Joint Research Centre

the European Commission's in-house science service

Serving society
Stimulating innovation
Supporting legislation

Smart Specialisation
- The S3 Platform

S3 Platform - B.3

JRC – European Commission

www.ec.europa.eu/jrc

European Commission

JRC B3
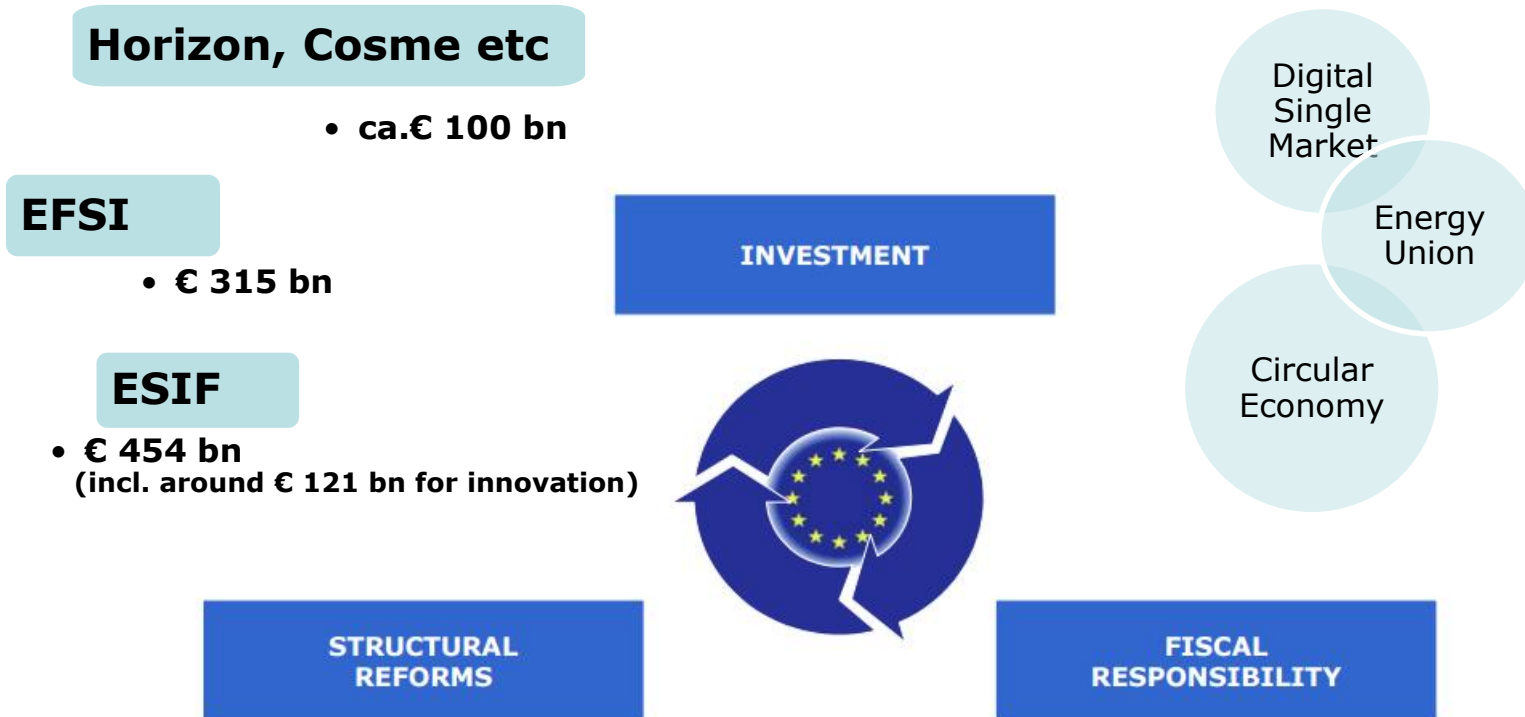## A territorial approach to growth and jobs

Regional and urban development, research and innovation

- Regional economic modelling
- Territorial modelling – Urban data platform - Urban development strategies
- Smart specialisation – regional R&I strategies – thematic platforms
- Territorial approach to neighbourhood and integration policy
- Synergies between regional and research funds: "Stairway to excellence"
- Growth and innovation in lagging regions
- Regional and urban innovation ecosystems

Industrial research, innovation and technologies

- Corporate research and innovation
- Key enabling technologies – global value chains
- Growth of innovative companies

# Supporting the number one EC priority: the Investment Plan for Europe

Horizon, Cosme etc

- ca.€ 100 bn

EFSI

- € 315 bn

ESIF

- € 454 bn
  (incl. around € 121 bn for innovation)

INVESTMENT

STRUCTURAL REFORMS

FISCAL RESPONSIBILITY

Digital Single Market

Energy Union

Circular Economy

Increase effectiveness of investments !

European Commission

Supporting EU Regional Policy

- **EU's main investment policy:** €340 billion for investments in economic, social and territorial cohesion for the period 2014-2020

- **Important driver for the real economy:** Boost for exiting the crisis and for establishing the basis of sustainable economic development.

- **Part of the European Economic governance:** European Semester. Increasingly important to achieve the **Jobs, Growth and Investment priority** (Europe 2020 strategy and the Investment Plan for Europe)

- Support to many EU policy objectives in the areas of **education, employment, energy, the environment, the single market, research and innovation.**

European Commission

Total EU budget for RIS3: EUR 43 billion of ESIF

- **plus national EUR 22 billion**
- **EUR 10 billion in financial instruments/rest in grants**
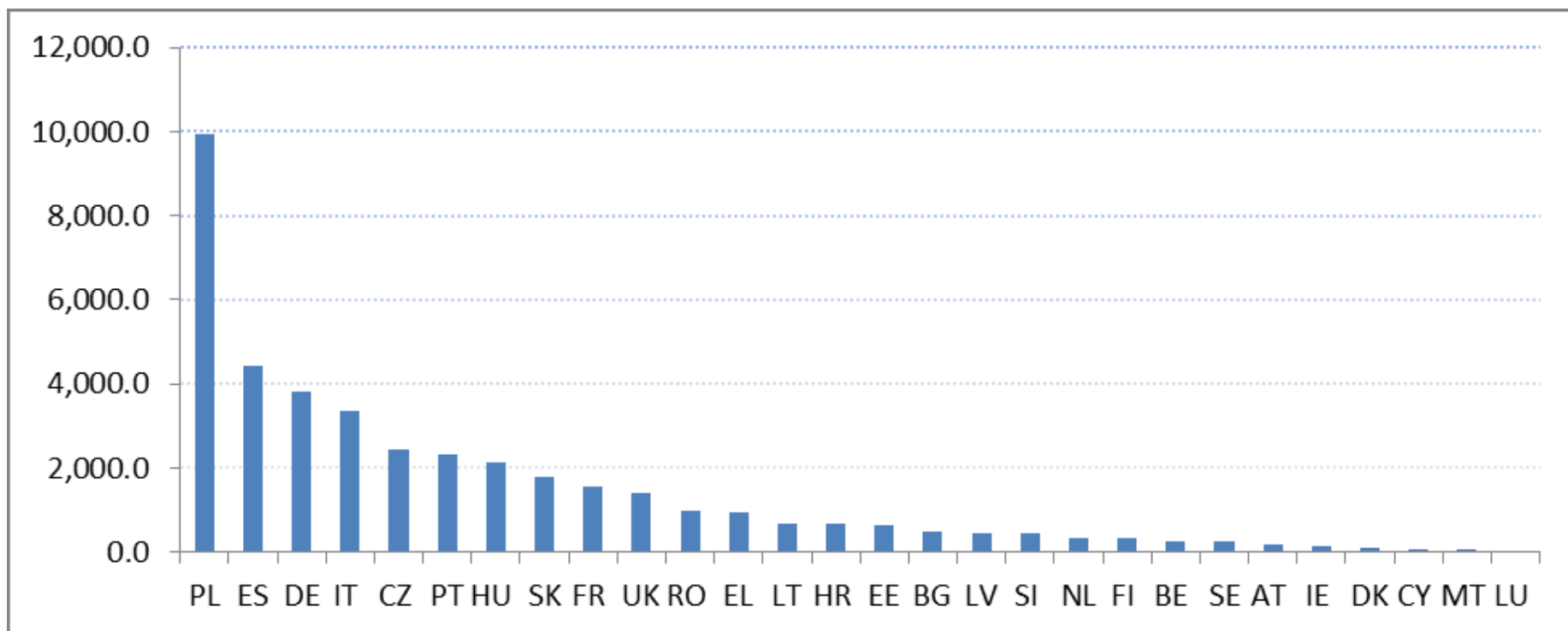
Source: Final ESIF partnership agreements as of December 2015 – Courtesy DG REGIO

Soon all open data available at: https://cohesiondata.ec.europa.eu/

European Commission

Leverage effect

Total EU budget available (ESIF): EUR 43 billion

National cofinancing: EUR 22 billion

Other resources included in the budgeting of smart specialisation strategies: up to 6 times more
(e.g. Private matching funds: EUR 10 billion)

(for info: H2020 ~ EUR 80 billion)

Achievements planned in Smart Specialisation

FIRMS

130 000

NEW DIRECT JOBS

45 000

NEW RESEARCHERS

30 000

START - UPS

5 000

RESEARCHERS WITH NEW INFRASTR.

72 000

PRIVATE MATCH **INVESTMENT**

€10 BLN

NEW TO MARKET **PRODUCT**

15 000

Source: S3 strategies Courtesy DG REGIO

European Commission

Ex-ante conditionality

The RIS3 ex-ante conditionality requires EU Member States and regions to have a smart specialisation strategy in place that:

- is based on a SWOT or similar analysis to concentrate resources on a limited set of research and innovation priorities;

- outlines measures to stimulate private research, technology and development (RTD) investment;

- contains a monitoring and review system;

- sees a Member State has adopted a framework outlining available budgetary resources for research and innovation; and

- a Member State has adopted a multi-annual plan for budgeting and prioritisation of investments linked to EU priorities (European Strategy Forum on Research Infrastructures –ESFRI).

European Commission

What's new in the Smart Specialisation approach?

Not a "Neutral" Policy

- S3 does not act only through horizontal measures that cut across the whole economy
- It requires policy makers to take the risk associated with selection of a limited number of activities to support

Bottom Up

Top Down

Choices Based on Entrepreneurial Knowledge

- No central and omniscient planner
- Interactive process of knowledge exchange and creation: the *entrepreneurial discovery process*

Hausmann and Rodrik 2003; Foray and Goenaga 2013; Foray 2015

European Commission

Centrality of Entrepreneurial Discovery Process

Priority-Identification Process:

1. **Entrepreneurial actors in abroad sense:** all actors potentially holding some type of entrepreneurial knowledge, from businesses to research institutions and the public administration

2. **Interactive process where *different* actors can meet**: become aware of potential for synergies and complementarities, or explore experimental ideas

3. **Shielded environment where actors can disclose information**: both virtual and physical space

4. **Non-hierarchical process**: stakeholders in this process stand on the same foot as the administration
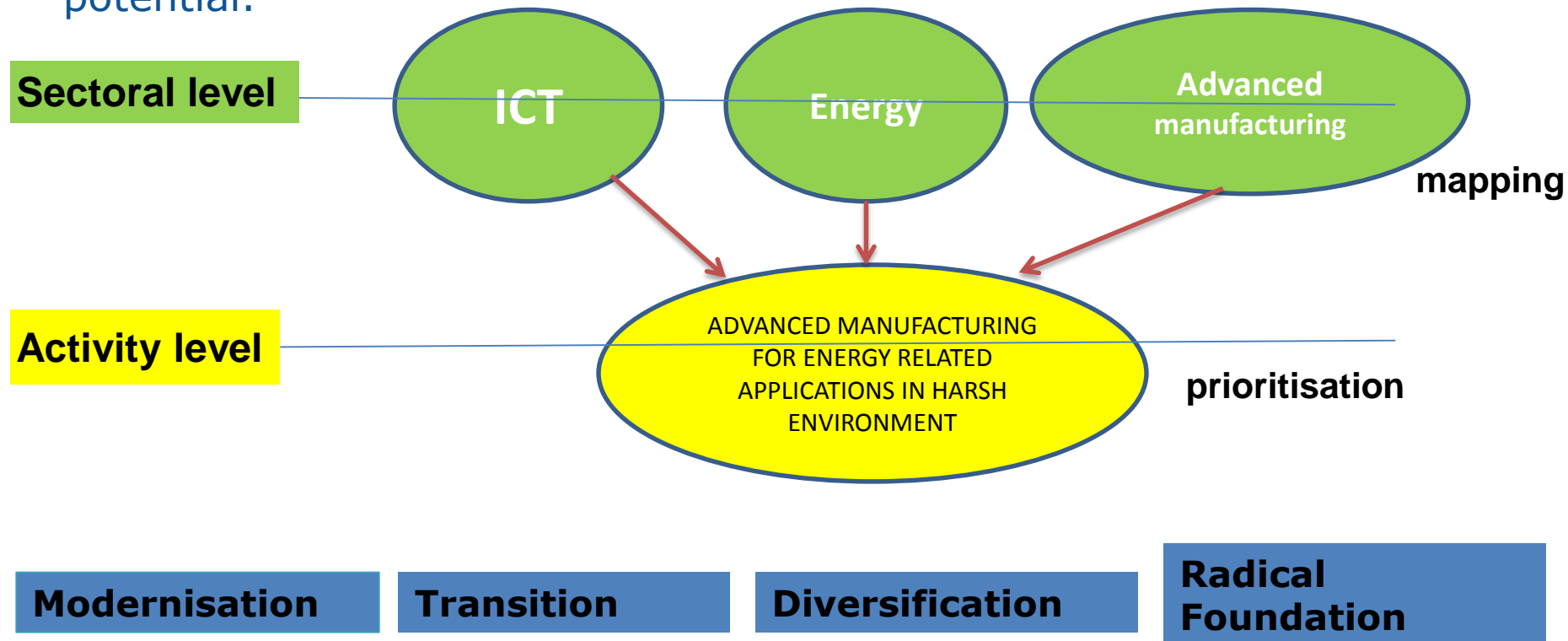
From the S3 Platform experience

Public authority will **prioritise** those activities that:

(i) Have critical mass of entrepreneurial resources and capabilities
(ii) Show stakeholders / entrepreneurs' commitment
(iii) Are suitable to realize the strategic goals/meet the needs and challenges of the local economy and society
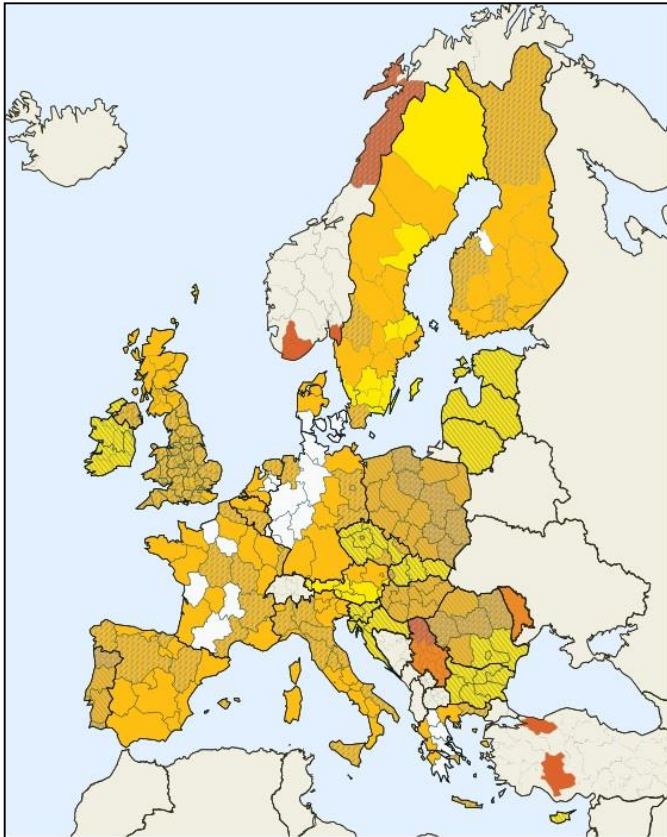
European Commission

Smart specialisation priorities:
crossroads between sectors, technologies, markets

Innovation is a combination of technologies, products, services, business models and behaviours – it is linked to networks, connections, value chains.

S3 is about developing new specialities / niches / market opportunities based on regional concentration of knowledge, competence and market potential.

Sectoral level

ICT

Energy

Advanced manufacturing

mapping

Activity level

ADVANCED MANUFACTURING FOR ENERGY RELATED APPLICATIONS IN HARSH ENVIRONMENT

prioritisation

Modernisation   **Transition**   **Diversification**   **Radical Foundation**
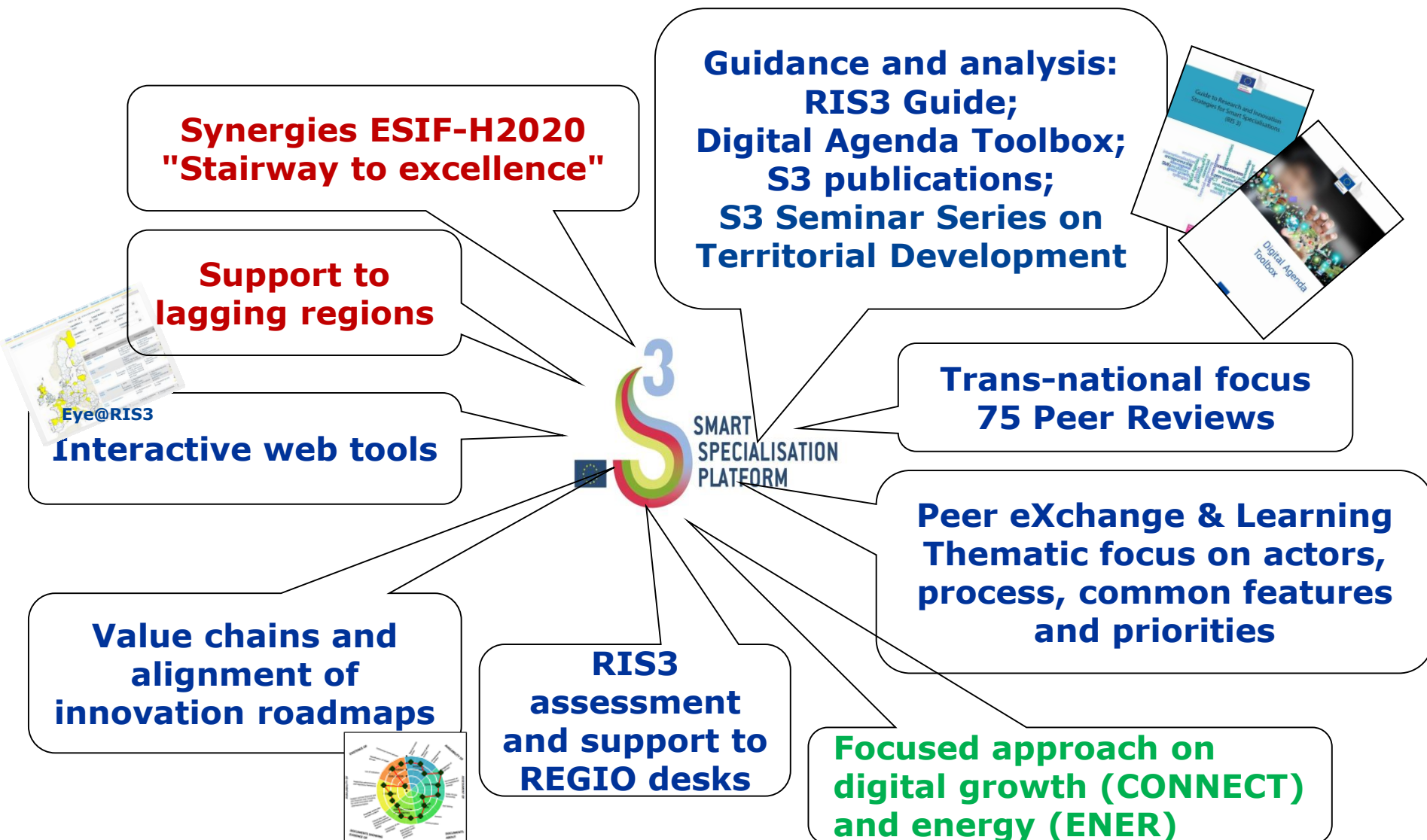
Smart Specialisation Platform

Created in 2011 to provide **science-based professional advice** to EU national and regional policy-makers for the establishment and implementation of their S3 strategies, make better use of the European Structural and Investment Funds (ESIF) and thus contribute to the Europe 2020 goals.

Some key data

- Wide membership: 171 regions + 20 countries

- Strong endorsement by national/regional policy makers: average 4.5/5 satisfaction rankings (86% rankings at least 4/5; 100% at least 3/5)

- High "loyalty rate": > 50% of regions attending workshops come back

Main activities of the S3 Platform

Synergies ESIF-H2020 "Stairway to excellence"

Guidance and analysis: RIS3 Guide; Digital Agenda Toolbox; S3 publications; S3 Seminar Series on Territorial Development

Support to lagging regions

Eye@RIS3

Interactive web tools

Trans-national focus 75 Peer Reviews

Peer eXchange & Learning Thematic focus on actors, process, common features and priorities

Value chains and alignment of innovation roadmaps

RIS3 assessment and support to REGIO desks

Focused approach on digital growth (CONNECT) and energy (ENER)

S3 Platform - Knowledge base

Policy Briefs and Working Papers

The S3 Policy Brief Series targets policy-makers and practitioners

and provides succinct analysis leading to policy recommendations.

The S3 Working Paper Series is more oriented towards an academic audience.

S3 tools

S3 Guidance: RIS3 Guide, Digital Agenda Toolbox and upcoming

RIS3 Implementation Handbook

RIS3 Assessment Wheel: to be used by policy-makers to position their RIS3

Benchmarking Regional Structure: an interactive tool to identify reference regions

uctural similarities

EYE@RIS3: on line mapping tool/database on regions' RIS3 priorities

EU Trade and Competition tool: mapping tool based on imputed bilateral trade flows   that

titive position of regions in the European trade network

ICT Monitoring Tool: on line mapping tool/database on regions' digital growth investments

S3 Peer review

Development of a codified methodology to foster transnational

mutual learning and cooperation (now used

beyond regional smart specialisation strategies)

75 peer review feedback reports

Eye@RIS3 – an online database for S3 priorities

- **Enables regions to position themselves, and**
- **to seek out potential partners for collaboration**

- Data from regional and national RIS3 strategies

- Four dimensions, short text descriptions, connections to EU policies, regional capabilities and target markets

- Not perfect matches, but an easy to use tool to give initial indications

- More than 1,200 regional priorities

Agrifood

Regions with
common
target priorities
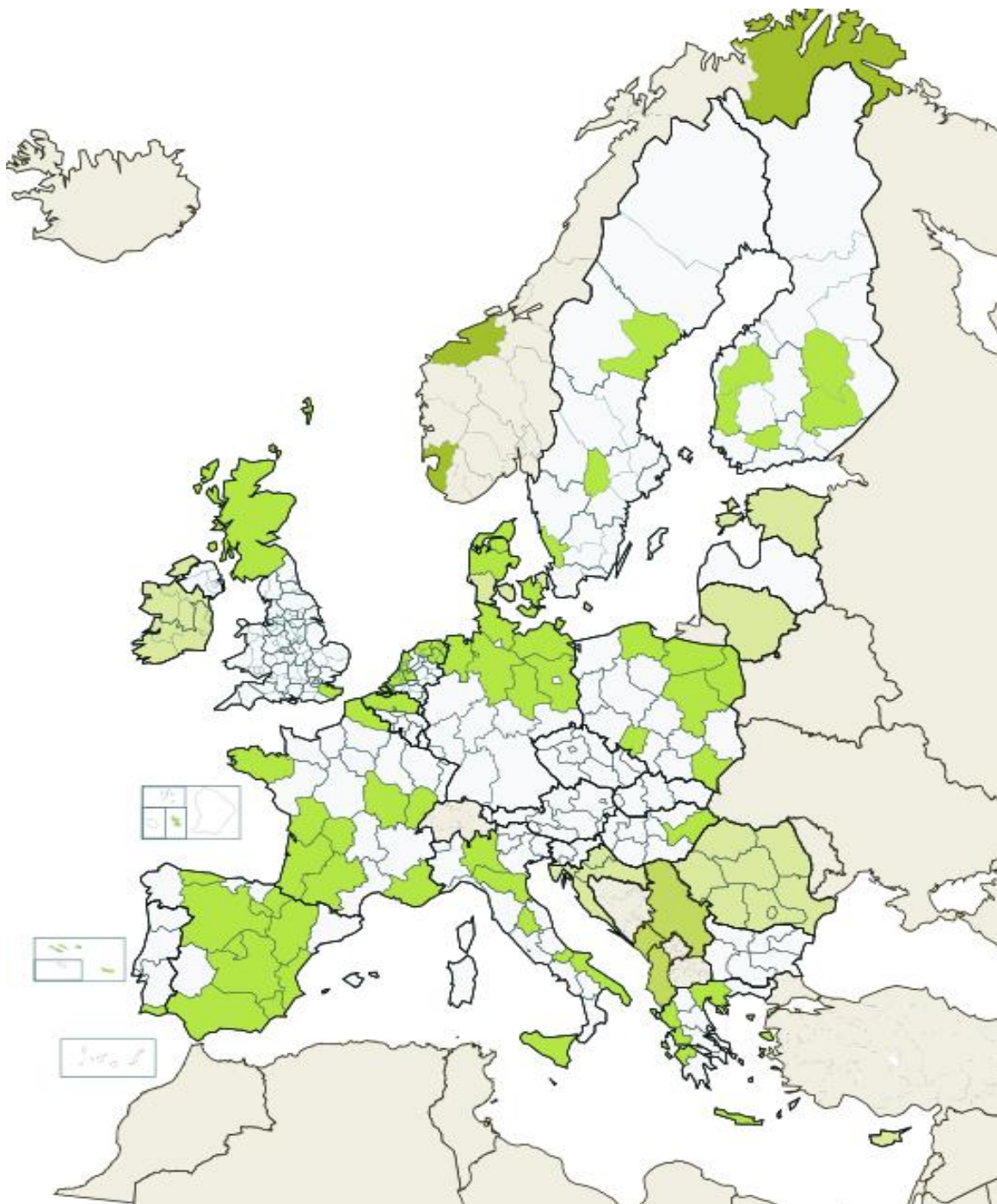
Source: Eye@RIS3

• Value chains and smart specialisation

- **What is it about?** The S3 Platform has recently launched a new and exciting project to assist regions in their efforts to facilitate the development of **new value chains through the interconnection of regional eco-systems** and their actors in triple/quadruple helix in specific S3 investment areas.

- **Why now?** S3 is an engine for the development of European eco-systems that are necessary to gather critical mass for market breakthroughs.

- **How?** The S3 Platform will provide **a multi-level support mechanism, combining efforts at regional, national and European level**, which addresses the particular market and system failures that prevent breakthroughs, starting with information and coordination failures and demand uncertainty. The development of interregional collaboration will be driven by opening-up regional smart specialisation strategies.
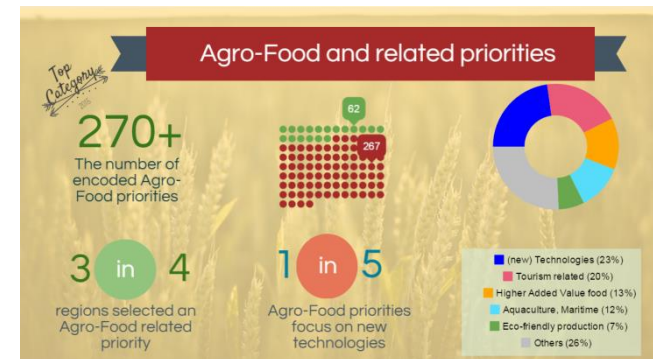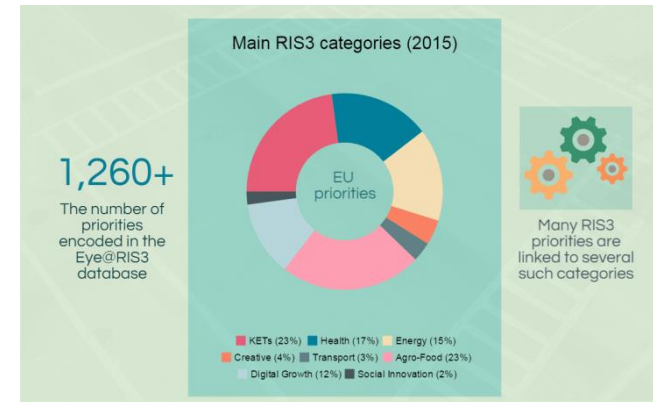
Growing interest to apply smart specialisation in other policy contexts (I) – The territorial element

EU neighbourhood policy (2015 review)

EU urban agenda (2016)

EU Macro-regional approach

Rural and local development?

Development and co-operation?

Growing interest to apply smart specialisation in other policy contexts (II) - The link to industrial policy

The Commission proposes to Member States to combine regional and industrial policy tools to create Smart Specialisation Platforms to help regions roll out smart specialisation programmes by facilitating contacts between firms and clusters, enabling access to the innovative technologies and market opportunities.

EC Communication: For a European Industrial Renaissance (2014)

Establishment of thematic smart specialisation platforms on industrial modernisation, agri-food and energy (2016).

Focus of some EU cluster policy and energy policy tools on smart specialisation priorities.

Link to the regional innovation scheme of the EIT.

"Smart specialization program of European Commission is currently the biggest experiment in innovation and industrial policy in the world and possibly biggest ever undertaken." (Kuznetsov-Sabel, World Bank and Columbia University, 2016)

Growing effort to enhance cross-linkages between policies, institutions and their departments

Thematic smart specialisation platforms
(industrial modernisation: JRC, REGIO, GROW)
(agri-food: JRC, REGIO, AGRI, RTD)
(energy: JRC, REGIO, ENER)
Knowledge exchange platform (RTD, CoR)
Innovation camps (CoR, JRC)

Support to governance processes in lagging regions (JRC, REGIO)
Stairway to Excellence (JRC, REGIO, RTD, EIT)

Beyond the EU

Australia, Brazil, Chile, Colombia, Mexico, Moldova,
Norway, Serbia, Tunisia,
Turkey and Ukraine

SMART SPECIALIZATION BOGOTA