMEs is below the average for EU-28. Operational Programme "Innovation and Competitiveness" (OPIC) 2014-2020 (The Program "Competitiveness and Innovation in Enterprises" for the period 2021-2027) as a part of the implementation of EU structural and investment funds (ESIF) in Bulgaria supports the capacity of enterprises for easier access, sustainable development and presence on markets but the SMEs still face limitations related to high production costs and the need for optimization of production chains, the use of obsolete production technologies, lower quality of products in some sectors.

The performance of Bulgaria in the green economy can be assessed as one of the poorest among the EU Member States based on the following indicators:

- Policy efforts are mainstreamed namely to improving the general SME financing, building of new labour skills and extending producers' responsibility for materials and products and these activities are mainly financed through the EU programmes;
- The Bulgarian economy is the most resource intensive economy in the Union. The industry costs of protection and restoration of the environment in Bulgaria are significantly above the average among the other Member States with continuous increase of 15% on an annual basis. The manufacturing industry has the highest expenditures;
- The Bulgarian economy is the most energy intensive economy in the Union. It has the highest consumption of energy per unit product of GDP or with 77,34% more than the average level within the EU;
- The performance within the eco-innovation field is again below the EU-average and Bulgaria ranks last in the eco-innovation index of the EU-28 (identified as a modest innovator together with Romania) regardless of the ambitions of the country in the Smart Specialization Strategy to improve to a moderate innovator by 2020
- Bulgaria is the last in the EU-28 in the output of environmental goods and services per unit of gross domestic products with only 2,7%.

These indicators signal for urgent need for mass improvements in both economic and policy in the direction of the green and blue economy. In that sense, the European Green Deal as an overarching policy framework, set the pathway for sustainable transition of EU towards climate neutrality. It is Europe's new growth strategy for a modern, resource-efficient and competitive economy stepping on the twin transition as a main driver. To embed the green and blue economies and the twin transition on multiple economic, societal and environmental levels in the EU ecosystems, the Commission has adopted a New Approach for a Sustainable Blue Economy in the EU, the EU Circular Economy Action Plan, the European Industrial Strategy, as well as the EU Bioeconomy Strategy. These strategies set the measures strengthening economy without damaging the environment and promoting the sustainable consumption, use of resources and growth.

Regarding the development of SMEs, including start-ups, based on the analyses performed within GRESS project, the following findings were made:

- 75% of the start-ups declare that they were set up without any support, but 1/3 of these companies received support at a later stage;
- Turnover from green sales stays constant with variation of 2% for nearly 1/3 of the responses. The dynamics of green jobs is low as well as 54.5% state that the number of green workers hasn't increased in the past 3 years;
- In terms of green investments, more than half of the respondents state that they have undertaken environmental investments in the past 3 years related to acquisition of machinery (58.3%), adoption of practices and/or systems for more efficient consumption of energy and other resources (50%) and R&D for new products and services (66.7%);
- In terms of funding, 58.3% have used public sources and the EU funding through the operational programmes are with highest attribution among these. In exploring the barriers towards funding for environmental investments from public sources, 53.3% state that the incentives are not suitable for the company, 33.3% define the procedures as too complicated and 26.7% are impeded by high co-funding rate;
- When asked to assess the external factors that would stimulate the investments in the green economy, the most recognized are business supporting structures such as accelerators, incubators etc., legislative and regulatory changes, availability of initiatives and green public procurement and policies aimed at increasing awareness in the market;
- More than half of the respondents stated that their companies have planned investments in the green economy.

The general conclusion of the survey is that there is vision among the companies about the potential in environmental investments and shift to green economy for their business operations, but they also identify external circumstances that need to be overcome in order to promote that shift. A complex mixed approach of boosting the innovation ecosystem through business creation services, targeted initiatives suitable to the companies and regulatory changes including green public procurement are all necessary for stimulating the investments of companies in the green economy.

2. General information

Project: GREEn Startup Support (GRESS)

Partner organisation: PP-5 Foundation Cleantech Bulgaria

Other partner organisations involved (if relevant): N/A

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3. Policy context in the region

3.1 Brief presentation of policy instrument

Initially the focus of GRESS project was **Operational Programme “Innovation and Competitiveness” 2014-2020**, as the main instrument for supporting innovation and competitiveness for the Bulgarian business. The implementation of the GRESS project covers the design and programming of the new programme for the period 2021-2027. For that reason, the current Action Plan affects the new instrument for support of SMEs in Bulgaria - **The Program “Competitiveness and Innovation in Enterprises” for the period 2021-2027** (The Programme). The programme is financed under the European Structural and investment funds (ESIF) allocated to Bulgaria. The general framework is outlined within the Partnership Agreement of Bulgaria, which is the national strategic document on governing and management of the European funds in the country in the programming period 2021-2027.

The Partnership Agreement is published for public discussions until 21.04.2022. After that, the document will be submitted to the European Commission for approval. Once approved, the programme "Competitiveness and Innovation in Enterprises" for the period 2021-2027 will be also approved and the first calls for proposals will be launched. According to the indicative timeframe, this process is expected to be finalized till autumn 2022 and the first calls for proposal under the Programme to be launched until the end of 2022. All texts below are based on the fourth revision of the Programme. After the official approval by the EC, certain changes may occur.

The Action plan also takes into consideration the National Recovery and Resilience Plan of the Republic of Bulgaria (version 1.5, dated 06.04.2022, the Plan), part of the Recovery and Resilience Facility of EU, as a main EU mechanism for facilitation the economic and social recovery from the crisis caused by the COVID-19 pandemic. The Plan transposes the EU policy to the national context stepping on the National Development Programme: BULGARIA 2030 and aimed at increasing the resilience of the national health system and mitigating the socio-economic consequences through measures to support enterprises and employment and to ensure appropriate safe working conditions with a view to resuming economic activity resistant to negative external influences. It lays the foundations for a green and digital transformation of the economy, in the context of the ambitious goals of the Green Deal. The Recovery and Resilience Plan presents the views of the Government and the society on how structural problems in the economy should be addressed, through an internally coherent and consistent combination of reforms and investments. In this regard, the interventions envisaged in the Plan should not be considered solely, but in combination with the interventions planned in the package of strategic documents within the Partnership Agreement 2021 – 2027, among which is also **The Programme "Competitiveness and Innovation in Enterprises" for the period 2021-2027**, which the current Action Plan addresses.

The plan is structured in four pillars (Innovative Bulgaria, Green Bulgaria, Connected Bulgaria and Fair Bulgaria), divided into 12 components, including 46 reforms and 59 investments.

The thematic area of GRESS project is relevant to **the component Smart Industry under Innovative Bulgaria Pillar**. It has envisaged a budget of BGN 3,376.5 (EUR 1726.38) million, of which BGN 1,616.5 (826.50) million at the expense of the Ministry of Internal Affairs and BGN 1,760 (EUR 899.87) million national (private) co-financing, which is 12.5% of the resource of the Plan.

This pillar is aiming at increasing the competitiveness of the economy and its transformation into an economy based on knowledge and smart growth through measures in the fields of education, digital skills, science, innovation, technology and the interrelationships between them. The planned reform under this component is ***Establishment of a mechanism for attracting industrial investments and development of industrial ecosystems*** with the following investments:

Investment 1: Programme for public support for development of industrial zones, parks and similar territories and attraction of investments (AttractInvestBG): creating conditions for attracting and establishing strategic investors in the industry (anchor investors) by preparing sites for investment, building leading, green, specialized and / or social infrastructure, etc. The programme envisages a mechanism that includes a combination of grants and loans.

Investment 2: Economic Transformation Programme: targeted support to Bulgarian small and medium enterprises in the main problem areas that slow down the transformation to a digital, low-carbon and resource-efficient economy. The programme will consist of two funds: Fund 1 - "**Growth and Innovation**" and Fund 2 - "**Green Transition and Circular Economy**".

Two complementary directions are foreseen under Fund 1: „Recovery and Growth” and „Innovation”. The first direction envisages two financial instruments by the European Investment Fund (within InvestEU). A competitive selection grant procedure for technological modernization and a voucher scheme for ICT solutions and cybersecurity in SMEs are envisaged. The second direction envisages structuring of equity instruments for innovation (implementation through the European Investment Fund), aimed at increasing the innovation capacity of enterprises, accelerating the improvement of their productivity and the transition to a knowledge economy, which will improve Bulgaria's current position as a modest innovator in the EU.

Fund 2 is also structured in two directions. The first aims to support the transition to climate neutrality by improving energy efficiency and independence in enterprises. A grant scheme is provided to support SMEs (including small mid-caps and mid-caps) to build new RES for own use in combination with local energy storage facilities. The second direction of the fund focuses on access to finance for SMEs and large enterprises in support of the transition to a circular economy through the introduction of circular production and consumption models, environmental standardization and promotion of recycling and recycling technologies, reuse of waste, repair and use of biologically based products.

The Plan and the European Structural and Investment funds are complementary in terms of interventions and there is a clear demarcation between the envisaged actions under the different programmes. On one hand, the Plan supplements the measures envisaged in the programmes "**Regions in Growth** and "**Competitiveness and Innovation in Enterprises**" for the period 2021-2027 (the policy instrument for GRESS) for support of construction and sustainable development of industrial parks. On the other hand, the Programme "**Competitiveness and Innovation in Enterprises**" for the period 2021-2027 envisages complementary measures for boosting industry, such as productive investments for support of specific groups of enterprises: family enterprises, enterprises from the creative industries and crafts. It is directly aimed at achieving smart and sustainable growth of the Bulgarian economy, as well as the implementation of industrial and digital transformation, mainly focused on SMEs, whereas in the Plan interventions for both SMEs and large enterprises are envisaged.

As an instrument for the implementation of the European Cohesion Policy for the period 2021-2027 and in particular the European Regional Development Fund, the Programme is intended to contribute to the achievement of the following Policy Objectives, set at European level:

Policy Objective 1 "A more competitive and smarter Europe by promoting innovative and smarter economic transformation and regional ICT connectivity" through the following specific objectives:

- Specific objective (i) development and strengthening of research and innovation capacity and introduction of modern technologies;

- Specific objective (ii) reaping the benefits of digitalisation for citizens, companies, research organizations and public authorities;
- Specific objective (iii) boosting sustainable growth and competitiveness of SMEs and job creation, including through productive investment.

Policy Objective 2 "A greener, lower-carbon and sustainable Europe with an economy in transition to zero net carbon emissions by promoting a clean and equitable energy transition, green and blue investments, a circular economy, climate change mitigation and adaptation, risk prevention and management and sustainable urban mobility "through the following objectives:

- Specific objective (i) promoting energy efficiency and reducing greenhouse gas emissions;
- Specific objective (vi) boosting the transition to a circular and resource-efficient economy.

Apart from the actions, described in the Plan, the support under the Programme is also aimed at overcoming the identified challenges and problems for the development of Bulgaria by addressing the relevant needs and requirements according to the goals and priorities, set out in the following strategic documents at national level:

- National Development Program Bulgaria 2030;
- The Innovation Strategy for Smart Specialization for the Period 2021-2027;
- The National Strategy for SMEs in Bulgaria 2021-2027;
- Digital Transformation of Bulgaria for the period 2020-2030;
- Strategy and Action Plan for Transition to the Circular Economy of the Republic of Bulgaria for the period 2021-2027;
- Integrated National Plan in the field of Energy and Climate of the Republic of Bulgaria 2021-2030.

As a tool for implementing the policies, set out in these documents, the Programme's interventions and measures are focused at fostering the economic development by improving the results and productivity of the innovation system, creating favorable conditions for quality development and sustainable business growth, and digital transformation in their interconnectedness and synergy.

In the frameworks of GRESS project, partners' experience was sought for improvement of the policies under two specific objectives:

- **Specific objective (iii) boosting sustainable growth and competitiveness of SMEs and job creation, including through productive investment and**
- **Specific objective (vi) boosting the transition to a circular and resource-efficient economy.**

Below are described the challenges, which the above specific objectives address:

- **Specific objective (iii) boosting sustainable growth and competitiveness of SMEs and job creation, including through productive investment** (focused on Policy Objective 1) addresses the below described challenges:
 - ✓ By 2019 Bulgaria reports the lowest share in the EU of adults who intend to start a business within 3 years;
 - ✓ The Bulgarian entrepreneurial ecosystem is characterized by uneven development in different regions;
 - ✓ Exports of goods and services increased by 144.9% in the period 2009-2018 due to the development of the competitiveness of Bulgarian companies and the positive economic trends;
 - ✓ The share of SMEs with a very low level of internationalization decreased from 94.5% in 2011 to 66.9% in 2020;
 - ✓ Despite the progress since the adoption of the Small Business Act, the cumulative impact of regulation remains a major problem for SMEs, both at EU level and at national level. SMEs are not informed or find it difficult to sift through essential information that would enable them to develop and expand their business;
 - ✓ According to the general findings on imbalances, risks and problems, set out in the EC Report for Bulgaria for 2019 in the framework of the European Semester, the access to finance for SMEs in Bulgaria corresponds to the EU average;
 - ✓ Over the last decade, the access to finance has improved, but nevertheless, by the beginning of 2020, one in four SMEs is experiencing difficulties in this regard;
 - ✓ There is a need for export support, incl. providing relevant and up-to-date information on foreign markets, supporting participation in international trade events, setting up specialized web portals and promoting e-commerce among smaller businesses (including measures to improve the quality and security of e-commerce services), development of the entrepreneurial ecosystem and improving the business environment by providing advice, training and information on market access, etc. in favor of SMEs on a “one-stop shop” basis.

- **Specific objective (vi) boosting the transition to a circular and resource-efficient economy** (focused at Policy Objective 2) addresses the below described challenges:
 - ✓ Low resource productivity: 0.4 EUR / kg compared to 2.2, EUR / kg average for the EU (Eurostat);

- ✓ 12.1% of SMEs face challenges in applying the requirements related to the classification, collection and treatment of waste;
- ✓ There is a need to raise awareness of entrepreneurs about the opportunities and benefits of developing circular business models, creating opportunities for exchange of good practices;
- ✓ Contribution to the implementation of the Council specific recommendation 3 for 2019.

3.1.1 Priorities

Focused on achieving the Policy objectives *Policy Objective 1 "A more competitive and smarter Europe by promoting innovative and smarter economic transformation and regional ICT connectivity"* and *Policy Objective 2 "A greener, lower-carbon and sustainable Europe with an economy in transition to zero net carbon emissions by promoting a clean and equitable energy transition, green and blue investments, a circular economy, climate change mitigation and adaptation, risk prevention and management and sustainable urban mobility"*, the Programme has set two priorities:

- **Priority 1** "Innovation and growth", focused at achieving Policy objective 1;
- **Priority 2** "Circular economy", focused at achieving Policy objective 2.

Below are listed the two Programme priorities with all specific objectives for a more comprehensive view, while the specific objectives, which are in the focus of GRESS project (in bold), are discussed in detail in point 3.1.2 of this document.

Under **Priority 1 "Innovation and growth"** are identified three specific objectives, of which the last one is in the focus of GRESS project:

- Specific objective (i) development and strengthening of research and innovation capacity and introduction of modern technologies;
- Specific objective (ii) reaping the benefits of digitalisation for citizens, companies, research organizations and public authorities;
- **Specific objective (iii) boosting sustainable growth and competitiveness of SMEs and job creation, including through productive investment.**

Under **Priority 2 "Circular economy"** are identified two specific objectives, as the second one is in the focus of GRESS project:

- Specific objective (i) promoting energy efficiency and reducing greenhouse gas emissions;
- **Specific objective (vi) promoting the transition to a circular and resource-efficient economy.**

The budget of the Programme is **1 222 550 000 EUR**, distributed under the priorities, as follows:

Policy objective	Priority	Specific objective	Budget in EUR
Policy Objective 1 "More competitive and smarter Europe by promoting innovative and smarter economic transformation and regional ICT connectivity"	Priority 1 "Innovation and growth"	(i) development and strengthening of research and innovation capacity and introduction of modern technologies; (ii) reaping the benefits of digitalisation for citizens, companies, research organizations and public authorities; (iii) boosting sustainable growth and competitiveness of SMEs and job creation, including through productive investment (in the focus of GRESS project).	730 770 000
Policy Objective 2 "A greener, lower-carbon and sustainable Europe with an economy in transition to zero net carbon emissions by promoting a clean and fair energy transition, green and blue investments, circular economy, climate change mitigation and adaptation, risk prevention and management and sustainable urban mobility	Priority 2 "Circular economy"	(i) promoting energy efficiency and reducing greenhouse gas emissions; (vi) boosting the transition to a circular and resource-efficient economy (in the focus of GRESS project).	459 890 000
	Priority 3 "Technical assistance"	The priority for Technical Assistance will support all actions of the Managing Authority of the Programme, necessary for the effective, efficient and appropriate implementation of the set goals and indicators.	31 890 000
Total budget:			1 222 550 000

GRESS instigates structural change of the policy instrument by proposing and adding new measures inspired by the experiences from the interregional cooperation(Policy Change – type 3).

As stated above, the implementation of the project coincides with the drafting of the new Operational Programme for the period 2021 – 2027, which was a great opportunity to analyse the results from the old **Operational Programme “Innovation and Competitiveness” 2014-2020** in the field of green economy, support of start-ups and SMEs and innovation and make suggestions for improvements of the new Programme **"Competitiveness and Innovation in Enterprises" for the period 2021-2027**. The proposed new measures are designed to tackle the identified gaps that were identified during the evaluation of the implementation of the Operational Programme “Innovation and Competitiveness” 2014-2020, namely:

- 1) The support for the SMEs was primarily for productive innovations in the companies;
- 2) The support was primarily for registered SMEs, support for startups from the initial stage was scarce or completely missing;
- 3) Support for consultancy services and trainings for start-ups and SMEs, as well of support for internationalization was scarce or completely missing;
- 4) Support in the field of green economy was referred primarily with measures for increasing of the energy efficiency in the companies;
- 5) There was a call for support of clusters, which was considered unsuccessful, as it was justified geographically rather than on sectoral level;
- 6) Support for industrial cooperation between SMEs especially within value chains was not envisaged.

Therefore, the GRESS partners’ experience and good practices on measures for increasing the limited support were sourced during the process of interregional knowledge exchange and the lessons learnt were transferred on multiple levels as follows: (1) to the Regional Stakeholder Group as some of its members are part of the thematic working group designing the new programme, (2) directly to the thematic working group of the Programme via the participation of PP-5 in it and (3) to the thematic working group for the design of National Strategy for Small and Medium Enterprises 2021 – 2027 where PP5 representatives also participate for achieving coherency between the strategy and the Programme as its main implementation instrument.

The entire interregional exchange and transfer process resulted in improvements of the new programme **"Competitiveness and Innovation in Enterprises" for the period 2021-2027** through the elaboration of new measures tackling the identified gaps and inspired by the partner regions, as described below:

- Industrial symbiosis – uniting SMEs within value chains
- Complex services for SMEs (support for provision of consultancy, trainings, visibility and internationalization, connection to industry)
- Clusters – cooperativity in a new manner (support for establishment of industrial collaboration based on sectors (and not on geographical location))

For more details about the suggested activities, please, refer to point 3.1.2 and point 5 in this document.

3.1.2 Specific objectives relevant for GRESS

The Programme "**Competitiveness and Innovation in Enterprises**" for the period **2021-2027** is an instrument for implementation of the objectives and measures, set in the main strategic documents, addressing the needs of the enterprises – the **Smart specialization strategy of the Republic of Bulgaria 2021-2027** and the **National Strategy for Small and Medium Enterprises 2021 - 2027**.

The interventions envisaged in the above papers are in response of Specific Recommendation № 3 of the Council regarding Bulgaria's National Reform Program 2019 (EC Report 2019): "To focus investment-related economic policy on research and innovation, transport, in particular its sustainability, water, waste and energy infrastructure and energy efficiency, considering regional disparities and improving the business environment". The following policy priorities are set out to address its implementation:

- 1) increasing the capacity productivity of the science and innovation system, as well as increasing the links between business and society. Increasing the applicability of research results in economics and quality of life;
- 2) sustainable growth of enterprises and development of the entrepreneurial ecosystem and business skills;
- 3) increasing the pace of digitalization of citizens, businesses and government

The Smart specialization strategy of the Republic of Bulgaria 2021-2027 (S3) sets five priority thematic areas for smart specialization: Informatics and ICT; Mechatronics; Industries for Healthy Living and Biotechnology; New Technologies in Creative and Recreational Industries; Clean Technologies, Circular and Low-carbon Economy. These priority areas are defined at NUTS III level, where each administrative area has identified its innovation capacity in two of the priority thematic areas for smart specialization, while thematic area "Clean Technologies, Circular Economy and Low Carbon Economy" is considered to be horizontal and a priority for all administrative units. The strategic goal of the document is increasing the national and regional innovation performance of the country, reaching a level of 60% compared to the EU average, which will strengthen Bulgaria's position in the group of "moderate" innovators by 2027. In order to achieve it, the strategy has set three operational objectives: Operational objective №1: "Improving the research system and the innovative performance of enterprises, incl. cooperation, by orienting research to the priority thematic areas for smart specialization and technologies of Industry 4.0 "; Operational objective №2: "Improving environmental friendliness (introduction of clean and green technologies) and digitalization in enterprises and internationalization of Bulgarian products and services, through commercialization and orientation of research to the priority thematic areas for smart specialization and technologies of Industry 4.0"; Operational objective №3: "Improving human resources through investment in training and key competencies in the priority thematic areas for smart specialization and technologies of Industry 4.0". The Programme objectives, relevant for GRESS project, add to all three operational objectives of the strategy.

The National Strategy for Small and Medium-sized Enterprises 2021-2027 has three objectives: Increased competitiveness, Specialization in high-tech production and knowledge intensive services and Regional equality. It includes six areas of impact (Entrepreneurship, Access to markets, Access to financing, Digitalization and skills, Better regulation and business environment, Environment) each of which contains specific strategic objectives in support of SMEs along the way of transforming Bulgaria into a more attractive place to start, develop and rapidly grow a small business, while the country is an active participant in the Single European market.

The Programme objectives, relevant for GRESS project, add to the implementation of the following measures of the Strategy:

Under area of impact *Entrepreneurship*:

- Measure 1.1 Boosting the entrepreneurial ecosystem;
- Measure 1.3 Support for start-ups;
- Measure 1.4 Support of key types of entrepreneurship.

Under area of impact *Access to markets*:

- Measure 2.1 Boosting the internationalization of SMEs;
- Measure 2.2 Support for SMEs to participate in trade promotion activities

Under area of impact *Access to financing*:

- Measure 3.1 Financial instruments to support the competitiveness of SMEs

Under area of impact *Environment*:

- Measure 6.3 Support for the participation of SMEs in the strategic value chains of the European Union;
- Measure 6.4 Improving the capacity of SMEs in connection with the transition to a circular and low-carbon economy.

Below are presented the specific objectives of the Programme, addressing the main goal of GRESS project – formation of sustainable start-ups and spin offs within the green economy and supporting SMEs in the green transition. The activities supporting the objectives are influenced by GRESS project, however, the ones directly corresponding to the suggested key measures by GRESS project, are highlighted and also presented in point 3.1 of this document.

Priority 1 “Innovation and growth”

Specific objective 3 "Boosting the sustainable growth and competitiveness of SMEs and job creation, including through productive investments.

Under this specific objective, the following indicative groups of activities are envisaged for implementation:

- Support for productive investments in enterprises according to the regional potential for development: support for family enterprises, enterprises from the creative industries and crafts;
- Encouraging entrepreneurial activity - support for the creation of new companies and development of start-ups;

- **Support for the development of the entrepreneurial ecosystem, promotion of internationalization and attraction of foreign investments: provision of complex services in support of SMEs:**
 - **consultations, trainings and information for development of business plans, determination of value of products, access to markets and financing, financial instruments, etc. in favour of SMEs on a “one-stop shop” basis;**
 - **support for the participation of Bulgarian SMEs in promotional activities in the country and abroad, incl. connecting Bulgarian companies with foreign partners to improve their export potential;**
 - **implementation of activities for proactive investment marketing, ensuring of mechanisms for providing services to potential investors; organizing and conducting events / incl. events abroad in order to attract investors;**
 - **support for the participation of enterprises in various European international networks.**
- **Support for growth and competitiveness of SMEs within new / existing industrial parks, incl. construction of production infrastructure.**

The suggested activities address the need for targeted policy in support of the entrepreneurial ecosystem and the development of entrepreneurship. In recent years, there has been a trend of gradual improvement in public attitudes towards entrepreneurship in the country, but the level of perceptions and intentions for entrepreneurship remains relatively low. By 2019, Bulgaria reports the lowest share in the EU of adults who intend to start a business within 3 years. The role of industrial clusters in Bulgaria is still not significant, due to a lack of understanding of their main characteristics as innovative organizational networks, and gaps in the institutional framework and mechanisms related to their registration, operation and monitoring. The Bulgarian entrepreneurial ecosystem is characterized by uneven development in the different regions. The proposed activity is within the framework of Priority 1 "Innovation and Growth" of the Programme and contributes to the implementation of Policy Objective 1 "A more competitive and smart Europe by promoting innovative and smart economic transformation and regional ICT connectivity".

Priority 2 “Circular economy”

Specific objective 6 "Promoting the transition to circular and resource-efficient economy"

Under this specific objective are envisaged indicative groups of activities in the field of product design, production processes and waste management, as follows:

- **More efficient use in the production of natural resources, including water - reduce the use of primary raw materials or increase the use of by-products and secondary raw materials;**

- Increasing the durability, possibilities for repair, modernization or reuse of products;
- Improving the recyclability of products, including the recycling of individual materials contained in products, also by replacing or reducing the use of non-recyclable products and materials;
- Reducing the content of hazardous substances in materials and products throughout their life cycle, including by replacing these substances with safer alternatives;
- Prolonging the use of products, including through re-use, durability design, change of purpose, disassembly, processing, modernization and repair, and product sharing;
- Support for improving waste management in enterprises, incl. prevention and reduction of waste generation, preparation for reuse, recycling. Support will be provided for the modernization of technologies for treatment and reduction of pollution from industrial wastewater;
- **Support for the establishment of partnerships between enterprises to achieve industrial symbiosis - sharing resources, services, by-products, creating a link between industries in which waste from one is a raw material for the other. Industrial symbiosis between enterprises in value chains will be encouraged;**
- **Creation of branch platforms (for example on material flows: plastics, wood, glass, etc.) for exchange of good practices.**

The focus of the measures will be support for the introduction of digital technologies and development and implementation of innovations in circular economy according to the priority area "Clean Technologies, Circular and Low Carbon Economy" of the Innovation Strategy for Smart Specialization 2021-2027, as well as development and implementation of innovative products, processes and business models aimed at permanently reducing resource intensity in industry.

Priority will be given to companies carrying out activities that are part of the EU Strategic Value Chains: Clean, connected and autonomous vehicles; Low CO₂ industry; Hydrogen technologies and systems.

Support for technological development, innovation and resource efficiency for waste pre-treatment plants is also envisaged as part of the recycling sector. Waste treatment plants contribute to the generation of recycled materials / secondary raw materials and their reintroduction into production chains as a part of the circular economy. Production investments and introduction of new technologies are important for the activities of enterprises in this sector, as well as for increasing the amount of secondary recycled materials to return to the economy.

The suggested activities meet the identified needs for investments in innovation in clean technologies and circular economy, adaptation of industrial bases, circularity and sustainability in the procurement, use and treatment of raw materials, support for business

partnerships to achieve industrial symbiosis, as well as creation of branch platforms for exchange of good practices.

According to the Green Pact, achieving climate neutrality and a circular economy requires full mobilization of industry, incl. SMEs. The transition to a circular economy is an opportunity to introduce sustainable and job-creating activities in SMEs that benefit society and the environment.

The results achieved so far by Bulgarian enterprises in terms of waste management are not optimal and the potential of the new circular economy business models has not been used. Only 10.1% of SMEs believe that recycling is part of their production process, and 12.1% of SMEs face challenges in meeting the requirements related to the classification, collection and treatment of waste. There is a need for information, additional support and guidelines for modernization in terms of waste management.

Very few entrepreneurs are aware of the opportunities and are ready to develop circular business models. Circular (secondary) use of materials in Bulgaria was 4.3% in 2016, which is significantly lower than the EU-28 average - 11.7% (Eurostat). The share of SMEs that have benefited from public support measures for the production of green products increased by 9% in 2014-2018. However, the share of SMEs that offer green products or services is below the average for EU. The share of enterprises offering green products and services is 9.5% and almost the same percentage (9.0%) plan to put such on the market. There is a need to raise awareness of entrepreneurs about the opportunities and benefits of developing circular business models and support for starting the production of green products and services.

The suggested activities are within priority 2 "Circular Economy" of the Programme and contribute to the implementation of Policy Objective 2 "A greener, lower-carbon and sustainable Europe with an economy in transition to zero net carbon emissions by promoting a clean and equitable energy transition, green and blue investments, a circular economy, climate change mitigation and adaptation, risk prevention and management and sustainable urban mobility".

4. Interregional exchange of experiences – lessons learned

For most of the duration of the GRESS project, society at large has been highly affected by COVID-19 pandemic. This was an unforeseeable event, which impacted the project activities greatly. Especially in early 2020, the uncertainty around the pandemic meant that it was neither possible to execute activities nor to plan. It quickly became apparent that the partnership could not conduct its activities as planned and needed to find new working methods to achieve the project's objectives. Consequently, all project activities developed into online events with a different approach but similar focus.

Working remotely had certain advantages: the partners could meet more frequently, engage more stakeholders, and organise spontaneous meetings with a particular focus. In addition, bilateral meetings between partners became more natural and thus relations between partners became closer on a personal level.

However, an entirely digital work mode proved not recommendable for the exchange of experiences and the learning process. To undertake such exchanges successfully, face to face contact is required with relationships built on both the formal and informal meetings. Informal meetings build trust and confidence, which is the starting point for such exchanges. Experience shows that learning happens not only via structured channels, but also informally via networking. Virtual tools can help, but physical meetings remain important catalysts of cooperation. Outcomes vary from concrete solutions to intangible results such as changes in mindset. Both are important. Therefore, it is essential to note that the GRESS partnership recognises that the process has not been optimal as it should have under different circumstances and as planned initially.

Nevertheless, under the imposed and unforeseen conditions, the consortium is pleased with the collaborative work to improve the five policy instruments.

4.1. GRESS policy learning process

Learning is a cognitive and social dynamic through which diverse types of actors involved in policy processes acquire, translate, and disseminate new information and knowledge about public problems and solutions. In turn, they maintain, strengthen, or revise their policy beliefs and preferences. A fundamental challenge in policy learning and experimentation is determining the underlying social and institutional criteria necessary to make policy learning successful.

A second related challenge is whether and how policy learning and experimentalist approaches are applicable across all types of regions. Success might depend on the ability of local leaders to form collaborative arrangements allowing public sector institutions to work with the private sector in devising experimental approaches. The ability to do so often depends on the willingness of policymakers to enhance their capacity to lead and work with change. Learning matters for innovation policy because policymakers face a complex and continuously evolving innovation system with insufficient evidence of how to influence it most effectively.

The GRESS partnership applied a five-step policy-learning process:

- 1) a review of the status on green growth in each region (further explained in section 4.2)
- 2) scan and exchange of experience and identification of good practice for mutual learning
- 3) assessment and ranking of relevant practices through peer assessments in RSGs
- 4) idea generation on policy intervention with interregional knowledge transfer
- 5) development and monitoring of regional action plans.

While the theoretical importance of policy learning is widely acknowledged, its implementation is challenging in practice. The challenges that need to be overcome to increase policy experimentation are multi-faceted, ranging from questions of commitment to learning by monitoring on the part of ruling politicians and their public sector managers to an organisation's technical capacity for learning by monitoring.

Guided by the five steps, each partner undertook a predefined and structured approach for collecting, analysing, and shortlisting suitable practices from the partner regions to respond to the identified challenges, learn, and improve the addressed policy instrument.

Through these interlinked and targeted activities, the GRESS project promoted the exchange of experience, identification, benchmarking and transfer of good practice and knowledge between partners and regional stakeholders in a holistic manner and provided legitimacy by validating and confirming the benefits of importing good practice from other partner regions towards the policy responsible institutions.

GRESS partners designed learning activities aimed at improving policy instruments. Learning therefore took place at different levels; individual (through workshops), organisational (through internal seminars and dissemination events for staff in partner's institutions), stakeholder (through RSGs) and external learning (through the Interreg Europe Policy Learning Platform and targeted EU networks).

4.1.1 Policy learning in Bulgaria

In the course of GRESS project, a process of learning and knowledge exchange between the partners has been established. In the case of Bulgaria, the partner undertook a structured approach for collecting, analysing and shortlisting suitable practices from the partner regions that have the potential to respond to the identified challenges in place and to modify the in terms of proposing new measures inspired by the partners' experience.

During the first RSG meeting in 2020, the stakeholders identified few topics of interest that they wanted to learn more about from the partner regions. These were: industrial symbiosis, indicators for measuring the implementation of circular economy in terms of the performance of the companies that benefit from the funding, green public procurement and criteria for identification of green companies. Given that the timing overlapped with the Covid-19 outbreak out in Europe, the knowledge exchange happened virtually via exchange of mails and documents in shared space. Based on the topics raised, the partners shared experiences on the following:

- (1) the establishment of industrial symbiosis (EYDE cluster in Norway, Caviro and Enomondo in Italy), how they operate, who initiated those. Also the partners provided knowledge on other examples from the Nordic macro-region;
- (2) classification of green companies performed in Emilia-Romagna based on either 'how they produce' (green production) or 'what they produce' (green business). Companies from the green production segment are assessed according to the existence of voluntary environmental certification, labels, implementation of green processes. Companies from the green business segment are assessed according to the sectors they operate in: traditional environmental markets or targeting new markets (like sustainable construction materials, organic food, renewables etc.);
- (3) introduction of green public procurement – Emilia Romagna region has established the regional agency for public purchase INTERCENT-ER which has the task to optimize, rationalize and simplify the expenditure for goods and services of regional public bodies and to develop

and execute information campaigns to promote the culture of sustainability. All these are based on the national framework for public procurement.

Additionally, PP5 explored the policy learning platform for policy briefs on the topics identified. The findings from the interregional knowledge exchange and the Interreg Europe PLP were then processed and presented at the second RSG meeting. Following on that, as part of the thematic working groups organized by the Managing authority (MA) of **The Programme “Competitiveness and Innovation in Enterprises” 2021-2027**, PP5 proposed the first specific measure inspired by the GRESS project to be included in the policy instrument - the introduction of support to the establishment of industrial symbioses between companies for nurturing circularity and improving resource efficiency. At the core of this action is the support to companies to initiate the symbiotic relationships between each other using the so-called ‘bottom-up approach’. The proposition was accepted by the MA and industrial symbiosis was included as indicative action within specific objective 6 “Promoting the transition to circular and resource-efficient economy”. Later in 2020, during the further evolution of the programme drafting, more topics of interest were added, connected to specific measures that would boost the support for SMEs and start-ups in the green economy. These topics include support measures for innovative green clusters, provision of services to SMEs and start-ups for nurturing innovation, entrepreneurship activity, internationalization and green transition and respectively exploration of partners’ knowledge in these areas took place. A virtual workshop was organized with the partners in November 2020 with the purpose of sourcing their knowledge and experience on the specific topics via the use of a visual whiteboard tool Miro. Inspiration was found in the specific practices for the identified topics such as:

- (1) principles for establishment and support to clusters: Clust-ER (Italy) and Green Chemistry Cluster (Poland) – in both cases the clustering follows a sectoral principle and not a geographical one which is a new approach for the Bulgarian context;
- (2) provision of services to companies: Metropolitan City of Bologna (Italy) has an office established for support services to the business ecosystem (innovation and traditional).

4.1.2 Development of measures for the policy instrument

Stepping into 2021, the fourth draft of the programme was issued and by end of January 2022 it still awaits approval from the European Commission. Additionally, the development of the National Recovery and Resilience Plan was also in progress in 2021. However, based on the interregional knowledge exchange in GRESS specific experience from the partners was processed by PP5, designed as proposals for measures for the programme that would support the start-ups and SMEs in the green economy. These measures can be summarized as follows: (1) support to innovation clusters based on sectoral orientation and (2) provision of services to companies using the ‘one-stop-shop’ approach. for inclusion in the programme and presented to the thematic working group in 2021. The proposed measures were positively evaluated and subsequently included in the policy instrument as indicative actions under Specific objective 3 “Boosting the sustainable growth and competitiveness of SMEs and job creation, including through productive investments” for provision of services to companies and Specific objective 6 “Promoting the transition to circular and resource-efficient economy” for clustering.

Given that the National Recovery and Resilience Plan also tackles green transition and support to companies especially in the frame of measures for cooperation within the premises of

industrial parks, the measures in the programme are complementary to the ones in the National Recovery and Resilience Plan and in their implementation a strict demarcation is observed meaning that the Programme focuses on support measures to SMEs and start-ups while the Plan complements with support measures to large enterprises as their role in building resource efficiency within value chains is crucial.

4.2 Survey analysis

As an integral part of the GRESS policy learning process, the partnership executed a survey in the project regions, targeting start-ups and SMEs to identify the drivers and challenges for green entrepreneurship.

The analysis focused on the positive effects of the green economy for businesses, not only in environmental terms but also in competitiveness. It aimed to identify the stimuli, the barriers and the public policies that could speed up green economy development and start-up processes. In particular, the survey focused on green investments, access to public and private funding, green jobs, and enabling external factors.

The survey results implemented in the partner regions show that their green economy business ecosystems present several similarities, although various peculiarities also occur. The need to establish a more integrated, supportive, and holistic ecosystem for green business development is particularly emphasised in the cases of Piraeus (Greece) and Bulgaria. More comprehensive support in internationalisation processes, networks, and translation of strategies into policies is required in the West Pomeranian and the Agder regions. In contrast, more excellent public sector leadership in fostering the green economy is needed in the Emilia-Romagna region (Italy).

The role of private and public funding also differs quite significantly among the regions. In West Pomeranian and Bulgaria, most respondents mainly went through a complete self-financing process for their business. In the Agder region and Emilia-Romagna on the other hand, public and private financing were significant in several cases. In addition, several respondents had access to external support services, incubators, acceleration programs or counselling.

Despite regional differences, numerous common challenges, obstacles, and drivers have been identified by respondents throughout all partner regions. For example, most respondents underlined that private and public funding was too small to support the development of new green start-ups and SMEs, which usually have to self-finance their business ideas. Access to public funding at the regional, national, and European levels was considered complicated and time-consuming. It requires high investment costs, human resources, time, and energy.

Complex application and administration procedures discourage applicants in all regions from submitting project ideas, in addition to high competition and selection criteria. The survey results clearly showed the need of more support services in the application phase, process simplification and institutions that can provide support to green businesses.

Respondents from all regions indicated the expectation for green jobs to increase in the future. However, recruitment of highly skilled employees and those qualified in green skills was considered an enormous challenge for green businesses.

Another common barrier encountered by green enterprises was the ability to afford the green investment and adaptation costs to be able to access the market. This is a crucial point as start-ups have identified insufficient market demand as hampering green investments.

In conclusion, the public sector must play an essential role in this sense and take the lead by improving green public procurement procedures, applying legislative, regulatory changes, providing more specific incentives for green businesses, and recruiting highly skilled green workers.

5. Actions identified

The actions developed under GRESS project support the improved policy measures in **The Programme “Competitiveness and Innovation in the Enterprises” 2021-2027** and respond to the identified needs both in the recommendations by the Council in terms of increased links between business and society and sustainable growth of the entrepreneurial ecosystem and business skills and in terms of the findings made with local SMEs and start-ups on their perceptions in the development of the green economy. The complex landscape of strategic documents in place on national level presuppose demarcation between the different instruments for maximizing the impacts of the initiatives on the economic and business environment. In that sense, the complementarity between the measures is essential for the design of favourable conditions for innovation and economic growth impacting wide range of beneficiaries – from start-ups and SMEs through business associations and industrial parks to large enterprises.

The policy instrument **The Programme “Competitiveness and Innovation in the Enterprises” 2021-2027** focuses on start-ups and SMEs as the main recipients of support. The proposed actions demonstrate new measures for the programme and intend to cover a full spectrum of interventions in different fields such as resource efficiency and productivity, better administrative support for business development and promotion of cooperativity between companies for generating more value and competitiveness. These measures are connected to the specific objectives of the policy instrument and are currently present in the programme as indicative activities that will be subsequently translated into the annual working programmes.

Action 1	Industrial symbiosis
Background	Industrial symbiosis is a complex set-up within the industrial ecology domain that aims to close the loop in the material and energy flows contributing to a circular economy model. Industrial symbiosis represents a shift from the traditional industrial model in which wastes are considered the norm, to integrated systems in which everything has its use (as defined in the Policy brief on Industrial symbiosis from the Policy Learning Platform of Interreg Europe). A research on the topic has shown that there are two approaches for

	<p>setting-up industrial symbiosis – a top-down where there is a national/regional policy framework in place for supporting symbiotic relationships and a bottom-up where this framework is missing and symbiosis originates from initiatives for connecting between different industrial actors in particular regions. Bulgaria does not have a policy framework in place for industrial symbiosis and therefore for supporting such initiatives the bottom-up approach would be more relevant. Therefore, experiences from partner regions where a policy framework is not existing and industrial symbiosis is a result of single initiatives between private actors have been considered relevant and sought. The inspiration for this action comes from Kristiansand, Norway and Emilia-Romagna, Italy. In both regions, the approach adopted to setting up industrial symbiosis is ‘bottom-up’ meaning that industrial symbiosis is not politically set-up on a national level through the legal framework but rather originates from the collaborative efforts of economical and/or regional actors who initiate it. In Norway, the EYDE cluster, in which Kristiansand Municipality partners, represents a partnership of 43 companies that work together to enhance competitiveness through greater resource efficiency and turning waste into value by utilizing side streams. The cluster companies enjoyed support from regional funding for improving energy efficiency and decrease the use of fossil fuels and raw material in order to lower emissions and costs. Similarly, in Italy thanks to access to the waste and by-products of wine production of CAVIRO and the availability of material of Hera (cuttings and pruning from the territory), a symbiosis has been set-up to produce biomethane, thermal energy and electricity and to create a virtuous circle between industrial production and energy from renewable sources. Companies are funded separately and not as an industrial zone. These two examples of funding support have been recognized by the MA of the policy instrument as a relevant approach for Bulgaria. As industrial symbiosis is not existing in the national policy framework, the potential approach is to instigate collaborations between companies either by co-location principle or within the value chains and to support them separately and not as part of industrial parks.</p>
<p>Action description</p>	<p>This action is within Priority 2 ‘Circular Economy’, Specific objective 6 "Promoting the transition to circular and resource-efficient economy" of the Programme.</p> <p>The focus is put on support of partnerships between SMEs in the value chains in response to the identified needs for investments in innovation in the clean technologies and circular economy and sustainability of supply, processing and utilization of raw materials.</p>

	<p>The concrete action will provide funding for collaborations between co-located SMEs for the establishment of industrial symbiotic relationships – utilization of waste/side streams between companies for increased resource efficiency. Companies will be invited to get together and apply jointly for funding under the programme.</p> <p>The Action focus on supporting joint initiatives of partnerships between enterprises to achieve industrial symbiosis through:</p> <ul style="list-style-type: none"> • sharing resources, services, by-products; • creating a link between industries in which waste from one is a raw material for the other; • creating connections between enterprises in value chains; <p>The action will be implemented via the following process:</p> <ul style="list-style-type: none"> • Launch of calls for SMEs to apply (tentatively by Dec 2022 following an annual work programme that is yet to be approved and published) – outlining the total funding for the call, eligible beneficiaries, eligible activities and costs, co-funding, deadline and amount of funding support per project • SMEs apply jointly within the announced deadline (the calls are open for at least 3 months) • Evaluation of the applications (according to the timeframe indicated in the Law on the Management of Funds from the European Structural and Investment Funds) • SMEs implement jointly the activities according to the call specifications and report to the Managing Authority (indicative period for implementation between 12 and 24 months).
Players involved	Managing Authority of Programme “Competitiveness and Innovation in the Enterprises” 2021-2027 (PCEI 2021-2027) will be managing the process of launching calls, evaluation of applications and monitoring of implementation
Timeframe	Launch of first annual working programme by Dec 2022
Planned budget (until 2029)	EUR 10 million for supporting the establishment of partnerships between enterprises for achieving industrial symbiosis
Funding sources	ERDF through Programme ‘Competitiveness and Innovation in the Enterprises’ 2021-2027
Expected impact and benefits	<p>Target values (2029): 24 enterprises from less-developed regions and 10 enterprises from regions in transition;</p> <p>Improved resource efficiency of companies;</p> <p>More stable supply chains;</p> <p>Established partnerships based on mutual benefits;</p>

	Drive for cooperativism and joining forces.
Implementation monitoring	In accordance to the work programme of PCEI 2021-2027

Action 2	Complex services to SMEs
Background	<p>In the process of evaluating the OPIC 2014-2020 and the design of new support measures for SMEs, it was identified that the business and innovation ecosystems in Bulgaria need targeted support for building capacity in business development, internationalization, access to new markets etc. as they still perform under average. Therefore, inspiration for the design and execution of such services for companies was needed and such experience was found at Metropolitan city of Bologna (MCBO) in the Emilia-Romagna region. MCBO has established and operates a support office for providing services to SMEs and start-ups. Similar kind of initiative has been planned in the National Strategy for SMEs 2021-2027 whose main instrument for implementation is the Programme. The Strategy plans for the creation of support services in diverse domains that will generally contribute to overcoming the informational asymmetry for SMEs and provide better access to information using the one-stop-shop approach. Therefore, the experiences from Bologna of having a strategic role for supporting the ecosystems were seen as relevant to be replicated as this would also be the role of the programme in the Bulgarian context. In Bologna, the Municipality has established an office dedicated to attractiveness, transformation processes and simplification of procedures in order to help businesses to:</p> <ul style="list-style-type: none"> • develop growth paths • innovate and transform the supply chains they operate in • network with other actors within the ecosystem • develop employment and qualification of the workforce • design business transformation processes <p>This actions is inspired by the Emilia-Romagna region in Italy and more specifically by MCBO and their support office within the municipality. With the operation of this office, MCBO provides services to SMEs and start-ups from the region focused on business development, internationalization, access to new markets, as well as trainings.</p>

<p>Action description</p>	<p>This action is within Priority 1 ‘Innovation and Growth’, Specific objective (iii) boosting sustainable growth and competitiveness of SMEs and job creation, including through productive investment.</p> <p>Stepping on the experiences of MCBO, a creation of a one-stop-shop for services for SMEs responding to the needs for single point of information in specific areas such as competitiveness, access to finance and internationalization, skills, innovation and IPR, environment, regulatory framework and support for entrepreneurs will be set up.</p> <p>It is expected that support services will be set up under the programme either by BSMEPA, or by international incubators, or by business associations who will be beneficiaries of the support and will provide consultancy, trainings, visibility and internationalization, connection to industry to SMEs and start-ups. The specific support for the development of the entrepreneurial ecosystem, promotion of internationalization and attraction of foreign will include provision of complex services in support of SMEs/start-ups as follows:</p> <ul style="list-style-type: none"> • consultations, trainings and information for development of business plans, determination of value of products, access to markets and financing, financial instruments, etc.; • support for the participation of Bulgarian SMEs in promotional activities in the country and abroad, incl. connecting Bulgarian companies with foreign partners to improve their export potential; • implementation of activities for proactive investment marketing, ensuring of mechanisms for providing services to potential investors; organizing and conducting events / incl. events abroad in order to attract investors; • support for the participation of enterprises in various European international networks. <p>The action will be implemented via the following process:</p> <ul style="list-style-type: none"> • Launch of call for support organizations for providing complex services to companies (tentatively by Dec 2022 following an annual work programme that is yet to be approved and published) – outlining the total funding for the call, eligible beneficiaries, eligible activities and costs, co-funding, deadline, and amount of funding support per project • Providers apply during the call window (open for at least 3 months).
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	<ul style="list-style-type: none"> • Selection of beneficiaries according to the timeframe indicated in the Law on the Management of Funds from the European Structural and Investment Funds. • Provision of services according to the contract for a given timeframe (indicative period for implementation could be up till 2030)
Players involved	Managing Authority of Programme “Competitiveness and Innovation in the Enterprises” 2021-2027 (PCEI 2021-2027) will be managing the process of launching calls, evaluation of applications and monitoring of implementation
Timeframe	2022-2023
Planned budget (until 2029)	EUR 40 million for provision of complex services for SMEs
Funding sources	ERDF through Programme ‘Competitiveness and Innovation in the Enterprises’ 2021-2027
Expected impact and benefits	<p>Target values (2029): overall support to 2107 enterprises from less-developed regions and 411 enterprises from regions in transition;</p> <p>Easy access to consultancy services;</p> <p>Lower time for administration activities</p> <p>Increased capacity in SMEs and start-ups in fields that are currently underestimated (entrepreneurship, innovation, business modelling);</p> <p>Increased readiness for entering international markets.</p>
Implementation monitoring	In accordance to the work programme of PCEI 2021-2027

Action 3	Clusters
Background	<p>In the frame of the programming period 2014-2020, clusters have been supported by OPIC following a geographical principle. This approach proved to be inefficient as non-viable clusters have been established but the desired impact on the regional economies has not been reached. Therefore, a shift in the approach was needed and the experiences from Emilia-Romagna, Italy and West Pomerania, Poland serve as good examples and cooperatives operate based on a sectoral orientation.</p> <p>In Emilia-Romagna, the structure of the clusters follows the smart specialisation of the region forming a group of 7 clusters – agrifood, construction, greentech, creative industries, health, mechatronics</p>

	<p>and digitalization. The clusters are supported by the Regional Operational Programme. They represent public-private partnerships between business, RTOs and universities for development of innovation for provision of trainings, infrastructure and support to companies for the creation of new products and services and business development. In Westpomerania, the Green Chemistry Cluster is a partnership between 150 members – companies and RTOs – that build solid relationships between industry and science for practical application of scientific results and creation of regional innovation ecosystem, where developers and users of innovation are located closely and collaborate actively.</p> <p>These examples demonstrated completely new approach towards the clusterization of industrial actors i.e. by sectoral orientation or even within the smart specialization thematics. Therefore, the experiences were translated into this action of the programme suggesting new approach.</p>
<p>Action description</p>	<p>This action is within Priority 2 ‘Circular Economy’, Specific objective 6 "Promoting the transition to circular and resource-efficient economy".</p> <p>Stepping on the new approach to clustering based on sectoral, rather than geographical principle is at the core of this action. Implementation will be identical to what has been done in the previous operational programme but the criteria for selecting projects will be different i.e. directed to sectoral orientation of the clusters following the regional specialization and potential for development. Basically, the action will support the creation of branch platforms – clusters for exchange of knowledge, good practices and material flow thus responding to the need of unite companies in specific sectors.</p> <p>The action will be implemented via the following process:</p> <ul style="list-style-type: none"> • Launch of call for support clusters and branch platforms with eligible candidates – existing innovation clusters (tentatively by Dec 2022 following an annual work programme that is yet to be approved and published) – outlining the total funding for the call, eligible beneficiaries, eligible activities and costs, co-funding, deadline and amount of funding support per project • Eligible candidates apply during the call window (open for at least 3 months) • Selection of clusters/branch platforms to be supported with the funding according to the timeframe indicated in the Law on the Management of Funds from the European Structural and Investment Funds

	<ul style="list-style-type: none"> Implementation of support to clusters for strengthening the innovation and scientific potential and creation of cooperation and shared infrastructure, know-how (indicative period for implementation between 12 and 24 months).
Players involved	Managing Authority of Programme “Competitiveness and Innovation in the Enterprises” 2021-2027 (PCEI 2021-2027) will be managing the process of launching calls, evaluation of applications and monitoring of implementation
Timeframe	2022 - 2023
Planned budget (until 2029)	EUR 50 million for supporting enterprises according to the regional sectoral specialization.
Funding sources	ERDF through Programme ‘Competitiveness and Innovation in the Enterprises’ 2021-2027
Expected impact and benefits	<p>Target values (2029): overall support to 263 enterprises from less-developed regions and 80 enterprises from regions in transition;</p> <p>Decrease the R&D costs on a sectoral level by joint initiatives or segmentation of R&D activities among companies;</p> <p>Transfer of know-how between companies;</p> <p>Potential for better coordination within the value chain resulting in higher resource productivity;</p> <p>Competitive advantages related to cost effectiveness, prices of utilities etc. when participating jointly in contracts;</p> <p>Lower resource prices based on collective purchase.</p>
Implementation monitoring	In accordance to the work programme of PCEI 2021-2027

6. Monitoring activities

Given that the programme covers a period of 7 years from 2021 to 2027, the working programme will be integral part of it outlining the timeline and resources available per years. Therefore, once the working programme is approved, there will be a clear picture of what is implemented and when and the monitoring will be strictly tied to this schedule. The working programme should be available at the start of phase 2 of the project.