

# Setting the Scene – Input Paper for Bulgaria

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# Economic profile of Bulgaria

## General trends in the economy:

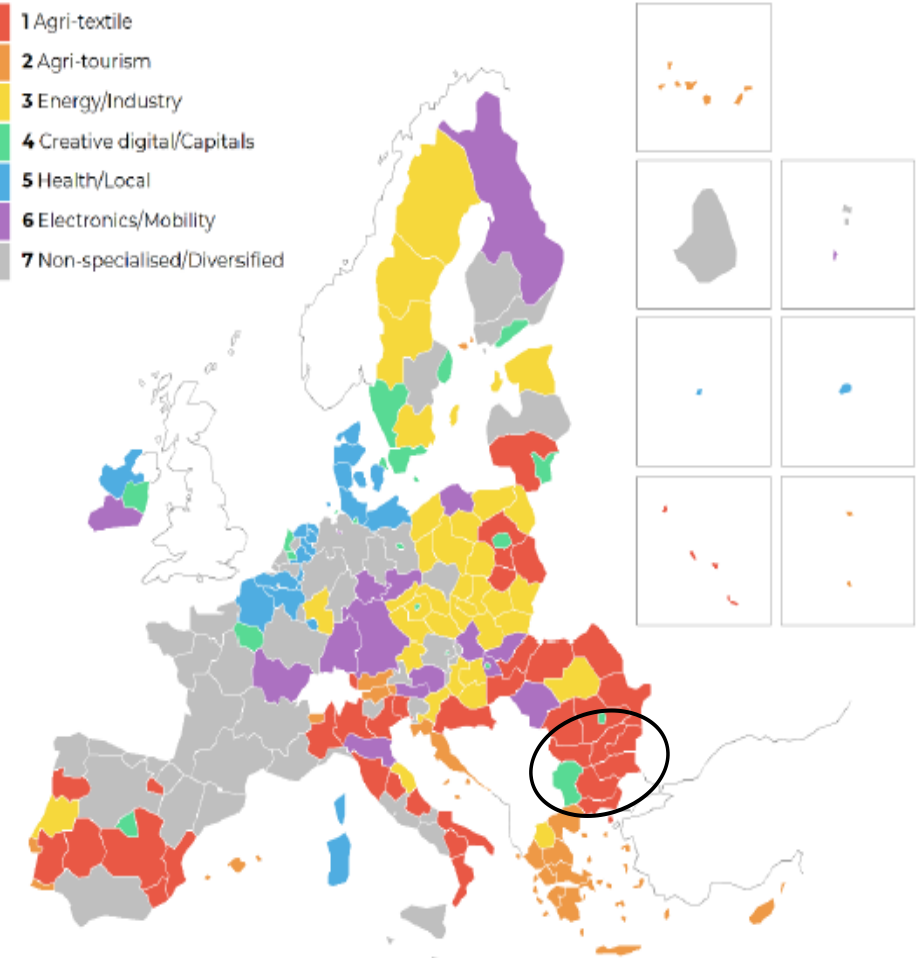
- **2022 GDP per capita of €18,600** (EU average of €32,400). Substantial **regional disparities** between the capital region and the more rural regions of Bulgaria.
- The **Covid-19 pandemic and the energy crisis** had a significant, but comparatively rather contained, impact on Bulgaria's economy, which managed to reset itself on the positive pre-pandemic trajectory.

## Sectoral composition:

- The largest sectors of the Bulgarian economy are **Agriculture & Mining (7.5%) and Manufacturing (18.7%)**. In total, however, the service sectors account for 69% of GVA in Bulgaria.
- While the more rural regions of Bulgaria specialise in sectors related to traditional industries, the capital region exhibits specialisation in the **Digital and Aerospace & Defense ecosystems**.
- With its diverse sectors and sectoral specializations, Bulgaria's economy has ample opportunities for growth through targeted measures to promote clusters.

### Group

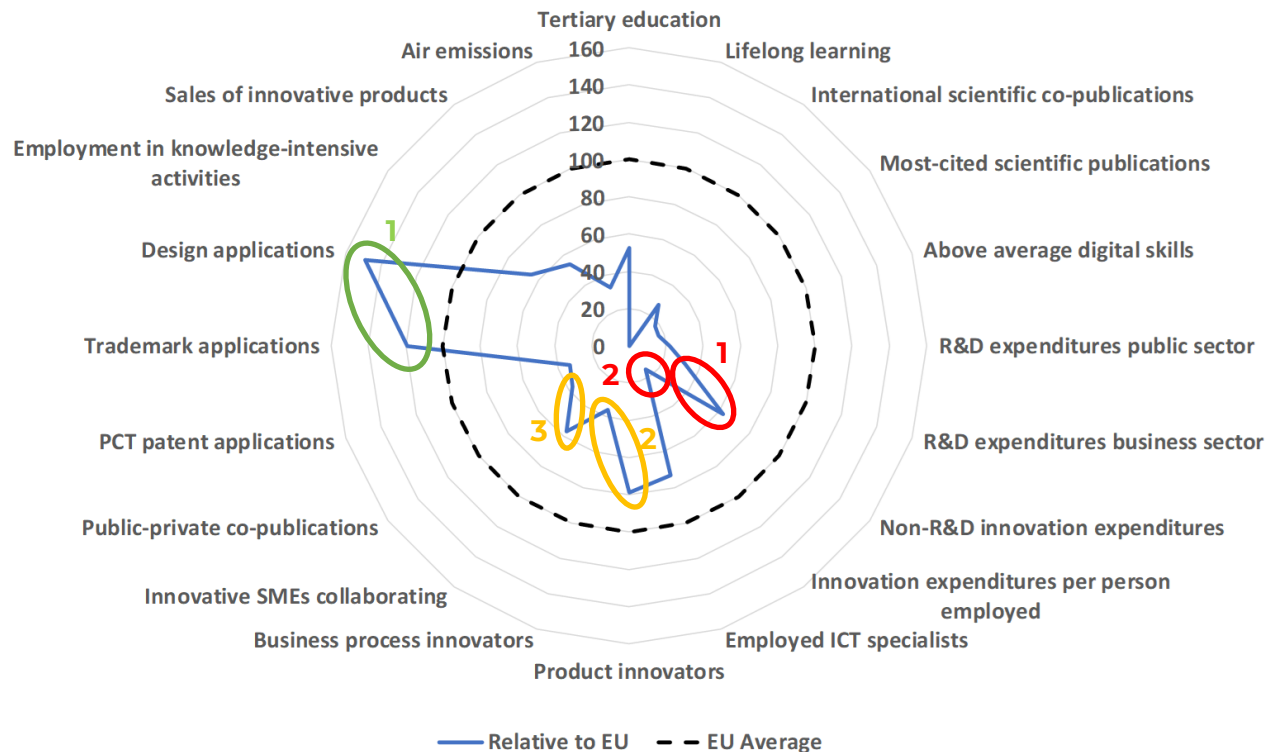
- 1 Agri-textile
- 2 Agri-tourism
- 3 Energy/Industry
- 4 Creative digital/Capitals
- 5 Health/Local
- 6 Electronics/Mobility
- 7 Non-specialised/Diversified



Source: European Cluster Collaboration Panorama Report (2021).

# Bulgaria's national innovation & regional competitiveness performance

## EIS: BG – Bulgaria as an “Emerging Innovator”



Source: Regional Innovation Scoreboard 2023

## Relative strengths of the innovation landscape

1. Trademark applications and Design applications (*relative to EU*)
2. Product innovators and business process innovators (significant performance change compared to 2016 and 2022)
3. Innovative SMEs collaborating with others and public-private co-publications (significant performance change compared to 2016 and 2022)

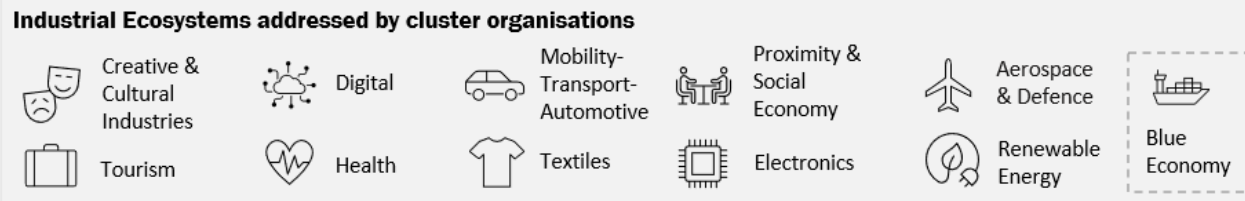
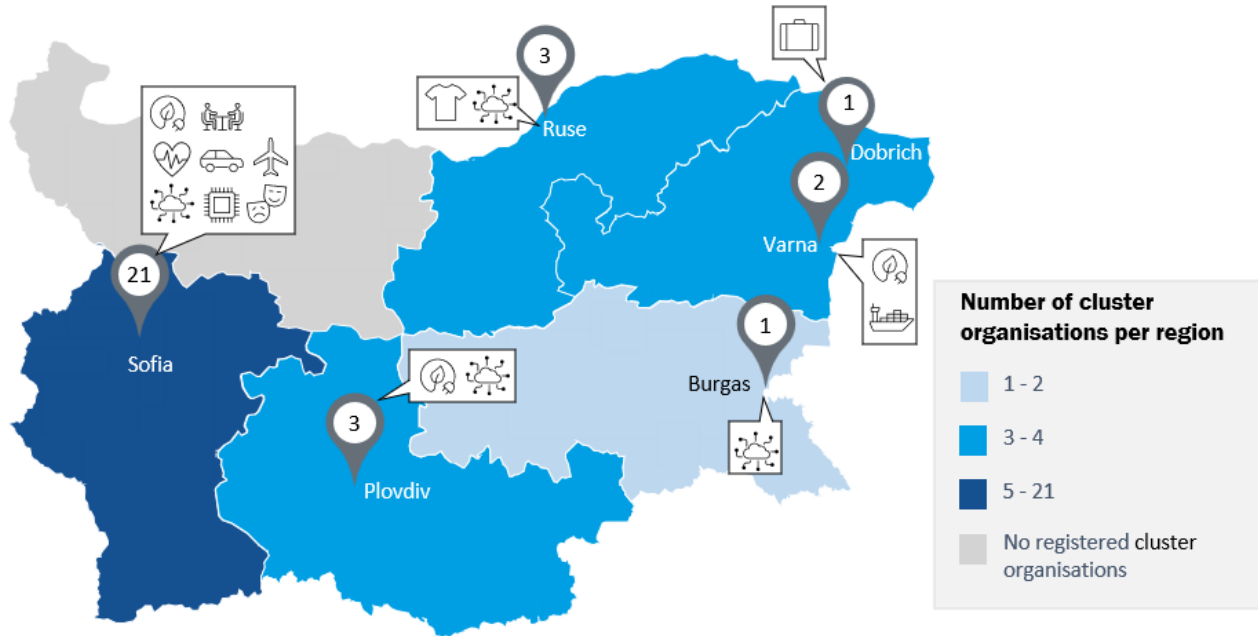
## Areas for improvement:

1. R&D expenditures both public and in the business sector (relative to EU).
2. Non-R&D expenditures (relative to EU).

## Regional Competitiveness Index 2022

- Bulgaria's overall average score falls **below the EU average**, with significant variations among Bulgarian regions.
- The capital region of South-West stands out for its relatively high performance,, particularly in **Higher education & LLL, Labour market and Innovation**.

# Cluster organisations\* in Bulgaria: Locations, sectors and structures



## Cluster Organisations

- 31 Cluster Organisations (CO) registered on the ECCP from Bulgaria
- Covering 10 out of 14 EU Industrial Ecosystems
- Top 3: Digital, Renewables/Energy, Mobility-Transport-Automotive

## Member Structure

- Small cluster organisations (15-50) members account for vast majority of total (81%; ØEU: 34%)
- Four larger cluster organisations (51-100) members (13%; ØEU: 27%), two cluster organisations with 201-300 members (6%; ØEU: 7%)

**Collaborative Areas:** Partnering for projects; internationalisation; digitalisation

Source: ECCP (2023). Own elaboration based on <https://reporting.clustercollaboration.eu/all>; last access 26.07.2023. \*registered on the ECCP

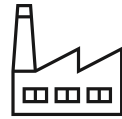
# Importance of cluster organisations for regional economic competitiveness

Cluster organisations are **positively correlated** with a range of **economic competitiveness indicators**:



## Business environment

- + Public R&D expenditure
- + Human resources in science & technology



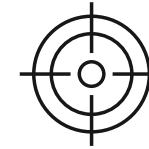
## Firm behaviour

- ++ Business R&D expenditure
- + Employed ICT specialists



## Intermediate performance indicators

- + Apparent labour productivity
- + PCT patents per Capita
- + ICT patents



## Outcome indicators

- + GDP per Capita
- + Employment in technology & knowledge intensive sectors
- + Share of ICT in GVA

**However:** The presence of regional industrial agglomerations is also linked with **higher air pollution**.

++ Positive correlation

+ Weak positive correlation

**Source:** Own elaboration based on ECCP Summary Report 2022

# The European Commission offers important programmes for collaborative projects among clusters & their members

2014-2020 funding period

2021-2027 funding period



## INNOSUP-1

- Horizon 2020 initiative
- Development of new-crossectoral industrial value chains across the EU
- **Three clusters involved in three INNSOP-1 projects (Cross4Health, INcluSilver and NEPTUNE)**



## ESCP-4i

- COSME initiative
- Development and implementation of joint internationalisation strategies to support SME internationalisation
- **Three clusters involved in seven ESCP-4i (GCA, INTonomous, MobiGoIn, AdPack, EC2i and EUT)**



## ESCP-4x

- COSME initiative
- Boost the cross-cluster networking and learning within the EU and development of cluster management excellence
- **No cluster participation from Skåne region in ESCP-4x.**



## ESCP-S3

- COSME initiative
- Boost cluster cooperation in specific thematic areas in the field of regional smart specialisation strategies
- **No cluster participation from Skåne region in ESCP-S3.**



## Euroclusters

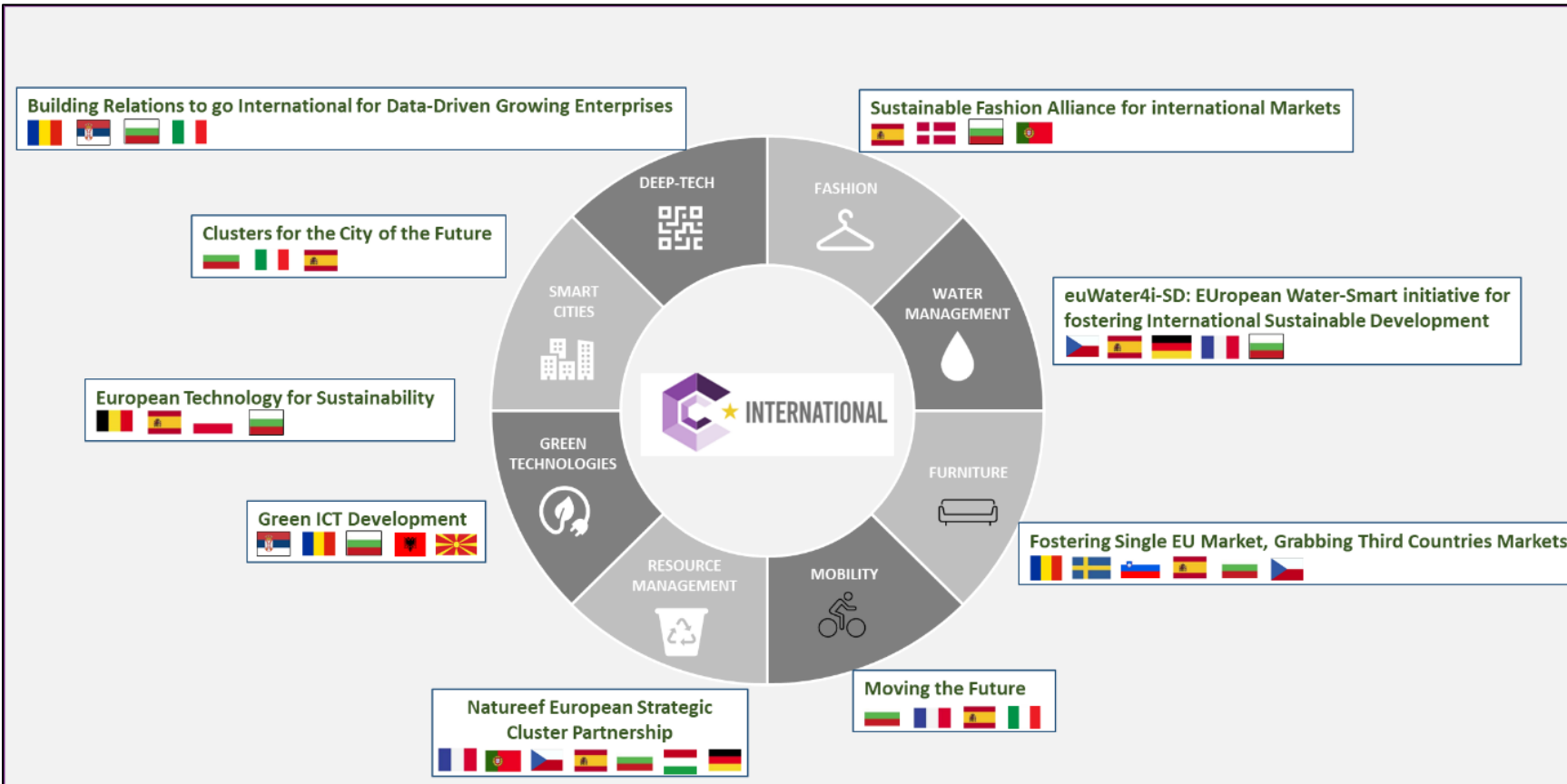
- Single Market Programme
- Support the implementation of the EC industrial strategy through cross-sectoral, interdisciplinary and trans-European cluster initiatives
- **One cluster involved in one Euroclusters (Silicon Eurocluster)**

Source: ECCP (2023)



# Bulgaria's cluster involvement in the ESCP-4i

## Overview of the Bulgarian involvement in the ESCP-4i



- **9 project participation in the ESCP-4i** by 7 Bulgarian cluster organisations.
- **European cluster partners** came from 16 different countries.
- **Thematic focus:** fashion, telecommunications, automotive, green technologies and furniture.
- **Diverse target markets:** Africa (Kenya, Uganda), Latin America (Bolivia, Peru), North America (Canada, USA) and more.

Source: ECCP (2023) based on information from COSME data hub.

# Three cluster organisations from Bulgaria part of first Eurocluster call

**AEC Eurocluster** (Support SMEs along architecture, engineering, and construction value chains, to enhance the resilience and overcome hurdles of the COVID-19 pandemic)



**AIBC** (aims at further supporting the development of Artificial Intelligence & Blockchain solutions by European Single Market SMEs & start-ups)



**Re-Centre** (Supports SMEs from the traditional furniture & living sector, the IT sector and the green/circular economy sector in the development of new business models to become more competitive)



**Silicon Eurocluster** (aims to achieve greater European self-sufficiency, with increased competitiveness and resilience in the electronics value chain, with specific attention to SMEs)



- The 3 cluster organisations „ICT Cluster“ „green synergy“ and “Black sea energy“ in 4 different Euroclusters
- **Thematic focus** on electronics, artificial intelligence & blockchain, digital, cultural & creative industries as well as construction
- **22 cluster partners** come from 11 different MS



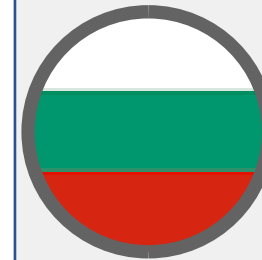
Source: ECCP (2023)





# Smart Specialisation in Bulgaria

- Cluster organisations (can) play an important role in the **design & implementation of S3**.
- Cluster organisations play a central role in the Bulgarian Smart Specialisation Innovation Strategy 2021-2027.
- Bulgarian cluster organisations were key stakeholders involved in the **EDP** that was used for developing the Bulgarian S3 2021-2027.
- The Bulgarian Smart Specialisation Innovation Strategy 2021-2027 identifies **five priority areas**.



## Priority areas of Bulgaria

1. Informatics and ICT
2. Mechatronics and microelectronics
3. Industry for healthy living, bioeconomy & biotechnology
4. New technologies in the creative & creative industries
5. Clean technology, circular & low carbon economy

Source: ECCP (2023) own elaboration based on the Bulgarian Smart Specialisation Innovation Strategy 2021-2027

# Final Remarks



## Economic profile

- The Bulgarian economy is characterized by a comparatively large agri-food & manufacturing sector, as well as substantial disparities between the capital region and the more rural regions.
- In terms of innovation performance, Bulgaria is an emerging innovator which stands out for design and trademark applications.



## Cross-border cooperation

- In the 2014-2020 period, cluster organisations from Bulgaria were involved in cross-border projects within the ESCP and InnosUP-1 initiatives.
- In the 2021-2027 period, three Bulgarian cluster organisations are involved in 4 Euroclusters.

## Cluster landscape

- Large share of cluster organisations is active in the Digital Industrial Ecosystem (12 out of 31). Further strengths are Renewables/Energy and Mobility-Transport-Automotive (5 each)
- Many cluster organisations show a strong priority for partnering for projects and international cooperation



## Smart Specialisation

- In Bulgaria, cluster organisations were involved in the development of the S3
- The Bulgarian Smart Specialisation Innovation Strategy 2021-2027 identifies 5 priority areas.

