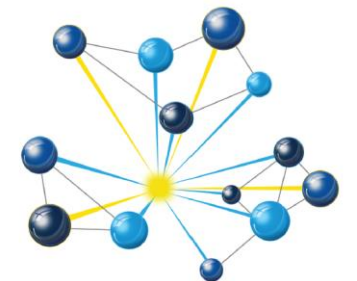


Vanguard Initiative – *New Growth Through Smart Specialisation*



VANGUARD INITIATIVE
New growth through smart specialisation

Reforming regional innovation systems: COR opinion



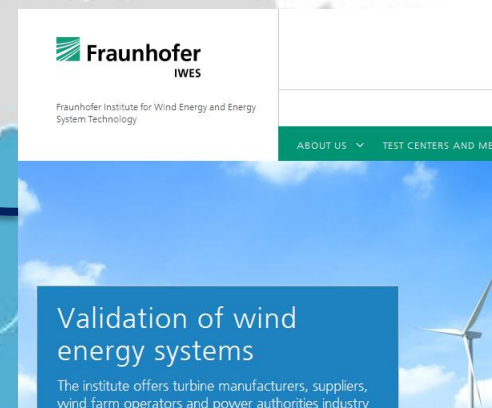
**European Committee
of the Regions**

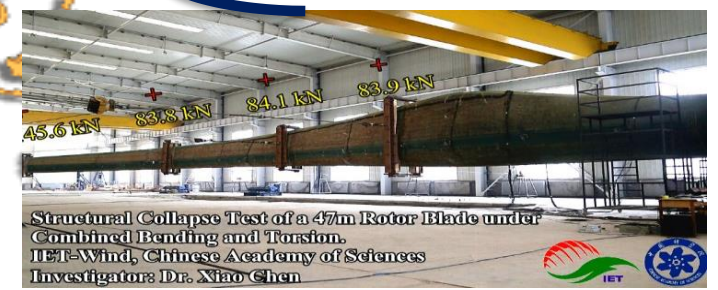
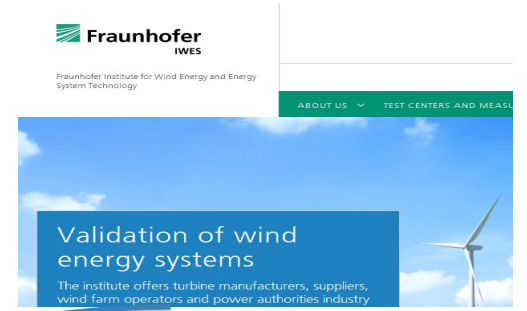
- **Avoid duplications**
- **Value chains through inter-regional cooperation**
- **RIS3 legal act (EC Recommendation)**



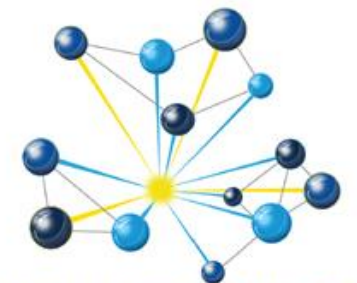
Wind Energies Testing Laboratories in the EU

CWD Center for Wind Power Drives | RWTH AACHEN UNIVERSITY

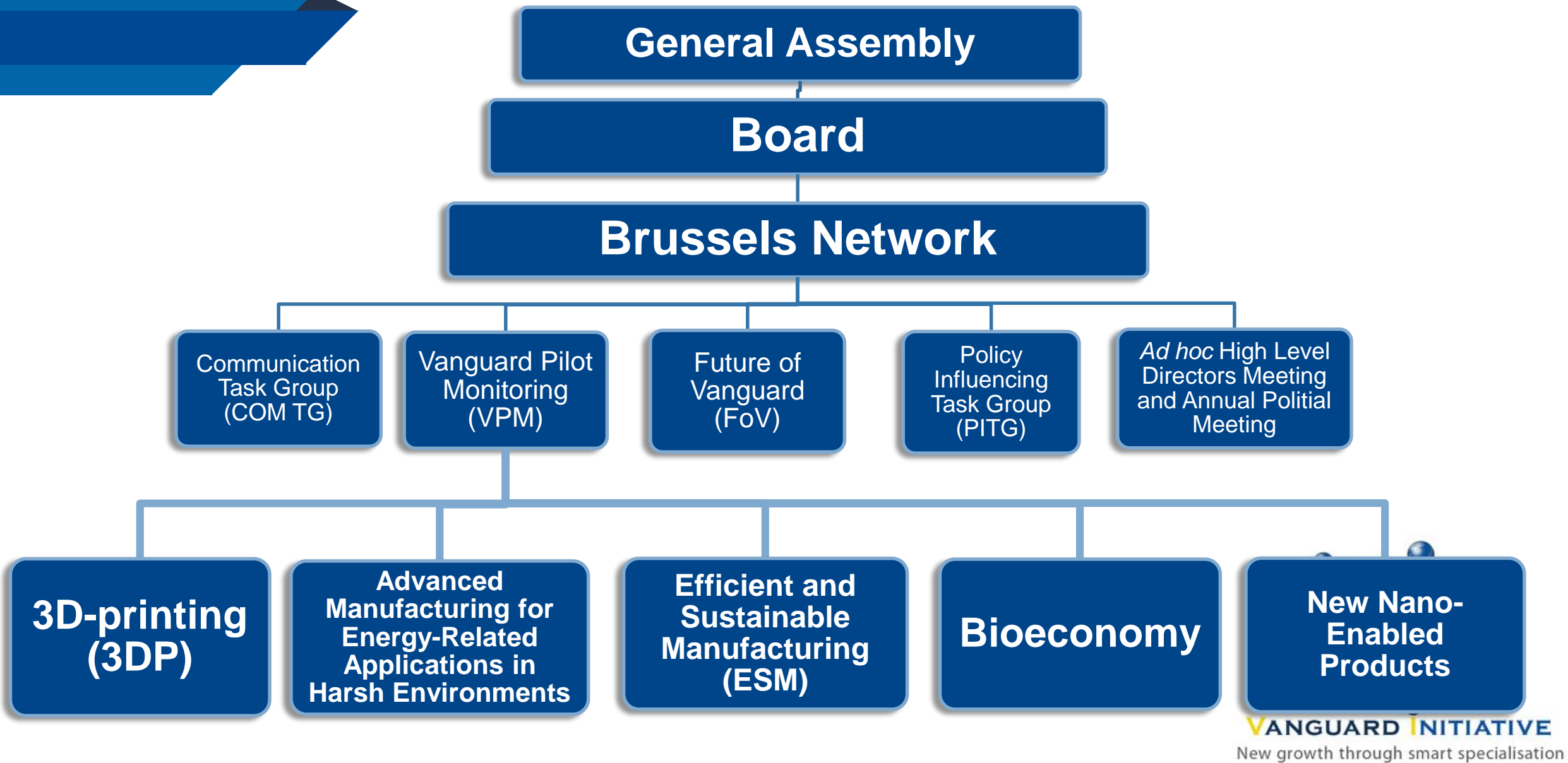




Current Member Regions



VANGUARD INITIATIVE
New growth through smart specialisation

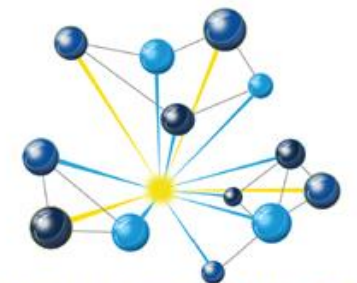
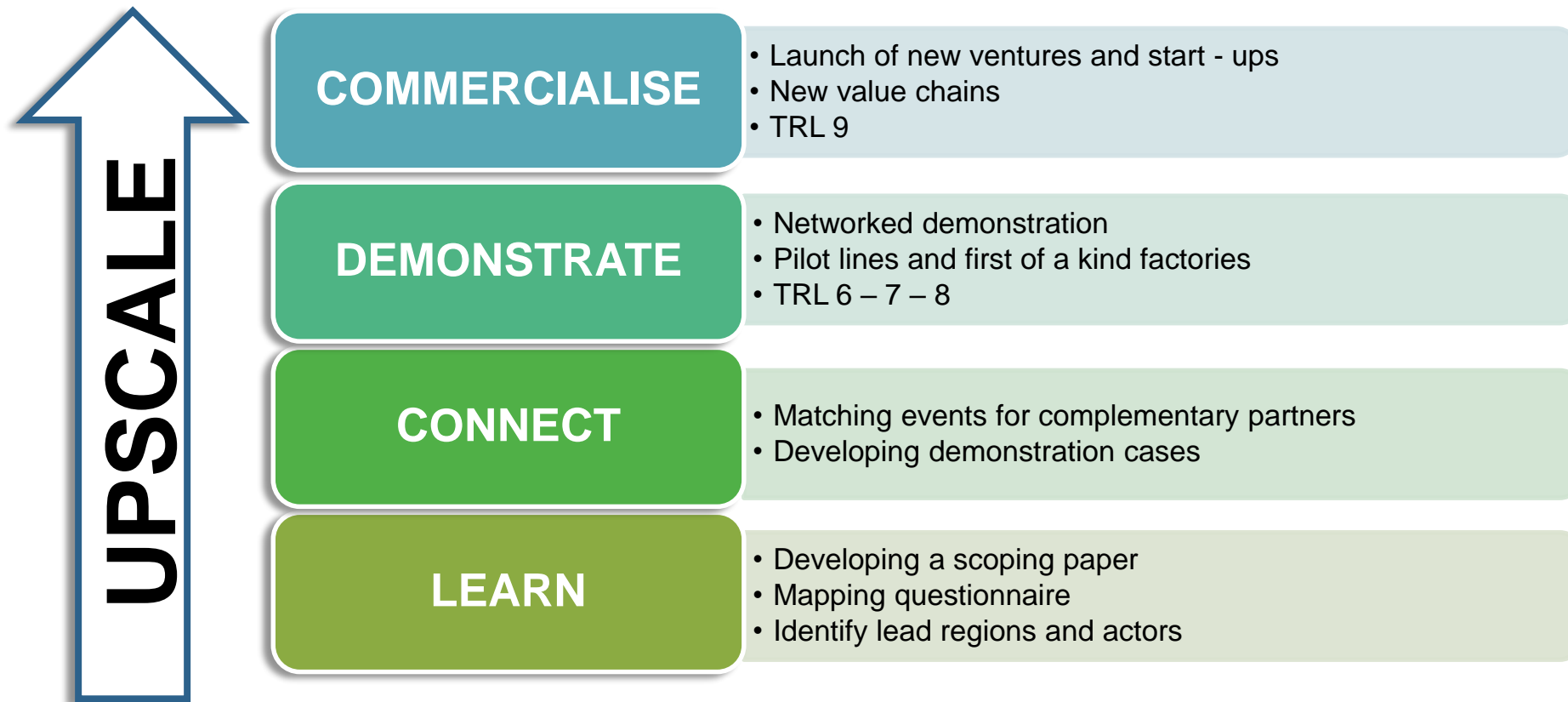


The Milan Declaration - a political declaration to be signed when joining Vanguard

- All new member regions signs the Milan Declaration
- A political commitment to **the principles of the Vanguard Initiative:**
 - **Support interregional networks**
 - Facilitate access to **combined funding for co-investment projects**
 - Explore solutions to **leverage public-private investments through EIB/EFSI**
 - Support **demonstration and piloting of new value chains in European industry clusters**
 - **Implementation of smart specialisation strategies etc.**



Methodology of the Pilot Projects



VANGUARD INITIATIVE
New growth through smart specialisation

Current pilot projects and demo cases

3D-printing

3D printed hybrid component

Additive Subtractive Platform
High Precision & High Finish
Production

3D printed automotive
components for large, medium,
and small complex parts

Machinery, tooling and
complex shapes

3D-Printed Customized
Components for Orthosis,
Exoskeleton and Exoprosthesis

Advanced Manufacturing for Energy-Related Applications in Harsh Environments

Corrosion

Manufacture of large-
scale components

Operations and
Maintenance

Sensing and
Instrumentation

Efficient and Sustainable Manufacturing

De-and Remanufacturing

Adaptive and intelligent
assembly and
manufacturing systems

Advanced Sustainable Surface
and Coating Manufacturing
Technologies on Polymers

Digital and Virtual Factory
integrating planning and
stimulation into operative
environments

Energy-Flexible and resource-
efficient factory operation

Bioeconomy

Lignocellulose biorefinery

Bio-aromatics

LNG Blue Corridors

New Nano- enabled Products

Nanowires for ICT and
energy applications

Nano enabled Micro System
for Bio Analysis (NeMs4Bio)

Nano Enabled Printed
Electronics



VANGUARD INITIATIVE
New growth through smart specialisation

Relation between VI Pilot Projects and S3P partnerships?

- VI Pilot Projects inspired EC to start with S3Ps
- VI Pilot Projects are fully committed to and engaged in the S3P Industry Modernisation (all) and S3P Energy (ADMA Energy), on our own conditions (i.e. membership model)
- S3P IM is the "structured and structural dialogue" VI has demanded for since its start
- Acting as a group in S3P IM has an added value
- "VI needs S3P IM and S3P IM needs VI"



Three Layer Model

- The three types of costs when building and scaling up Demo-Cases;

- **Layer 1 costs: Initial costs for the set-up of (new or upgraded) demonstration infrastructure**

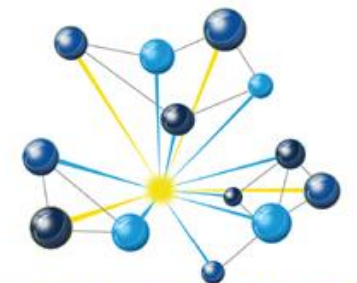
- = exclusively subsidies*

- **Layer 2 costs: Operating costs for the project-based and company-driven demonstration activities**

- = a combination of public funding (project-related subsidies) and private co-funding for the operating costs*

- **Layer 3 costs: Costs related to the industrial replication and upscale/production, once the demonstration activities have been successful (validated, certified)**

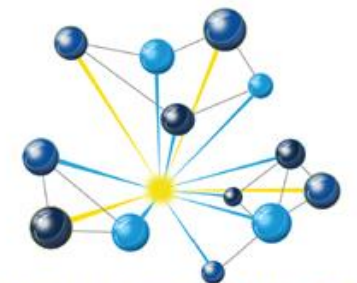
- = a combination of EIB-type public loans and private co-investment for industrial upscale/replication (i.e. investment in new production lines)*



VANGUARD INITIATIVE
New growth through smart specialisation

Vanguard Initiative proposals to overcome the funding and financing challenges

- Devoting **additional public funds** to cover the initial financing gap (*Layer 1 and 2 costs*)
- An easy accessible **voucher system for SMEs** engaged in VI core activities, in order to fund feasibility studies and scale-up work in, for example, shared facilities (*Layer 2 costs*)
- **Interregional technology vouchers** interchangeable between participating regions (*Layer 2 costs*)
- **Combining regional (non-EU) subsidies** to compensate for costs incurred to visits to demonstration facilities in other regions. A specific Vanguard Initiative ERA-Net reinforcing and expanding MANUNET would be instrumental in this (*Layer 2 costs*)
- The creation of a programme-level **Vanguard Initiative Fund** for inter-regional demonstration, covering the requirements of all three categories of cases. (*Layer 1 costs, and to some extent also Layer 2 costs*)
- **A thematic expansion of the InnovFin Energy Demo Projects instrument** to cover broader industrial modernisation activities (*Layer 3 costs*)
- **An Interreg B programme on the level of EU-28** (*Layer 1 costs*)



VANGUARD INITIATIVE
New growth through smart specialisation