



## Opportunità della Piattaforma S3 “Advanced Materials for Battery Partnership” della Commissione Europea

AFIL, LE2C

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# Le partnership S3: cosa sono e obiettivi

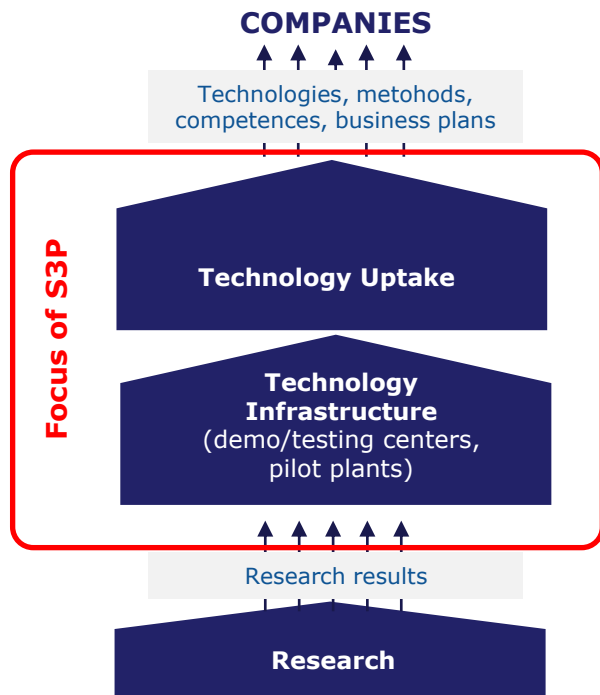
Le partnership S3 nascono per volere della Commissione Europea, in particolare dalla DG Regio, al fine di **identificare macro-aree tematiche di collaborazione tra le regioni** per accrescerne la competitività e resilienza:

- Agrifood
- Blue Growth
- Digital Innovation for Industry
- Energy
- **Industrial Modernization**
- Industrial Transition
- Education and Skills for S3
- Sustainable Development Goals
- Targeted Support



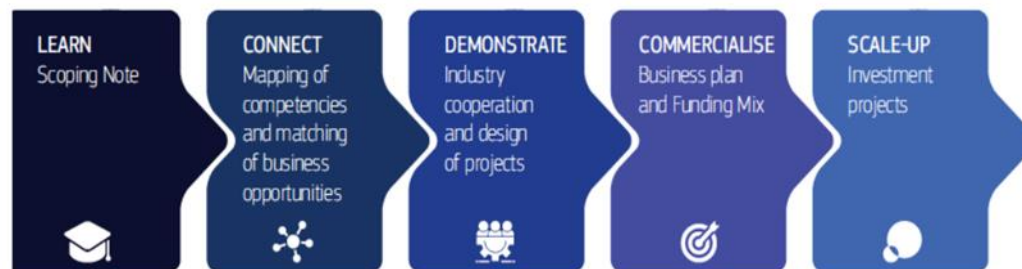
L'output delle partnership è la creazione di un **portfolio di progetti di filiera**, supportati nel loro sviluppo attraverso diversi programmi di finanziamento, in grado di **allineare ed identificare le priorità strategiche** per le istituzioni.

# Le partnership S3: metodologia



Le partnership mirano a progetti ad **alto TRL** che favoriscano il transfer tecnologico di soluzioni innovative, supportate dalla ricerca (Pilot Plants e demo-centres).


La **metodologia** per lo sviluppo di tali partnership si fonda su quella di Vanguard e prevede una prima fase di mappatura delle competenze regionali, la dimostrazione dell'innovazione proposta tramite progetti e poi la commercializzazione e lo scale-up delle soluzioni.



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# Le partnership S3 nell'area Industrial Modernization

Ispirate a Vanguard, le partnership nell'area Industrial Modernization sono molteplici.

 <p><b>ADMA ENERGY</b></p>	 <p><b>Advanced Material for Battery</b></p>	 <p><b>AI&amp;HMI</b></p>	 <p><b>BERRY+</b></p>	 <p><b>Medical technology</b></p>	 <p><b>Mining Industry</b></p>	 <p><b>Nano-enabled products</b></p>	 <p><b>Personalized Medicine</b></p>
 <p><b>Bio-economy</b></p>	 <p><b>Chemicals</b></p>	 <p><b>Cultural and Creative Regional Ecosystems</b></p>	 <p><b>Cybersecurity</b></p>	 <p><b>Photonics</b></p>	 <p><b>Safe &amp; Sustainable mobility</b></p>	 <p><b>Textile Innovation</b></p>	 <p><b>SME in Industry4.0</b></p>
 <p><b>Digitalization and safety for tourism</b></p>	 <p><b>ESM</b></p>	 <p><b>3D Printing</b></p>	 <p><b>Hydrogen Valleys</b></p>	 <p><b>Social Economy</b></p>	 <p><b>Sport &amp; Vitality</b></p>	 <p><b>Water Smart Territories</b></p>	 <p><b>Wireless ICT</b></p>

 Coordinate da AFIL (Regione Lombardia)

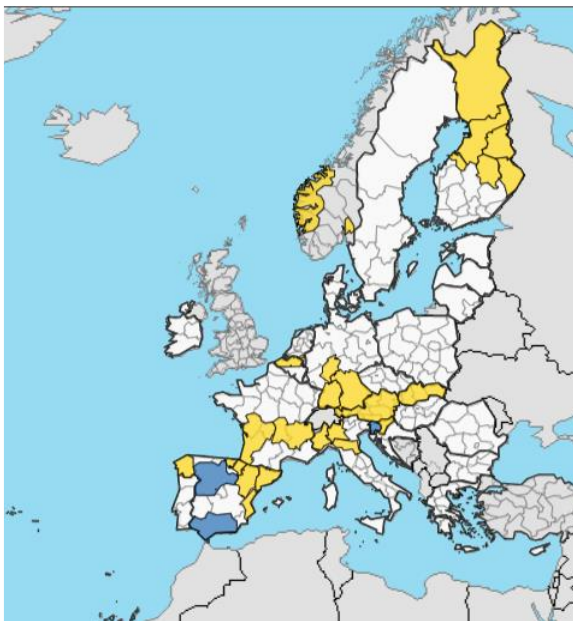
 AFIL come partner rappresentante Regione Lombardia

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# La partnership delle batterie: AMBP

## Updated Map of AMBP

Partner Regions (31)



### **LEADERS: Andalusia, Castile and Leon, Slovenia West, Lombardy**

- Aragon
- Austria
- Auvergne Rhone-Alpes
- Baden-Württemberg
- Basque Country
- Bavaria
- Brussels – Capital Region
- Catalonia
- Central Ostrobothnia
- Emilia Romagna
- Flanders
- Galicia
- Hessen
- Kainuu
- Lapland
- Metropol Region Eindhoven
- Navarra
- North Karelia
- Northern Ostrobothnia
- Northern Savonia
- Nouvelle Aquitaine
- Piemonte
- Slovakia
- Slovenia East
- Valencia
- Viken
- Western Norway

<https://s3platform.jrc.ec.europa.eu/batteries>

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# AMBP: horizontal areas

## ▪ **Sustainable Raw Materials, Extraction and Processing**

The objective is to map the resources in Europe, focusing on Co, Li and Graphite, to assess the impact for Europe in terms of sustainability of processes, logistics and technical viability.

(Finland, Andalusia, Alentejo)

## ▪ **Improved batteries for mobility applications**

The topic here is the manufacturing of cells components optimized for the mobility applications: production of advanced cathode and anode materials, Solid State Lithium-ion batteries and Nanostructured Silicon for batteries.

(Bavaria, Auvergne Rhone-Alpes, Norway)

## ▪ **Improved batteries for stationary storage applications** (based on Li, Na or redox flow batteries)

(Basque Country, Valencia)

## ▪ **Recycling and remanufacturing** of existing Lithium-ion Batteries

(Bavaria, Lombardia)

## ▪ **Network of research & testing centers** including advanced materials and materials coming from recycling, industrial cells and the full battery

(Slovenia, Lombardia)


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# GRAZIE PER L'ATTENZIONE!

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# LOMBARDY ENERGY CLEANTECH CLUSTER

**Evento «batterie per la mobilità  
sostenibile e lo storage stazionario:  
sfide ed opportunità per la Lombardia»**

**OMAR PEREGO (RSE)**

**26/01/2022**



## **HORIZONTAL AREA 5** (COORDINATED BY WEST SLOVENIA AND LOMBARDY)

### **PROJECT 5.1 – NETWORK OF PROTOTYPING & TESTING CENTERS**

**S3 Partnership on Advance  
Materials for Batteries  
(AMBP)**

**Main objective:** to provide **multi-point access to the equipment** needed for faster deployment of advanced materials along the battery value chain (advanced testing centers which can provide equipment and knowhow for **more efficient use of resources and faster time to applications**).

## TARGETS

Innovative solutions developed in research labs/start-up companies verified in a **real environment**;  
Creating **additional capacities** in different regions;  
Having **unified procedures** for testing;  
**Prototype lines** ready to adopt new chemistries.

## SECTORS

All sectors and areas that are developing materials, components and applications for batteries

## **West Slovenia**

TAB Mežica, Elaphe, GEN-I, ELES, Pipistrel, Podkrižnik, Iskra, Cinkarna, Universities and institutes

## **Basque region (Spain)**

CIC energiGUNE, TEKNIKER

## **Castilla y León region (Spain)**

CIDAUT, Foundation for Transport and Energy Research and Development, ICAMCYL,  
Institute for Business Competitiveness of Castilla y León

## **Piemonte, Lombardy, Emilia Romagna (Italy)**

Manz Italy Srl; Energica Motor Company S.p.A.; BETTERY Srl; Flash Battery Srl; Sovema Group S.p.A.;  
Graphene XT; RSE; CNR; Rei Lab S.r.l.; Kaitek S.r.l.; ENEL Distribuzione

Emilia Romagna, Lombardia and Piemonte are organizing an **Italian coordinated proposal**, inclusive of each regional peculiarities and industrial strong points.

## EMILIA ROMAGNA

Art-ER (Emilia Romagna) supports the local automotive industry that strongly demands for the presence of battery testing (both in R&D and validation phase). Thus, filling the actual gap with extra-UE testing providers. The aim is to increase, or at least maintain, the actual revenues coming from traditional ICE based automotive testing.

## LOMBARDIA

LE2C and AFIL clusters support the local stakeholders to upscale R&I results to industrial applications. The regional peculiarities are more focused to stationary application, including second life concept. Investments are necessary to promote new chemistry pilot lines and testing labs (from cells to whole systems), also for improving diagnostic and control systems.

I cluster sono facilitatori.

Le imprese e i centri di ricerca partecipano nella definizione dei progetti.

Il progetto è in fase di redazione del **business plan** che comporta l'analisi della **bancabilità** e la ricerca di finanziamenti.

Strumento costituito ad hoc è il «**Interregional Innovation Investments (I3)**»  
[https://eisma.ec.europa.eu/programmes/interregional-innovation-investments-i3-instrument\\_en](https://eisma.ec.europa.eu/programmes/interregional-innovation-investments-i3-instrument_en)

Lo strumento prevede co-finanziamento da parte degli stakeholder.  
Ci devono dunque essere interessi delle imprese.

# GRAZIE PER L'ATTENZIONE!



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# Prossimi passi

- **Manifestazione di interesse**
- **Mappatura**
- **Networking e condivisione di scopi**
- **Definizione di un «progetto lombardo»**
- **Cogliere opportunità iniziative Europee (AMBP, Vanguard, HE, Interreg, ...)**
- **....**



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