

# The European Commission's science and knowledge service

## Joint Research Centre



# Smart Specialisation Strategies - STI Roadmaps for SDGs



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# Why we believe we can contribute



**Scale**



**Flexible framework**



**Support structure**



**Innovation in policy-making**



**International partnerships**

**130 000 R&D&I projects (estimate)**

**68 billion euro investment**

**120 S3 strategies**

**120 000 jobs to be created**



European Commission

# The DNA of Smart Specialisation



*Setting transformative agendas relying on **four main features***



**Localisation:** focused on territorial specificities



**Customisation:** no "one size fits all" – adapted to local context and institutions



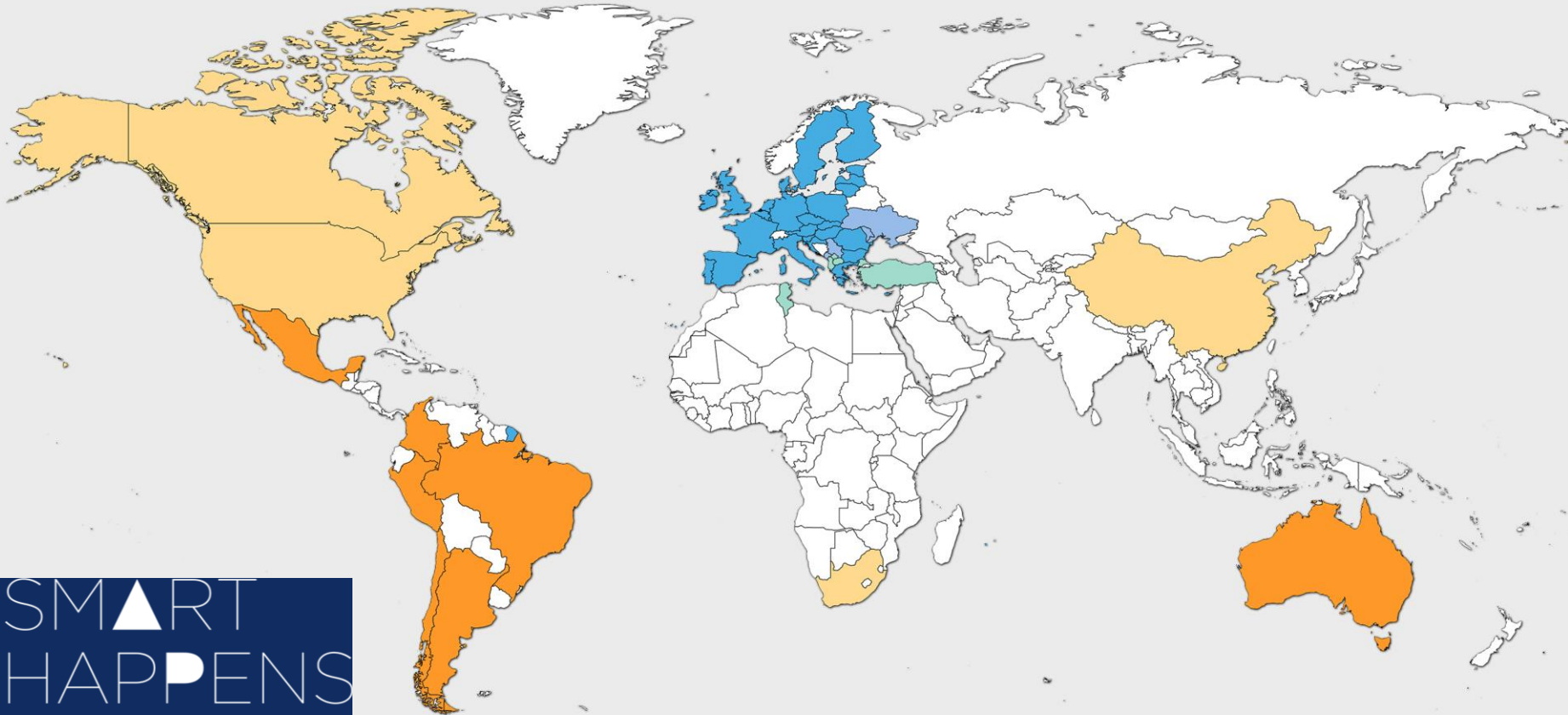
**Prioritisation:** targeting most promising potential for development/transformation



**Mobilisation:** involving public and private stakeholders

**→ Combining evidence-based and community-based knowledge**

# Outreach








**EU:** 120 strategies,  
68 bln euro 2014-  
2020

**EU  
Neighbourhood:**  
12 countries in the  
process,  
Financing based on  
the results of the  
process

**Worldwide: 9**  
countries,  
Soft support

SMART  
HAPPENS  
HERE.

Logo: S3 from Hunter, Australia

-  EU countries implementing Smart Specialisation Strategies
-  Countries with advanced S3 development process
-  Countries that have initiated S3 process development
-  Countries that cooperate with JRC on Smart Specialisation
-  Countries that expressed interest in Smart Specialisation



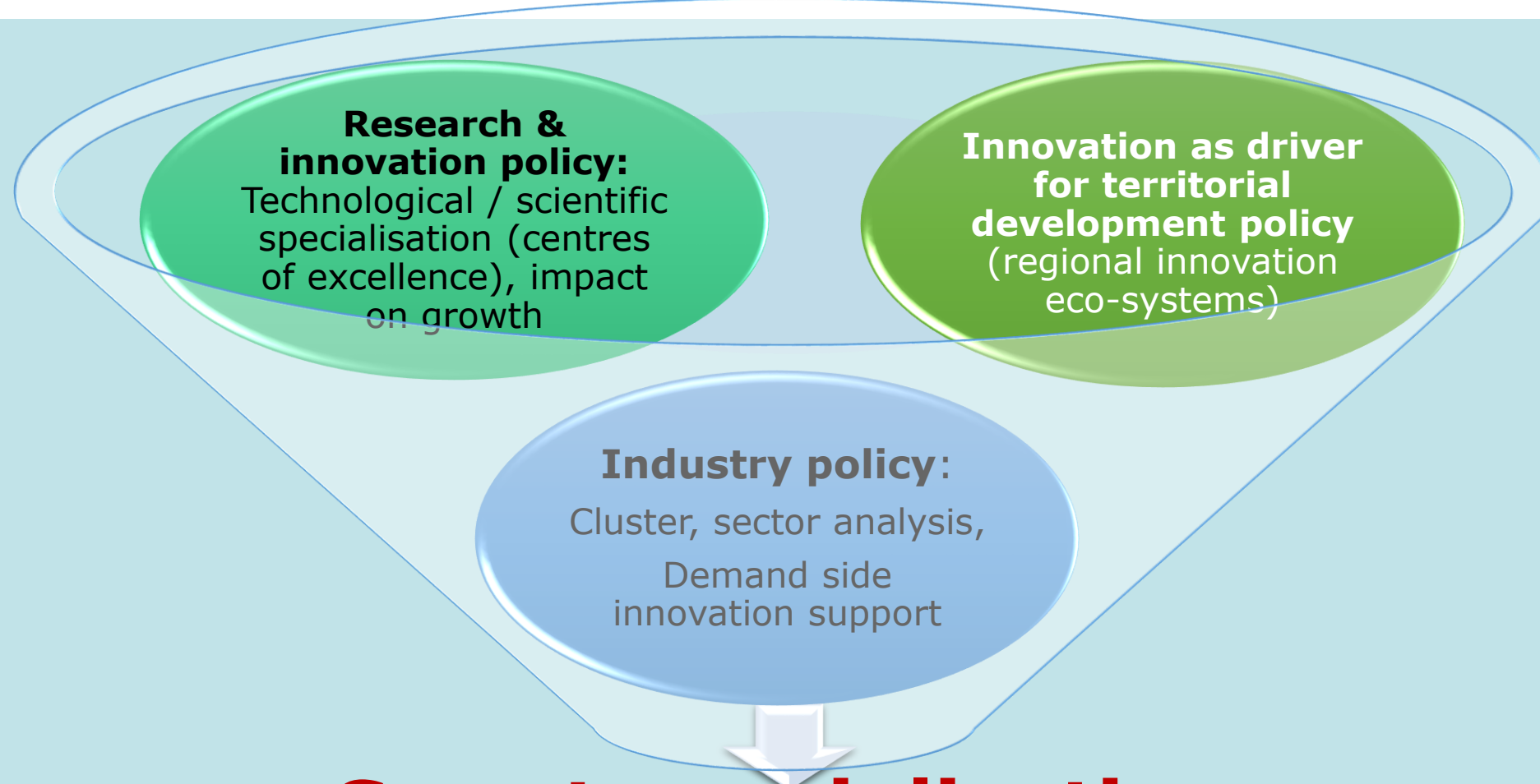
# What we can contribute to the STI Forum

- Contribution to the Guidebook
- Contribution to Session 6 and 5 of the Forum with the progress on the pilots we run and good practice examples
- Side event/training workshop?

# Our input to the UN process

- Working group of experts and countries
- Collecting and presenting the good practice examples
- Providing pilot activities within our process (starting from SDG mapping for S3)
- Raising awareness on SDGs/S3 connection among Member States and Partner Countries
- Organizing peer reviews on S3 and SDGs
- Supporting integration of STI, SDG and S3 agendas
- Developing recommendations and guidance

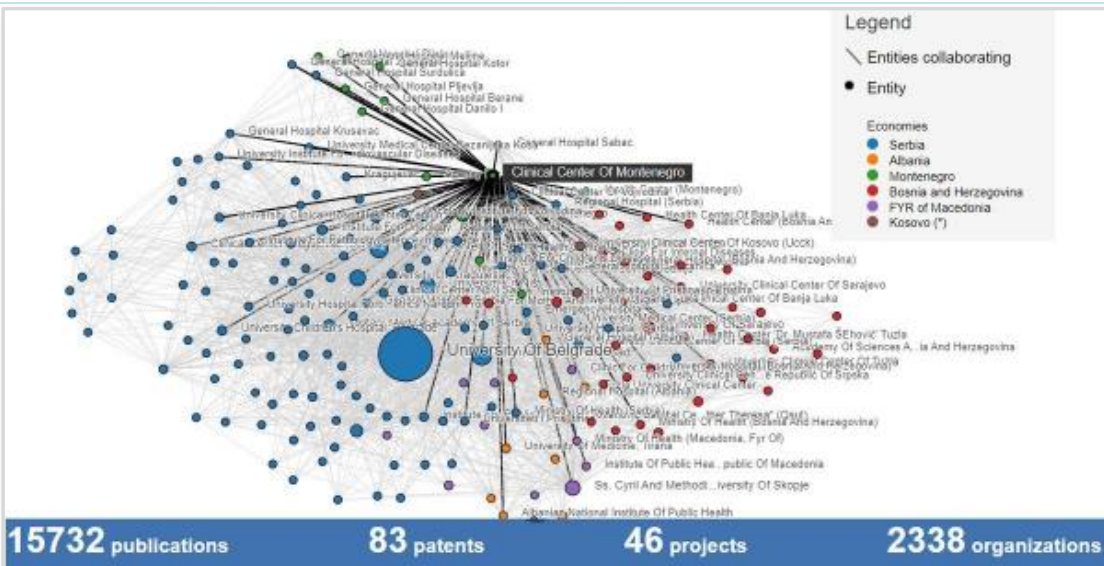
# Full name: Research and Innovation Strategies for Smart Specialisation



**Smart specialisation**

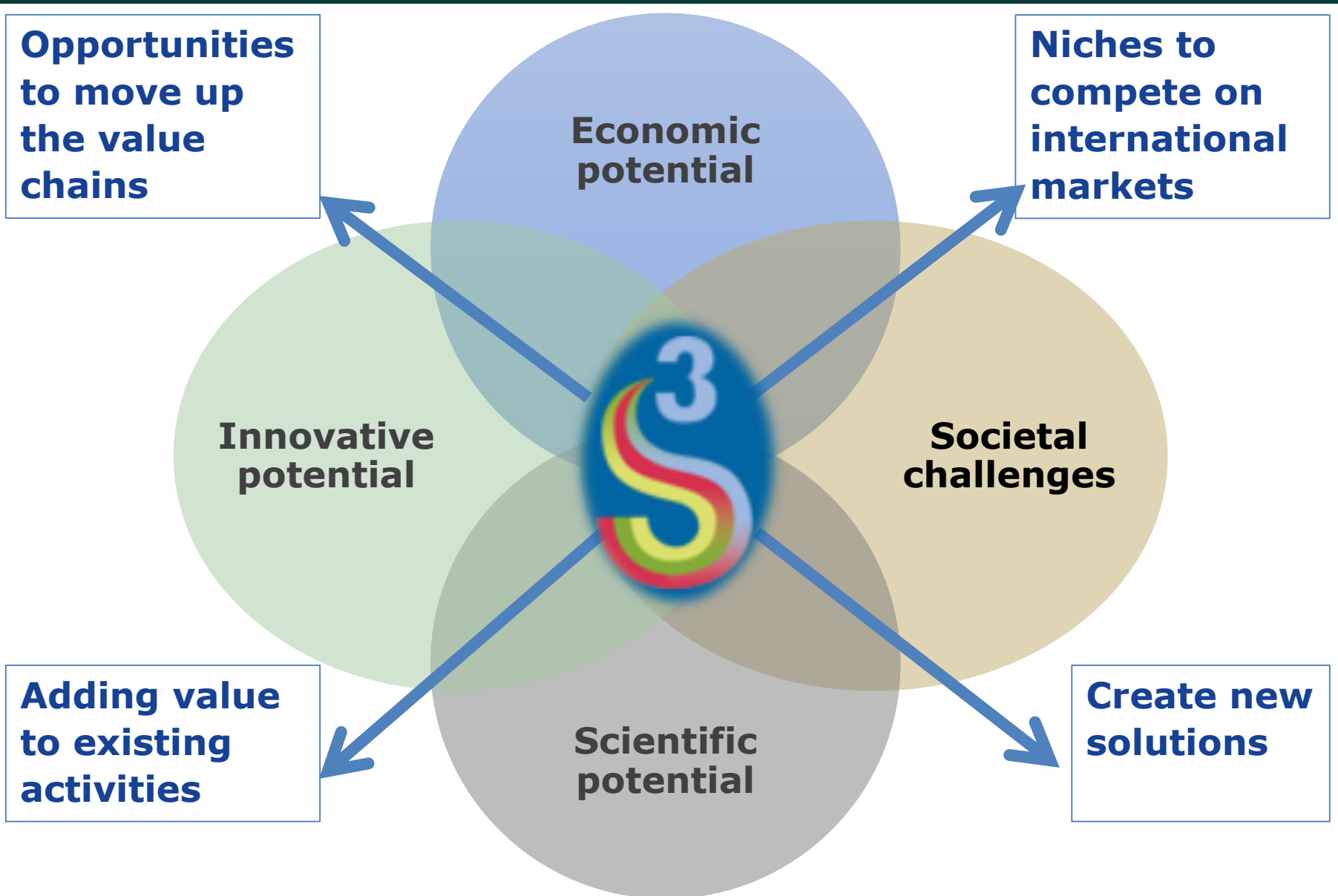


# Territorial point of view – pushing for systemic changes



**Leaving no place behind**

# Smart specialisation as a transformative process



**Look at the potentials and opportunities present in a territory**

**Consider the resources you have**

# Example of transformative activities

## **Economic potential:**

High level of production and employment in agriculture and food processing

## **Scientific potential:**

Top level pharmaceutical and biotechnology research

## **S3 priority:**

Function foods for cardiac patients

## **Innovative potential:**

Quickly growing bio-tech cluster

## **Societal challenge:**

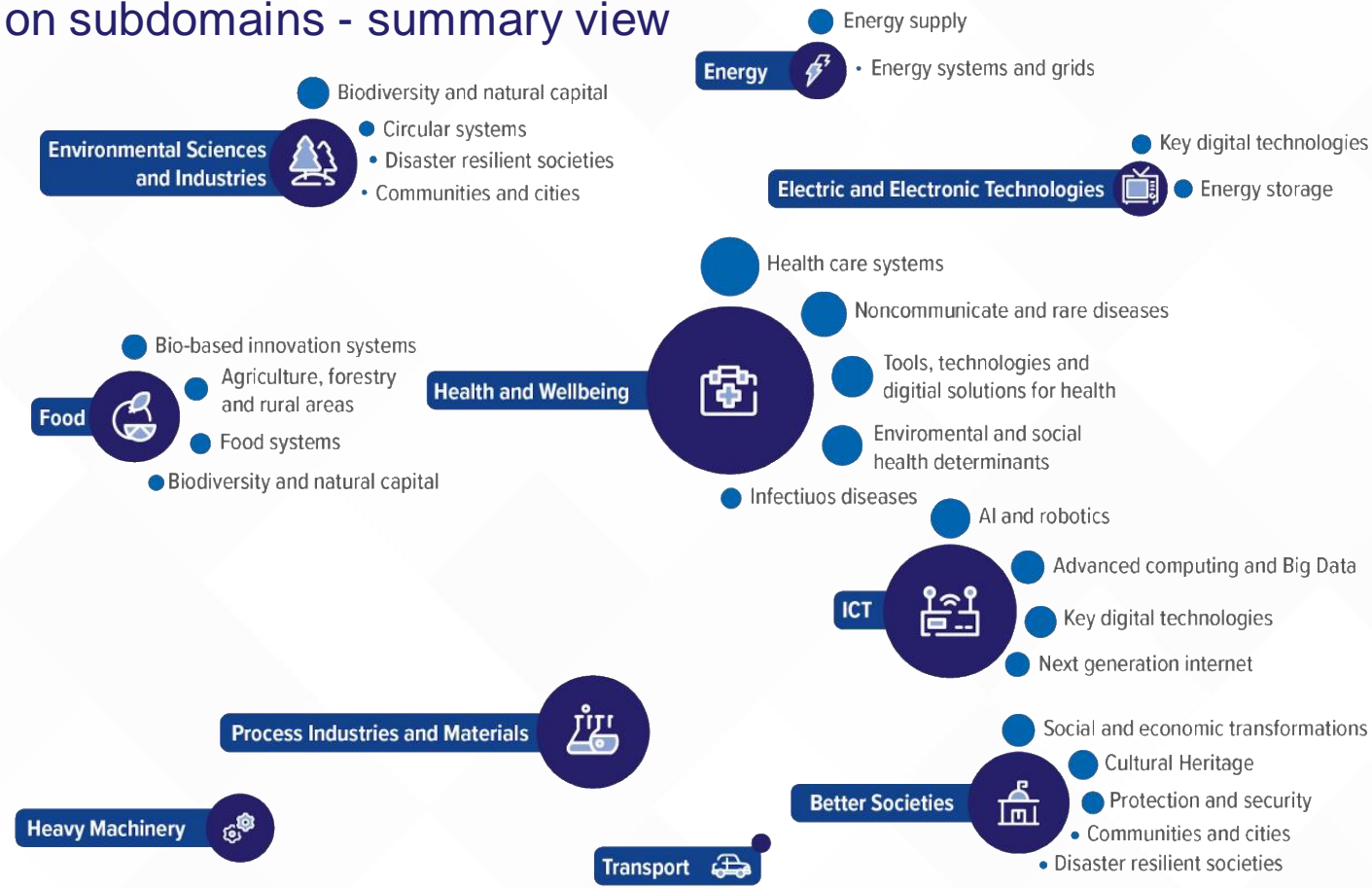
Health – obesity and cardiac disease

## **Other examples:**

- Digitalisation of welfare services (Sweden)
- Medical technology and patient care (France)
- Low carbon and low emission energy production (Poland)
- Cleantech – new products and processes for green chemicals development (Italy)

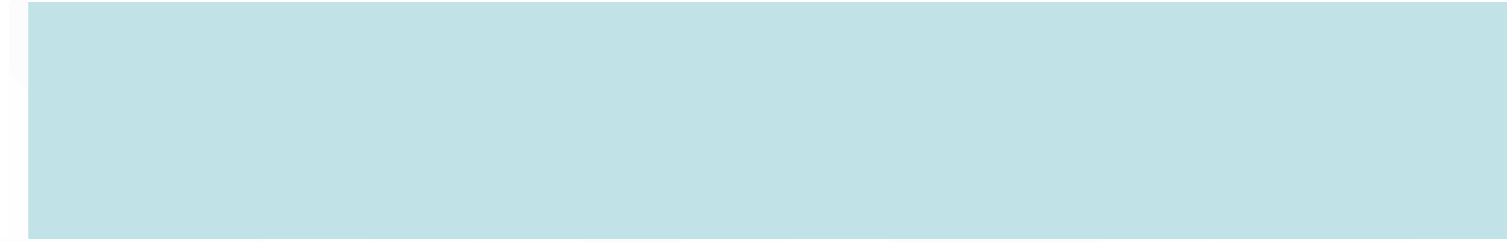
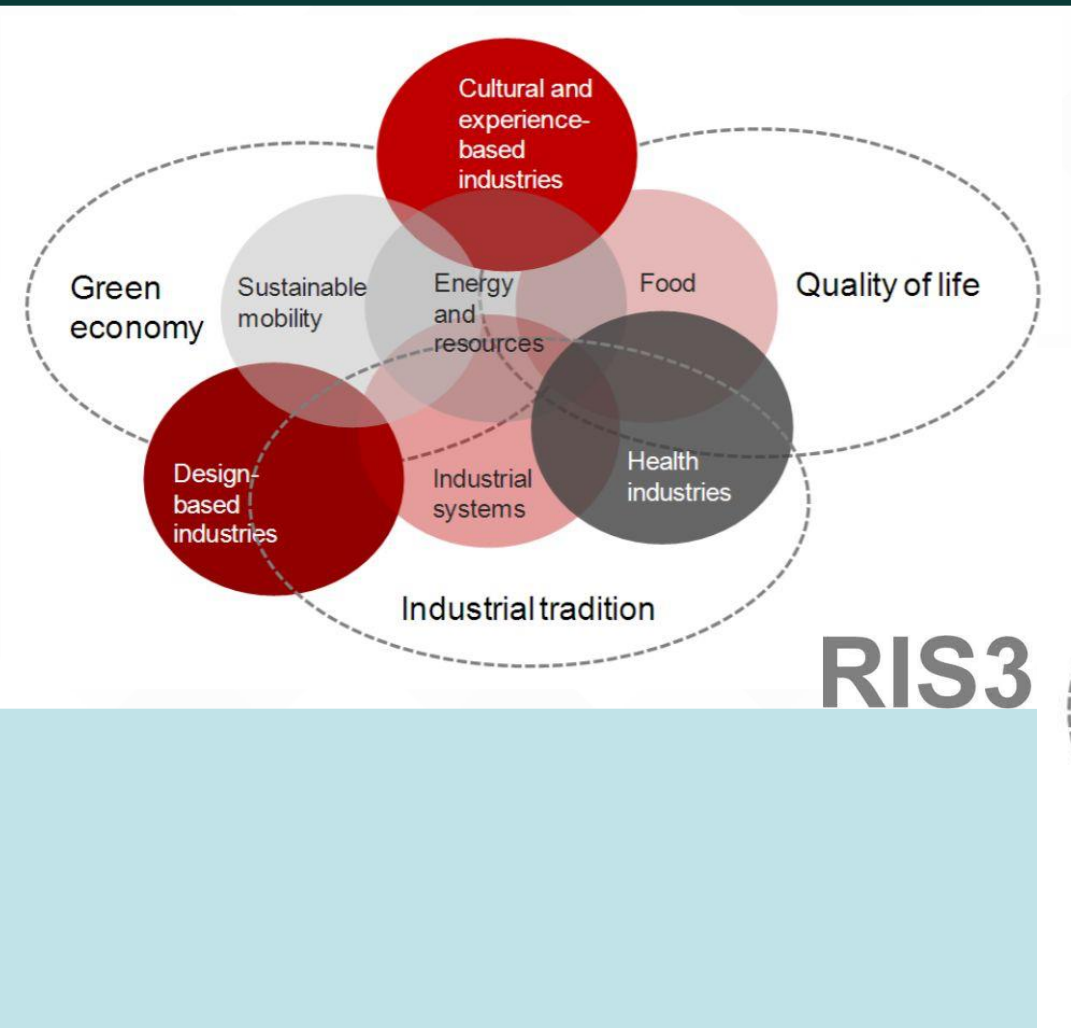
# Details are important!

## Specialisation subdomains - summary view





# From S3 priorities to SDGs



# Importance of the process





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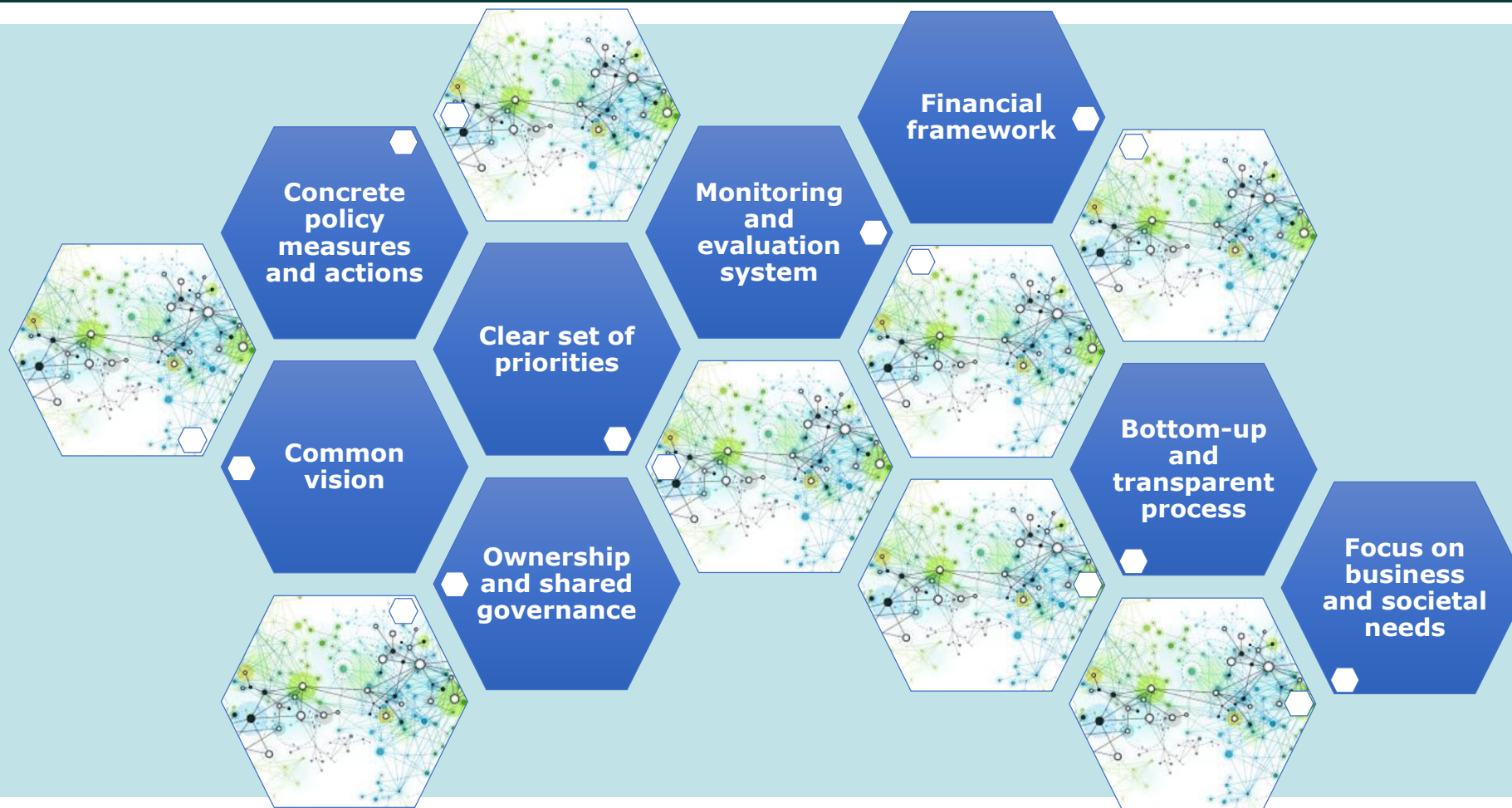
## **Institutional discovery:**

- Political mandate
- Right coalition of ministries, departments, agencies and other public institutions
- Learning and adaptation process
- Stability and consequence
- Learning to talk to external stakeholders and build trust

## **Entrepreneurial discovery:**

- Process of discovering real business needs and ways to address them based on knowledge and innovation
- Mobilising and enabling businesses to answer societal challenges
- Quadruple helix: business, academia, civic society and public authorities

# S3 as an STI roadmap



# Key requirements:

National or subnational research and innovation strategy is in place with the following elements:

Step 1 – Analysis of regional context/potential

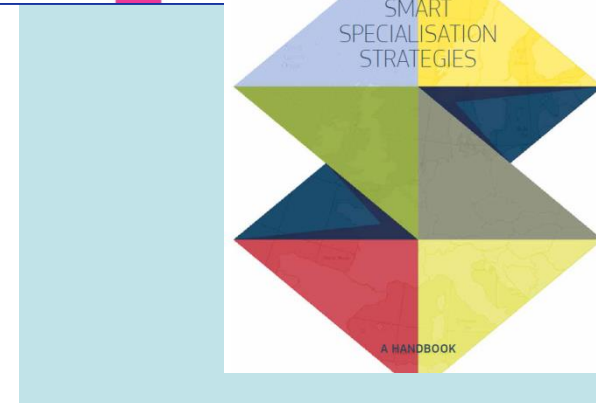
Step 2 – Governance

Step 3 – Vision for the future

Step 4 – Selection of priorities

Step 5 – Policy mix

Step 6 – Monitoring and evaluation



Available on the S3 Platform webpage  
<http://s3platform.jrc.ec.europa.eu>

# International partnerships for common priorities



Advanced manufacturing



Non-food Biomass



Efficient and Sustainable Manufacturing



3D-Printing



New Nano-Enabled Products



Textile Innovation



Medical technology



Photonics



Cybersecurity



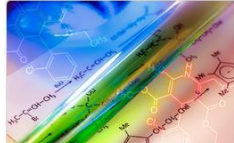
Social Economy



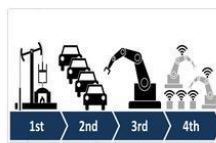
Artificial Intelligence & Human Machine Interface



Personalised medicine



Chemicals



SMEs to the Industry 4.0



Sport



Digitalisation and Safety for Tourism



High Tech Farming



Traceability & Big Data



Consumer Involvement in Agri-Food



Nutritional Ingredients



Smart Sensors 4 Agri-Food



Bioenergy



Marine Renewable Energy



Smart Grids



Sustainable Buildings



Solar Energy

- ### 3 Platforms:
- Industrial Modernisation
  - Agri-food
  - Energy

30 partnerships

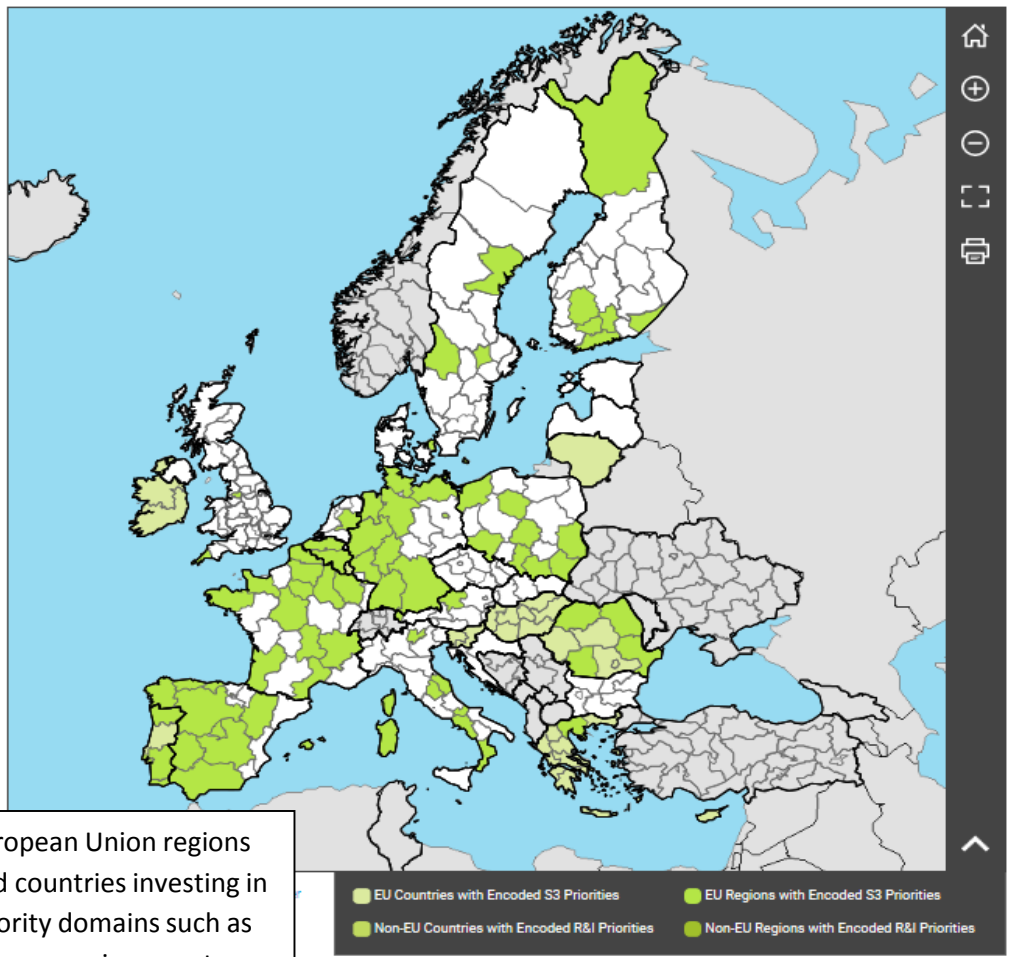
153 regions

28 countries





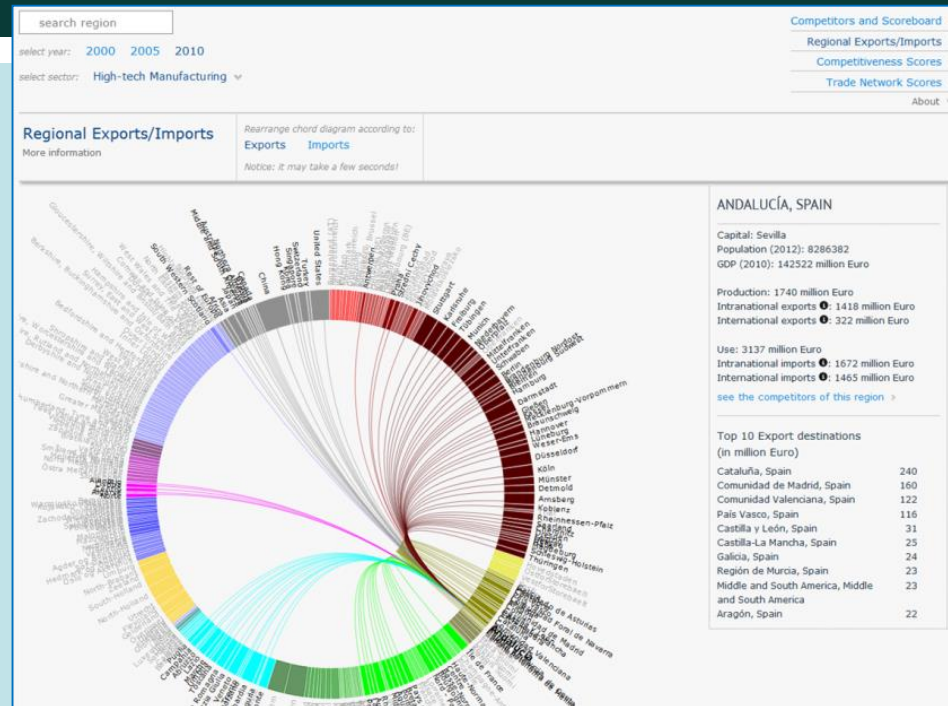
# Tools for cooperation



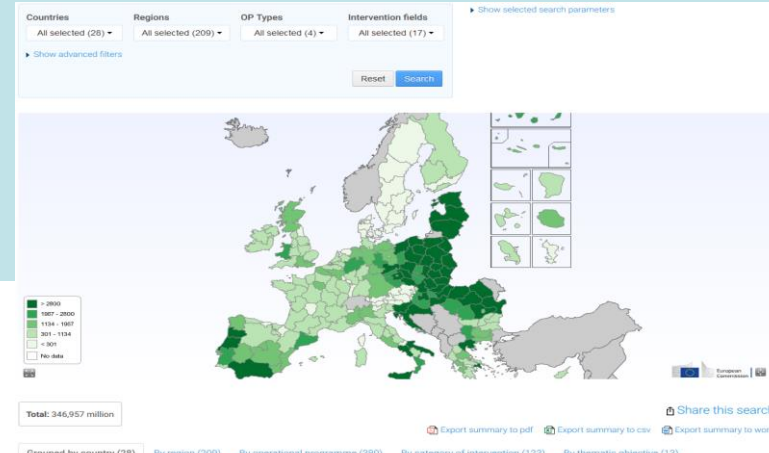
European Union regions and countries investing in priority domains such as cleaner environment, energy-efficient networks and low energy computing

Region	Country	Year	Value
Andalusia	Spain	2011	1000000000
	Spain	2010	1000000000
	Spain	2009	1000000000
	Spain	2008	1000000000
Catalonia	Spain	2011	1000000000
	Spain	2010	1000000000
	Spain	2009	1000000000
	Spain	2008	1000000000

Benchmarking of regional structures



Analysis of trade flows



Analysis of investment



# Any questions?

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