

VANGUARD INITIATIVE
New growth through smart specialisation

Webinar – Rede europeia Vanguard Initiative: Iniciativas piloto e oportunidades de financiamento Inter-regional

Vanguard Initiative: strategy, activities and main pilot initiatives
Klaus Niederländer, Network Manager

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The Vanguard Initiative

**Network of 33 Regional Governments/Public Authorities
(incl. Regional Development Agencies)**

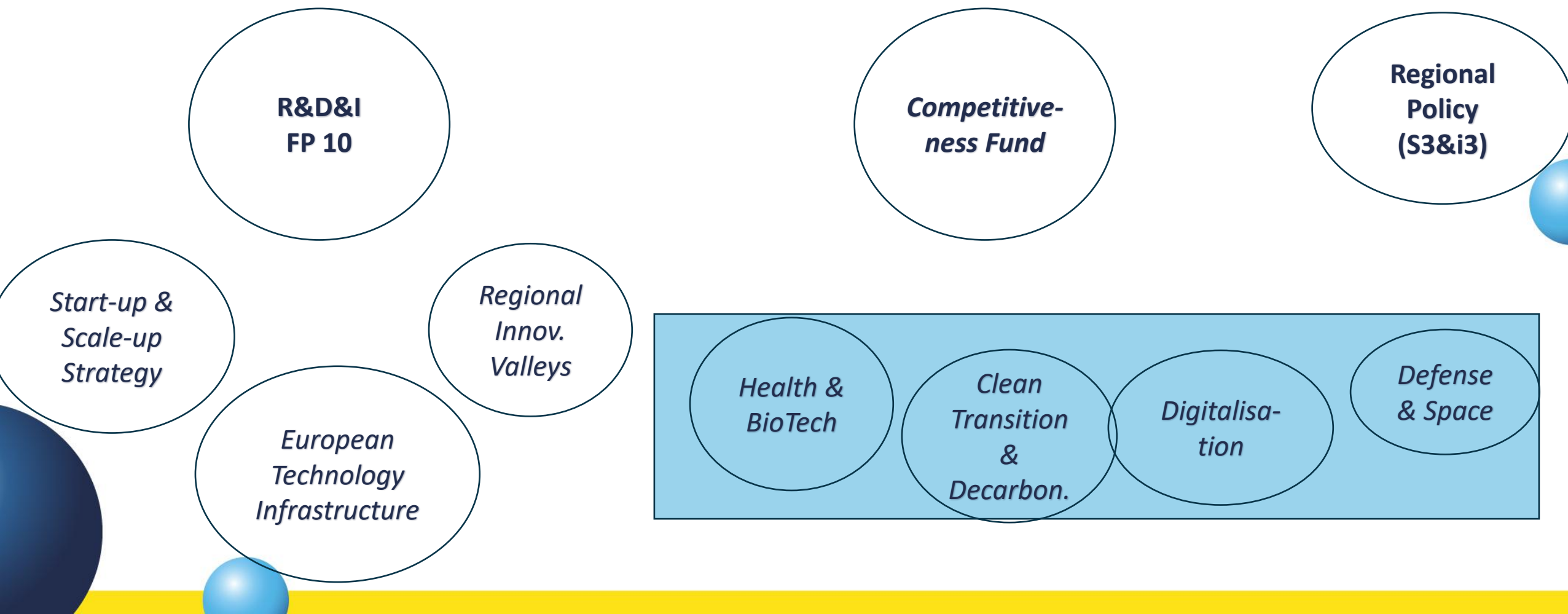
Vinnovate
Financial Tool

**8 Pilots /
Innovation
Platforms**

**Policy
Intelligence
&
Influencing**

The EU Policy & Funding Environment

The EU's New Multi-Financial Framework 2028-2034



The Pilot Universe

**Meeting, Exchange, Learning & Collaboration Platform
for Regional Innovation Actors**
(Clusters, Technology Centres, Universities, SMEs,...)

3D Printing

Manufacturing
Pilots

ESM

ADMA

Nano & Micro

Energy:
Hydrogen

Artificial
Intelligence

Bio
Economy

Smart
Health

VI Pilot Methodology

Market-Ready solutions

COMMERCIALISE

- Launch of new ventures and start-ups
- New value chains
- **TRL 9**

DEMONSTRATE

- Concretisation of application areas & demo-cases
- Development of Pilot lines and first of a kind factories
- **TRL 6 – 7 – 8**

CONNECT

- Matching events for complementary partners
- Developing demonstration cases

LEARN

- Scoping of innovation area
- Identify lead regions and actors
- Mapping of value chain (actors, technologies, missing elements)

Business & Investment Plans

ADMA - Advanced Manufacturing for Energy-Related Applications in Harsh Environments

4 Demonstration cases



- **Power Transfer:** high interest with hydrogen focus
- **Decommissioning:** strategic priority
- **Next Gen Materials:** coatings, composites
- **Mooring Systems:** early-stage interest

Main lines of actions



- **Review & development of demo cases**
- **Scouting new offshore opportunities**
- **Capacity building & stakeholder engagement**
- **Cross-pilot coordination & funding support**

Key achievements



- **Funding diversification following MARIS3-NET status**
- **Integration into S3 Blue Economy Platform (2024)**
- **Cross-pilot event at Key Energy Rimini in 2024**
- **Strategic study visits in Scotland & Poland**

3D-Printing

8 Demonstration cases



Horizontal Industrial Challenges

- **Increasing Life of Parts:** 'Maintenance' and 'repairing'
- **Lighter Components:** Deployment of 'hybrid' components
- **More Sustainable Production:** Smart AM for Sustainable Production
- **Improving Finishing:** Automated removal and smoothing
- **Automatization of AM factories**

Vertical Application Areas

- **Large Parts**
- **Integrated Electronics**
- **Robotics Applications**

Main lines of actions



Be informed:

- Interregional funding opportunities
- Developments (applications-technologies, competences)

Be Connected:

- New users/customers
- New partners

Innovate & Deploy

- New users/customers
- New partners

Influence

- Contribute to strategic road mapping
- Contribute shaping interregional/EU policies

Key achievements



Participation: 26 regions involved with 400+ organization & 600+ individuals

Successful funding; example of Metal Catal project with cascade funding

Policy Influencing: Additive Manufacturing Structured Dialogue

Events 2025:

- VI 3DP Pilot Funding Webinar
- 3DP Business Innovators Meeting

Efficient & Sustainable Manufacturing (ESM)

4 Demonstration cases



De- & Re-Manufacturing

Digital Transformation

EFREFO (energy-flexible and resource efficient factory operation)

Polymer-based functional products

Main lines of actions



Integrate a multidisciplinary set of advanced and innovative enabling technologies and digital innovations (TRL 7-8)

Offer services to European end-users, mainly manufacturing companies, to solve specific industrial challenges related to their products.

Manufacturing Efficiency & Sustainability Focus
Increase throughput, improve quality & reduce costs vs reduce energy consumption & emissions

Key achievements



Participation: 17 regions involved with 4 further regions interested

Funding; A number of EU funding projects submitted (Interreg, Horizon, i3, Cosme)

Events in 2025:

- Smart Polymer Congress Milano
- ...

Nano-/Microsystems and High-Tech Materials for Industrial Transformation

2 Demonstration cases



- **M4NA - Mems for Nanoanalytics**
- **Structural Health Monitoring**

Main lines of actions



- **Rescoping & revitalising the pilot:** to obtain a strong and vivid community
- **Develop new concrete (from TRL 5) inter-regional platform** of collaborative demonstration cases in the field high-tech materials for the industrial transformation.
- **Accelerate uptake of high-tech materials:**
- **Successful restructuration and continuation of the Pilot**

Key achievements



- **New communication strategy**
- **Relaunch event in Q2 2024**
- **Definition of new interregional value chains and/or the launch of new demo-cases**
- **Identify and facilitate activities and synergies across VI pilots, e.g. with hydrogen pilot**

Smart Health

4 Demonstration cases



- **RegMed XB – Regenerative Medicine**
South Netherlands & Flanders
- **Personnal data management platform :**
Flanders, East NL, EN Finland
- **Radiotracers characterisation and synthesis**
NE Romania, Emilia Romagna, Slovenia
- **Mobile app support for chronic diseases :**
Slovenia

Main lines of actions



- **Scout for funding opportunities :**
- **Pilot meetings :** Co-creation sessions, updates on EC regulations and funding, matchmaking sessions, pitches, site visits, ...
- **Communicate, foster interregional cooperation and ecosystem relations**
- **Support democase development:** needs analysis, ideation, on-demand meetings

Key achievements



- **Scout for funding opportunities :** 1 Interreg and 3 Vinnovate selected for funding (1,4M€), ...
- **5 Pilot meetings :** joint meetings with S3P MedTech, pitches of startups
- **Foster interregional cooperation and ecosystem relations :** presentation video, collaboration with EP PerMed
- **Support democases development :** Demonstration service (S3 CoP)

Bio-Economy- Innovative use of non-food biomass

4 Demonstration cases



- **Bioaromatics**
Produce lignin-based aromatic molecules and innovative sustainable materials
- **Lignocellulosic biorefinery**
From lignocellulose biomass to intermediate and end-products of bulk and fine chemicals
- **Liquified Bio-Methane**
Advancing the state of the art of biogas upgrading
- **Biopolymers**
Matching polymer market applications and new biobased technologies

Main lines of actions



- **Build an interregional bioeconomy alliance by promoting stakeholder engagement in the Pilot**
- **Demonstrate the bioproducts' large-scale feasibility production by raising public and private funds**
- **Increase bio-based products market uptake by accelerating interregional demonstration projects**

Key achievements



- 17 regions in 10 countries**
- 10 annual events, 500+ bio-based experts**
- 10 project proposals from new Pilot partnerships**
- 1 Memorandum of Understanding signed with the Bio-based Industry Consortium (BIC)**
- Cooperation on BIC Regional funding platform**

Hydrogen - Driving Europe's Green Transition

4 Demonstration cases



- **HYDROCOMP:** Standardizing H2 pipelines & vessels (Małopolska, Saxony)
- **Industrial Decarbonisation:** Replacing fossil fuels with green H2 (Slovenia)
- **H2 Networks:** Connecting H2 research & industry (Lombardy, Scotland, Wales)
- **H2 in Shipping:** Applying H2 in maritime transport (Friuli Venezia Giulia, Lombardy, Slovenia, Małopolska)

Main lines of actions



- **Expand & Strengthen Partnerships:** Recruit new regions & stakeholders
- **Advance Demo-Cases:** Refine projects & scale up hydrogen applications
- **Secure Funding:** Pursue EU funding (e.g., I3 calls)
- **Enhance Governance & Outreach:** New Community Manager, boost visibility.

Key achievements



- **Partnership Growth:** 17 member regions, 30 stakeholders engaged.
- **Funding Momentum:** Vanguard H2 IVC I3 proposal submitted (Dec 2025).
- **Active Engagement:** Hosted "H2 Pitching & Matchmaking" (March 2024, 13 pitches).
- **EU Presence:** Strong participation in European Hydrogen Week & Hydrogen Europe.

Artificial Intelligence

Demo cases under review



- **Building European AI value chains with social impact**
- **Encourages cross-regional collaboration via networks** like EEN, EDIHs, and the Digital Transformation Accelerator

Main lines of actions



- **Foster interregional AI value chains through champions & collaborative networks**
- **Support B2B & B2C AI initiatives by leveraging existing ecosystems**
- **Enable access to EU funding (e.g., Horizon Europe, I3)**
- **Provide guidance on joint project development and innovation-driven cooperation.**

Key achievements



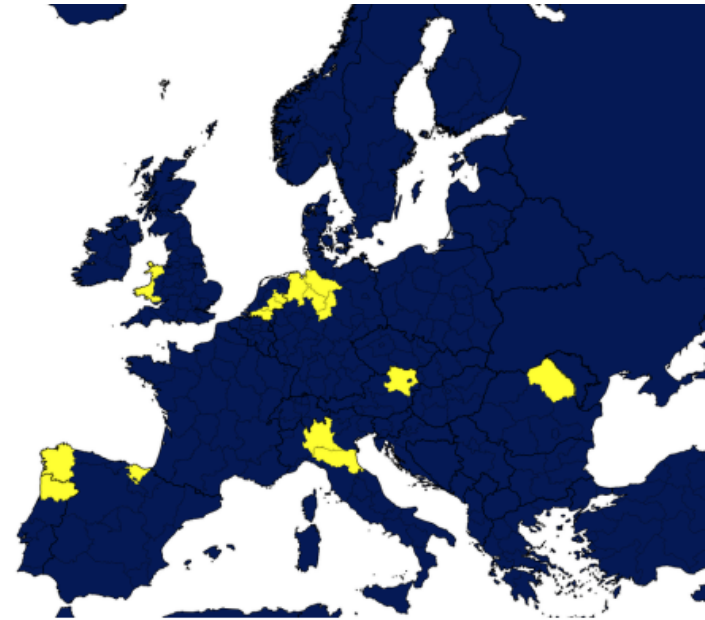
- **Partnership:** 17 member regions, 30 stakeholders engaged.
- **Funding Momentum:** Preparation of EU project proposals
- **Active Engagement:** Final Event AI REDGIO 5.0 , Brussels November/December 2025



Vinnovate – the Interregional Funding Tool of the Vanguard Initiative

List of participating regions

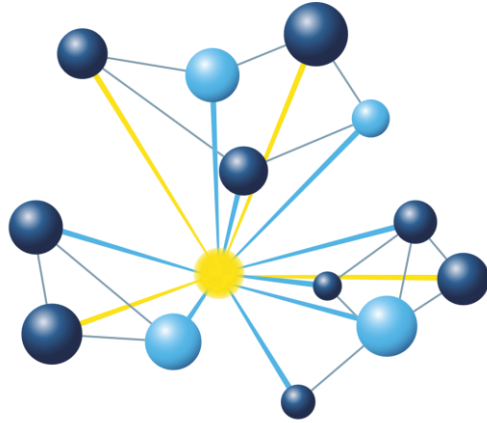
Only organisations located in these regions are eligible for funding!



- East NL (Gelderland & Overijssel provinces)
- Noord Brabant
- Lombardy
- Norte
- Basque Country
- Lower Austria
- Emilia-Romagna
- Wales
- Lower Saxony
- Galicia
- North-East Romania

Timeline Overview of Call 2025

- 2nd of May 2025 (17:00 CET): Opening of the Call
- 15th of September 2025 (23:59 CET): Closing of the submission of the “project fit form”
 - We encourage applicants to submit their ‘Project Fit Form’ as soon as possible: this will give them more time to prepare the actual proposals
- 15th of October 2025 (23:59 CET): Closing of the submission of “full” proposals
- 18th of December 2025: Communication results to applicants
- December 2025/February 2026: Signing of consortium agreement and funding negotiations, according to the respective regional/national rules, if necessary.



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