



# Clusters and S3 Thematic Platforms

Webinar of the European Clusters Alliance on the role of clusters in accelerating the European recovery

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# Outline

- Introduction to the Smart Specialisation (S3) concept, the S3 Platform and the Thematic S3 Platforms (TSSPs)
- Clusters and S3
- Participation of clusters within the S3 Partnerships
- Specific cases:
  - *Ilari Havukainen, East and North Finland, Arctic Smartness*
  - *Marisa Fernández Soler, Water Smart Territories*
  - *Simon Maas, Smart Sensors 4 Agri-food*
  - *Felipe Carrasco, Smart Regional Investments in Textile Innovation*

# The concept of Smart Specialisation (S3)

- **A place-based innovation policy**
  - A place-based approach to research and innovation (R&I) policy that aims to boost growth and jobs in Europe
  - Based on a SWOT or similar analysis to identify **region's own competitive advantages**
  - Through **concentration of resources** on a limited set of R&I priorities (preferably going beyond sectoral definitions) in which innovation can most readily occur
  - Regional priorities are identified through an **open dialogue** between policy makers, industry, research and education institutions and civil society – Entrepreneurial Discovery Process (**EDP**)
- The development of Regional R&I Smart Specialisation Strategies (RIS3) = introduced as an ex-ante condition to access cohesion funds for R&I in the 2014–2020 period (ERDF, TO1)
  - **Over 120 smart specialisation strategies have been developed**

# The Smart Specialisation Platform supporting innovation-led growth in EU regions



The S3 Platform provides advice to EU countries and regions for the design and implementation of their S3:

- Provide **guidance material**:

*RIS3 Guide, Implementation Handbook, Digital Agenda Toolbox...*

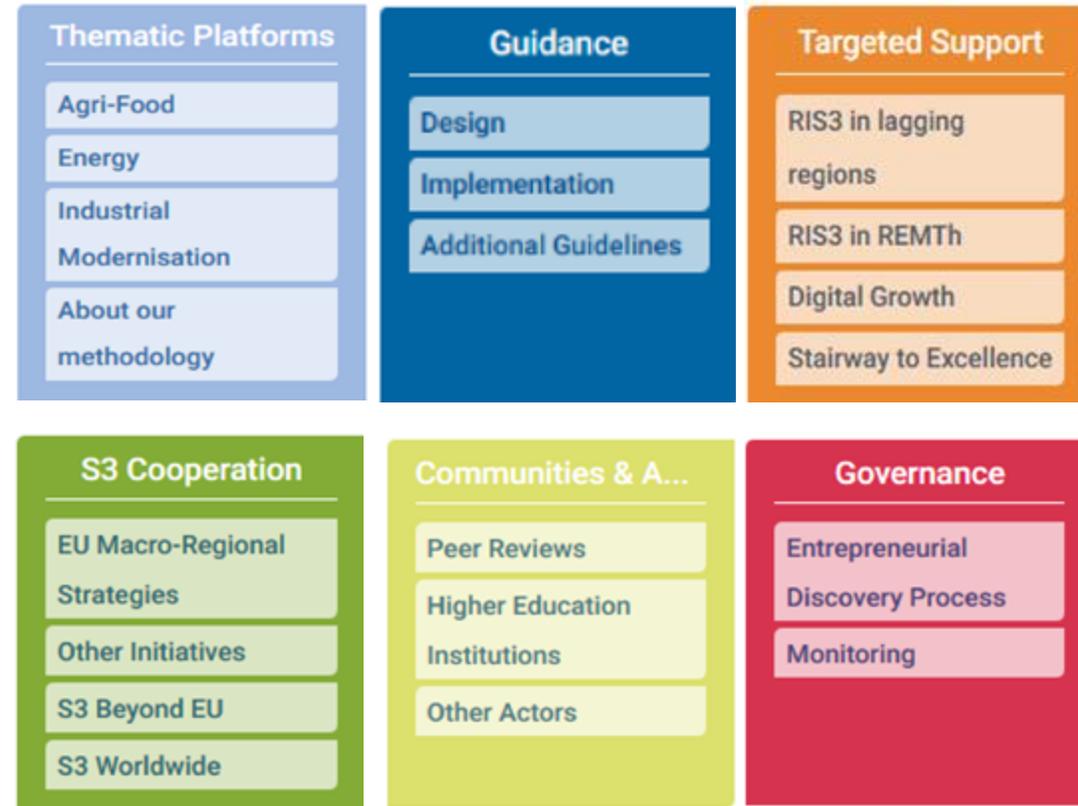
- Support access to relevant **data and tools**:

*S3 priorities (Eye@RIS3), Regional Benchmarking, Energy ESIF Monitoring, Digital Innovation Hubs...*

- Facilitate **peer-reviews and mutual learning**

- **Train** policy-makers: MOOC...

- **Analyse**: Conceptual and empirical developments, policy briefs, working papers...



<http://s3platform.jrc.ec.europa.eu/home>

# Smart Specialisation Strategies in practice

Several challenges have been identified:

- Develop a stronger place-based regional innovation ecosystem through **improved internal connectivity** (between different policies e.g. energy, between existing industrial and knowledge provision actors...)
- Grow a larger, stronger and more dynamic regional innovation ecosystem by **opening it up and connecting** it to macro-regional and European knowledge networks and systems of innovation.
- Create economic growth through innovation **expanding across borders** and **fostering interregional cooperation**

# Implementing S3 through transnational and interregional cooperation



Taking advantage of the outward-looking dimension of S3:

- **3 Thematic S3 Platforms:** connect regional **innovation ecosystems** and provide **interactive & participatory environment** (Q-helix and bottom-up) supporting **interregional cooperation**

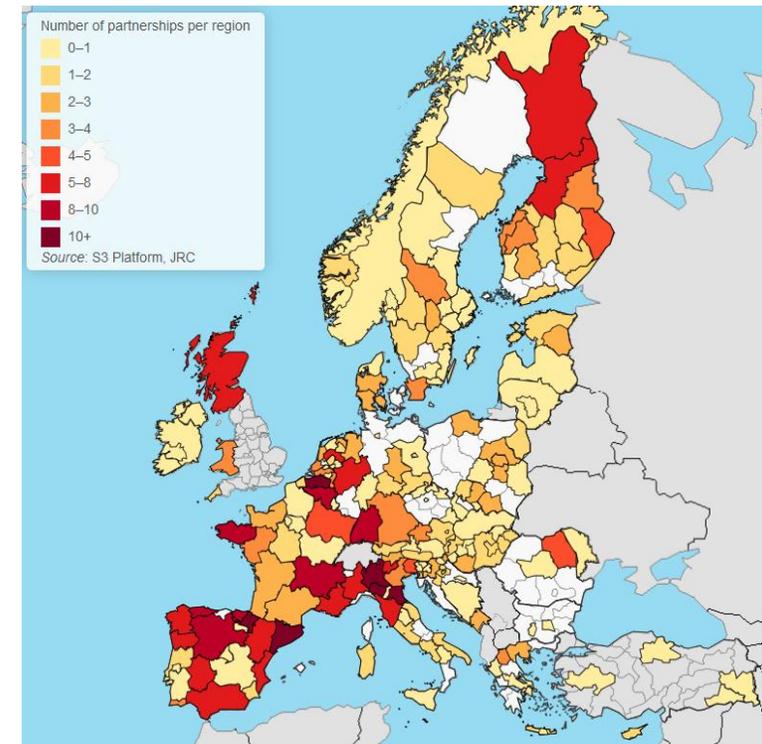
- Launched in 2015-2016
- 209 regions from 33 EU + non EU countries

**S3P Agri-Food** - **S3P Energy** - **S3P Industry**

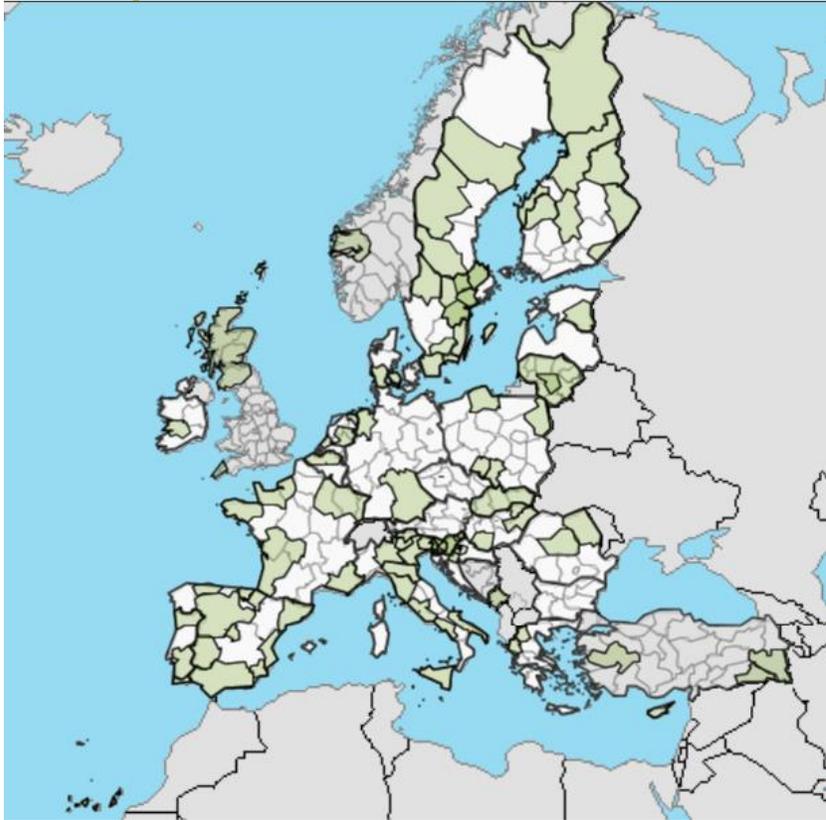
- **33 Thematic Interregional S3 Partnerships:**

Based on their local priorities, EU regions have partnered around **areas of common interest** and **joined forces** to:

- **avoid duplication,**
- exploit **complementary strengths** across the EU,
- increase **critical mass,**
- enhance the development & investments in **EU value chains,**
- build **synergies** with other regional, national and EU networks and initiatives.



# S3 Thematic Platform on **Energy** (S3PEnergy)



- **6 partnerships** in energy + Heating & Cooling initiative
- **89 territorial admin. units** in 27 different countries
- Objectives:
  - 1) Support the implementation of the S3 of the regions/countries that have chosen energy-related priorities in their RIS3 (TO1)
  - 2) Assist countries in the optimal uptake of the Cohesion Policy funding opportunities for energy (TO4 & TO7e)
- **DGs involved:** REGIO, ENER y JRC

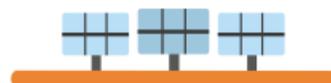
<https://s3platform.jrc.ec.europa.eu/s3p-energy>



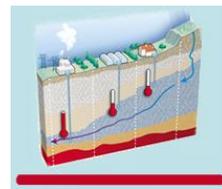
BIOENERGY



SMART GRIDS



SOLAR ENERGY



GEOTHERMAL



MARINE RENEWABLE  
ENERGY



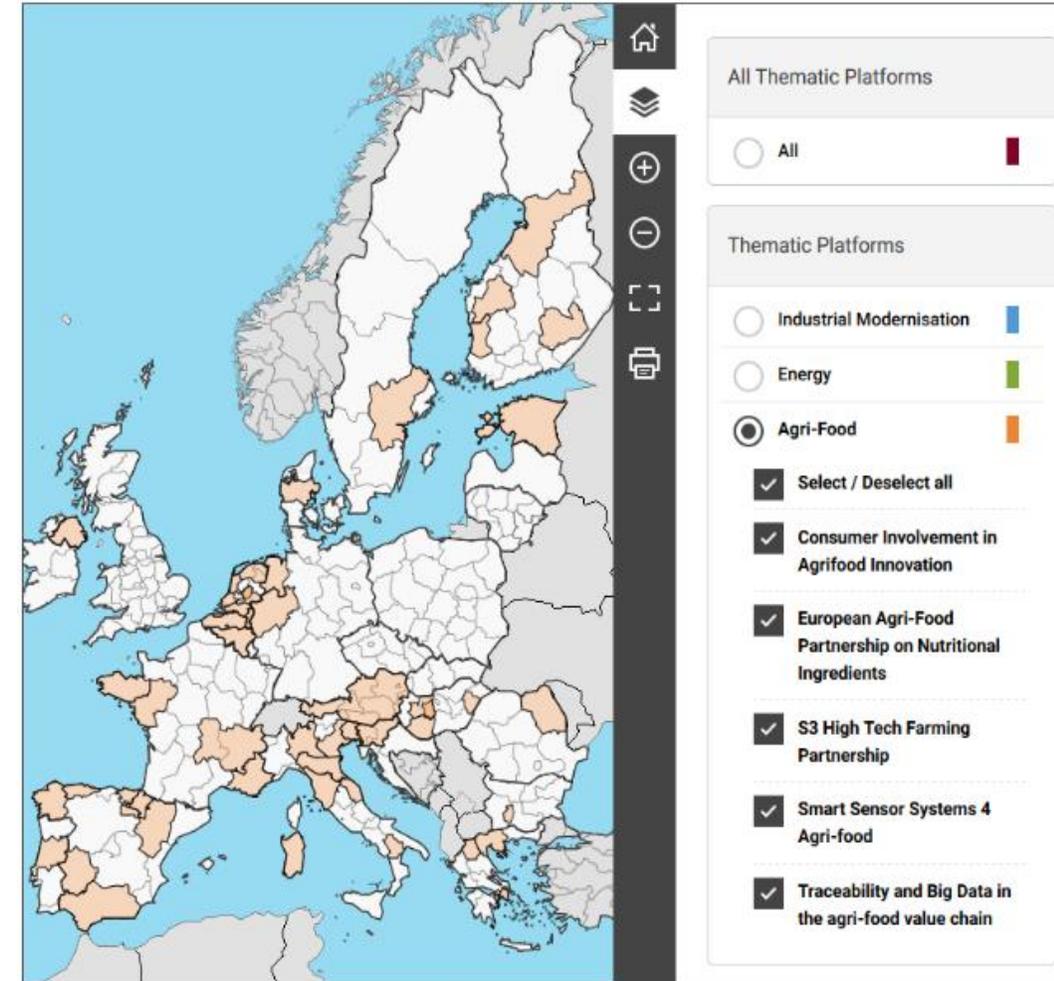
SUSTAINABLE  
BUILDINGS



# S3 Thematic Platform on Agri-food

<https://s3platform.jrc.ec.europa.eu/agri-food>

- **5 partnerships:**
  - Consumer Involvement in Agri-Food (4 regions/MS),
  - High-tech Farming (34)
  - Nutritional Ingredients (11)
  - Smart Sensors for Agri-Food (15)
  - Traceability and Big Data (22)
- **61 territorial administrative units**
- **EC DGs involved: AGRI, REGIO, RTD & JRC**



High Tech Farming



Traceability & Big Data



Nutritional Ingredients



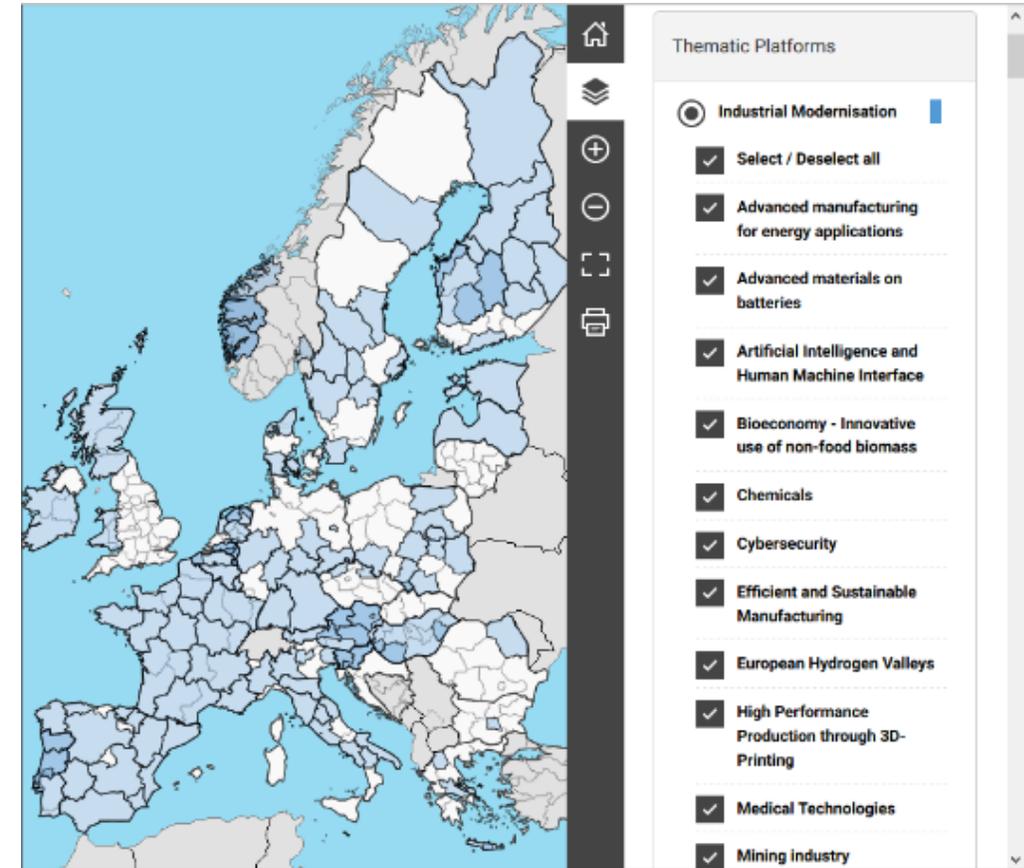
Consumer Involvement  
in Agri-Food



Smart Sensors 4 Agri-  
Food

# S3 Thematic Platform on Industrial Modernisation

- Aims to support EU regions committed to generate a pipeline of industrial investment projects following a bottom-up approach - implemented through interregional cooperation, cluster participation and industry involvement.
- **EC DGs** involved: REGIO, GROW, RTD and JRC



<https://s3platform.jrc.ec.europa.eu/industrial-modernisation>

# S3 Thematic Platform on Industrial Modernisation

- 22 partnerships
- 135 territorial administrative units
- 31 leading regions / 4 DGs
- 1 Steering Committee



Advanced manufacturing



Non-food Biomass



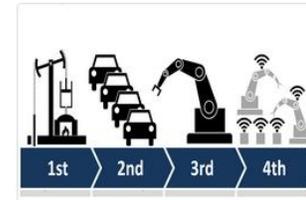
Efficient and Sustainable Manufacturing



3D-Printing



New Nano-Enabled Products



SMEs to the Industry 4.0



Sport



European Cyber Valleys



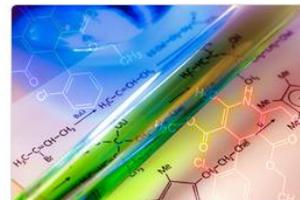
Social Economy



Artificial Intelligence & Human Machine Interface



Personalised medicine



Chemicals



Safe and sustainable mobility



Digitalisation and Safety for Tourism



Advanced materials for batteries



Mining industry



Water Smart Territories



Textile Innovation



Medical technology



Photonics



Hydrogen Valleys

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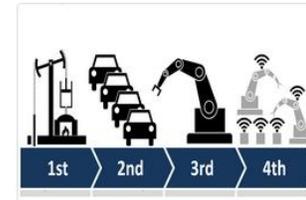
Non-food Biomass



Enabling  
M



Enabled  
acts



1st 2nd 3rd 4th

SMEs to the Industry 4.0



Sport



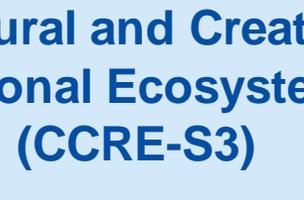
European Cyber Valleys



Social Economy



Artificial Intelligence & Human Machine Interface



Personalised medicine



Chemicals



Safe and sustainable mobility



Digitalisation and Safety for Tourism



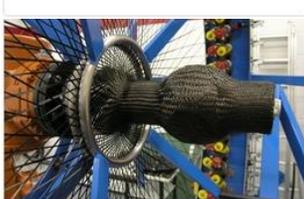
Advanced materials for batteries



Mining industry



Water Smart Territories



Textile Innovation



Medical technology



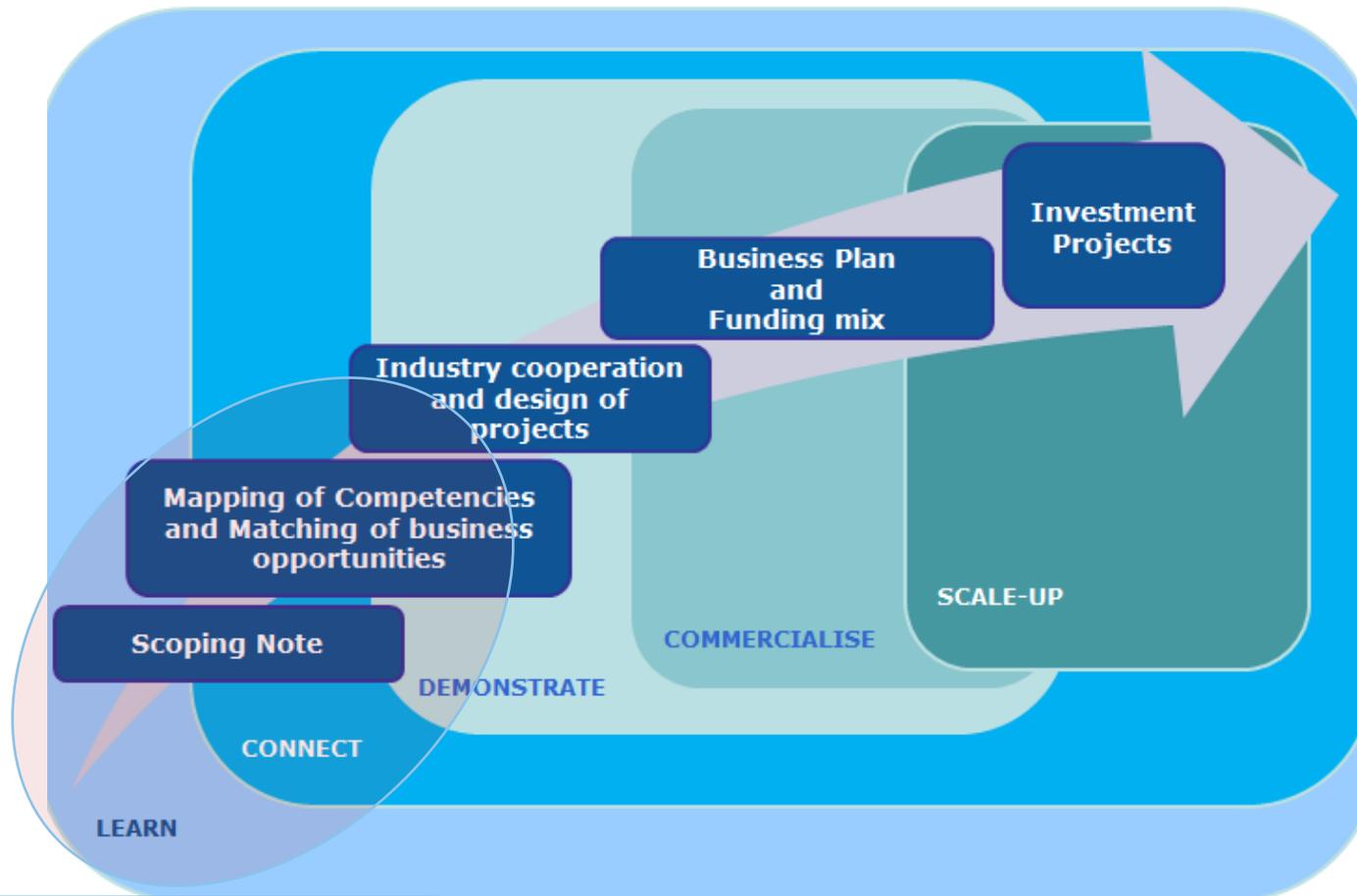
Photonics



Hydrogen Valleys

**NEW!**  
Cultural and Creative Regional Ecosystems (CCRE-S3)

# S3P support: Methodological Manual



JRC S3 Platform  
support

To assist public authorities responsible for *designing and delivering interregional investment projects* in the S3 context and ensure that these joint projects attract private sector interest sufficient to ensure their sustainability.



[https://publications.jrc.ec.europa.eu/repository/bitstream/JRC116630/s3p-thematicmanual\\_online.pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC116630/s3p-thematicmanual_online.pdf)

# Clusters and S3

Two enlightening citations:

- *Being **strongly rooted in the local context**, clusters act as magnets for all relevant actors: public authorities, SMEs, industry, cities, but also universities and competence centres. Within a smart specialisation strategy, the potential to develop and support local initiatives using technology and innovation-tools for social cohesion and local prosperity should be emphasised. Clusters of social and ecological innovation are ideal vehicles to align local SMEs, social enterprises, citizens' initiatives, local-regional governments and research to help digital and sustainable transition.*

**Ulla Engelmann, Head of "Advanced Technologies, Clusters and Social Economy" Unit, DG GROW**

- *Clusters embrace all relevant actors of the innovation provide important information about needs, opportunities and ongoing transformations –all essential elements of S3. In addition, clusters are not limited to any border, but often stretched over several regions where they can facilitate the implementation of actions through interregional cooperation. In short, **clusters are ideal vehicles to transmit S3-enhanced to the business level and to give S3 real impact in terms of innovation within enterprises, new VCs and jobs in innovative new fields with high growth potential.***

**Michael Keller & Jacques Bersier, 2019, Smart Specialisation Strategies with Smart Clusters - A New Approach to Generating Transformative Activities**

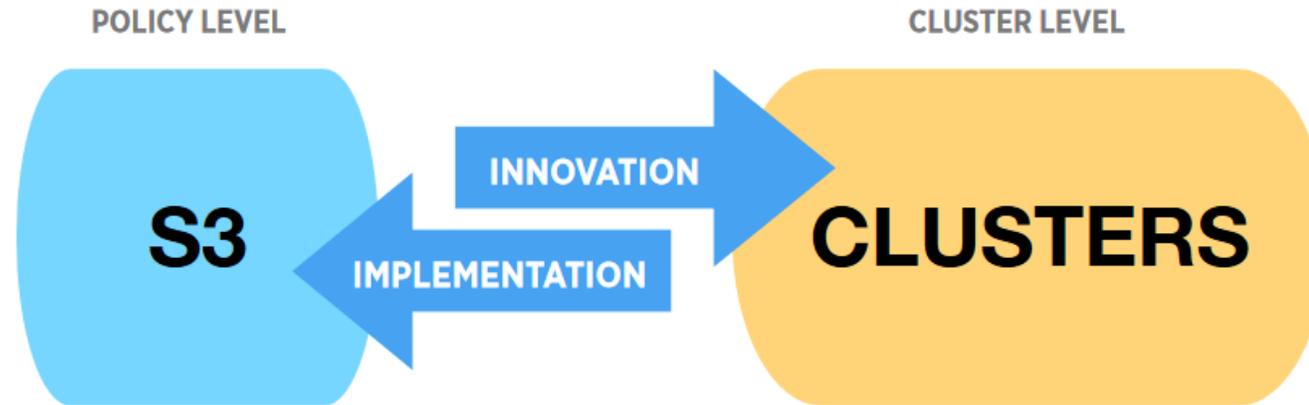
# Clusters and S3

**Cohesion policy 2021-2027:** A larger, stronger and more dynamic regional innovation ecosystems through improved internal connectivity and the opening/connection to macro-regional and EU knowledge networks and systems of innovation

- Knowledge transfer between key stakeholders – Active EDP
- Synergies (not only funding issues)
- Digitalisation
- More support to interdisciplinary and cross-sectors investments
- Inter-territorial collaboration
- More support for innovative companies and market-creating innovations

**Need for a coordinated approach: Reinforced smart specialisation**

# Clusters and S3



## Main Benefits of the Interplay

### S3 triggers

- Transformation processes
- Entrepreneurship
- Innovation

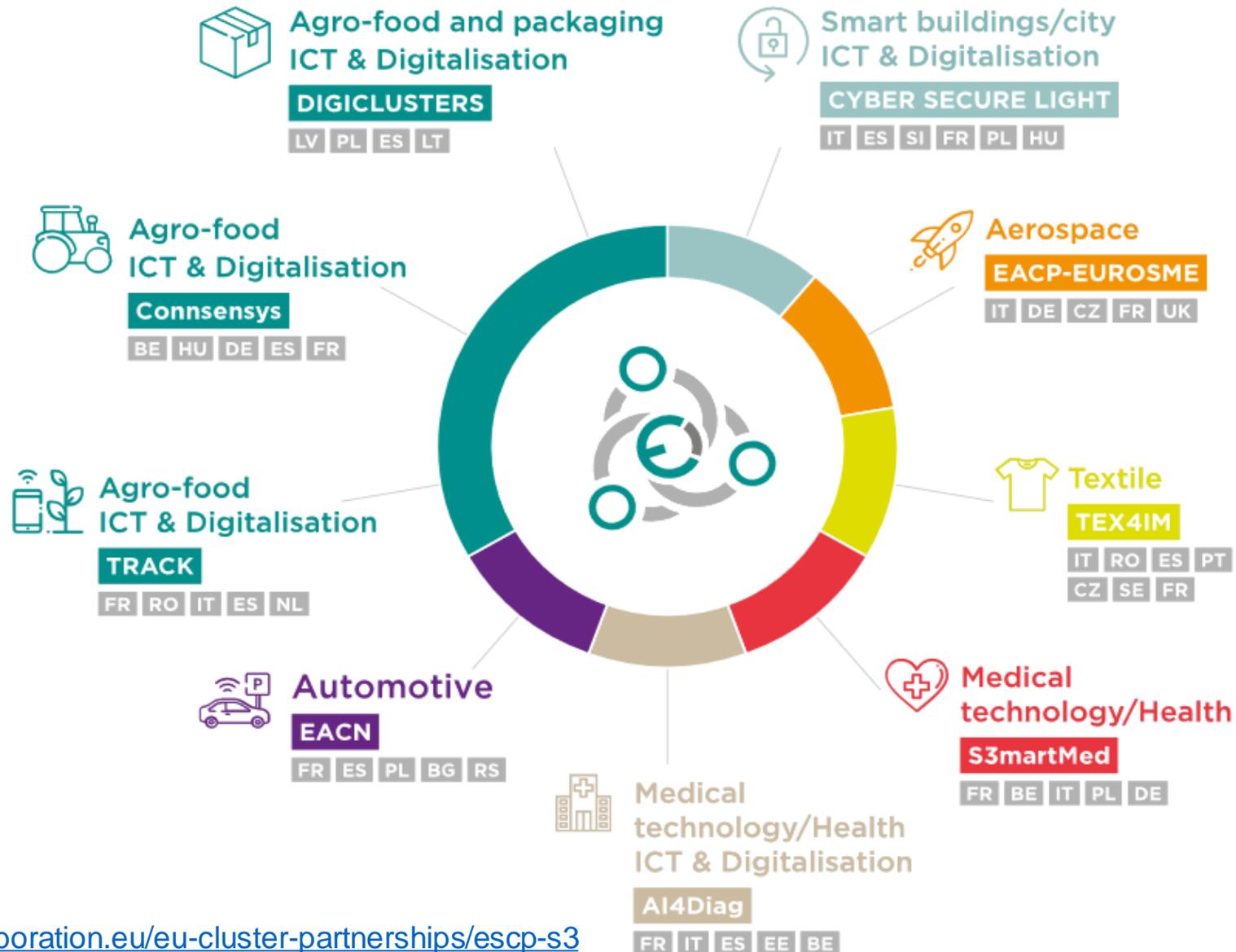
### Clusters represent

- Local concentrations of capacities
- Entrepreneurial resources
- Mid-grained level of aggregation
- Cross-sectoral connectivity
- Actors of the quadruple helix

**Figure 3: The Interplay between S3 and Clusters**

Source: [Jacques Bersier and Michael Keller, 2018.](#)

# The “European Strategic Cluster Partnerships for smart specialisation investments” (ESCP-S3)



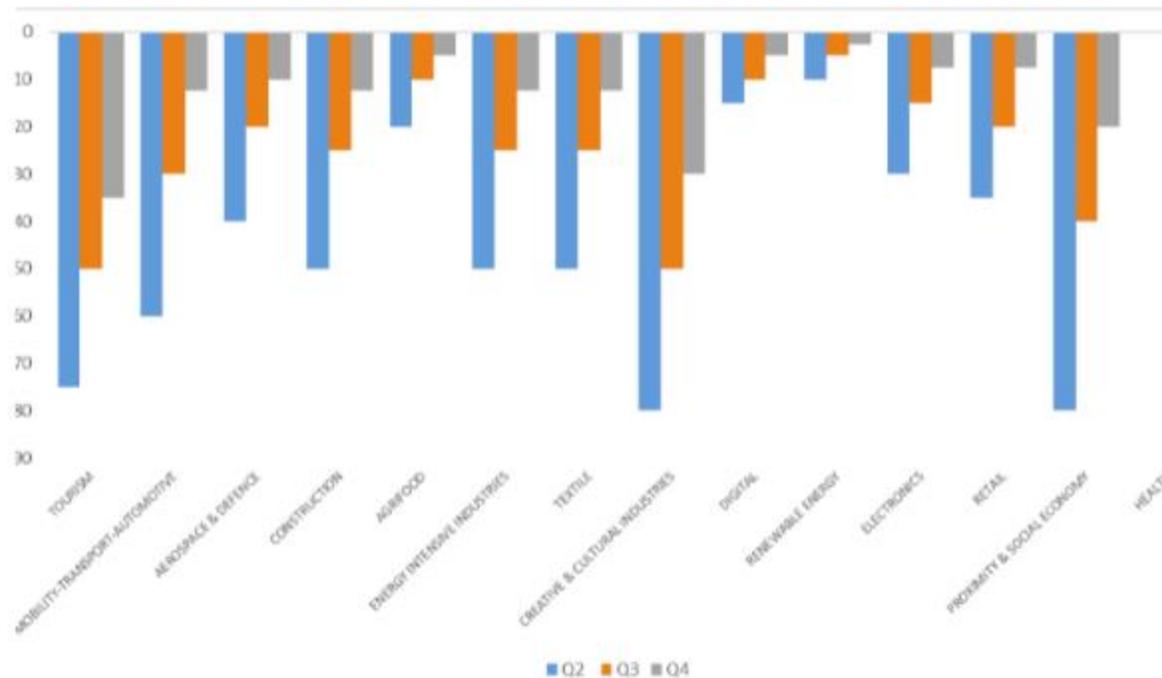
# Recovery package

Next Generation EU will be rolled out under **three pillars**:



## Supply chains have been severely disrupted

Current and expected drops in turnover reported by industry (share of turnover)



## 14 industrial ecosystems have been identified.

- Tourism
- Mobility-Transport-Automotive
- Aerospace & Defence
- Construction
- Agri-food
- Energy Intensive Industries
- Textile
- Creative & Cultural Industries
- Digital
- Renewable Energy
- Electronics
- Retail
- Proximity & Social Economy
- Health

➔ **Important role of clusters to support the recovery of these ecosystems**

# Delivering S3 interregional investments through industrial clusters

- Need for better communication and collaboration between the regional clusters and the S3 platforms/partnerships. → European Cluster Alliance!
- Clusters as a concrete tool to ensure active EDP on the ground, providing key information on (new) needs and challenges (support to the partnerships in strategic analysis activities: mapping/matching...)
- Clusters can increase the participation of the industry in the partnerships' collaboration projects and ensure private sector backing (B2B...)
- Common interest in achieving results (business opportunities):
  - Clusters bring market-oriented knowledge and business capacities → interregional partnerships bring common regional priorities → collaboration can help make projects happen.
- Increase the inter-territorial collaboration and cross-cluster innovation

# Thank you!



**More information:**

<http://s3platform.jrc.ec.europa.eu>

 @S3Platform

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# QUESTIONS & ANSWERS