



VANGUARD BIOECONOMY PILOT: INTERREGIONAL COOPERATION ON INNOVATIVE USE OF NON-FOOD BIOMASS

DANIELE COLOMBO
VANGUARD BIOECONOMY PILOT
TECHNICAL COORDINATOR



WHAT IS THE VANGUARD INITIATIVE?

- Member regions with strong political commitment
- To speed up the market uptake of new innovative technologies
- Collaboration between regional authorities, clusters, business, RTOs
- Exploring and facilitating public-private investment and co-funding possibilities
- Co-shape EU policy and agenda



MEMBER REGIONS

ASTURIAS - ES	NORTE - ES
AUVERGNE - RHÔNE-ALPES - FR	OBERÖSTERREICH - AT
BADEN - WÜRTTEMBERG - DE	OSTROBOTHNIA - FI
CANTABRIA - ES	PAYS DE LA LOIRE - FR
CATALUNYA - ES	RANDSTAD REGION - NL
EAST NETHERLANDS - NL	REGION DALARNA - SE
EMILIA ROMAGNA - IT	REGION SKÅNE - SE
EUSKADI - ES	SAXONY - DE
GALICIA - ES	SCOTLAND - UK
LOMBARDIA - IT	SOUTH DENMARK - DK
MAŁOPOLSKA - PL	SOUTH-NETHERLANDS - NL
NAVARRA - ES	TAMPERE REGION FI
NORD-PAS DE CALAIS - FR	VLAANDEREN - BE
NORDRHEIN-WESTFALEN — DE	WALLONIE - BE



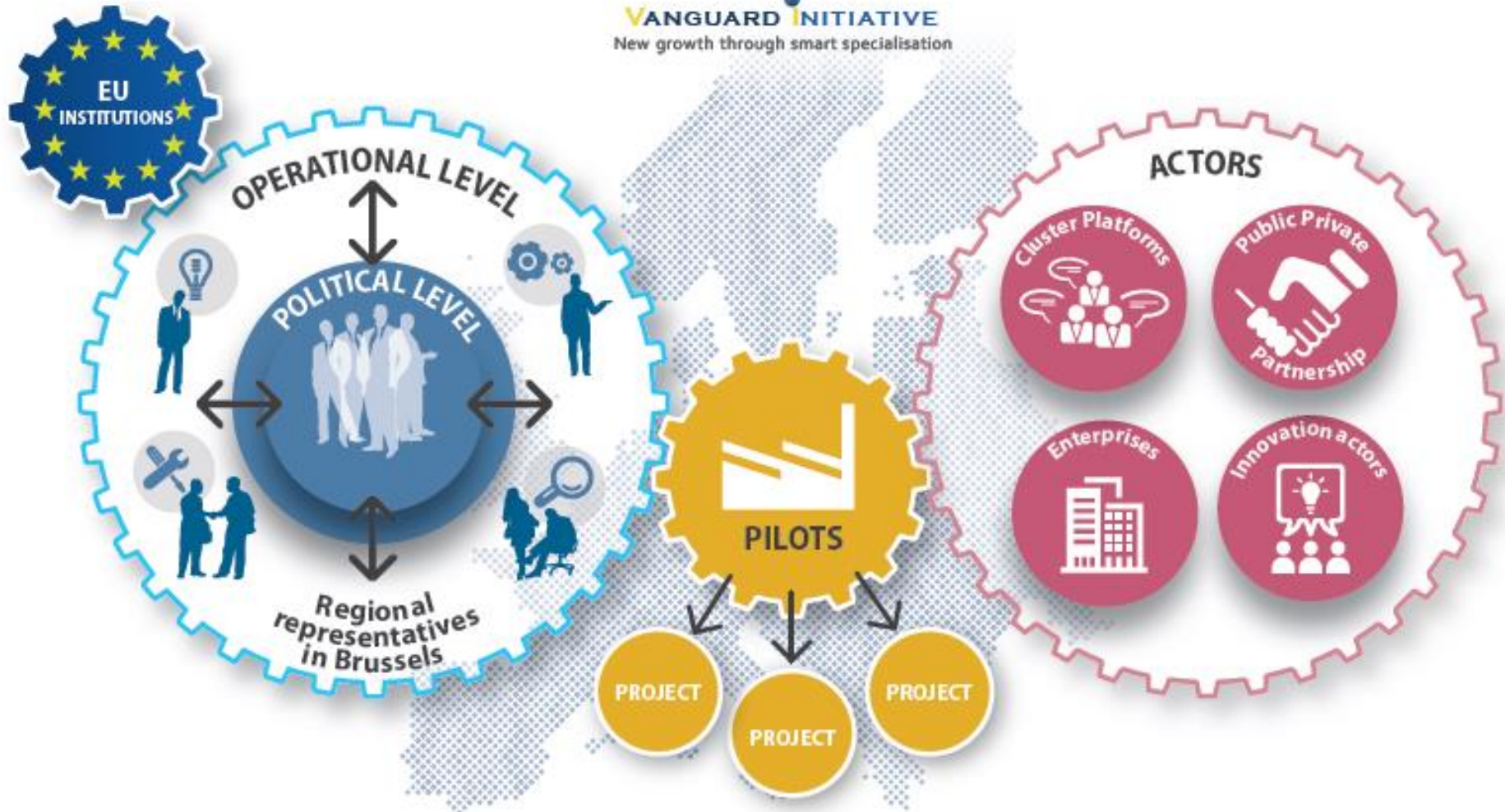
VANGUARD PILOTS: WHY & HOW

- Industry driven need to connect & upscale regional efforts to **speed up market deployment**, with focus on joint-demonstration
- Aim: developing cross-regional demonstration projects (Demo Cases) which are close to market (post-prototype level, **TRL > 5**)
- Leverage public-private partnerships for co-investment

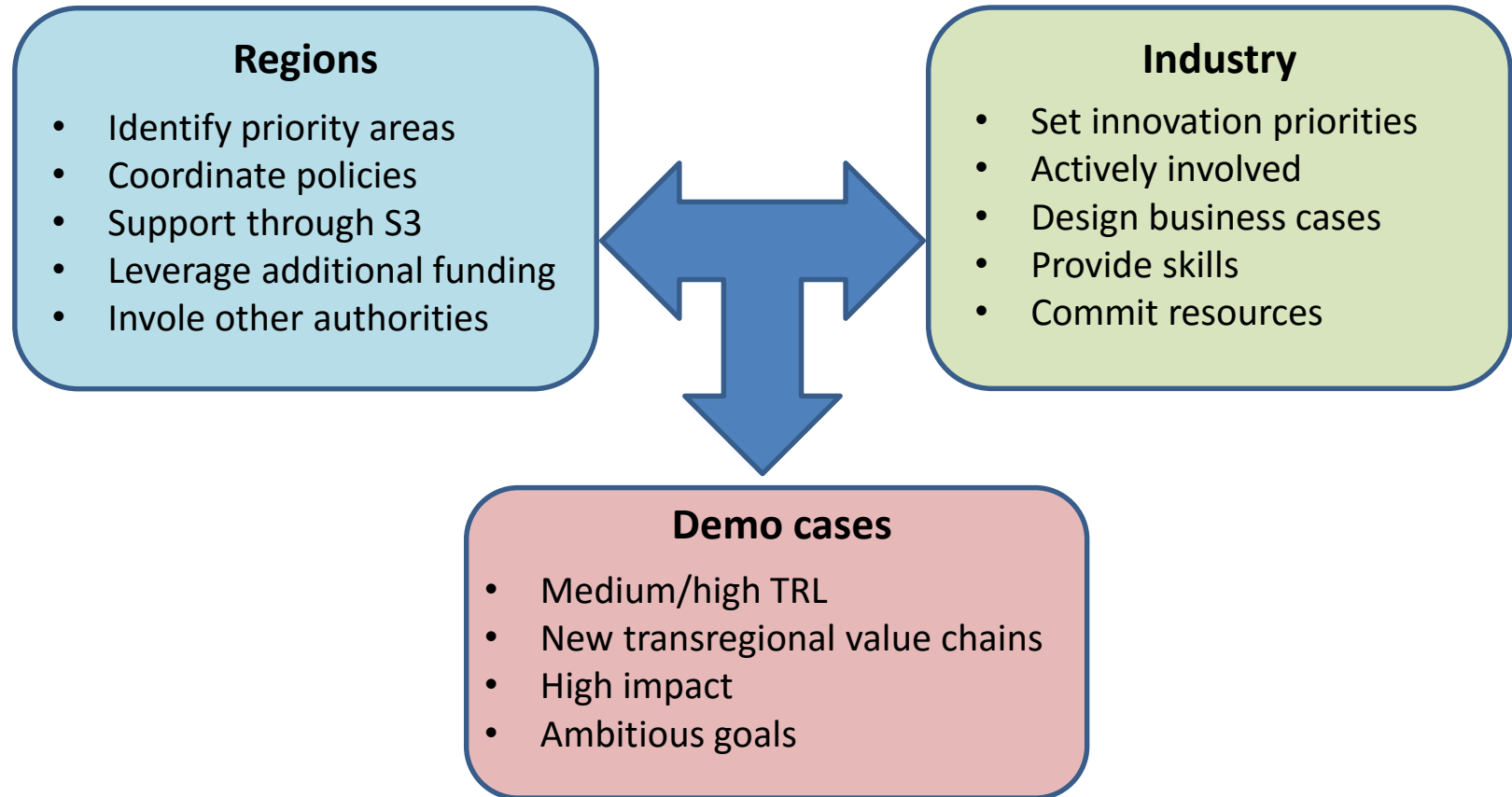
1 - 3	4	5	6	7	8	9
Research	Pilot	Demonstration	Commercial			



VANGUARD INITIATIVE
New growth through smart specialisation



AN INNOVATIVE PUBLIC PRIVATE PARTNERSHIP



BIOECONOMY PILOT DEMO CASES

Demo Case	Objective
Biobased Aromatics	Joint Demonstration on Lignin Valorisation to Aromatics
Lignocellulose Refinery	Production of chemicals and fuels from lignocellulose biomass
Biogas Beyond Energy	Biogas production towards more and higher value added outputs
(Waste) gas into Value	Use of industrial waste gases to produce chemicals via (syn)gas conversion
Bio Aviation Fuel	Promoting larger scale aviation biofuel production
Food & Feed from Agrofood Waste	Extracting functional foods and feed from different waste streams
Food & Feed Ingredients from Algae	Production of food supplements/nutraceuticals and other pharma bioactive compounds from micro-algae



LESSONS LEARNED SO FAR

- Two markets, different appeal
- Is the bioeconomy world ready for this exercise?
- Is the overall framework ready for the specific characteristics of the bioeconomy?
- Top/down, bottom/up: how to make it work?
- Do open networks get along with competitive ideas?
- How do we engage companies, overcoming their fears?



FURTHER INFORMATION & CONTACTS

VANGUARD INTERNET SITE: WWW.S3VANGUARDINITIATIVE.EU/

CONTACTS

- **BART VERSCHOOR** – DEPARTMENT OF ECONOMIC AFFAIRS - PROVINCE OF ZUID-HOLLAND
TEL + 31 (0)70 441 8456 MAIL: BJ.VERSCHOOR@PZH.NL
- **VALENTINA PINNA** - LOMBARDY REGION DELEGATION TO THE EU
TEL +32-(0)2-518.76.05; MAIL: VALENTINA_PINNA@REGIONE.LOMBARDIA.IT
- **DANIELE COLOMBO** - LOMBARDY GREEN CHEMISTRY CLUSTER
TEL +39,02,8515,5230 MAIL: DANIELE.COLOMBO@MI.CAMCOM.IT