

VANGUARD INITIATIVE
New growth through smart specialisation

Vanguard Initiative

Gavin Lewis –Welsh Government (VI Chair)

What is the Vanguard Initiative: A network of many regions



- Regional membership
- Industry based S3
- Political commitment (Milan Declaration)
- Mobilizing and organizing stakeholders in the region
- Active participation in the network structure and core activities
- Brussels base with decentralised delivery

Place-based approach to boost Regional Innovation Ecosystems

Policy Influencing

- How to fund technology uptake activities and how to join forces to support their roll-out
- Advocating for stronger commitment to enable effective synergies between EU funding tools and instruments, with regional and national funding

Interregional Collaboration

- Promoting co-investments in European priority areas
- Facilitating access to combined funding for co-investment projects
- Taking advantage of better synergies between regional, national and European instruments to support interregional collaboration

SMEs and Intermediaries

- Increase the competitiveness of companies and scale-up regional businesses
- Project development beyond TRL 5
- Exclusive networks of pilot plants, demo sites and partners

How does the Vanguard Initiative deliver?

39 of the most advanced industrial regions in Europe leading by example in delivering growth and jobs through industry-led interregional cooperation, co-creation, and co-investment

5 Task Groups

Vanguard Pilot Monitoring

Policy Influencing

Co-Funding and Financing

Future of the Vanguard Initiative

Stakeholder Engagement

8 Pilot Projects, over 30 demo-cases

New Nano-Enabled Products

Bio-Economy

Efficient Sustainable Manufacturing

High-Performance Production through 3D Printing

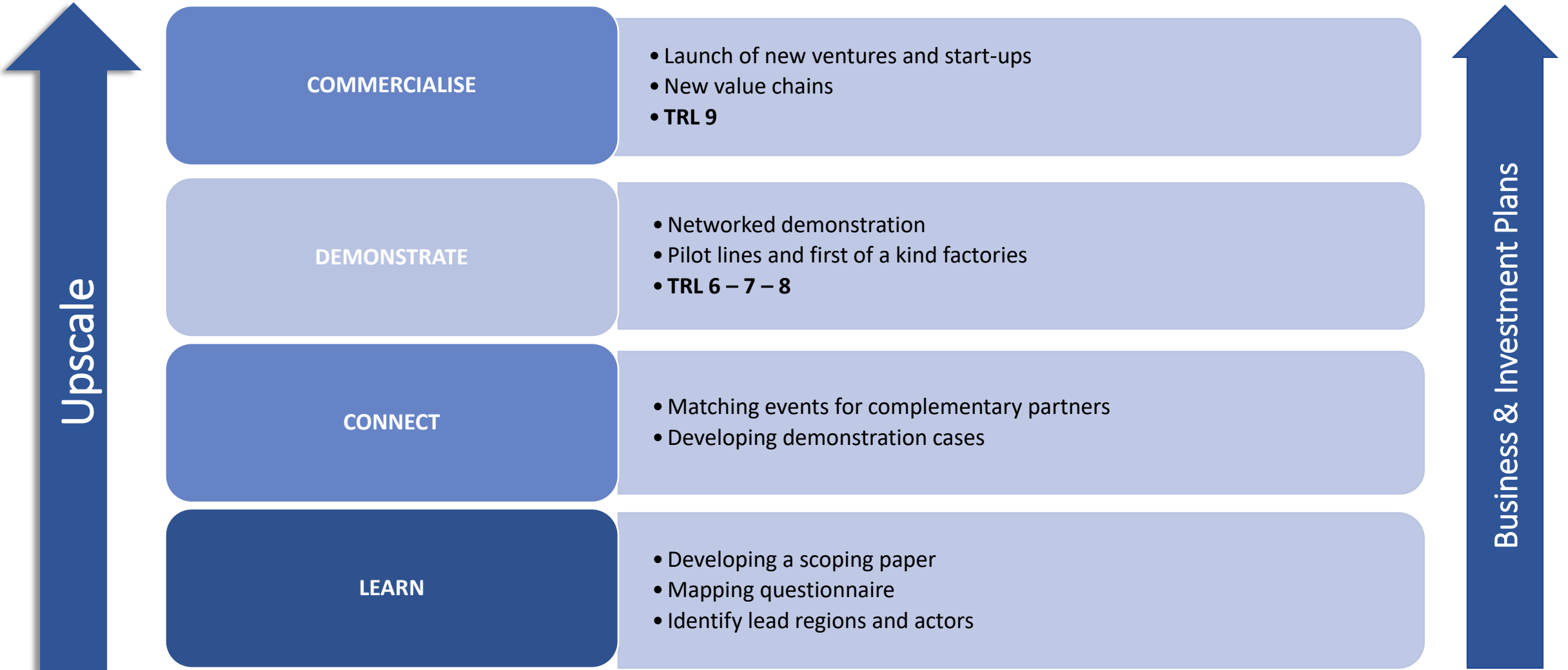
Advanced Manufacturing for Energy-related Applications in Harsh Environments

Smart Health

Artificial Intelligence

Hydrogen

VI Pilot Methodology



VI Pilot Projects

- **Decentralised Approach**
- **Interregional cooperation projects between companies and knowledge institutes in a specific technology field or application domain**
 - demonstration projects, no research (> TRL 5 – post prototyping)
 - industrial commitment (to participate/lead/co-invest)
 - European dimension : added value of joint demonstration
 - expected significant impact (economic, social and environmental returns)
- **European Networks of Demonstrators**
- **Building of new industrial value chains through a pipeline of investment projects in order to :**
 - accelerate market development
 - global competitiveness

VI democases

- **VI democases common objectives**
 - establish shared facilities for demonstration of new technologies
 - facilitate access to shared facilities
 - lower technology uncertainty, risks and costs
 - stimulate industrial replication and upscale (hence market uptake)
- **each democase**
 - combination of complementary demonstration facilities
 - group(s) of companies accessing infrastructure (TRL 6-8)
 - Industrial replication and upscale (if the above is successful) (TRL 8-9)
- **types of democases**
 - challenge driven or technology driven
 - connecting existing infrastructure
 - building brand new infrastructure
 - connect and upgrade existing infrastructure (hybrid format)

VI Pilot Projects and Democases

3DP	ADMA	ESM	Bioeconomy	Nano	AI	Smart Health	Hydrogen
Multi-Material components	Power transfer in the sea	De / Re manufacturing	Biopolymers	Nanowires for ICT and energy applications	AI & HMI Grid	Personal Data Management	H2 networks and portfolios
Hybrid Manufacturing	Joining of large components	Digital transformation	Lignocellulose biorefinery	Nano enabled Micro System for Bio Analysis	Data Modelling in soft sensors	Mobile health evolution in chronic disease control	Replacement of Fossil fuels in industrial
Robots	New methods of component manufacture	Polymer based functional products	Liquified Bio-Methane	Printed Electronics on metallic 3D objects	Resource Efficiency	Medicine-Citizen Lab	H2 in Shipping
Integrated electronics	Sensing and Remote Technologies	Energy-flexible and resource-efficient factory operation	Bio-aromatics	Structural health on composite materials			Standardisation of Hydrogen pipelines and Vessels in Hydrocomp
Maintenance	Corrosion and offshore subsea Infrastructure						

What are the future Priorities for Vanguard Initiative?

- VI has an ambition to be the main EU network of Industrial Regions by 2025
- Build on the success of the Interregional Innovation Investments Instrument (I3) of the European Commission
- Create within VI an interregional funding mechanism to support European Value Chains
- How do we position VI and its members to take full advantage of upcoming EU and Regional initiatives?