EU Strategy for the Adriatic and Ionian Region
EUSAIR

3RD FORUM OF THE EU STRATEGY FOR THE ADRIATIC AND IONIAN REGION

CATANIA 24-25 MAY 2018

VALENTINA PINNA

THE ROLE OF NETWORKS AS INNOVATION SYSTEMS INTEGRATORS

LESSONS LEARNED FROM THE VANGUARD INITIATIVE

VANGUARD INITIATIVE

OUR REGION OUR FUTURE

Interreg ADRION ADRIATIC-IONIAN
EUSAIR FACILITY POINT

This event is co-financed by the European Regional Development Fund

VIDEO

VANGUARD INITIATIVE
New growth through smart specialisation

What is the Vanguard Initiative?.

- **Industrial Innovation Initiative** focusing on **market uptake** of innovative technologies (KETs)
- **Interregional cooperation** between **innovation ecosystems** (regional authorities, clusters, businesses, knowledge institutes)

Industry based S3, Smart Specialization as coordination principle

- Exploring and **facilitating public-private investment**
- **Active participation** in the **network** structure and at **pilot level**

Main features of the Vanguard Initiative

- **Bottom-up, Industry involvement, Cluster facilitation**
- **Competitive EU value chains**
- **"Pilot initiative" for S3 Platform on Industry Modernization**
- **Strong political commitment at regional level** and ambition to co-shape **EU policy agenda** (Letter to the Council, Milan Declaration)
- **Multilevel governance, multi level funding synergies**
- **Structured dialogue with European Institutions**

VANGUARD INITIATIVE
New growth through smart specialisation

How Vanguard Works

Vanguard methodology

VANGUARD INITIATIVE
New growth through smart specialisation

UPSCALE

COMMERCIALISE or INDUSTRIAL UPTAKE

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

Industry Owned

DEMONSTRATE

- Networked **demonstrators**
- **Pilot lines** and first of a kind factories
- **TRL 6 – 7 – 8**

Industry Driven

CONNECT

- Matching events for **complementary partners**
- Developing industry led **demonstration cases**

Industry Driven

LEARN

- Developing a **scoping paper**
- Mapping questionnaire
- Identify lead regions and actors

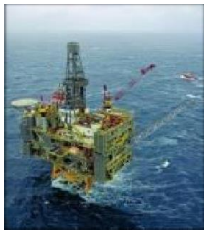
Industry Inspired

Business & Investment Plans

3RD FORUM OF THE EU STRATEGY FOR THE ADRIATIC AND IONIAN REGION
CATANIA 24-25 MAY 2018

OUR REGION OUR FUTURE

Vanguard methodology tested in 5 thematic pilots





1st generation

Advanced Manufacturing for Energy applications

3D Printing

Efficient & Sustainable Manufacturing

2nd generation

Bioeconomy

Nano Enabled Products

Challenge driven or Technology Driven pilots

VANGUARD INITIATIVE
New growth through smart specialisation

5 Pilots & 30 demo cases: test bed for Thematic S3 Platform

3D-printing	ADMA Energy	Efficient and Sustainable Manufacturing	Bioeconomy	New Nano-enabled Products
3D printed hybrid component	Corrosion	De-and Remanufacturing	Lignocellulose biorefinery	Nanowires for ICT and energy applications
Additive Subtractive Platform High Precision & High Finish Production	Manufacture of large-scale components	Adaptive and intelligent assembly and manufacturing systems	Bio-aromatics	Nano enabled Micro System for Bio Analysis (NeMs4Bio)
3D printed automotive components for large, medium, and small complex parts	Operations and Maintenance	Advanced Sustainable Surface and Coating Manufacturing Technologies on Polymers	LNG Blue Corriodors	Nano Enabled Printed Electronics
Machinery, tooling and complex shapes	Sensing and Instrumentation	Digital and Virtual Factory integrating planning and stimulation into operative environments		
3D-Printed Customized Components for Orthosis, Exoskeleton and Exoprosthesis		Energy-Flexible and resource-efficient factory operation		
Mass-customised 3DP consumer products				
3DP in Textile				

VANGUARD INITIATIVE

Test bed: Pilots and Demo cases

Criteria for demo cases

- **Demonstration projects**, no research (>TRL 5 - post prototyping)
- **Industrial Commitment** (to lead/participate/co-invest)
- **European dimension** – need to provide an added value compared to what exists at regional level
- Added-value of **joint demonstration**

Each Demo Case =

- Combination of complementary demonstration facilities
- Group(s) of companies accessing infrastructure (TRL6-8)
- Industrial replication & upscale (if the above is successful) (TRL8-9)

3 types of Demo Cases

- Challenge driven or technology driven
- Connecting existing or building new demonstration infrastructure
- Connect & upgrade existing infrastructure (hybrid format)

VANGUARD INITIATIVE

Test bed: Pilots and Demo cases

- **Cooperation** between clusters, companies and knowledge institutes in specific technology field or application domain

- **Accelerate market development** for high-value added **products** or uptake of innovative **processes**

- **Interregional joint-demonstration projects / European Network of Demonstrators**
- Building of new **industrial value chains** through a **pipeline of investments projects**
- **EU global competitiveness, looking at economic and social impact and susutainability**

VANGUARD INITIATIVE

Vanguard Initiative Where are we?

Learning by doing

LEARN → CONNECT → DEMONSTRATE → COMMERCIALISE

Monitored by JRC and other EC services

30 demo cases at different maturity level

Upscale

2 Demo cases developed a business plan and started the dialogue with the EIB

Signature of MoU by regions involved (on going)

VANGUARD INITIATIVE
New growth through smart specialisation

Pilot and demo cases: different level of maturity

3RD FORUM OF THE EU STRATEGY FOR THE ADRIATIC AND IONIAN REGION

CATANIA 24-25 MAY 2018

OUR REGION OUR FUTURE

Mainstreaming of Vanguard experirnce

VI methodology adopted for the launch of S3 thematic platforms

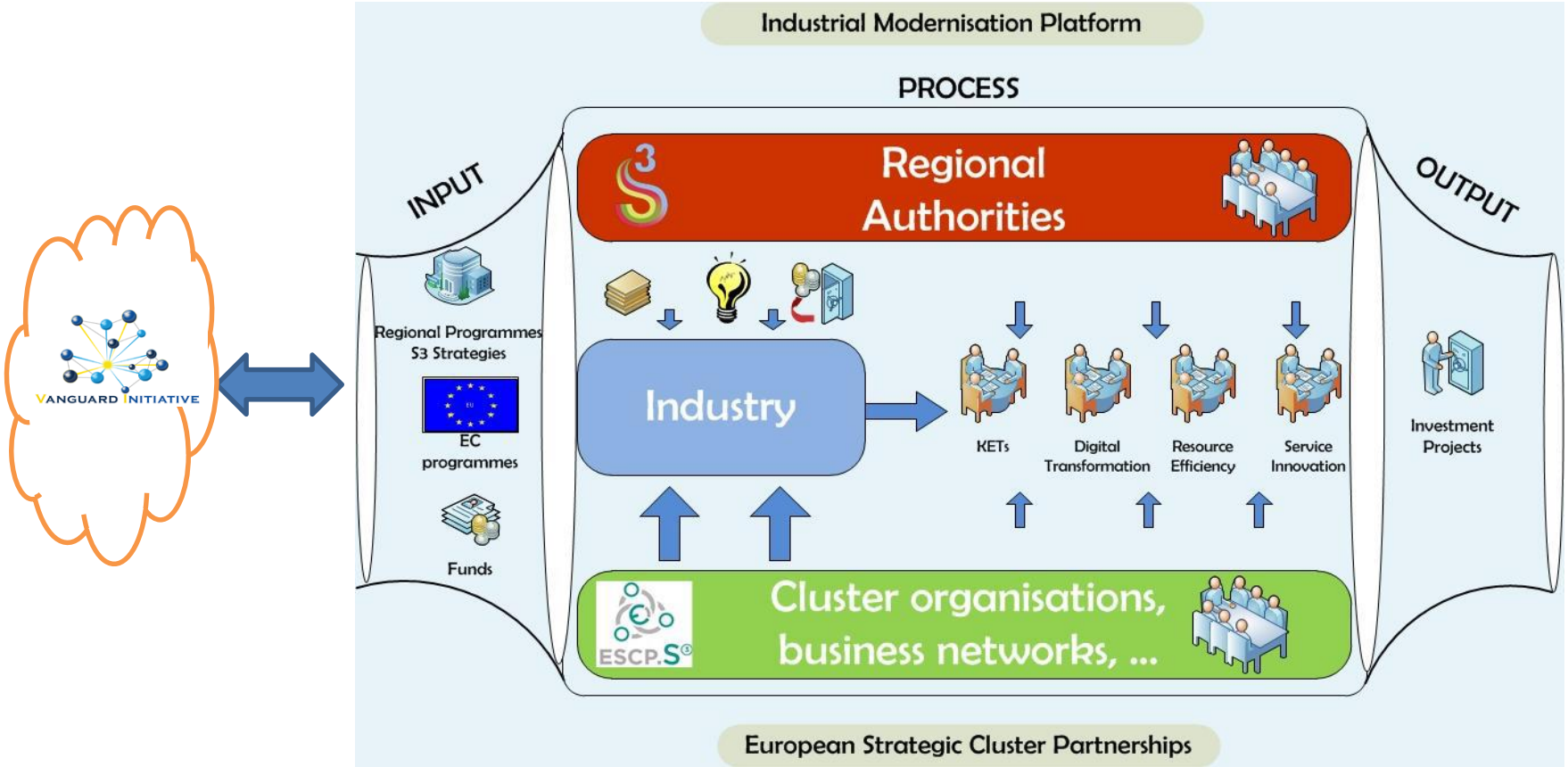
(ao DG REGIO, GROW, RTD, JRC, AGRI, CONNECT, ENER)

Migration under the umbrella of the S3 Platform on Industrial Modernisation

Structured dialogue with European Institutions

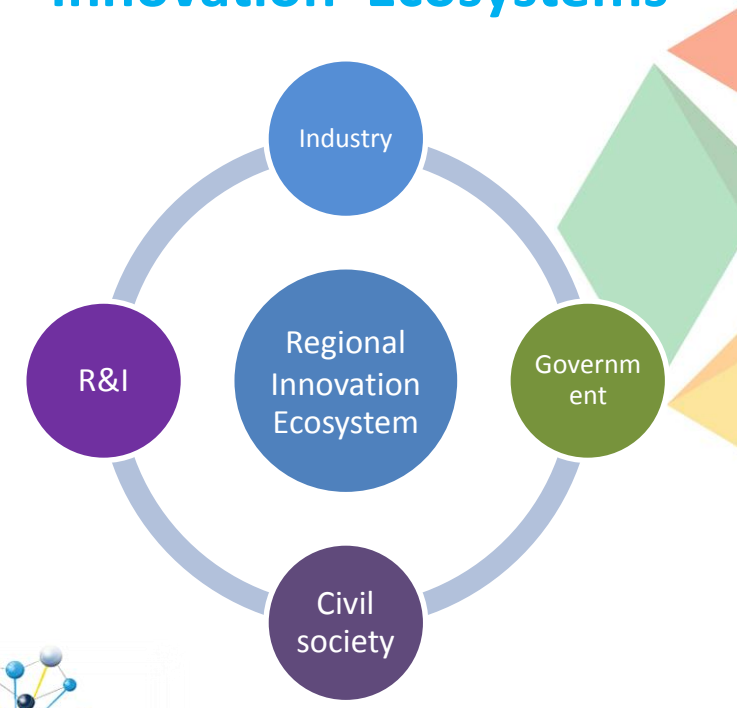
VANGUARD INITIATIVE

Mainstreaming of Vanguard experirnce



Lessons learned:

Importance of place based Innovation Ecosystems



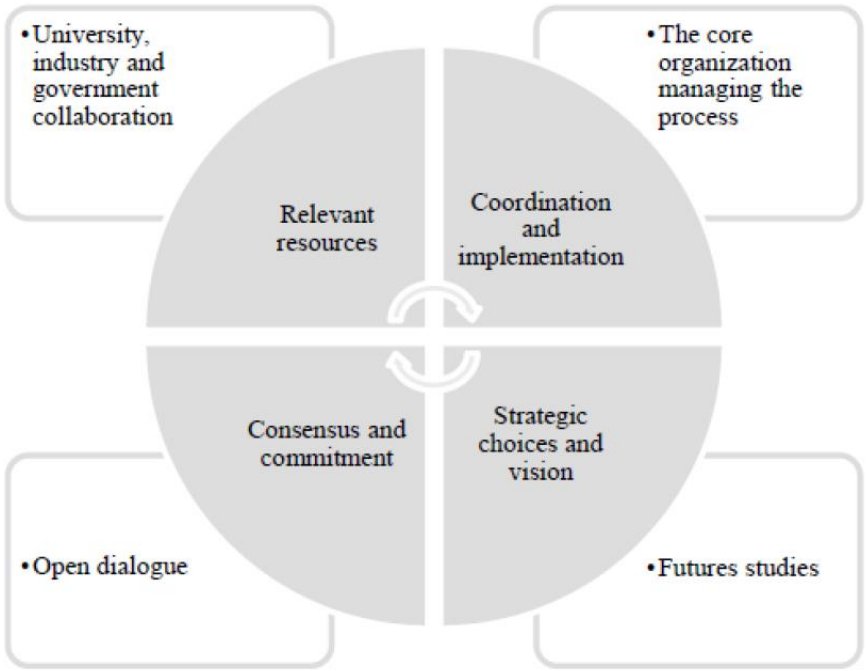


Fig. 1 – *Model for building innovation ecosystems.* (Credits: Oksanen and Hautamäki, 2014)

JRC Report on Place-based Innovation Ecosystems 2017

VANGUARD INITIATIVE
New growth through smart specialisation

Lessons learned : S3 as coordination principle for joining up outside the region

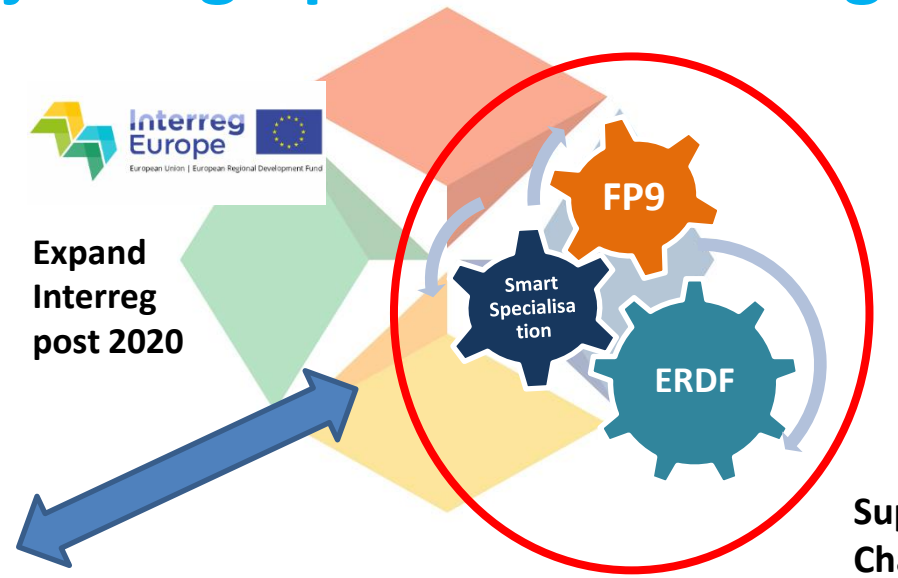
D

C

Region A

Expand Interreg post 2020

Interreg Europe



Region B

Encourage Strategic Cluster partnerships

Support Value Chain Initiatives

Projects at the right functional dimension

Strengthen S3 Thematic Platforms

S3 SMART SPECIALISATION PLATFORM

Lessons learned: Territorial impact needs synergies

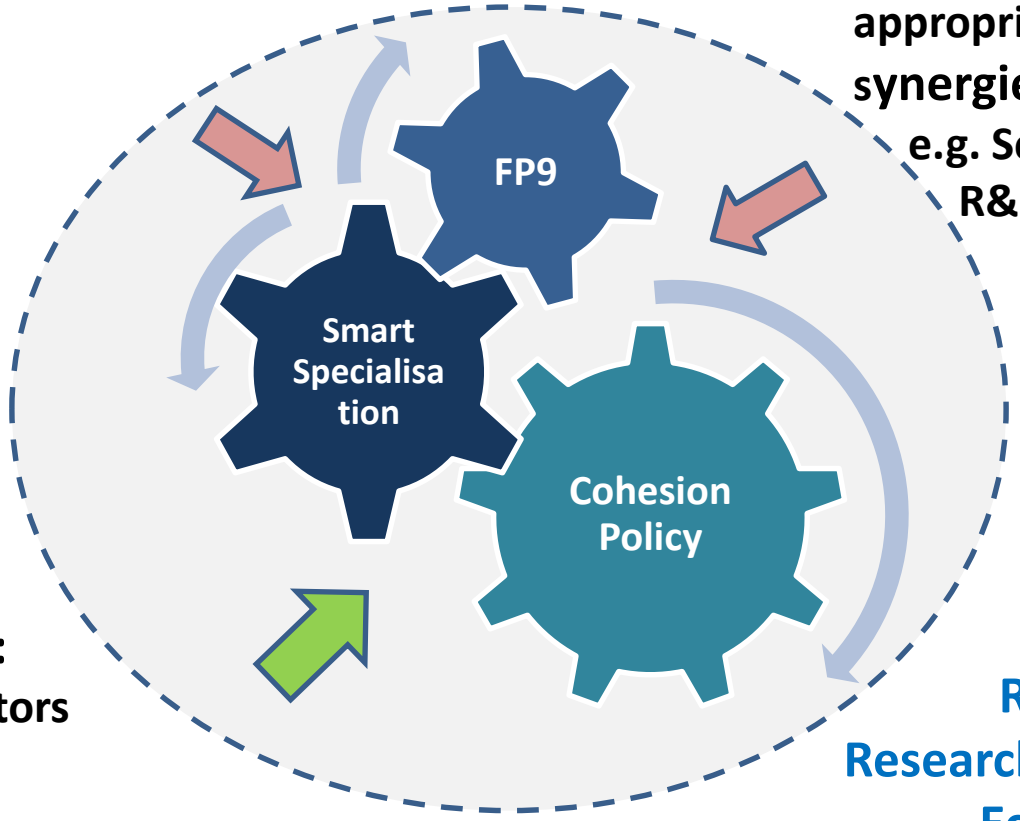
Awareness of the territorial dimension:

- Research infrastructure
- Innovation Capacities
- Skills

Combining funding

Building critical mass:

- Mobilising the key actors
- Quadruple helix
- Concentration



Ensuring appropriate resources & synergies:

e.g. Seal of excellence
R&I FP- ESIF-EFSI

VANGUARD INITIATIVE

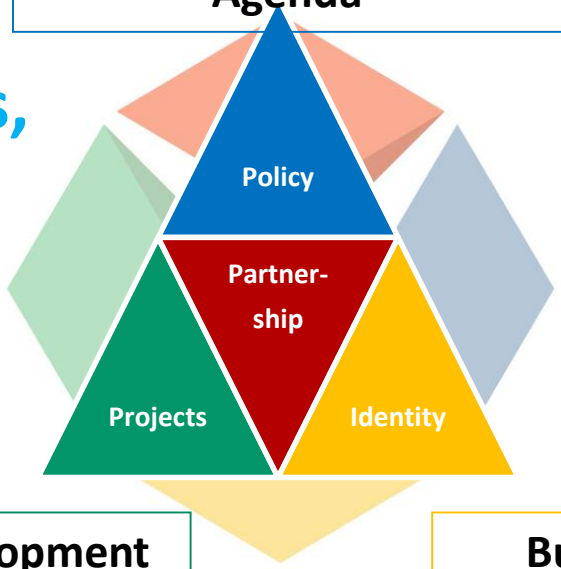
Regional Research & Innovation Ecosystem

3RD FORUM OF THE EU STRATEGY FOR THE ADRIATIC AND IONIAN REGION
CATANIA 24-25 MAY 2018

OUR REGION OUR FUTURE

Lessons learned: Policy, Partnerships, Projects, Identity

Influencing EU Research & Innovation Policy Agenda



Building Partnerships and capacities to work together valorising the existing networks and platforms

Supporting project development & investments engaging EUSAIR partners in EU opportunities

Building the identity of EUSAIR, mutual knowledge, building trust

3RD FORUM OF THE EU STRATEGY FOR THE ADRIATIC AND IONIAN REGION
CATANIA 24-25 MAY 2018

OUR REGION OUR FUTURE

VANGUARD INITIATIVE
New growth through smart specialisation

THANK YOU

Valentina Pinna
Head of sector Research & Innovation
Lombardy Region

Chair of the Vanguard Initiative

@VI_Brussels #Vanguardinitiative

www.s3vanguardinitiative.eu