EUROPEAN CLUSTER COLLABORATION PLATFORM

Country factsheet

Bulgaria

An initiative of the European Union

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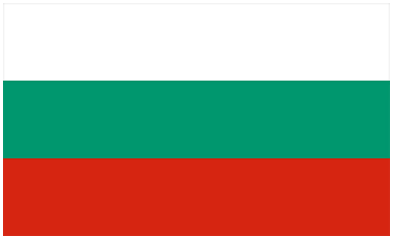
Introduction



This document presents an overview of the cluster policy in Bulgaria. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the European Semester Country Report for Bulgaria.
The European Semester was an instrument introduced to coordinate the EU Member States economic policies and address the economic challenges faced by the EU. Its goals are "to ensure sound public finances, to prevent excessive macroeconomic imbalances in the EU, to support structural reforms to create more jobs and growth, and to boost investment". Thus, it focuses on the following areas: business environment; financial and fiscal stability; green economy; public administration; labour market and skills; and, social protection and cohesion.

The COVID-19 pandemic has caused an unprecedented economic shock to the European and global economy. In response, policymakers at EU and national level have acted decisively and at short notice to make available very significant financial resources, notably through the Recovery and Resilience Facility, to tackle the threat of a prolonged downturn. National recovery and resilience plans have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. Clusters are not directly mentioned in the National recovery and resilience plan[1].

[1] National Recovery and Resilience Plan of Bulgaria file:///C:/Users/Usuario/Downloads/npvu-en-08022021.pdf

01

Industrial ecosystems and cluster landscape

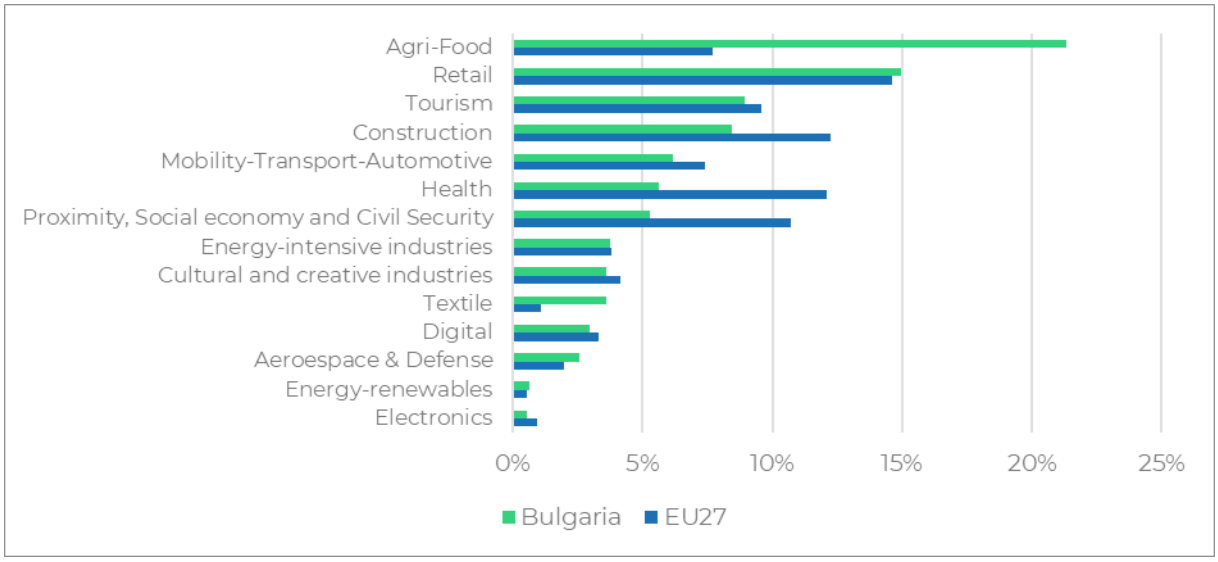
1. Industrial ecosystems and cluster landscape

This section will provide information on the national cluster organisations and statistical clusters in the country. The general cluster organisation landscape will show the geographical distribution of cluster organisations in the country registered under the ECCP, while the statistical clusters will display the top-performing clusters according to different measures of cluster strength (e.g. specialisation, size, productivity, dynamism. global frontier firms, high growth SMEs and gazelle firms).

Employment in the 14 ecosystems in the country

As part of its Industrial Strategy (March 2020), the European Commission has selected 14 industrial ecosystems that are particularly relevant in Europe and encompass all players operating in a value chain. The following graph shows the proportion of the country's employment accounted for by each ecosystem, as well as the equivalent figure for the EU27 on average. The ecosystems are ordered, from top to bottom, according to the amount of employment in the country. When the bar for the country is higher than that of the EU27, it indicates that the country is more specialised in that ecosystem.

Graph 1: Employment in the ecosystems



Source: Own elaboration from Eurostat and National Statistical Offices

Regionally relevant nodes

Economic activity, and therefore employment, is not equally distributed in all regions. Specialisation can be measured through Location Quotients (LQ) that reflect the relative specialisation of an activity in a region compared to the EU average. If the LQ for a given activity-region combination is above 1.5, it is considered a specialisation node, and if the activity accounts for at least 1 % of total employment in the region, it is considered regionally relevant. The following tables shows the total number of regionally relevant specialisation nodes in each region in the country and identifies the top five most specialised of these nodes. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 47 in the country, while the second table is based on the 14 ecosystems, which total 13 in the country.

Table 1: Regionally relevant sectoral nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
BG31: North-West (Bulgaria)	7	A02 - Forestry & logging	C14 - Manuf. of wearing apparel	A01 - Crop & animal production	D35 - Electricity, gas & steam	C31 - Manuf. of furniture
BG32: North-Central (Bulgaria)	8	A02 - Forestry & logging	C14 - Manuf. of wearing apparel	A01 - Crop & animal production	C10 - Manuf. of food products	C28 - Manuf. of machinery & equipment
BG33: North-East (Bulgaria)	10	A02 - Forestry & logging	H50 - Water transport	A01 - Crop & animal production	C14 - Manuf. of wearing apparel	C23 - Manuf. of other non-metal mineral products
BG34: South-East (Bulgaria)	9	B05 - Mining of coal & lignite	A02 - Forestry & logging	A01 - Crop & animal production	C14 - Manuf. of wearing apparel	C25 - Manuf. of fabricated metal products
BG41: South-West (Bulgaria)	7	C14 - Manuf. of wearing apparel	N80 - Security, investigation activities	J61 - Telecommunications	M74 - Other prof., scientific, techn. act.	J62 - Computer programming, consultancy
BG42: South-Central (Bulgaria)	6	A02 - Forestry & logging	C14 - Manuf. of wearing apparel	A01 - Crop & animal production	C27 - Manuf. of electrical equipment	C22 - Manuf. of rubber & plastic products

Source: Own elaboration from Eurostat and National Statistical Offices

Table 2: Regionally relevant ecosystem nodes

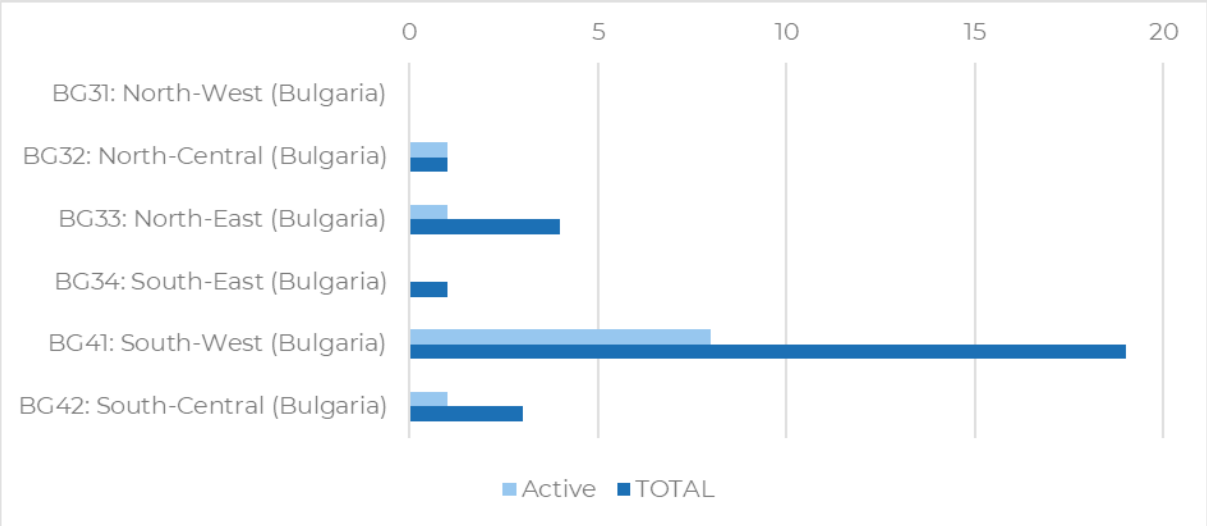
Region	Number of nodes	Node 1	Node 2	Node 3
BG31: North-West (Bulgaria)	2	Textile	Agri-Food	-
BG32: North-Central (Bulgaria)	2	Textile	Agri-Food	-
BG33: North-East (Bulgaria)	2	Agri-Food	Textile	-
BG34: South-East (Bulgaria)	2	Agri-Food	Textile	-
BG41: South-West (Bulgaria)	3	Textile	Aeroespace & Defense	Digital
BG42: South-Central (Bulgaria)	2	Textile	Agri-Food	-

Source: Own elaboration from Eurostat and National Statistical Offices

Cluster organisations in the regions

There are 28 cluster organisations registered on the ECCP in the country, 11 of which can be considered active on the ECCP, having updated their profiles during the first half of 2021. The following graph shows the presence of cluster organisations in the different regions.

Graph 2: Cluster organisations profiled and active on the ECCP



Source: Own elaboration from Eurostat and National Statistical Offices

02

National cluster policy, programmes and initiatives

2. National cluster policy, programmes and initiatives

Policy type:	Broad policy
Policy name:	Innovation Strategy for Smart Specialisation *RIS3, smart specialisation strategy*
POLICY OBJECTIVES	**Increasing competitiveness and boosting scale up of SMEs** **Supporting internationalisation activities** **Fostering R&D activities, technology development and implementation** **Fostering innovation and strengthening innovation ecosystems** **Supporting the creation of new cluster organizations** **Promoting entrepreneurship, start-ups and spin-offs** **Promoting social and sustainable economy and other solidarity-based initiatives** **Promoting employment and upgrading skills and competences** **Enhancing territorial cohesion (through RIS3)** **Strengthening the network of cluster organisations/cross-clustering** **Connect to global supply chains**
	The Strategy invests in effective policy to promote R&D, innovation, and the development of human capital (training and entrepreneurship), investing in high-tech areas that have based on Bulgaria's existing strengths, and the focus on developing and promoting Bulgarian exports.
	Cross-sectoral

POLICY FOCUS	The Strategy focuses on technology sectors that conduct scientific research and development including: mechatronics and clean technologies, information and communications technologies, biotechnology, nanotechnology, creative industries, pharmaceuticals, and food.
RESPONSIBLE AUTHORITIES	**Both drafting and implementation** **Provides funding** **Oversees the implementation**
	The Strategy follows a specific organisational structure governed by the Council of Ministers, which is advised by the Council for Smart Growth. The strategy implementation involves multiple ministries, coordinated by the Inter-Institutional Working Group for Coordination of Measures for Development of Innovation. The Ministry of Economy and Energy coordinates the policies of the responsible ministries through a peer network as well as regional level policy coordination through a partnership network at the regional level.
BENEFICIARIES	**SMEs** **Cluster organisation** **Research organisations** **Academic institutions** **Start-ups** **Business associations** **Large firms** **Technology centres** **General population**
	The Strategy seeks to improve human capital and entrepreneurship, promotes R&D and innovation activities with institutions, and focuses on developing firms of all sizes through existing strong clusters and their organisations.

INSTRUMENTS	**Financial**	**Funding collaboration initiatives** **Support to R&D projects, SMEs becoming cluster members, etc.** **Subsidies to hire personnel** **Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)** **Innovation: voucher, support to hire PhDs, cooperation with R&I actors**
	Technical assistance	**Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.** **Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence** **Support for soft skills development: coaching, management training, upskilling/reskilling** **Support for networking and partnership building (at national and/or international level)** **Others: Broadband internet for residential and business uses and government digital transformation**
	Explanation	The Strategy is jointly financed by the state and the European Union Operational Programme. There is also expected private expenditures for R&D and by non-profit organisations. The funding is based on the goal of 1.5% of GDP expenditures on R&D by 2020.
HISTORY	**Period**	**Limited period**
	Ending year *(for policies with limited period)*	2020
	Starting year	2014
	Explanation	The time period aligns with the implementation of other national policies (e.g., National Strategy for Scientific Research 2020, National Roadmap for Research Infrastructure) as well as the timing of the European Union Operational Programmes. The Innovation Strategy for Smart Specialisation 2021-2027 will define five thematic areas in which Bulgaria has a competitive advantage and capacity for smart specialisation: 1) informatics and ICT, 2) mechatronics, 3) industry for a

		healthy lifestyle and biotechnology, (4) new technologies in creative and recreative industries and 5) clean technologies, circular and low-carbon Economy. The new strategy has not yet been implemented.
BUDGET	**Overall**	EUR 1.37 billion
	Annual	Varies from EUR 180 million (2019-2021 annually) to EUR 230 million (2018)
	Source of funding	The Strategy is jointly financed by the state (47.9%) and the European Union Operational Programme (52.7%)
POLICY EVALUATION	**Availability**	**in-itinere**
	Results	The Strategy outlines the annual report evaluations with output, outcome, and impact indicators (e.g., number of enterprises collaborating with R&D institutions and university-industry collaboration in R&D) but no current annual report or evaluation has been publicly released.
POLICY ALIGNMENT WITH THE EU PRIORITIES		**Green economy** **Digitalisation** **Social inclusion**

03

State of play of cluster policy

3. State of play of cluster policy

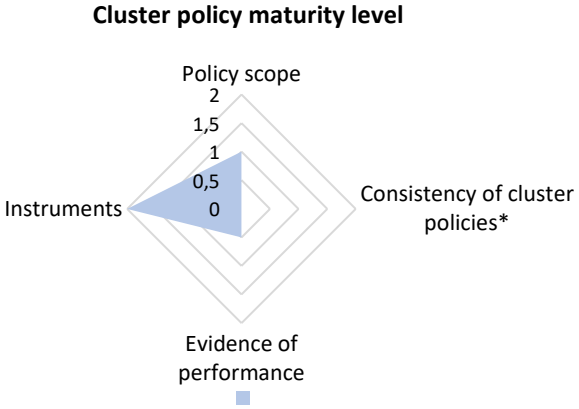
The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 2 and which are scored based on their existence:

- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- **Consistency of cluster policies:** assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- **Evidence of performance**: th**e** existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020 and 2021). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Bulgaria	Maximum score
Policy scope	1	2
Consistency of cluster policies*	0	2
Evidence of performance	0,5	1
Instruments	2	2

** This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies*



State of play of cluster policy in the country	
Policy evaluation (for terminated policies)	**Availability of evaluations for terminated policies**
	The National Strategy for Regional Development (2005-2015) was evaluated in 2010. The interim evaluation report (no final evaluation was publicly released) found that the part of the Strategy related to clusters, Priority 1 (Increasing the regional competitiveness of the basis of the knowledge economy) was not progressing well. The projects under the Regional Development Operational Programme were not confirmed while 40 projects valued at over EUR 21 million were under the Human Resources Development Operational Program. As a result, the programmes did not fully cover the objectives outlined in Priority 1 and only 6% of the budgeted amounts were paid out in project funding.
Policy approach in the country	**Cluster approach used directly by national/regional development agencies** **Specific policies to support cooperation projects** **Broad-based framework policies to support cooperation effectiveness**
Continuity	Bulgaria's broad policies that support cluster development began officially in 2004 and have since continued. However, the support has been provided through broader policies.
Consistency	**No cluster policy available**
	Bulgaria has developed a number of broad policies that support cluster development and only one cluster policy, the National Cluster Strategy (2007-2013). With the support of the Bulgarian government, the first cluster organisation was registered as a non-profit in 2004. Since then Bulgaria has developed the following broad policies: National Innovation Strategy (2004); National Strategy for Investments (2005-2010); OP Regional Development (2007-2013); National Strategy for the Promotion of SMEs (2007-2013) and most recently, adopted the Innovation Strategy for Smart Specialisation of the Republic of Bulgaria for the Period 2014-2020. The Innovation Strategy for Smart Specialisation 2021-2027 has not yet been implemented.

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Strengthening the European economy through collaboration

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