



**REGIONS
& CITIES**

**European Week
Brussels 7-10 October 2019**

#EURegionsWeek



Regions and cities, pillars of the EU's future



Smart Specialisation Platform on Energy

Isabelle SEIGNEUR, Fernando MÉRIDA MARTÍN

**B3. Territorial Development Unit
Joint Research Centre
European Commission**

S3PEnergy: <http://s3platform.jrc.ec.europa.eu>



What is Smart Specialisation?

- 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

The development of **Regional R&I Smart Specialisation Strategies (RIS3)** was 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



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, Good practice examples...
- Support access to relevant **data and tools**: S3 priorities (Eye@RIS3), Regional Benchmarking, Energy and ICT ESIF Monitoring, Digital Innovation Hubs...
- Facilitate **peer-reviews and mutual learning**
- **Train** policy-makers: MOOC...
- **Analyse**: Conceptual and empirical developments, policy briefs, working papers...



The screenshot shows the homepage of the Smart Specialisation Platform. At the top, there is a navigation bar with the European Commission logo and the text 'SMART SPECIALISATION PLATFORM'. Below this, there is a search bar and a menu with options like 'Home', 'S3 Platform', 'Sections', 'Tools', 'News', 'Events', and 'Knowledge Repository'. The main content area features a 'Consultation on Horizon Europe "European Partnerships"' banner, a 'What we can do for you' section with a list of services, and a grid of six service tiles: Thematic Platforms, Guidance, Targeted Support, S3 Cooperation, Communities & Actors, and Governance. On the right side, there is an 'S3P Calendar' for October 2019 and a 'Reports & Publications' section. At the bottom, there is a 'Smart Regions' section with a map of Europe and a 'S3 Tools' section with a video player.

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

S3 in Practice: Supporting Innovation-led Growth in EU Regions

Several challenges have been identified:

- *Challenge 1:* Develop a stronger place-based regional innovation ecosystem through **improved internal connectivity** (between different policies, between existing industrial and knowledge provision actors...)
- *Challenge 2:* 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.
- *Challenge 3:* Create economic growth through innovation **expanding across borders.**

Implementing S3 through transnational and interregional cooperation

3 Thematic Smart Specialisation Platforms have been set since 2015:

- Provide interactive and participatory environment supporting interregional cooperation
- Offer hands-on support to regions committed to implement together their S3 in European strategic growth areas



Implementing S3 through transnational and interregional cooperation

- To **connect** regional innovation eco-systems
- To exploit **complementing strengths**, avoiding duplication of RIS3 investments and efforts
- To **overcome interregional fragmentation** and lack of critical mass across the EU
- To **improve the existing business environment** by identifying barriers to innovation, new investment or skills.
- To get access to **wider business and knowledge network**
- To join, enhance and even create new **EU value chains** in specific areas linked to their S3 priority areas, **expanding business opportunities** & realising **joint investment projects**
- To develop **shared infrastructures**
- To **build synergies** with other regional, national and EU networks and initiatives
- ...

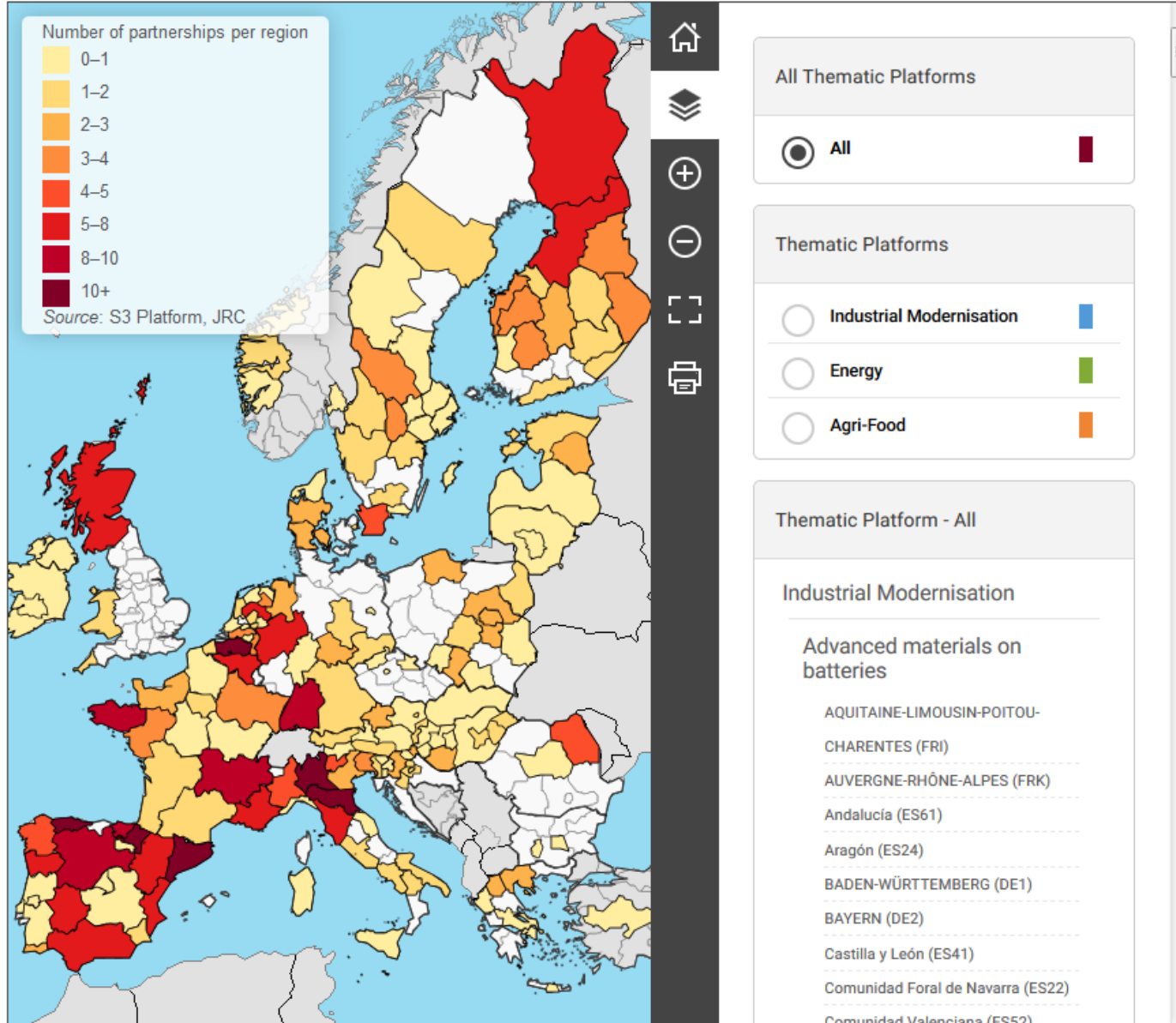
S3 Interregional Partnerships

Based on their local priorities, the EU regions have found areas of common interest and joined forces within S3 Interregional **Partnerships**.

The **bottom-up** component in this process has resulted in a wide variety of thematic partnerships, driven by a **broad range of actors**.

- Currently **32 partnerships in total**
- **197 territorial administrative units**
- ✓ Organised shared spaces for joint demonstration of solutions
- ✓ Coalitions of committed partners: politically committed lead-regions + active partners (leading-by-example)
- ✓ Mobilising bottom-up cluster actors for forging new business opportunities

S3 Thematic Platforms Map



Partnerships

Based on their local joined forces within

The **bottom-up** co-partnerships, drive

- Currently **32** pa
- **197** territorial

- ✓ Organised shared
- ✓ Coalitions of com (by-example)
- ✓ Mobilising bottom

non interest and

ty of thematic

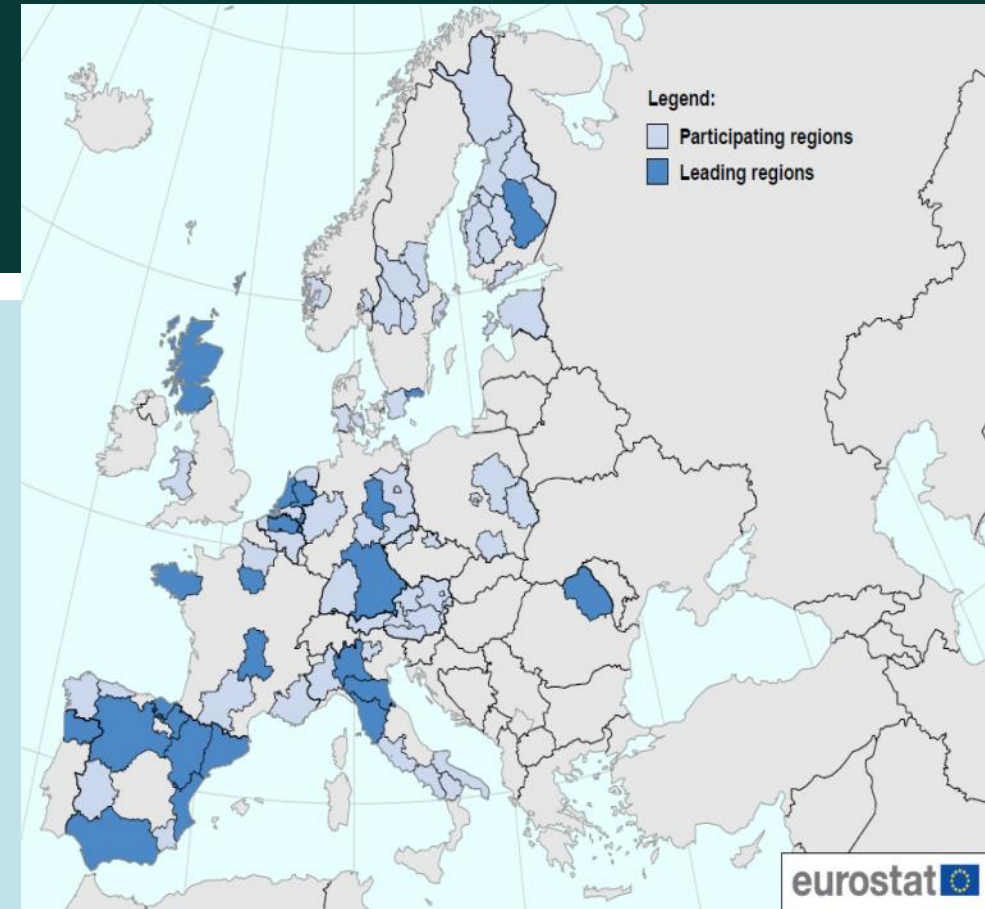
ve partners (leading-



**REGIONS
& CITIES**

European Week
Brussels 8-11 October 2018

S3 Platform on Industrial Modernisation



It 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.

- **21 partnerships**
- **130 territorial administrative units**

EC DGs involved: DG REGIO, DG GROW, DG RTD and JRC



Advanced manufacturing



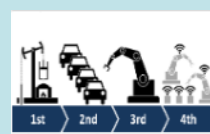
Non-food Biomass



Efficient and Sustainable Manufacturing



3D-Printing



SMEs to the Industry 4.0



Sport



Digitalisation and Safety for Tourism



European Cyber Valleys



Social Economy



Artificial Intelligence & Human Machine Interface



Personalised medicine



New Nano-Enabled Products



Textile Innovation



Medical technology



Photonics



Chemicals



Safe and sustainable mobility



Advanced materials for batteries



Mining industry



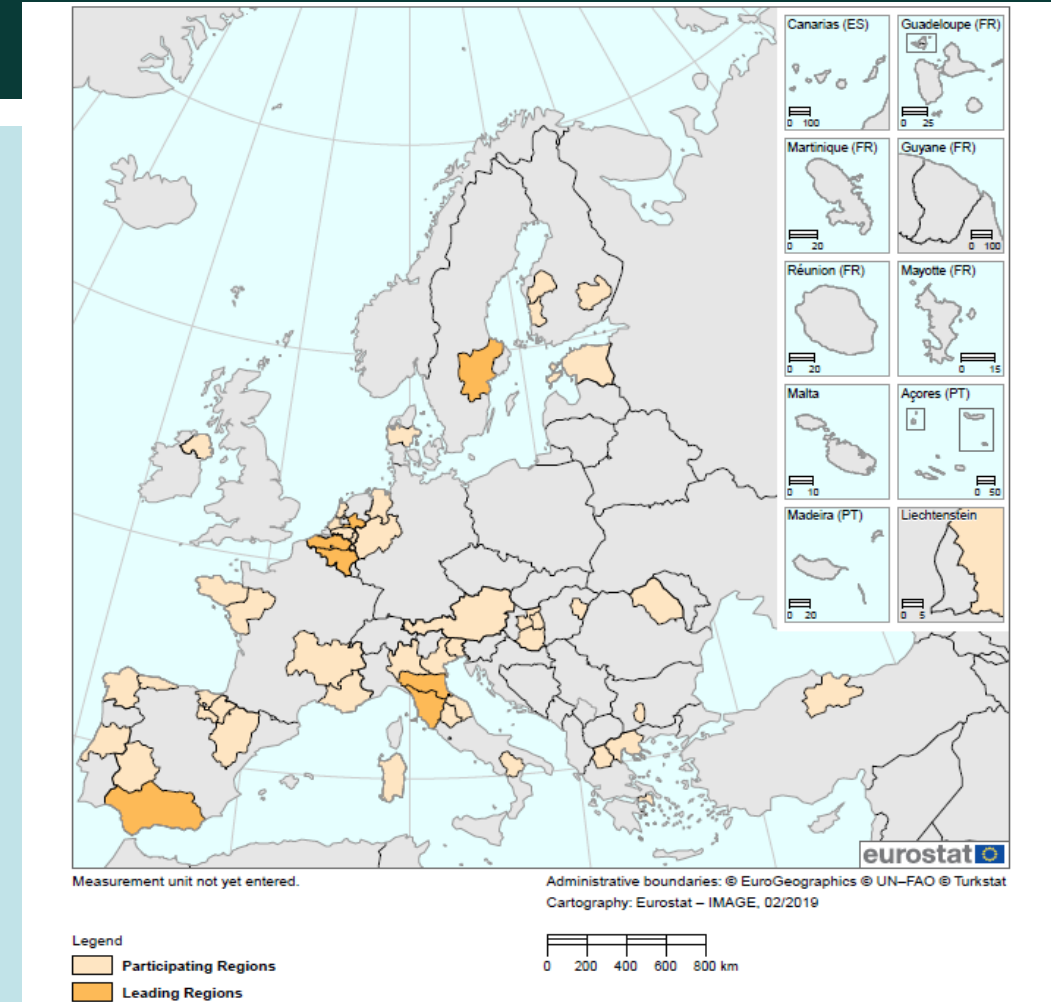
Water Smart Territories



Hydrogen Valleys

S3 Platform on Agri-food

- **52 territorial administrative units**
- **5 partnerships:**
 - Consumer Involvement in Agri-Food (4 regions/MS),
 - High-tech Farming (27)
 - Nutritional Ingredients (10)
 - Smart Sensors for Agri-Food (15)
 - Traceability and Big Data (21)
- 7 leading/co-leading regions
- Many participating regions come from: Italy (8), Spain (8), France (5), Hungary (4) and The Netherlands (4)
- **EC DGs** involved: DG AGRI, DG REGIO, DG RTD and JRC



High Tech Farming



Traceability & Big Data



Nutritional Ingredients



Consumer Involvement
in Agri-Food



Smart Sensors 4 Agri-
Food

S3 Platform on Energy (SP3Energy)

2/3

of all MS/regions have chosen an energy-related priority in their RIS3!

€40 BILLION

have been allocated from the Cohesion Policy to support investment in the low carbon economy transition (Thematic Objective 4)

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) – co-funding opportunities

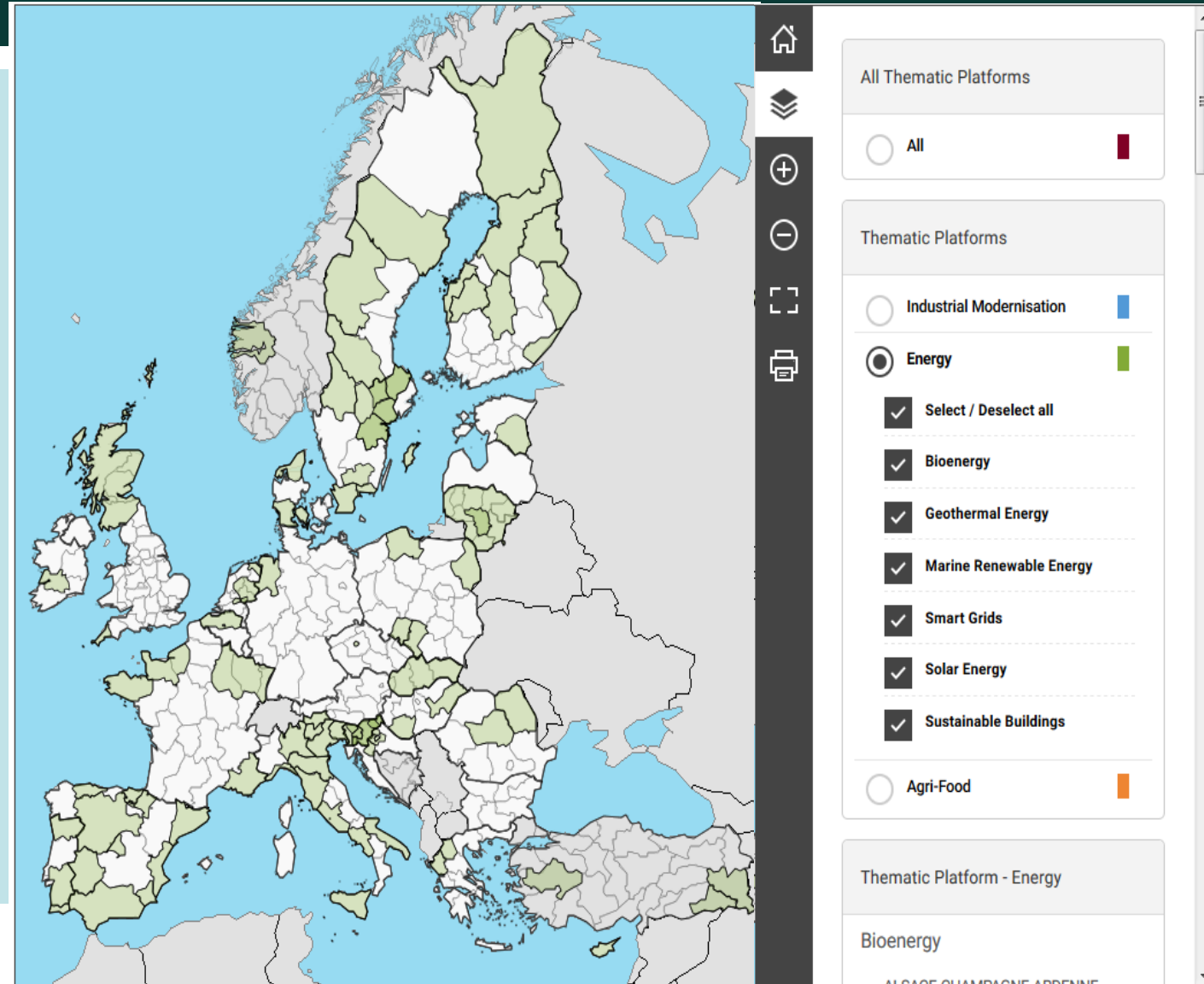
• Joint action between **DG REGIO, DG ENER and JRC**



S3 Platform on Energy (SP3Energy)

- 6 partnerships
- Heating & Cooling initiative
- 89 territorial administrative units, in 27 different countries

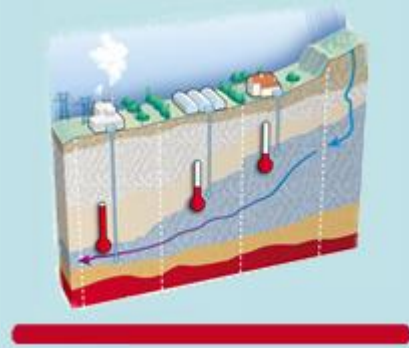
<http://s3platform.jrc.ec.europa.eu/s3p-energy>



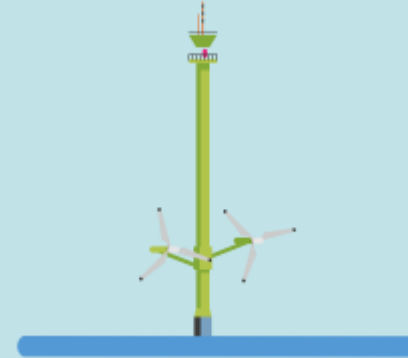
SP3Energy Partnerships



BIOENERGY



GEOHERMAL



MARINE RENEWABLE ENERGY



**SMART
GRIDS**

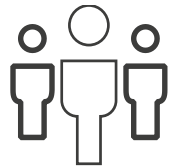


**SOLAR
ENERGY**



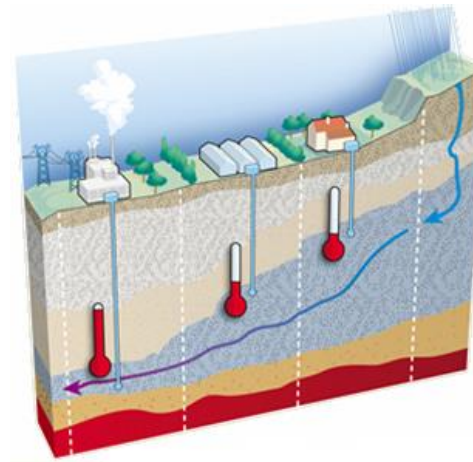
**SUSTAINABLE
BUILDINGS**

Interregional partnership for Smart Specialisation on **GEOTHERMAL ENERGY**



Leader

TUSCANY (IT)



11

REGIONS

ES: Asturias, Canary Islands;
FI: Northern Ostrobothnia (Pohjois-Pohjanmaa; Oulu);
IT: Tuscany, Lombardy;
NL: Arnhem/Nijmegen, East Netherlands, Groningen city;
PT: Azores;
UK: Scotland;
TK: West Turkish provinces (Zafer)



Partner regions of the S3 Partnership Geothermal Energy 2.0 will share, test and jointly develop new solutions that can help overcoming existing gaps and concerns in the geothermal sector, by developing a new governance model respecting territories and supporting private businesses



Interregional partnership for Smart Specialisation on **BIOENERGY**



Leaders

Lapland (FI) and
Castile and Leon (ES)

23

REGIONS AND
MEMBER STATES



Reference topics



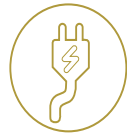
Biofuels
(bioethanol,
biogas)



H&C
(biomass-based)



Knowledge transfer
on biomass feedstock,
installations and energy
consumption



Electricity
(forestry power
plants,
agriculture
power plants)

**Castile and Leon
(ES)**

**Lapland
(FI)**

16



This interregional partnership aims at developing a collaborative framework to facilitate joint business among EU regions with bioenergy-related priorities in their Smart Specialisation Strategies.



European
Commission



Interregional partnership for Smart Specialisation on **MARINE RENEWABLE ENERGY (MRE)**



Leaders

Scotland (UK) and
Basque Country (ES)

16
REGIONS

The Marine Renewable Energy (MRE) partnership builds on the work and experience of the Advanced Manufacturing for Energy Applications (ADMA Energy) pilot within the Vanguard Initiative (VI), which is active across the blue economy and subsea sectors. The partnership seeks to apply expertise gained in the ADMA Energy pilot to demonstration specifically in the MRE sector, with an initial focus on sensing remote monitoring as sensing is a key enabling technology for the developing of offshore, wave tidal, and other MRE areas.

This partnership has been awarded by the European Commissions' DG Regio with an Interregional Innovation Project – Pilot Action, specifically focussed on addressing cross-regional investment projects in the area of sensing and remote monitoring.





Interregional partnership for Smart Specialisation on **SMART GRIDS**



Leaders

Provence-Alpes-Côte d'Azur (FR) and Basque Country (ES)

10 REGIONS AND MEMBER STATES

Basque Country (ES)

Provence-Alpes-Côte d'Azur (FR)

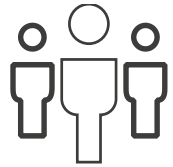


The aim of the partnership is to increase the competitiveness of the partner regions by collectively fostering new business opportunities in order to develop an overall approach to the value chain of smart grids.





Interregional partnership for Smart Specialisation on **SOLAR ENERGY**

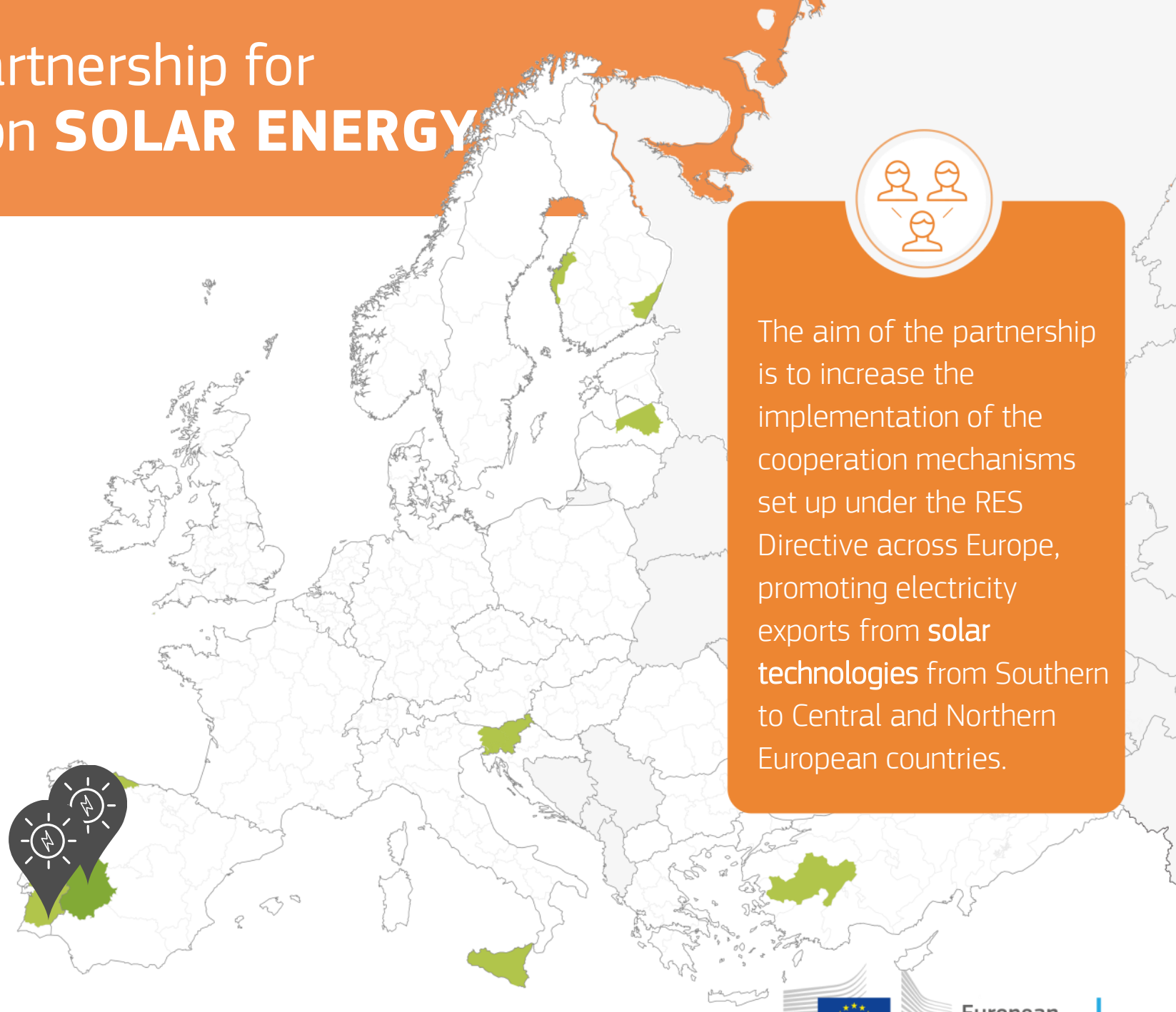


Leaders

Extremadura (ES)
and Alentejo (PT)

12

REGIONS AND
MEMBER STATES



The aim of the partnership is to increase the implementation of the cooperation mechanisms set up under the RES Directive across Europe, promoting electricity exports from **solar technologies** from Southern to Central and Northern European countries.

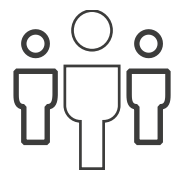




Interregional partnership for Smart Specialisation on **SUSTAINABLE BUILDINGS**



The Sustainable Buildings Partnership was established to identify and solve key industrial challenges in the existing buildings and construction sector.



Leaders

Andalusia (ES), North Great Plain (HU) and North West Croatia (HR)

42

REGIONS AND MEMBER STATES



Reference topics



Eco-construction, bioclimatism and insulation of buildings



Renewable energy integration in buildings



Systems of maximum energy efficiency in buildings and cities

The S3PEnergy HEATING & COOLING Initiative

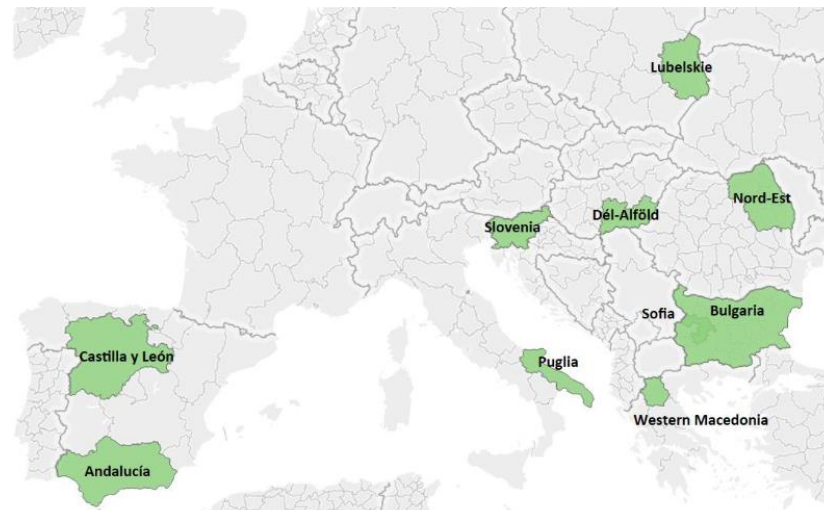
Objective: to support regions to improve their H&C strategies and to enhance their chances to access EU funds for their projects.

3 workshops with regional representatives and experts: info about available technologies, good practices examples of implementation of H&C strategies and financial options.

4 public reports: (1) workshop summaries; (2) available EU funding sources; (3) case studies on EU funding strategies for four H&C projects from this initiative, and (4) an overview of the activities performed in the project.

10

REGIONS AND
MEMBER STATES



<https://s3platform.jrc.ec.europa.eu/heating-and-cooling>

Publications



Overview of activities performed in the heating and cooling initiative of the smart specialisation platform for energy

Technical Report

CARLSSON Johan; JIMENEZ NAVARRO Juan Pablo; BERTOLDI Paolo; SEIGNEUR Isabelle



Identification of EU funding sources for the regional heating and cooling sector

External study report made for the Joint Research Centre

Veen, Roel van der; Kooijman, Esmee



Workshop on regional heating and cooling priorities and financing in the framework of the Smart Specialisation Platform (S3P-E H&C)

EUR - Conference and Workshop report by the Joint Research Centre

BOZA-KISS Benigna, CARLSSON Johan, JIMENEZ NAVARRO Juan Pablo, BERTOLDI Paolo

S3PEnergy support activities

- EUSEW 2018, Brussels: **Financing options for S3 implementation in Energy**
- March 2019, Seville: TAIEX-REGIO Multicountry Workshop on **State Aid Map in Energy Sector**
- July 2019, Budapest: Learning Lab on "**Supporting the effective uptake of Cohesion Policy funds in energy - S3 as a tool to enhance innovation capabilities in EU13**", jointly with Stairway to Excellence (S2E)
- **Good practices** in Energy and S3
- **Social Innovation** examples in Energy and S3
- etc.



Thank you!



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

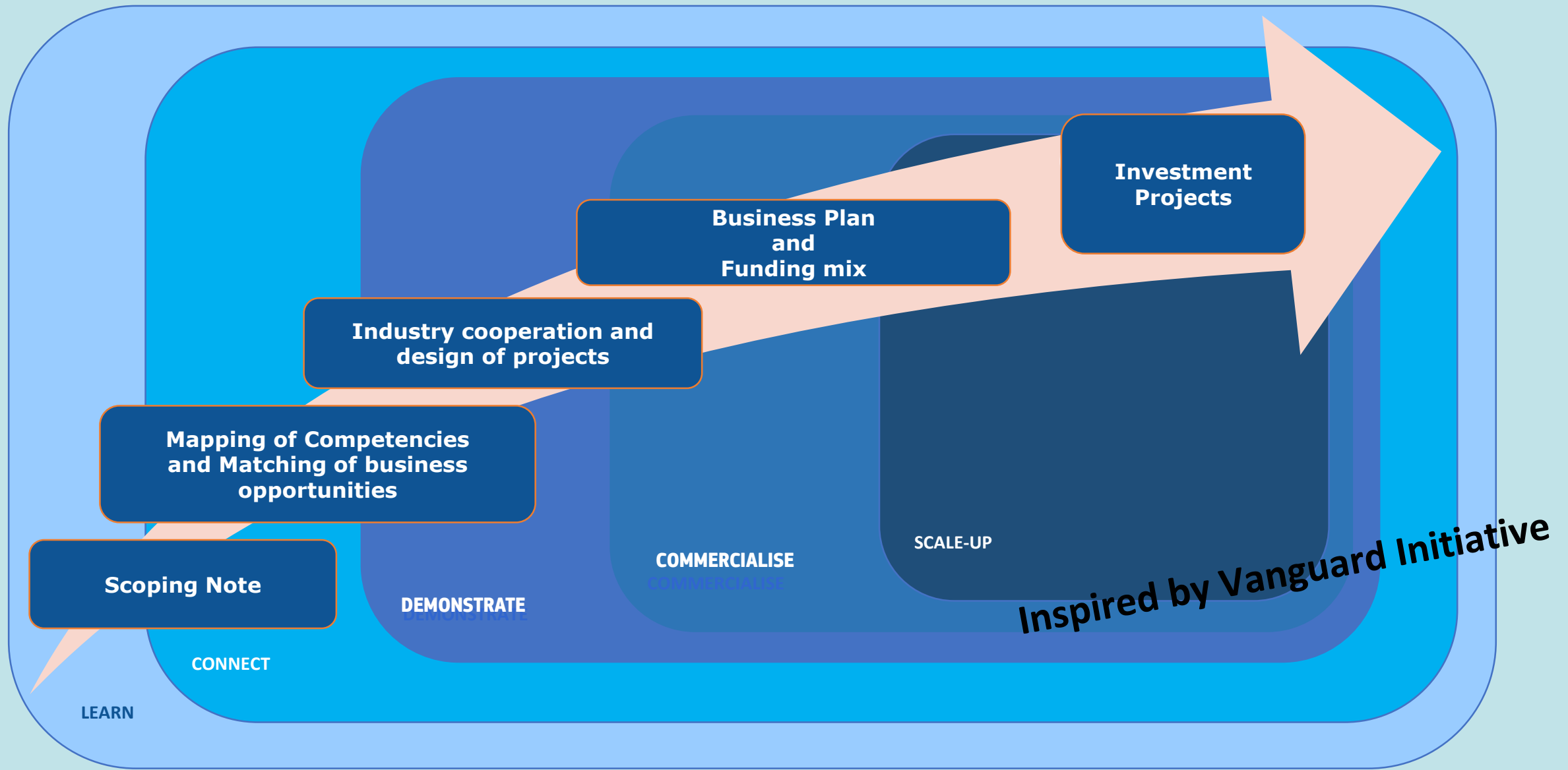
 @S3Platform #S3PEnergy

Isabelle.SEIGNEUR@ec.europa.eu

Fernando.MERIDA-MARTIN@ec.europa.eu

S3PEnergy: JRC-B3-S3PLATFORM-ENERGY@ec.europa.eu

S3 Thematic Partnerships - Methodology



Areas of Shared Interest

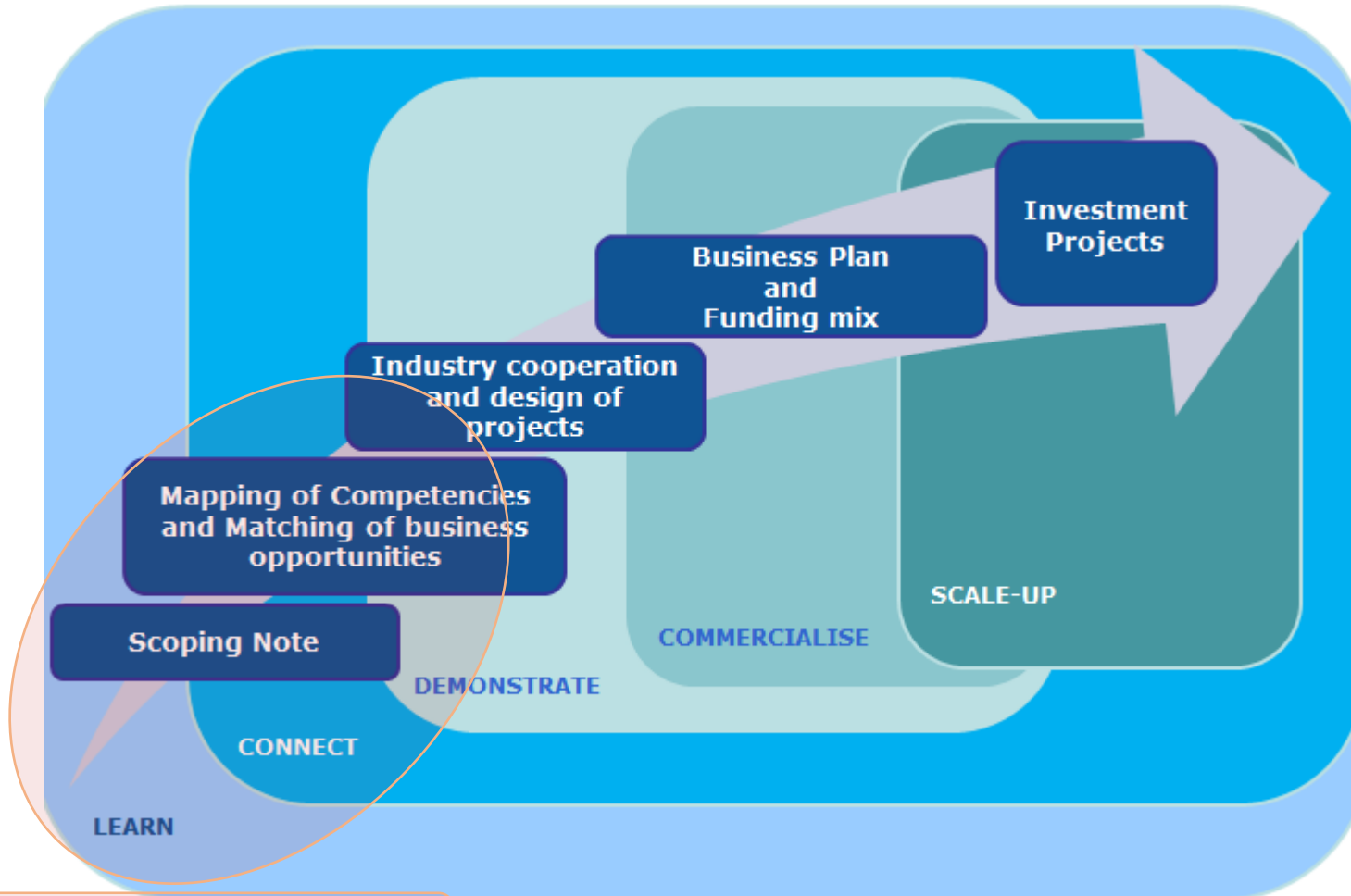
Co-funded Joint Calls

Demonstration Projects (TRL6/7) Joint Pilots

Access to new funding and New Markets

New Products and Services New Value Chains

S3P support: Methodological Manual

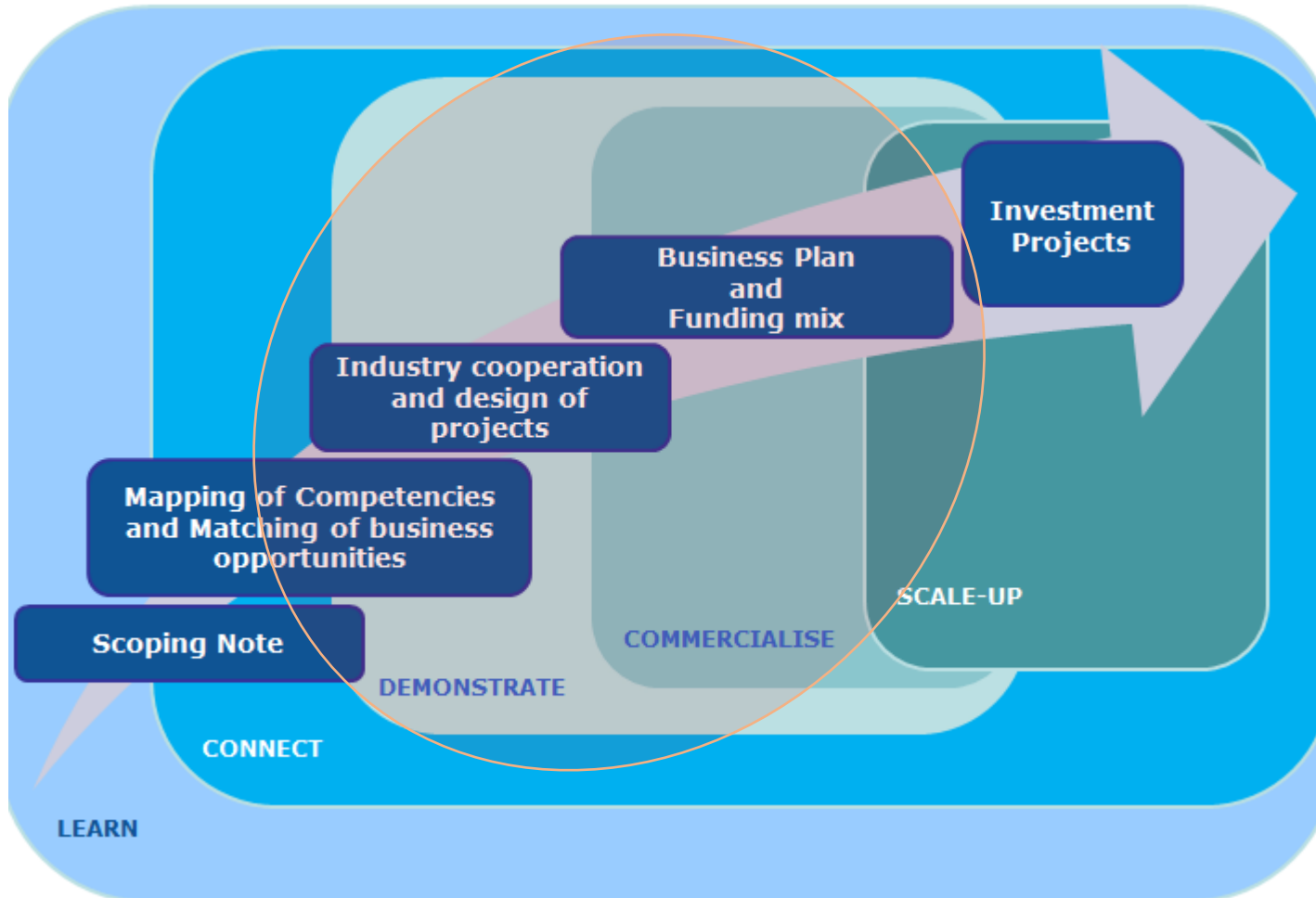


To assist public authorities responsible for ***designing and delivering interregional investment projects*** in the S3 context and ensure that these joint projects attract private sector interest sufficient to ensure their sustainability.



JRC S3 Platform support

S3 Interregional Innovation Projects: Pilot Actions



Under the Energy Platform, two **pilot projects** are in place from 2018, supported by DG REGIO with technical assistance:

1. "Smart Campus" Pilot, part of the **Sustainable Buildings Partnership**, to improve the energy efficiency of University Campuses
2. "Sensing and Remote Monitoring" Pilot, part of the **Marine Renewable Energy Partnership**



What is Smart Specialisation ?

= **Evidence-based considering all assets and problems in a region**, incl. External perspective / internal / global market

= No top-down decision, but **dynamic / entrepreneurial discovery process** uniting key stakeholders around shared vision

= Mobilisation of investments and **synergies across different departments and governance levels** (EU-national-regional)

= **All forms of innovation** – not only technology driven also social

= **Differentiation**: SWOT analysis (all types of assets), **competitive advantages**, potential for excellence, opportunities

= **Concentration of resources** on priorities, problems and core needs (no sprinkler principle, no picking the winners, yes to catalytic investments)

= **Place-based economic transformation**: rejuvenating traditional sectors through higher value-added activities, cross-sectoral links, new market niches by sourcing-in and disseminating new technologies rather than re-inventing the wheel; exploiting new forms of innovation