

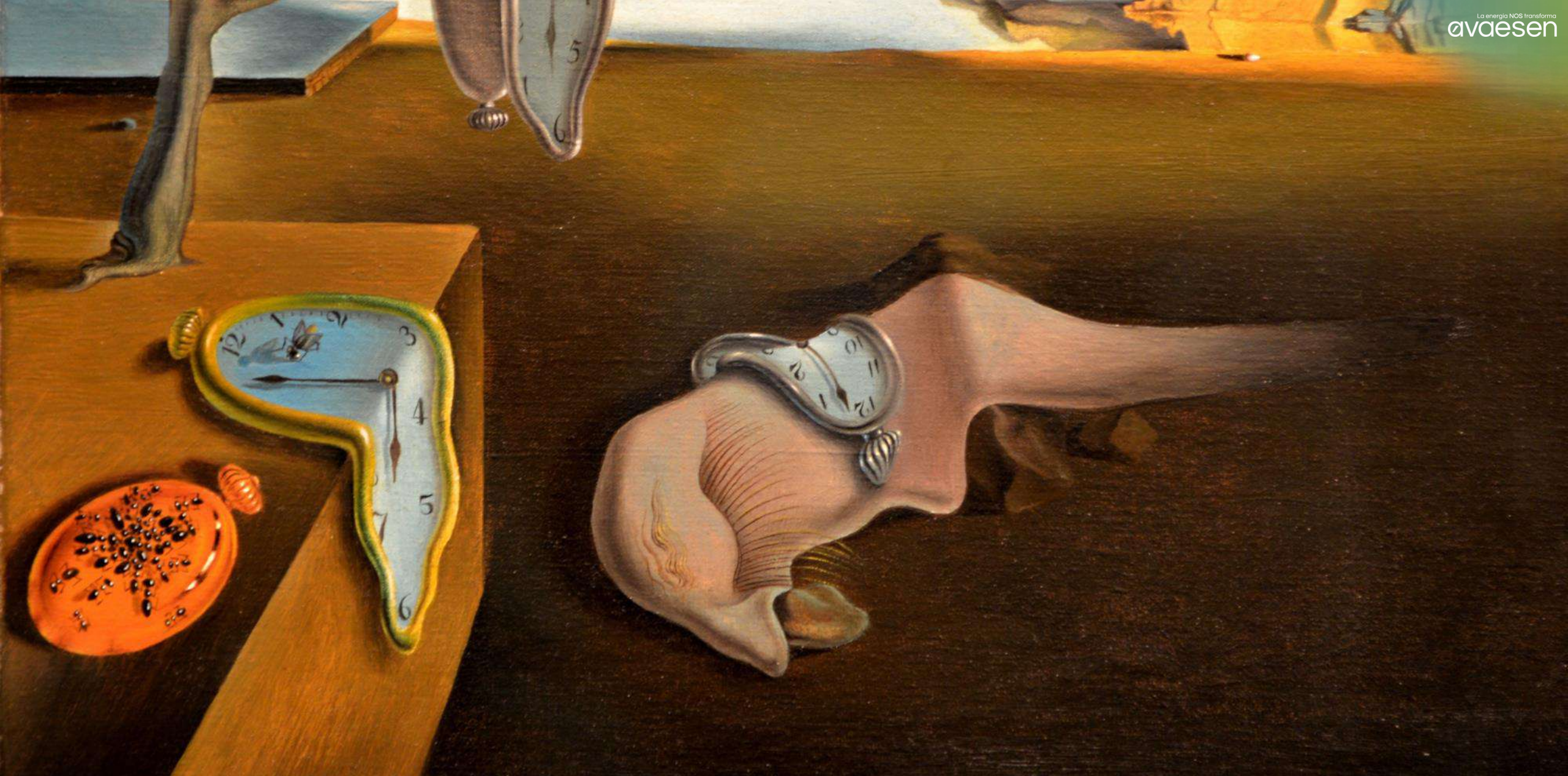
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26-27 SEPTEMBER 2022, PRAGUE



CLUSTERS IN A FAST CHANGING WORLD

La energía NOS transforma
avaesen





WE ARE OUT OF TIME

CLIMATE CHANGED

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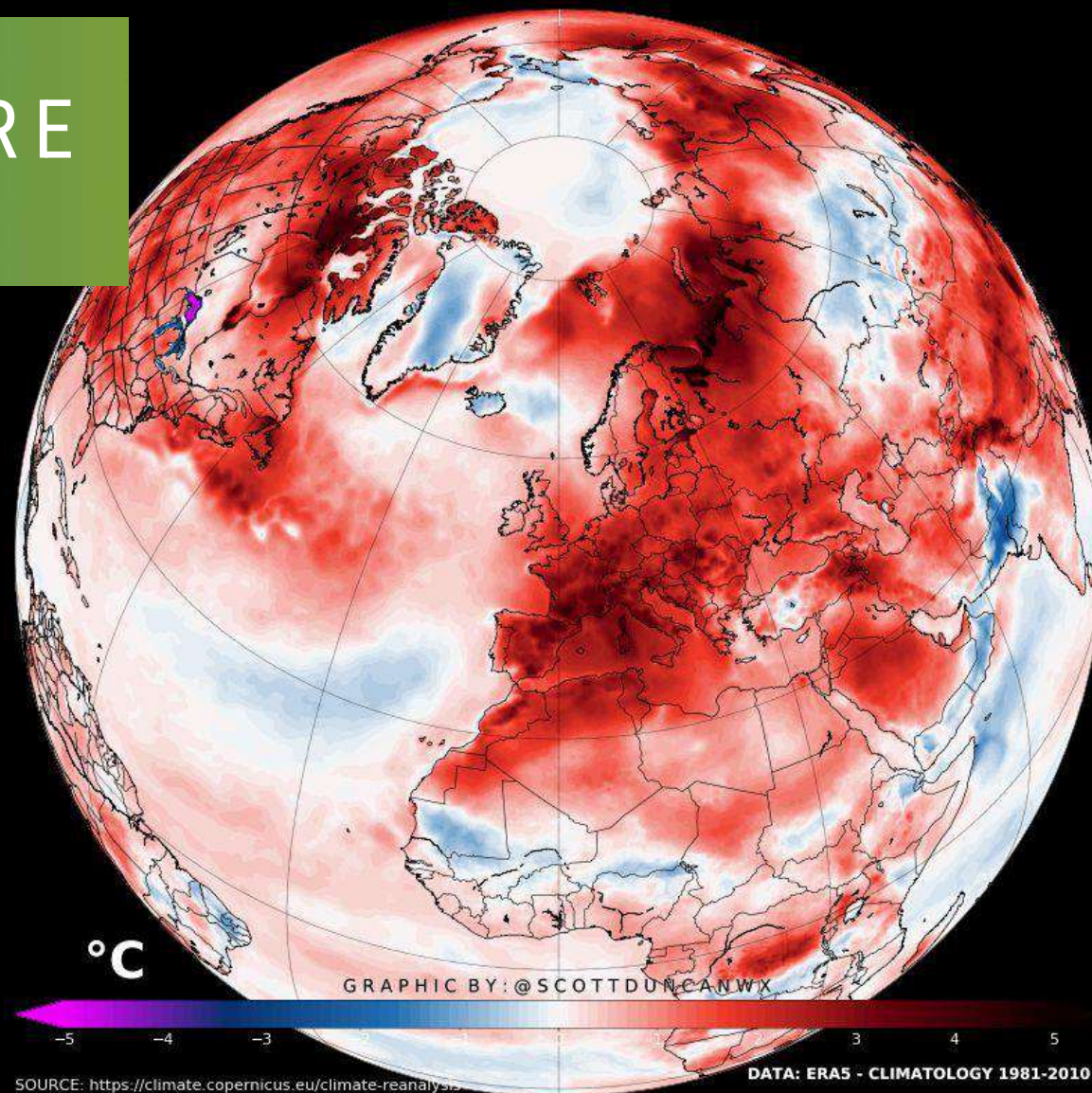


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SUMMER 2022

TEMPERATURE ANOMALY



DANUBE AT RECORD LOW LEVELS THIS YEAR

RHINE CRIPPLED WITH DROUGHT

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5 AUG 2021



Copernicus

3 AUG 2022



Copernicus

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WILDFIRES BLAZING EUROPE



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MADNESS STRUCK EUROPE

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A FULLY-BLOWN ENERGY CRISIS

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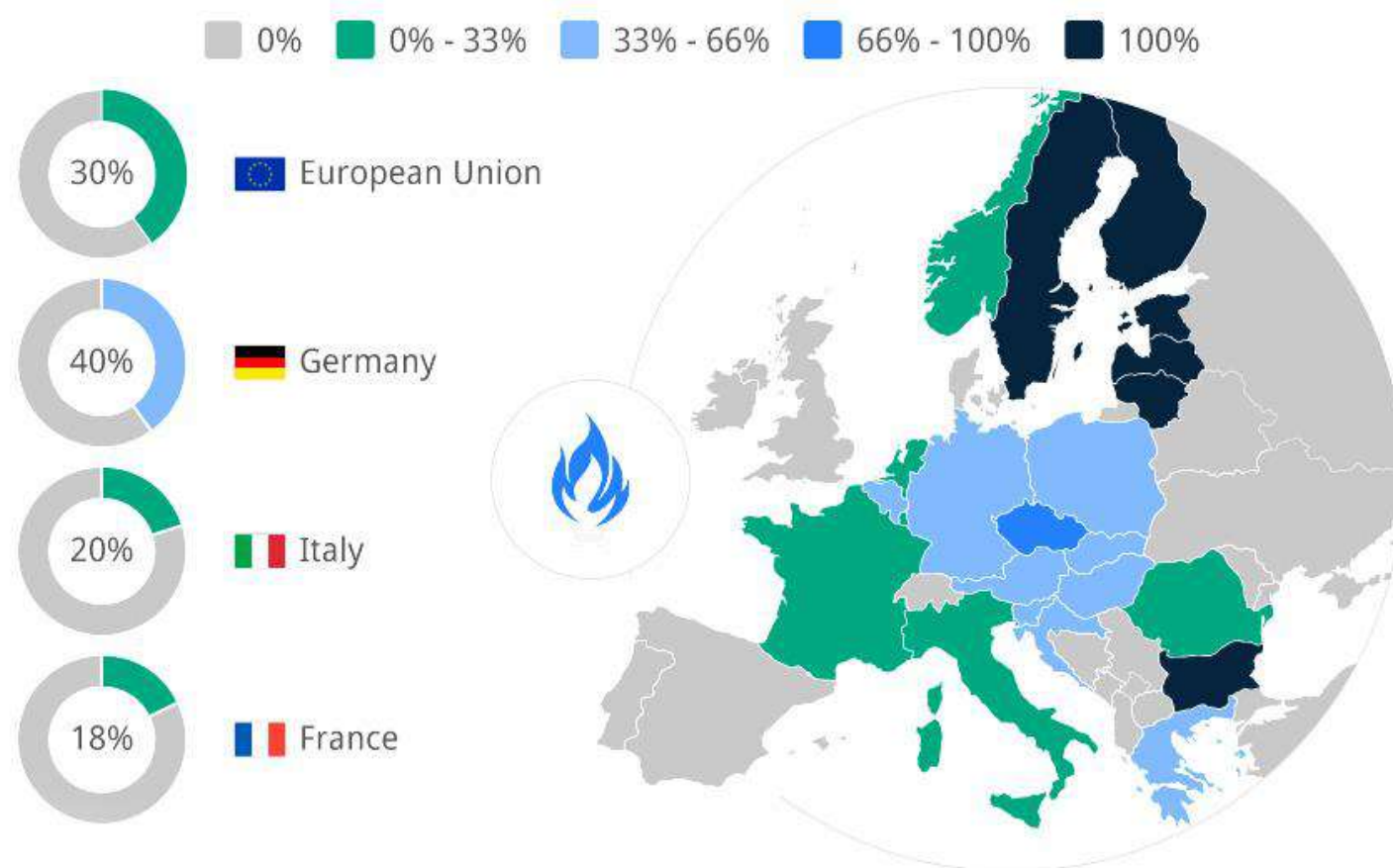


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EUROPE HIGHLY DEPENDENT ON RUSSIAN GAS

PERCENTAGE OF GAS SUPPLIED BY RUSSIA TO EUROPEAN COUNTRIES



Save gas for
safe winter

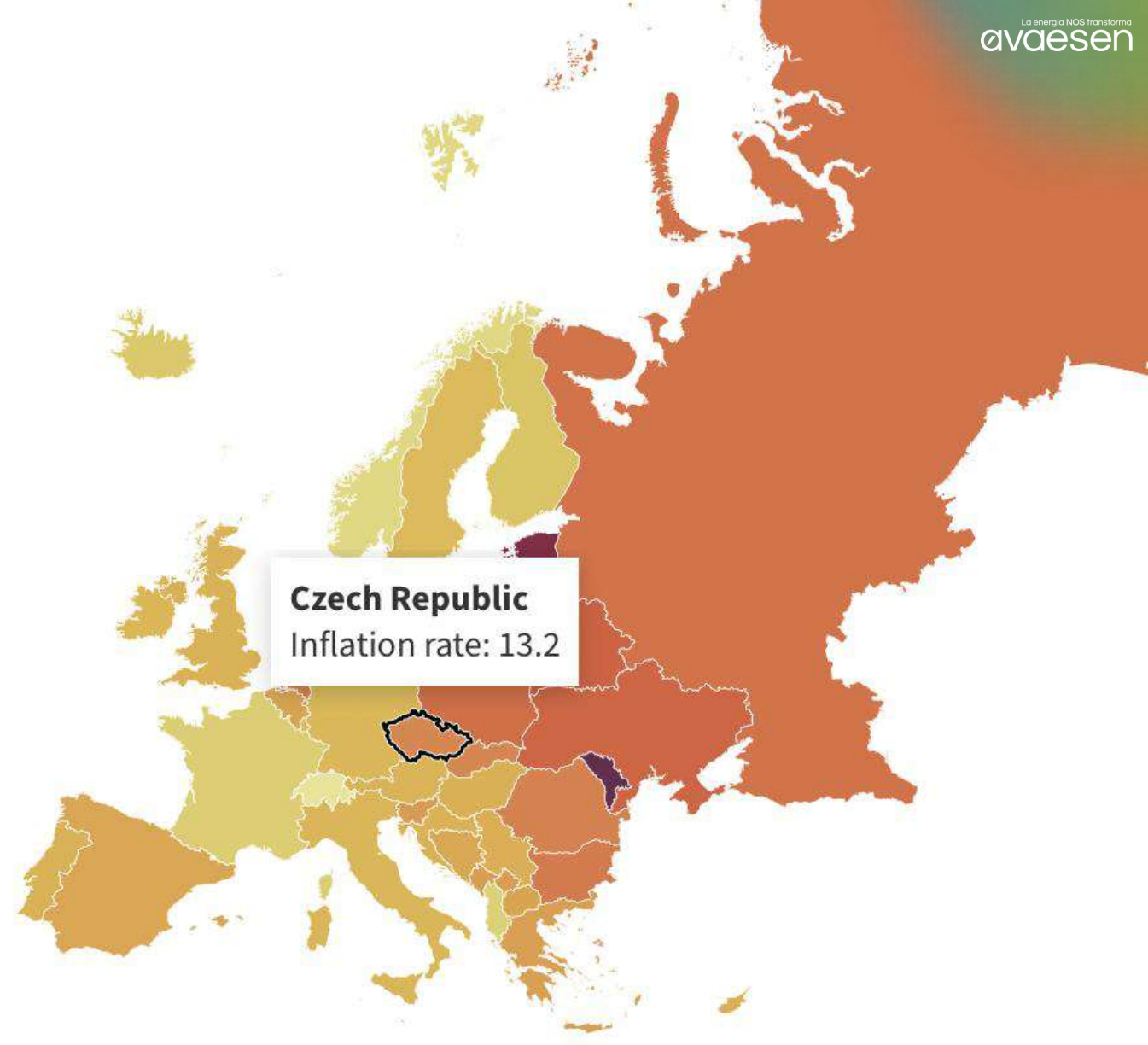
THE END OF AN ERA



INFLATION SOARING

INFLATION RATES BY COUNTRY IN EUROPE

Percent 1.5  27.1



FOOD CRISIS

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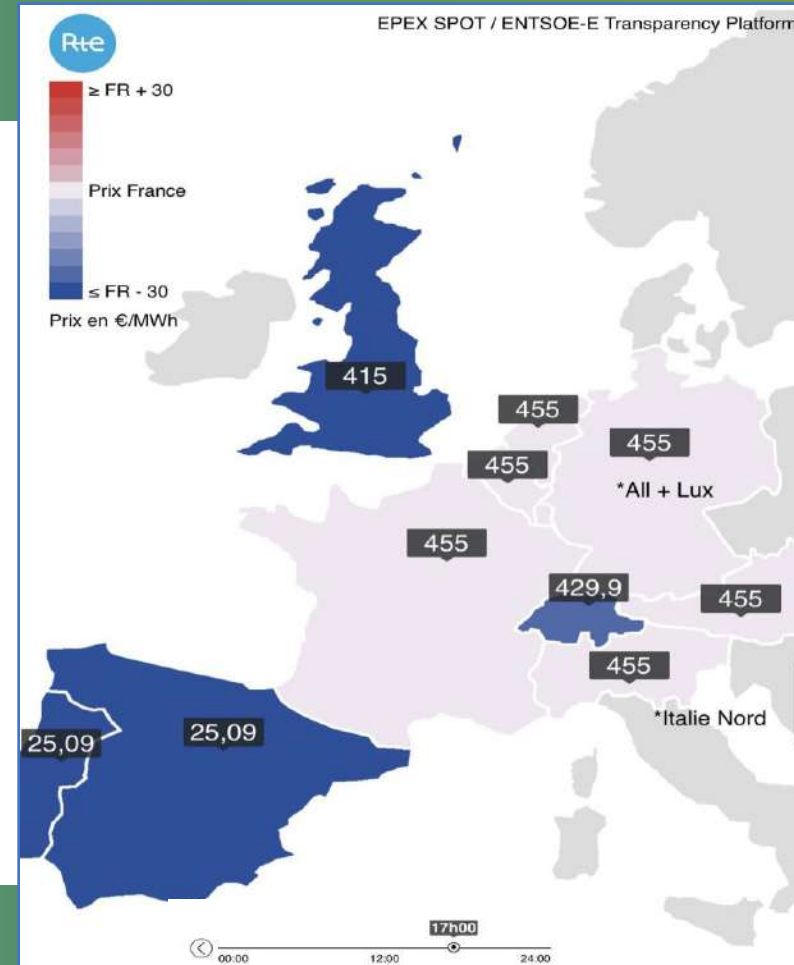
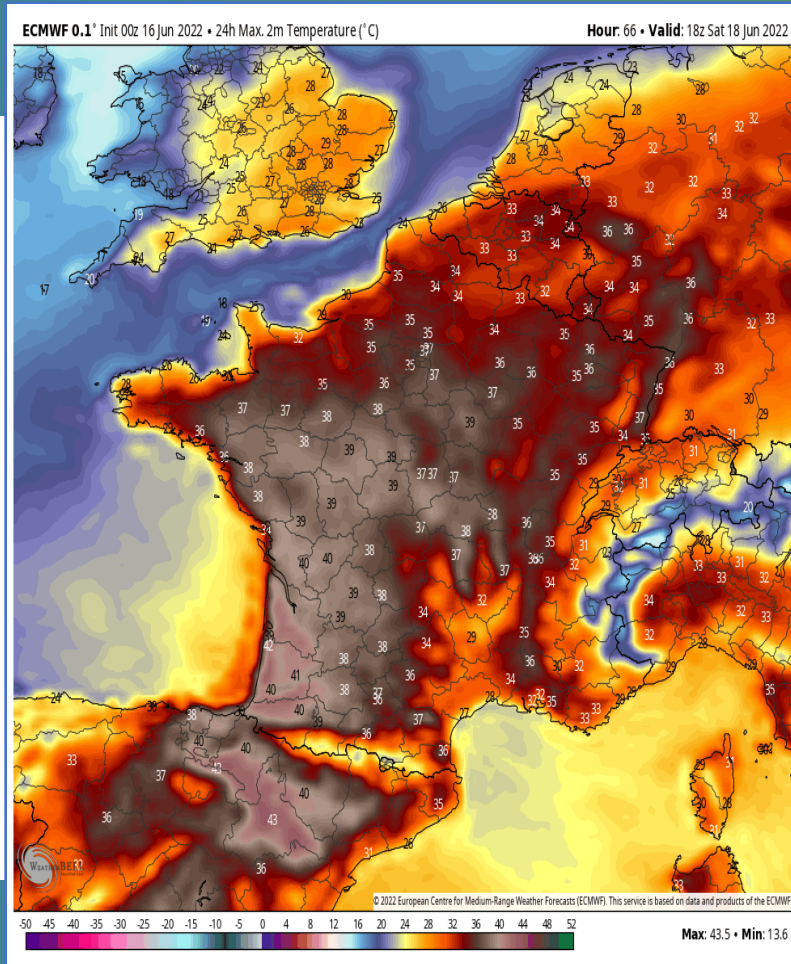
BUT, AS IN ANY BLACK SWAN EVENT...

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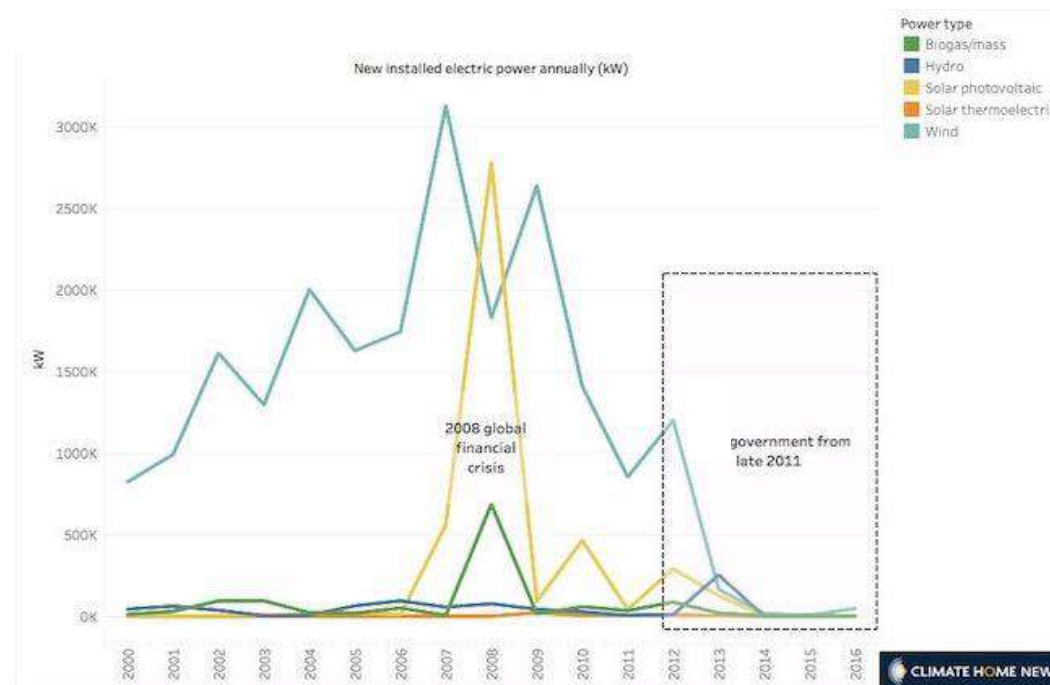
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RENEWABLES PALIATE GAS PRICES

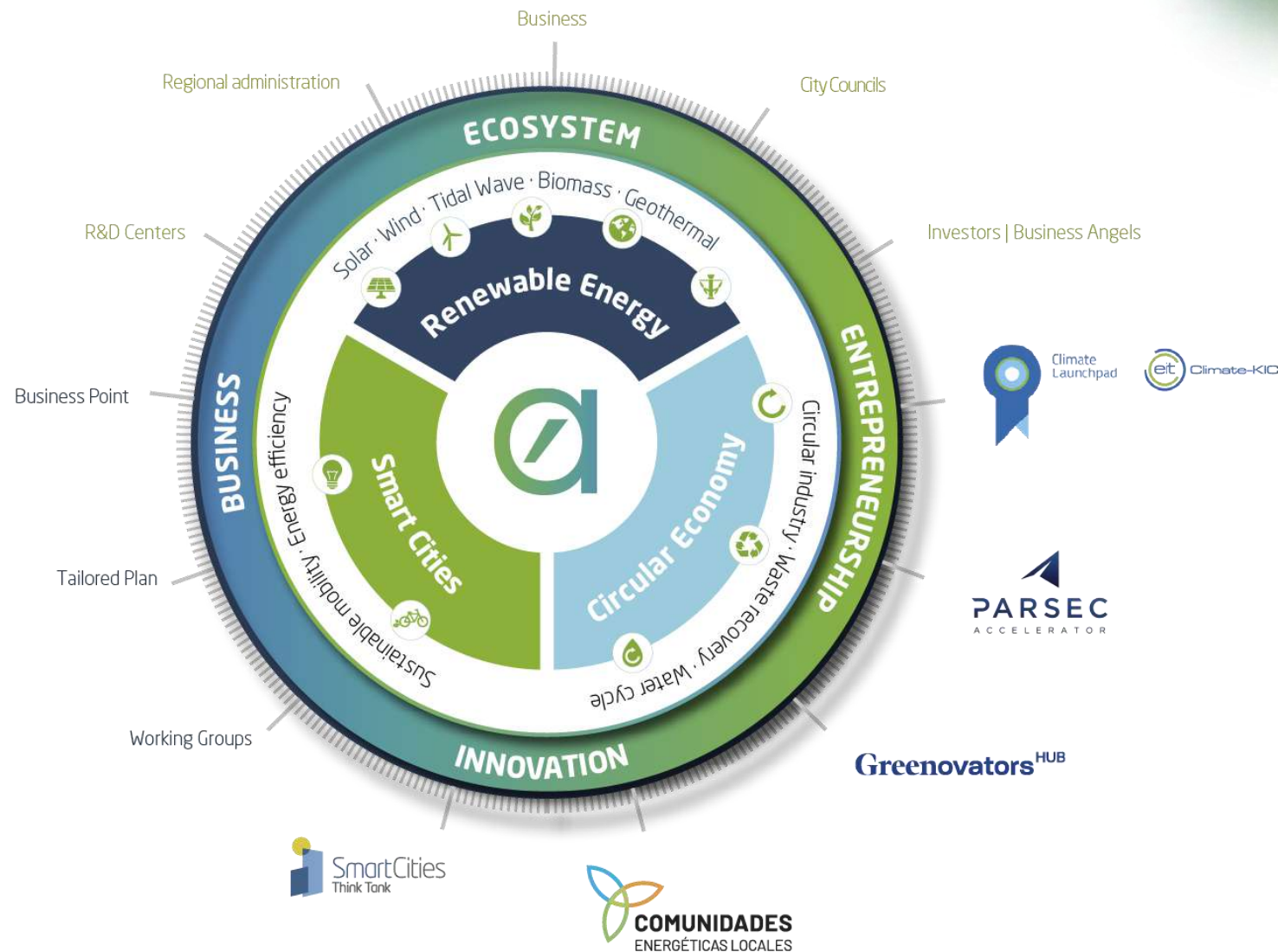


AFTER "TAX ON SUN"

Green power collapse: Spain after 2008

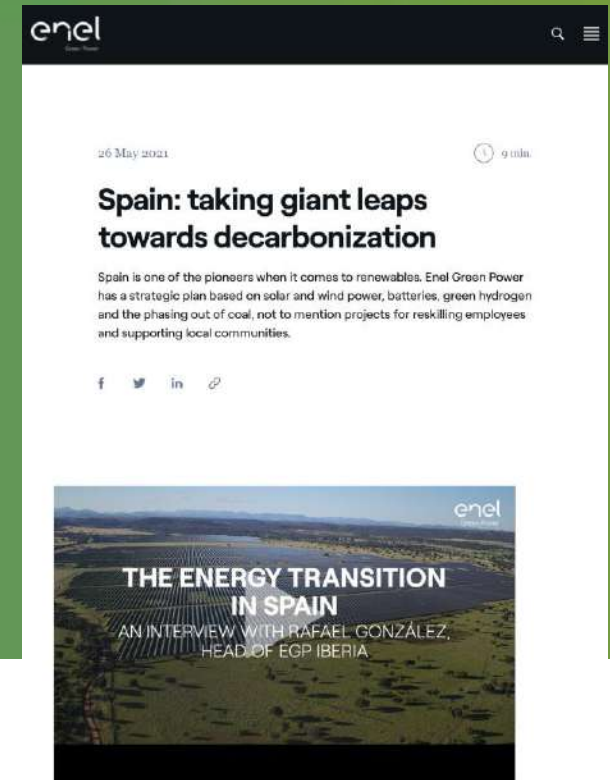
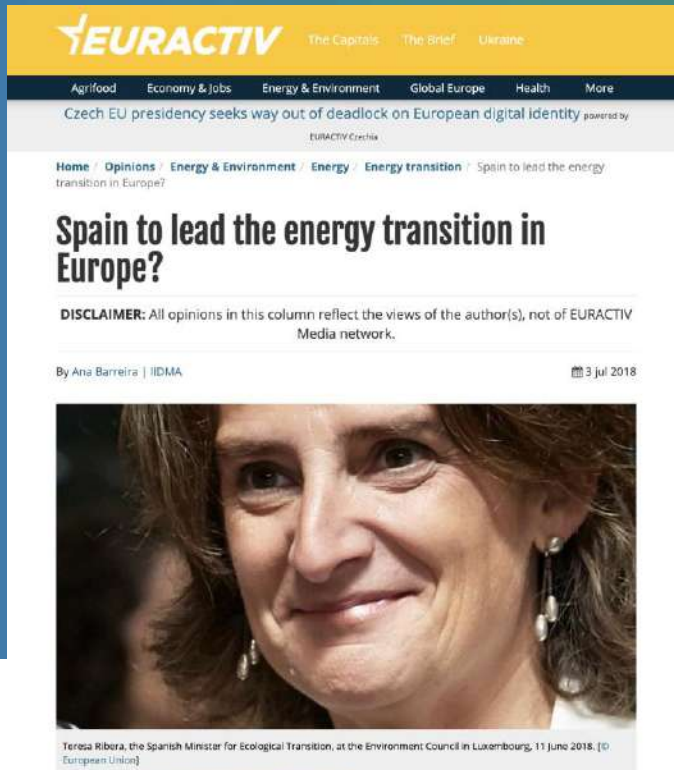


ORCHESTRATING ENERGY TRANSITION



EXCEEDING THE EU TARGETS

BOOSTING THE SHARE OF RENEWABLES TO 43% BY 2030.



SPAIN A NEW GREEN CHAMPION





Solar Target by 2030:
6.000 MW





PV Projects
on the table in 2022:

7.000 MW

Solar Target by 2030:
6.000 MW





MULTIPLE TENSIONS

1

SUPPLY CHAIN DISRUPTIONS

MADE IN CHINA

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2

BOTTLENECKS AND PERMITS



3

NEXT GENERATION EU

MAKE IT REAL

**Next
Gen
EU** 

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4

SKILLS



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NIMBY EFFECT



@vdaesen
ORCHESTRATING CHANGE
TO
#REPowerEU

SOLUTIONS

Powered by
Avaesen Cluster

1



MANUFACTURING MADE IN VALENCIA

Photovoltaic Panels

1



MANUFACTURING MADE IN VALENCIA

The Valencian Battery Alliance

1



Volkswagen

MANUFACTURING MADE IN VALENCIA

Electric Battery Factory

1



Volkswagen

MANUFACTURING MADE IN VALENCIA

Electric Battery Factory

2



NEW RENEWABLE ENERGY LAW

3



RESKILLING AND UPSKILLING

#Pact4Skills

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3



SMART CITIES THINK TANK

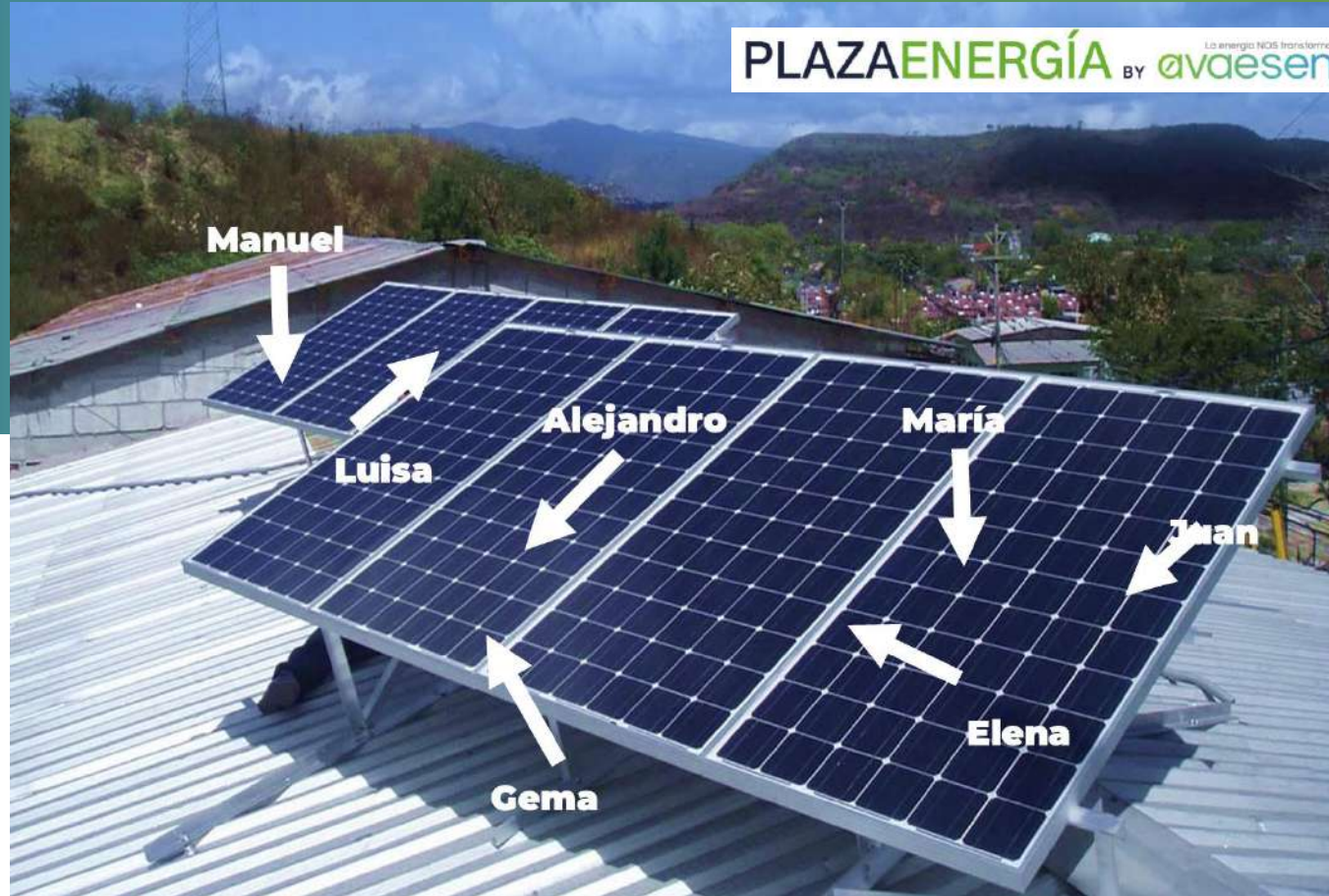
Cross-sectorial Cooperation

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4



BUILDING CITIZEN-LED ENERGY COMMUNITIES

4



TACKLING ENERGY POVERTY

4



SCALLING-UP NEW BUSINESS MODELS

4



AGRI-VOLTAICS

Creative collaboration: Agro-food and solar power

5



LARGE-SCALE, TRANSFORMATIONAL PROJECTS

EU CLUSTERS, AGENTS OF CHANGE

1. Catalyse change at speed and scale in times of crisis.
2. Orchestrate multiple stakeholders. Move the industry forward.
3. Innovation brokers. Link problem owners and solution providers.
4. Leverage investments locally.
5. Key in the reskilling and upskilling revolution.
6. System-wide transformation, not only sectorial.
7. Power the Industry 4.0/5.0 and the well-being economy.



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THANK YOU
Bianca Dragomir
CEO
bdragomir@avaesen.es

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Energy Security and Strategic Resilience of the European Economy

Marc Rechter
Co-Founder & CEO
MCPV



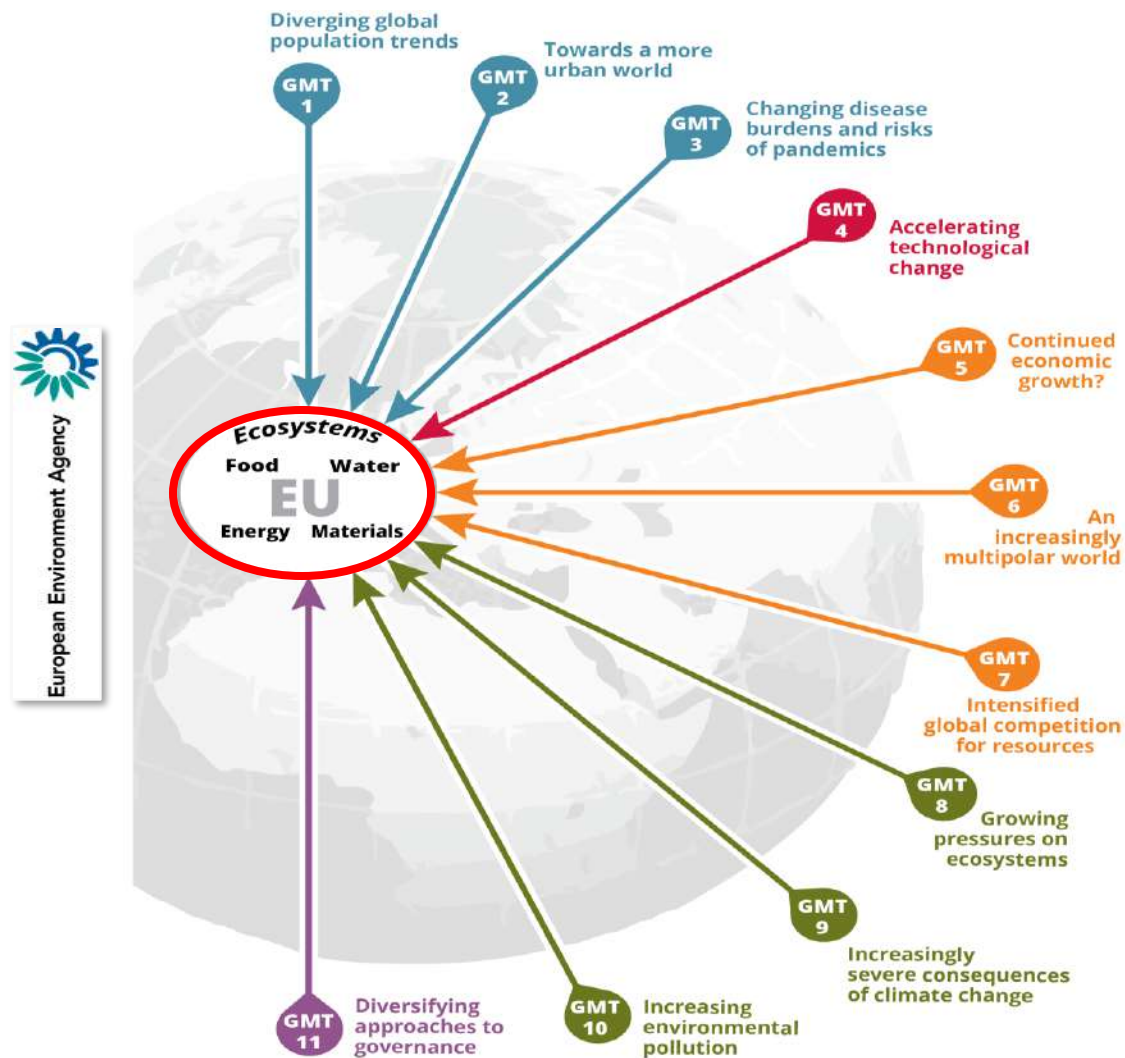
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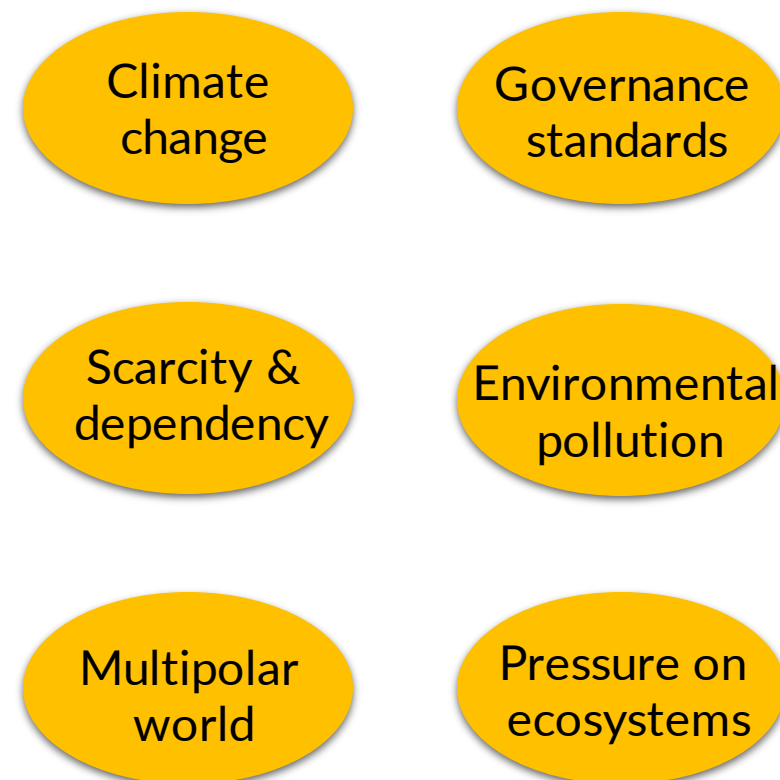
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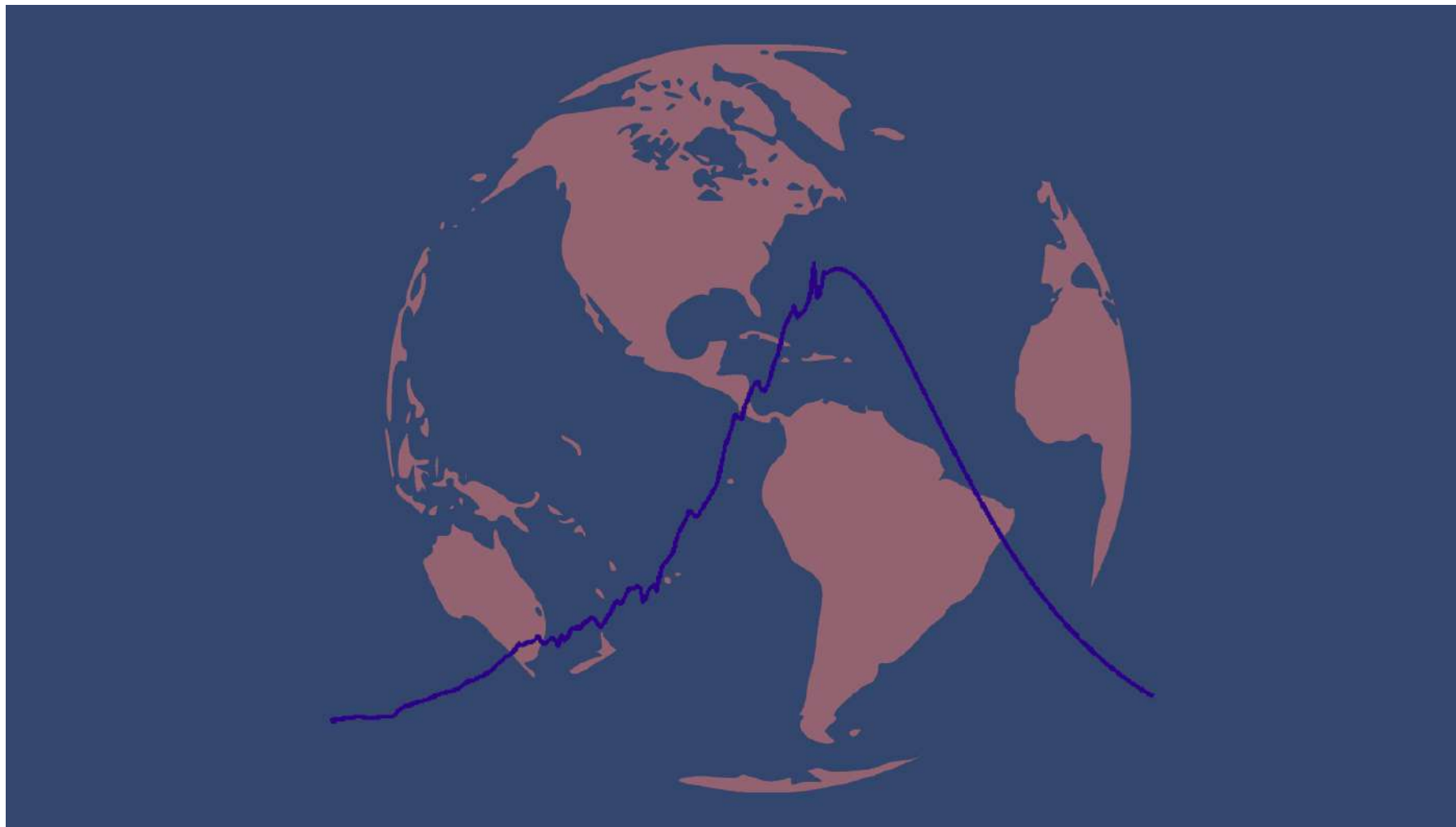
Global megatrends

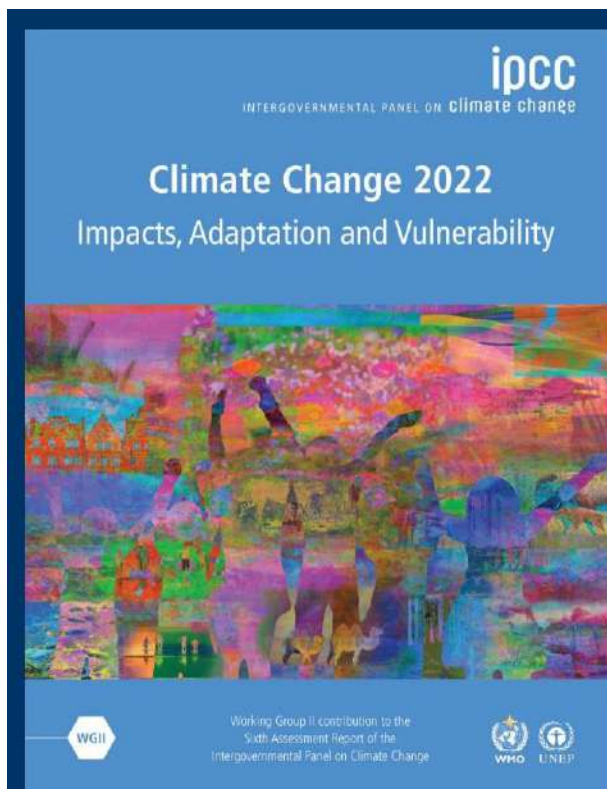


Megatrends which will define decades to come



Carbon Budget





The scientific evidence is unequivocal: climate change is a threat to human well-being and the health of the planet.

Any further delay in concerted global action will miss the brief, rapidly closing window to secure a liveable future.

This report offers solutions to the world.

The new IPCC report

Consequences of climate change and solutions for Europe

Europe

Europe is warming faster than the global average. The effects can be seen everywhere, with major regional differences. Some consequences are irreversible, such as the loss of glaciers and the extinction of species.

Floods

In a scenario where warming exceeds 3°C, the damage caused by river floods may double. As 2100 approaches, damage as a result of coastal flooding will, in the 3°C scenario, be ten times higher than current levels. Early warning systems, room for rivers, flood defences, and the relocation and prevention of building in high-risk areas will limit the consequences.

Heat

Heat stress will inflict more casualties. In the 3°C scenario, this risk will be 2 to 3 times higher than in the 1.5°C scenario. Early warning systems and the greening of cities will help to reduce the risk.

Drought

The risk of water shortages will increase with higher levels of warming, particularly in western and central Europe and southern Europe. The more efficient storage, retention and re-use of water are effective measures. Physical and technological circumstances will limit adaptation options.

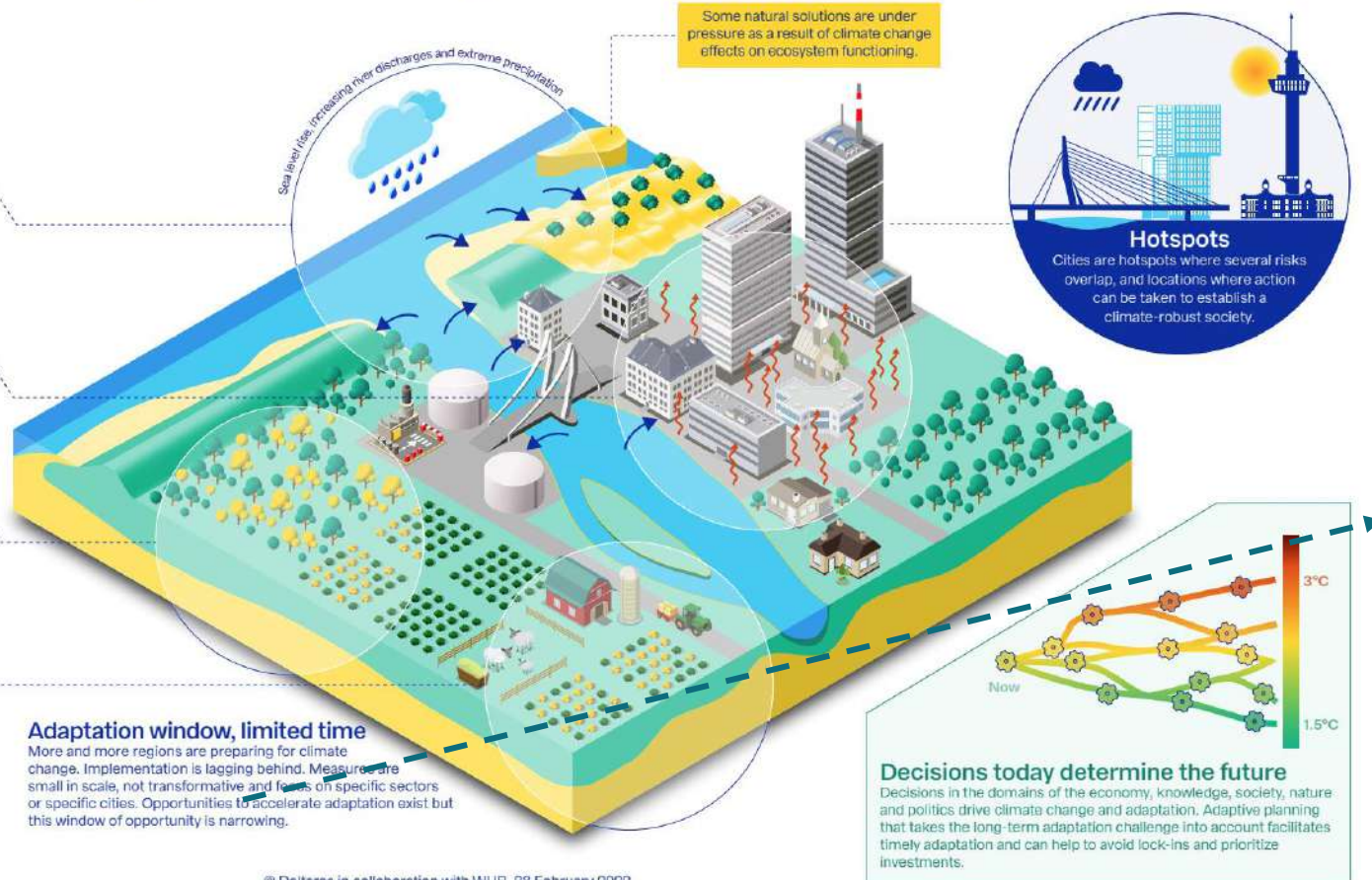
Nature

The habitat for current land and marine ecosystems will be reduced, with irreversible consequences. This process will accelerate if warming exceeds 2°C. The restoration, extension and linkage of protected nature areas will enhance the capacity of ecosystems to adapt.

Agriculture

A combination of drought and heat will exacerbate the risk of crop losses. In the short term, irrigation will be effective but, over time, it will increase risk of water scarcity.

Some natural solutions are under pressure as a result of climate change effects on ecosystem functioning.



More and more regions are preparing for climate change. Implementation is lagging behind. Measures are small in scale, not transformative and focus on specific sectors or specific cities. Opportunities to accelerate adaptation exist but this window of opportunity is narrowing.

Deltares

© Deltares in collaboration with WUR, 28 February 2022

(b) Observed impacts of climate change on human systems

Human systems	Impacts on water scarcity and food production				Impacts on health and wellbeing				Impacts on cities, settlements and infrastructure			
	Water scarcity	Agriculture/crop production	Animal and livestock health and productivity	Fisheries yields and aquaculture production	Infectious diseases	Heat, malnutrition and other	Mental health	Displacement	Inland flooding and associated damages	Flood/storm induced damages in coastal areas	Damages to infrastructure	Damages to key economic sectors
Global	±	-	○	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	○	-	-	-	-	-
Asia	±	±	-	-	-	-	-	-	-	-	-	-
Australasia	±	-	±	-	-	-	-	not assessed	-	-	-	-
Central and South America	±	-	±	-	-	-	not assessed	-	-	-	-	-
Europe	±	±	-	±	-	-	-	-	-	-	-	-
North America	±	±	-	±	-	-	-	-	-	-	-	-
Small Islands	-	-	-	-	-	-	○	-	-	-	-	-
Arctic	±	±	-	-	-	-	-	-	-	-	-	±
Cities by the sea	○	○	○	-	○	-	not assessed	-	○	-	-	-
Mediterranean region	-	-	-	-	-	-	not assessed	-	±	-	○	-
Mountain regions	±	±	-	○	-	-	○	-	-	na	-	-

Confidence in attribution to climate change

- High or very high
- Medium
- Low
- Evidence limited, insufficient
- na Not applicable

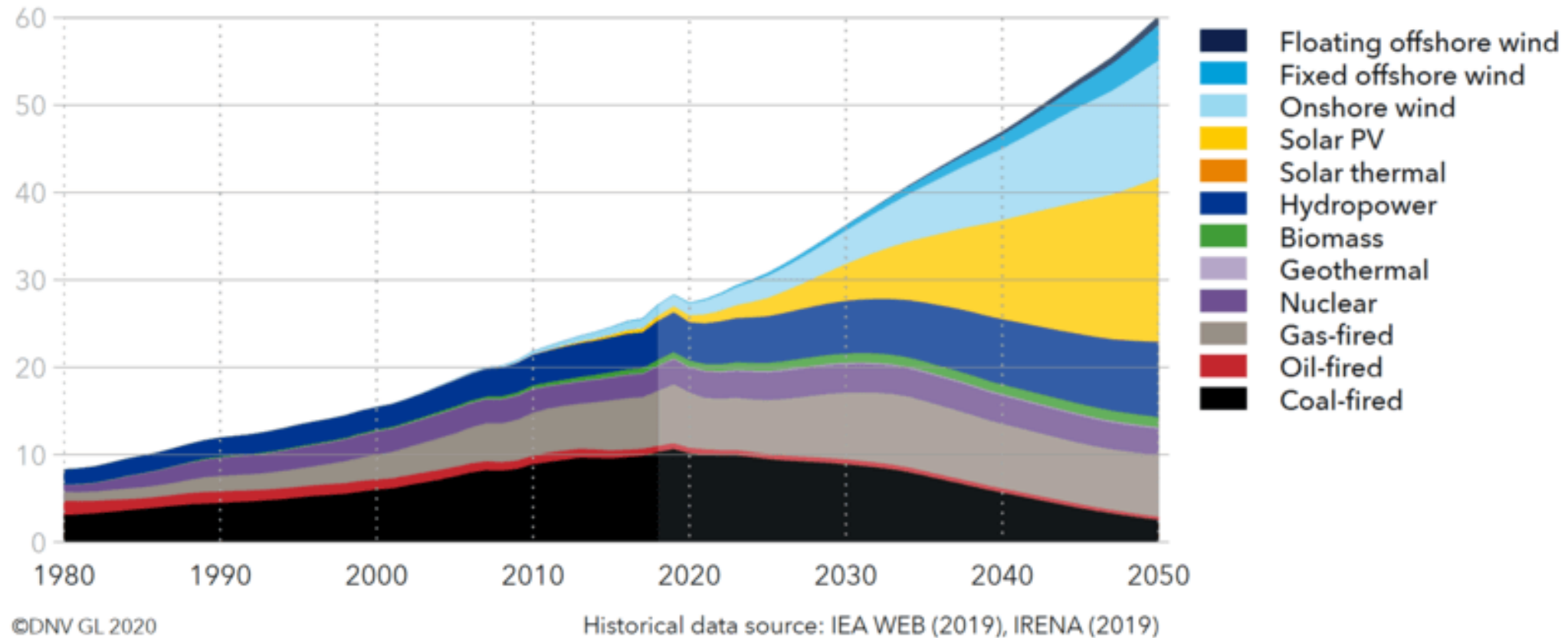
Impacts to human systems in panel (b)

- Increasing adverse impacts
- ± Increasing adverse and positive impacts

What do we need to mitigate?

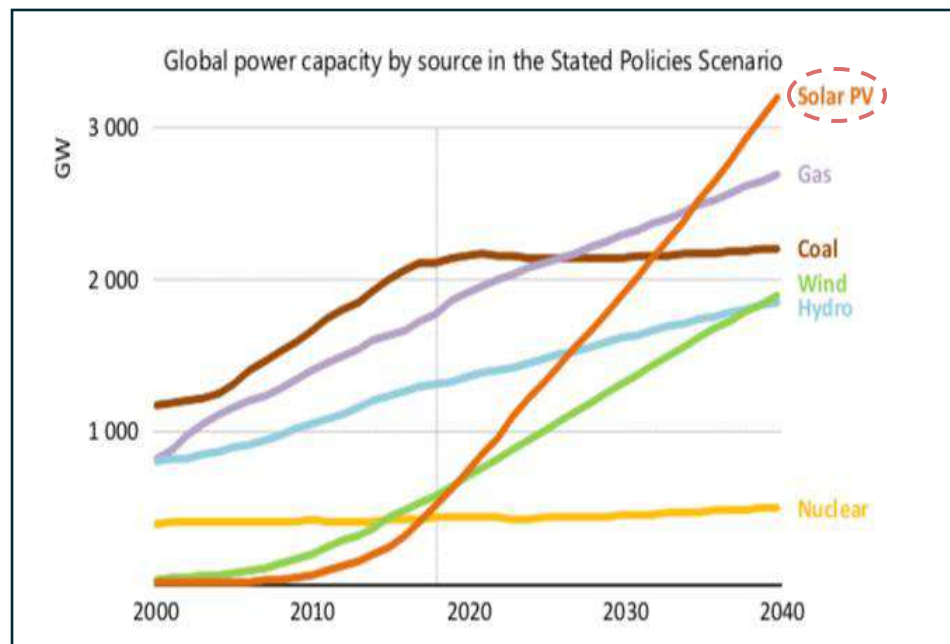
World electricity generation by power station type

Units: PWh/yr



Solar PV is the key enabler of the energy transition

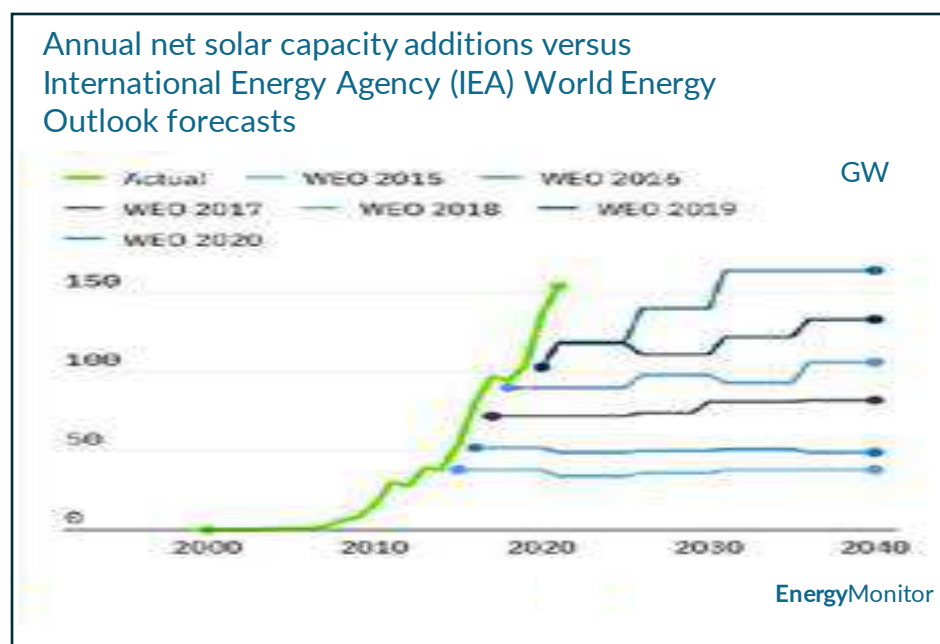
Installed power capacity 2000-2040



- Global PV installed capacity exceeded 1TW in '22
- For 100% renewable energy generation, need ~ 30-60 TW of PV installed (and 20-40 TW Wind)

Source: IEA

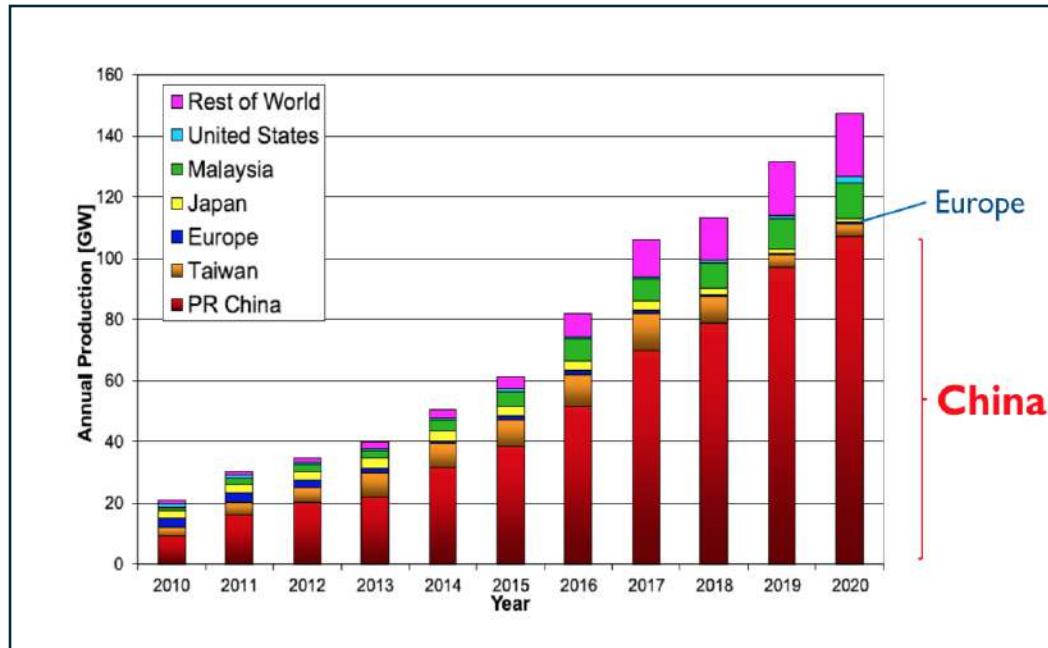
Annual net solar additions vs forecasts



- Annual Solar PV additions consistently higher than forecasts
- Solar PV growth outperforming due to it being the lowest cost of renewable energy and climate change imperatives

EU energy dependency: from fossil fuel to renewable energy

Global annual PV production by country / region

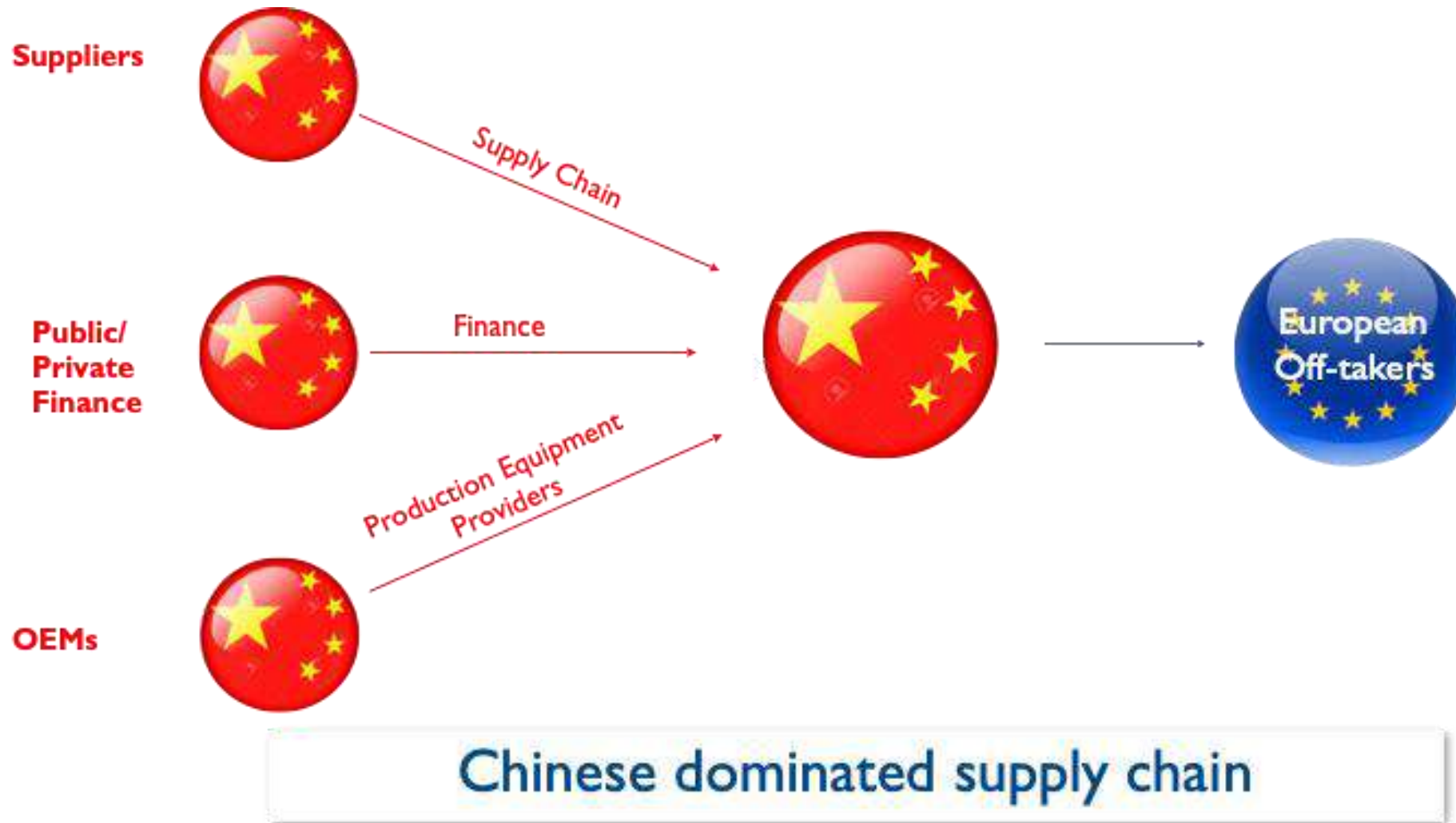


“... The rapid growth of renewable energy is likely to alter the power and influence of some states and regions relative to others, and to redraw the geopolitical map in the 21st century”

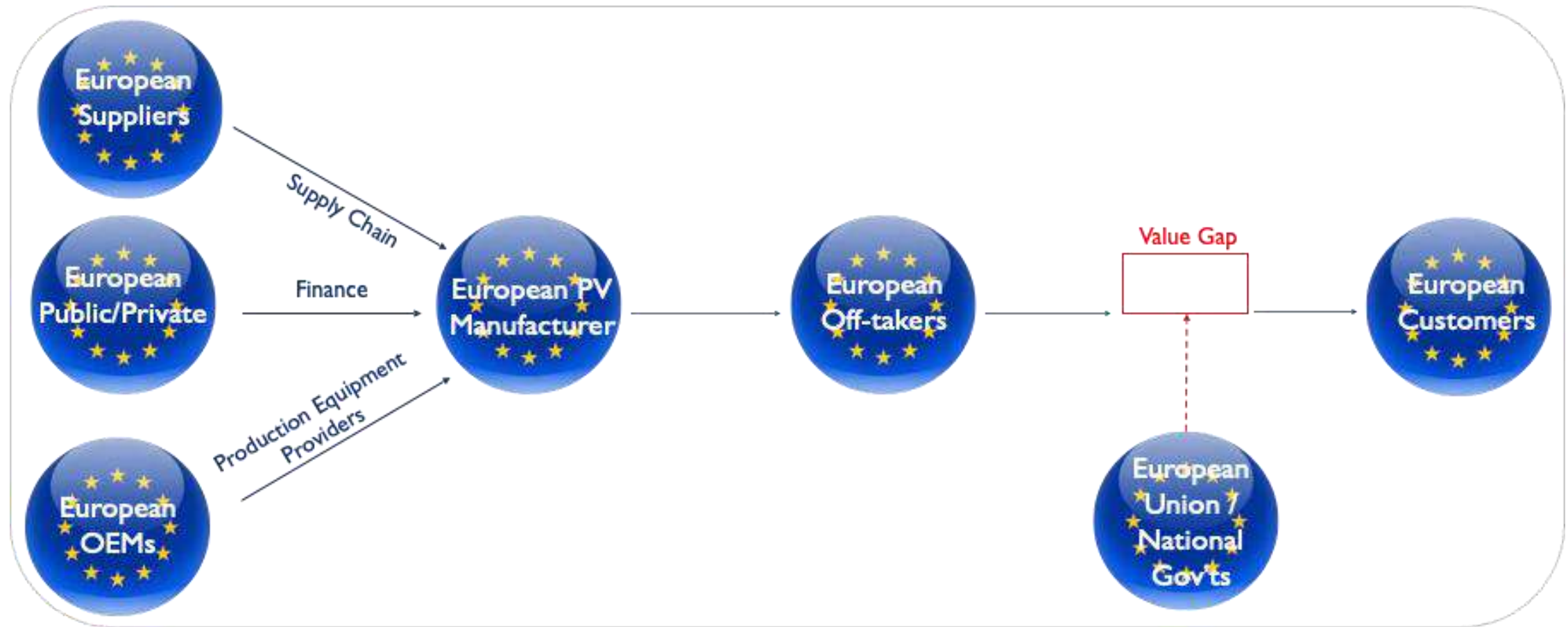
International Renewable Energy Agency (IRENA)

urgent need
Europe has an opportunity to become energy independent

European PV Industry – Current Supply Chain

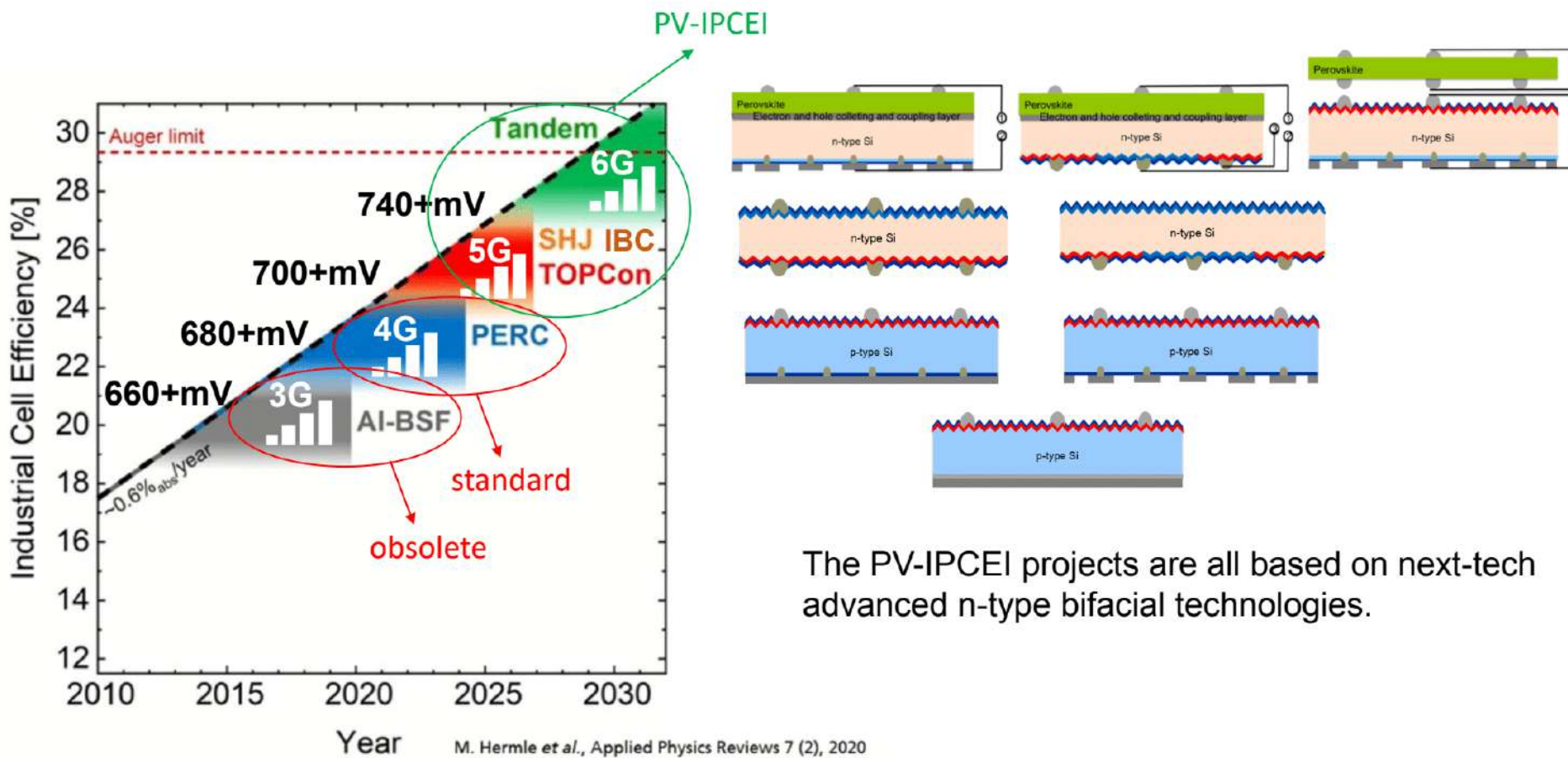


European PV Industry – Target Supply Chain

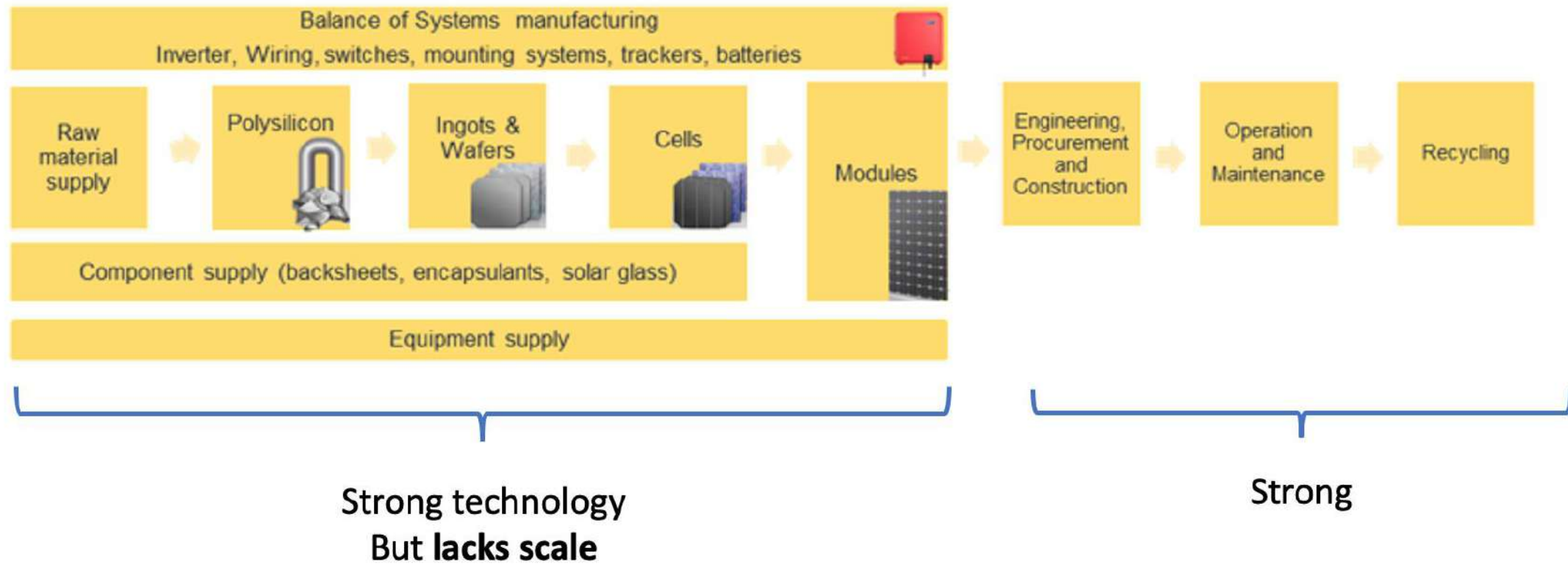


The EU needs to underwrite any “value gap” that may arise for an initial period of time

EU Solar PV Opportunity



EU Supply Chain



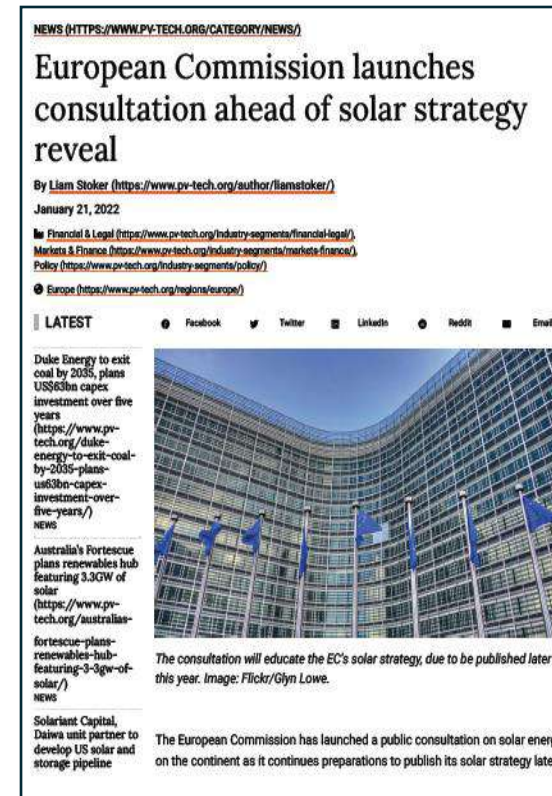
Mobilization within the EU



Private sector champions - major European IPP's making the case for an EU solar PV manufacturing base

On Public agendas at the highest levels

End-to-end EU Private-Public Industrial strategy for Solar PV



Important Projects of Common European interest (IPCEI)



- Projects of EU strategic importance relating to innovation in resource-intensive core market segments
- Promotes innovative industrial deployment, facilitating policy and private-public joint partnerships
- Existing IPCEI projects
 - Battery value chain
 - Microelectronics
 - European batteries innovation
- Solar PV next

Solar market & need for European module production: political support

EU will do 'whatever it takes' to rebuild solar energy
manufacturing in Europe



"We need to bring manufacturing back to Europe, and the Commission is willing to do whatever it takes to make it happen ... Part of this is looking at possible financing options," Kadri Simson - Commissioner for Energy

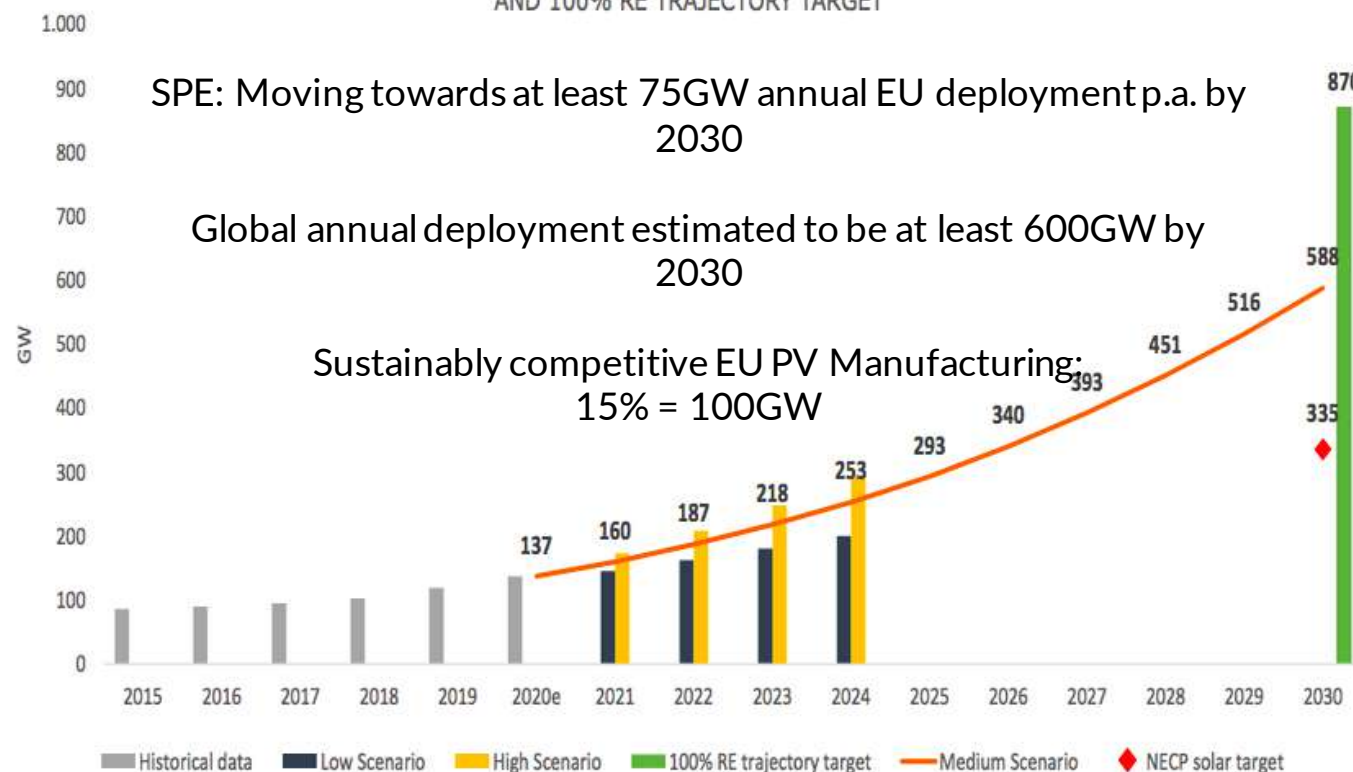
EU Solar Action



European Solar Initiative

A new European Solar Initiative
20 GW solar by 2025 | 40B€ of GDP/y | 400 000 jobs

EU27 TOTAL SOLAR PV MARKET SCENARIOS 2021 - 2030
AND 100% RE TRAJECTORY TARGET



“By 2030 the share of wind and solar energy in power production capacities should double from the current level of 33% to 67%. And by then solar energy will also be the largest electricity source in the EU with more than half coming from rooftops.”
Kadri Simson



esmc
European Solar Manufacturing Council

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Energy Security



EU ENERGY SECURITY = Technology + Scale + Level Playing Field

KEY Industries	Technologies	Scale	Level Playing Field	PROPOSED ACTIONS
WIND			 CBAM/TAXONOMY/...	ACCELERATE EXISTING PLANS PROTECTION THROUGH STANDARDS SUPPORT MANUFACTURING AND OFFTAKE BOOST EU SOLAR VALUE CHAIN REVIEW AUCTION MECHANISM TO ENABLE STRONG INDUSTRIAL BALANCE SHEETS
BATTERIES			 + IPCEI	
HYDROGEN			 + IPCEI	
SOLAR			 NOTHING	

SPEED IS KEY

U.S. IRA and Indian PLI



- \$9 billion in consumer home energy rebate programs and 10 years of consumer tax credits to make homes energy efficient;
- \$60 billion to on-shore clean energy manufacturing in the U.S. across the full clean energy supply chain, including billions dedicating to clean technology and clean vehicle manufacturing facilities;
- Over \$60 billion in tax credits and grants to invest in programs and technologies to reduce emissions in every sector of the economy, including from electricity production, transportation, industrial manufacturing, buildings, and agriculture;
- Over \$60 billion in environmental justice priorities to promote investments in disadvantaged communities; and
- Over \$25 billion in investments in clean energy development in rural communities, climate-smart agriculture, forest restoration, and land conservation.

If successful, the IRA would propel the U.S. ahead of European Union and other similarly situated jurisdictions in achieving ambitious climate goals.



Indian government approves second phase of solar manufacturing incentive scheme

The Indian cabinet allocated around \$2.4 billion for the second phase of the incentive scheme.

SEPTEMBER 22, 2022 **UMA GUPTA**

- RUSSIA – UKRAINE: THERE IS NO TIME TO WASTE – STATE OF EMERGENCY FRAMEWORK
- UNCERTAINTY IMPACTS PRIVATE MARKET FUNDING: PUBLIC SUPPORT TO FILL THE GAP
- EU AND MS FUNDING INSTRUMENTS: TOO SLOW AND TIMING MISALIGNED WITH URGENCY
- FOR IMMEDIATE IMPACT WE NEED:
 - ✓ ACCELERATED ALLOCATION GRANT INSTRUMENTS* TOWARDS MATURE PROJECTS
 - ✓ ISSUE STATE/CREDIT GUARANTEES – TO UNLOCK AND ACCELERATE PROJECTS
 - ✓ TAX CREDIT SYSTEM – NO NEED TO REINVENT THE WHEEL

WE NEED AN EU GREEN ENERGY MARSHALL PLAN

* RRF, IF, InvestEU, ERDF, EIB, IPCEI, NGF...

A new European Solar Initiative
20 GW solar by 2025 | 40B€ of GDP/y | 400 000 jobs

MCPV – Enabling the EU PV sector



Gigawatt HjT production lines scale-up plan

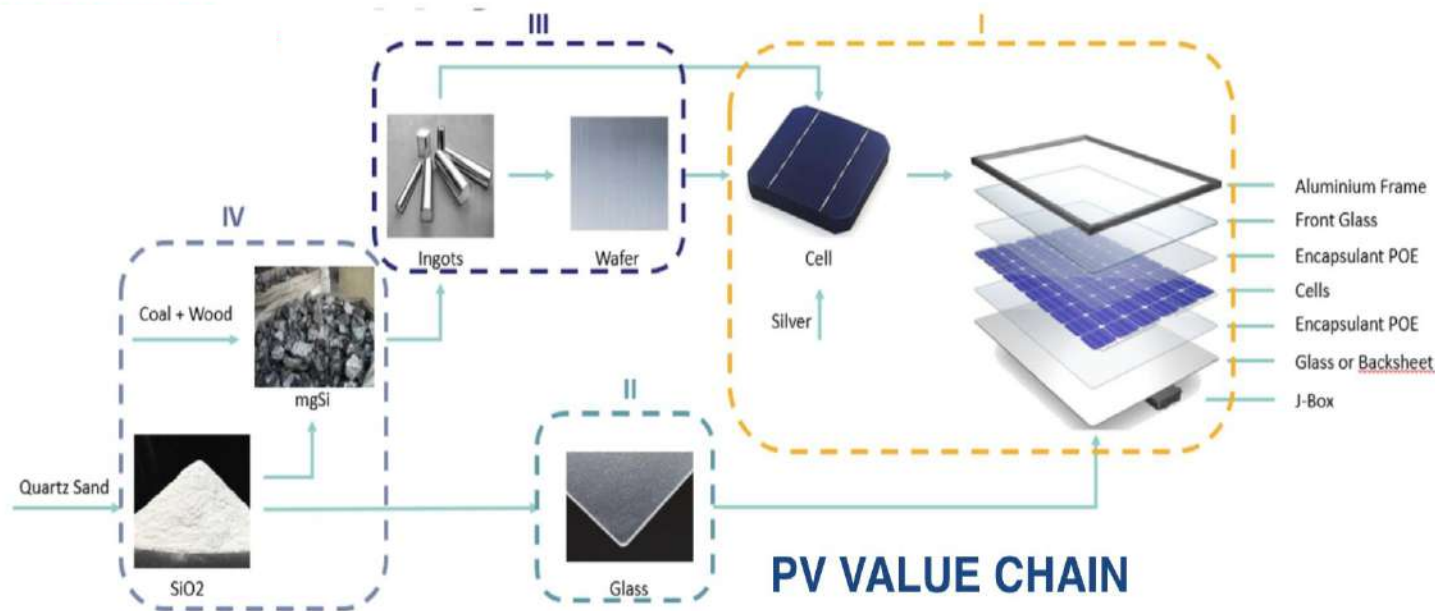
		Cell site*	Module sites (options)** Proximity to end markets
2024	Phase 1 (3+ 3GW Cell and Module)	3 GW Netherlands	3 GW Spain
2025	Phase 2 (3 + 3 GW Cell and Module)	3 GW Germany	3 GW Morocco
2026/27	Phase 3 (3 + 3 GW Cell and Module)	3 GW 	3 GW
2028/29	Phase 4 (6 + 6 GW Cell and Module)	6 GW 	6 GW

* Cell lines supply corresponding module lines in same phase

** Manufacturing sites are currently planned in Germany and Netherlands (Cells), Spain and Morocco (Modules)



PV Supply Chain



- **Short Supply Chain**
- **All Raw Materials available in EU**
- **All technologies available in EU**
- **EU leading in R&D**
- **Can recapture global market with next generation manufacturing technology**

MCPV – Collaborative Supply Chain Scale Up



Collaboration areas include (among others):

Resource optimization	Industry 4.0 & 5.0	Artificial Intelligence & data spaces
Supply chain enablement	Sustainable building & production	Recycling & 2 nd life

NB: company and institution names are merely indicative

Collaborative Approach to Scaling the EU Supply Chain



- Cross Value Chain Coordination to ensure timely raw material and manufacturing scale-up
- Cross Value Chain risk mitigation and visibility through long term offtake agreements starting at IPP and Energy Utilities level and then upstream
- Public-Private Partnerships across Member States to ensure timely availability of public funding and risk mitigating instruments where needed (especially in early phases)
- EU and Member State Policy action: Standards on CO2 footprint, labor rights, circularity, IP protection, local content (contribution to GDP, jobs, energy security...)

Marc Rechter

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+351.925.215.395

Thank you

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Future-proofing of actions

co-creation of actions for
resilience, green and digital transition

Why, how, what next for business?

Antonio Novo

President of the European Cluster Alliance & Curator of Industrial Forum Task Force 2 on Transition Pathways

EU Industrial Forum: Why?

In view of our geo-political context, the European Commission needed a **new, inclusive and open mechanism for co-designing solutions with stakeholders.**

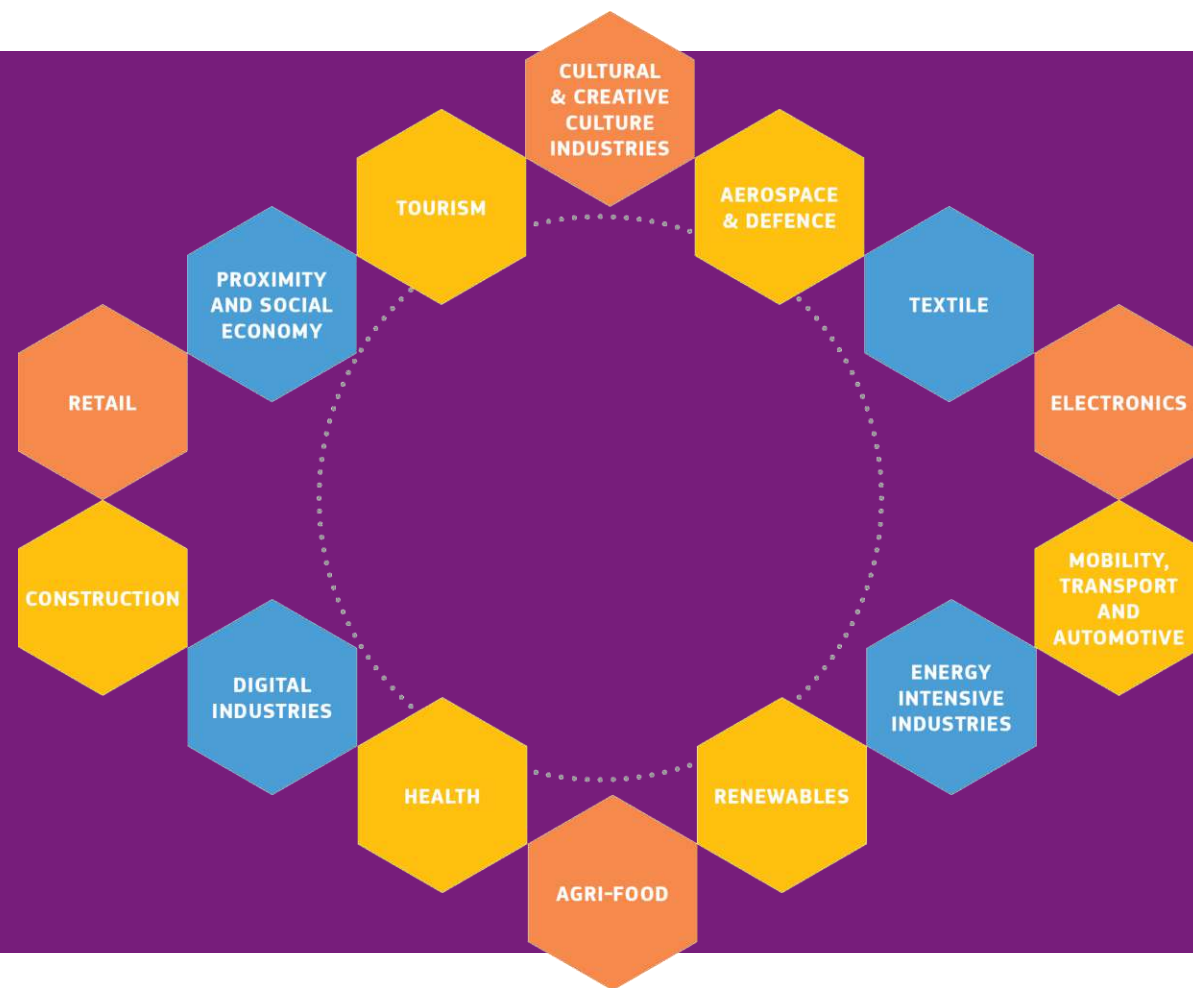
“The Industrial Forum shall contribute to the **coordination of recovery efforts**, bringing together the views of industrial stakeholders, public authorities, civil society organisations and investors.”



What for?

Two key tasks:

1. To contribute to the Commission's work on industrial ecosystems
2. To assist the Commission in tracking the implementation of the new Industrial Strategy



How?

5 Task Forces:

1. Single Market, **KPIs** and industrial ecosystems
2. Support the development of **Transition Pathways**
3. Support the analysis of **strategic dependencies**
4. Identify and advise on **cross-border and cross-ecosystem** investment needs and cooperation opportunities
5. Support the uptake of **advanced manufacturing** processes by EU industry

Every member can:

- Nominate representatives
- Propose external experts
- Contribute to the
 - Reports
 - Best cases and references
 - Other deliverables, like matchmaking events

The European Clusters Alliance

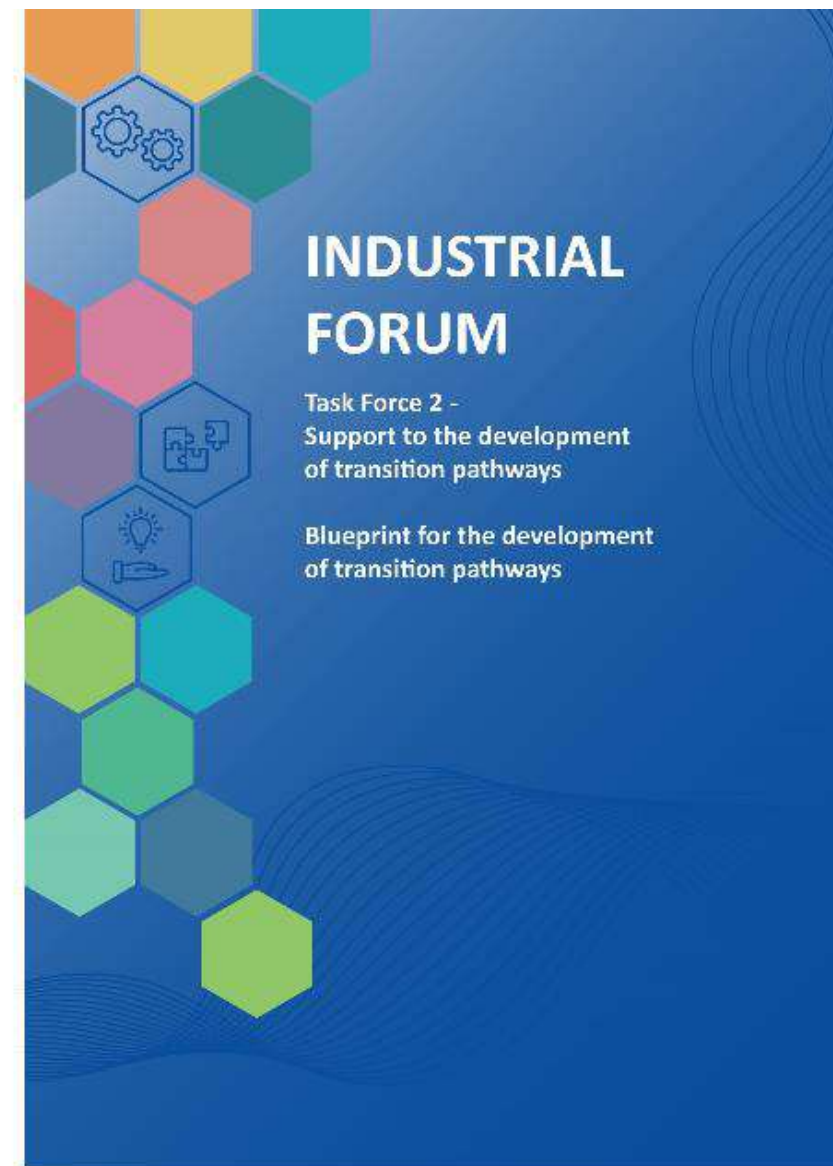
- co-curates Task Force 2 and 4, including sub-group on Impact of the War in Ukraine
- has nominated experts for every Task Force
- is contributing through meetings and experts to every Transition Pathway in development



What next? Transition Pathways and readiness for crisis

More than never we need to contribute, from our network perspective and fully involving our members, with

- solutions to the current challenges
- plans for future scenarios



Thank you!

Antonio Novo

Antonio.Novo@clustersalliance.eu

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Transition pathways: our way to the future

Ulla Engelmann
Head of Unit D2 – Industrial Forum, Alliances, Clusters

What are transition pathways?



Goal: an actionable plan for the transition of industrial ecosystems that eventually will lead to project pipelines, co-created by the European Commission and relevant stakeholders

Building blocks:

- setting a vision: goals and milestones for greening and digitalisation + resilience
- looking at bottlenecks, gaps, enablers (including regulatory), monitoring mechanism
- making a business case for investments
- taking into account competitiveness, governance, R&I technology, infrastructure, skills
- Stress on social impact of the transition, international and SME dimension

Taking into account: relevant inputs such as **ecosystems analysis** (fiches), **digital compass and fit for 55 targets**, **industrial technology roadmaps** (ERA + Action Plan on Synergies between civil, defence and space industries) and inputs from stakeholders such relevant expert groups and the **Industrial Forum**

Priority ecosystems: given to ecosystems and sectors that urgently need to transition to remain competitive, **energy-intensive industries** and **construction**, as well as to sectors heavily affected by the crisis, **tourism** and **mobility**

EU INDUSTRY DAYS

08-11 FEB
2022

#EUIndustryDays



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European
Commission



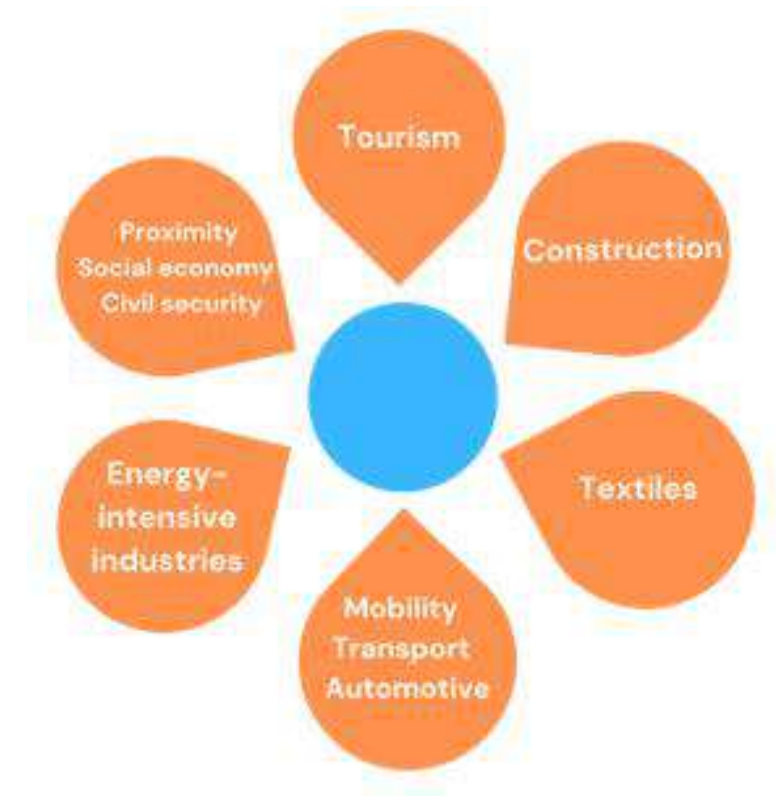
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Transition Pathways

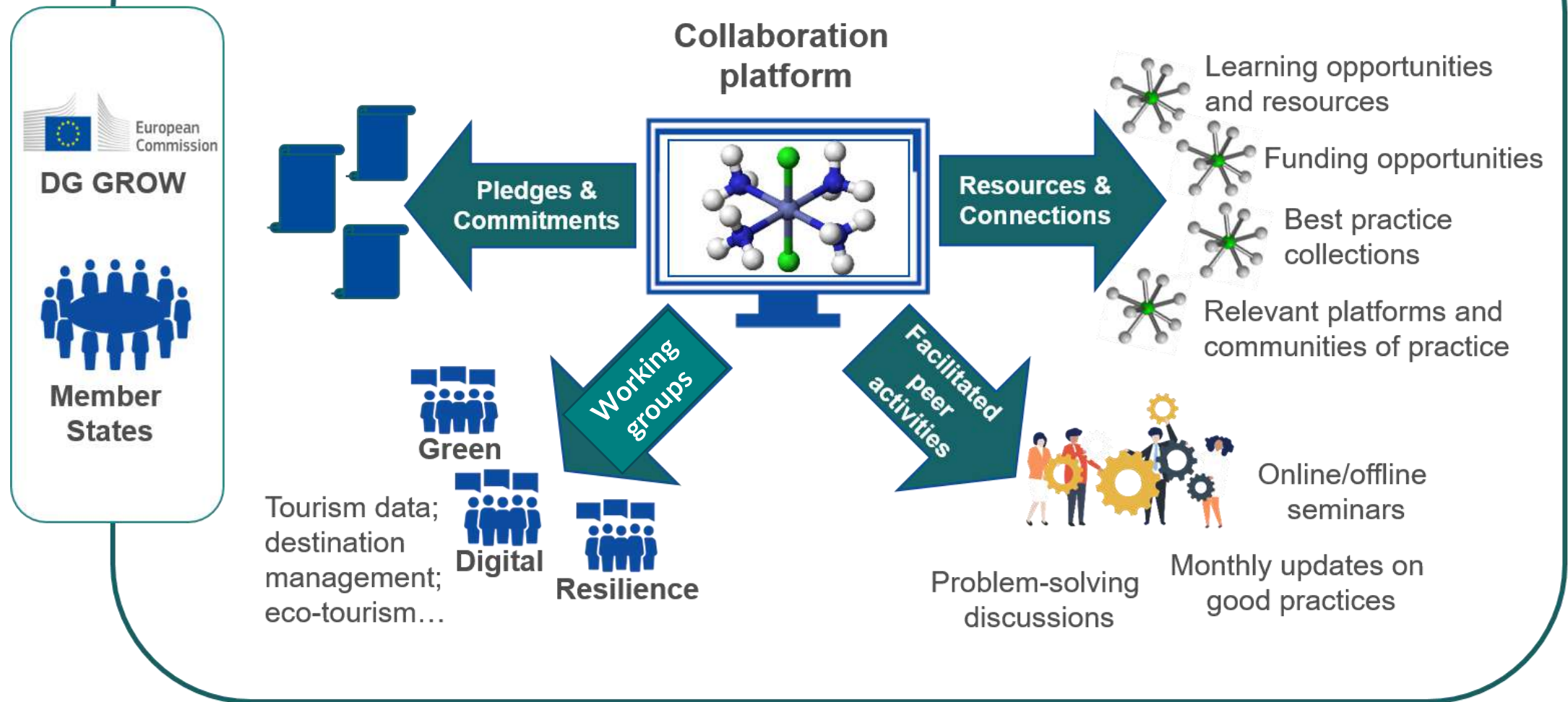


Transition Pathways status and timelines

Ecosystem	SWD with scenarios	Public consultation	Transition Pathway (policy reports)	Public Event
Tourism	21 June 2021	Closed on 15 September 2021	4 February 2022	EU Industry Days - 8 February 2022
Chemicals	n.a.	No formal public consultation (series of stakeholder meetings 16/02; 15-16/03; 25/04)	October-November 2022	-
Mobility	24 January 2022	Closed on 29 April 2022	Q4 2022	-
Construction	14 December 2021	Closed on 28 February 2022	Q4 2022	-
Proximity & Social Economy	8 December 2021	Closed on 28 February 2022	October 2022	14 November 2022
Textiles	30 March 2022	Closed on 15 May 2022	Q1 2023	
Mobility	24 January 2022	Closed on 29 April 2022	Q4 2022	-
Construction	14 December 2021	Closed on 28 February 2022	Q4 2022	-
Retail	Q4 2022	Q4 2022	Q2 2023 (TBC)	-
Agri-food	Q4 2022	Q4 2022	Q2 2023 (TBC)	-
Aerospace & defence	Q4 2022	Q4 2022	Q2 2023 (TBC)	-

Implementation platform for Tourism

Together for EU Tourism



Examples of indicators for change and results

Examples of indicators reported on all ecosystems:

- Share of companies who seek professionals with advanced tech skills
- Top R&D investors, Large companies, SMEs
- Share of SMEs adopting advanced (and basic) technologies
- Relative Trade balance - Raw Materials
- Value of public investment in digital and green technologies
- Renewable energy use

Examples of transition happening:

- Creative and Cultural: CI: 2good2go: Reducing food waste from restaurants.
- Tourism: Booking.com: Certificate for sustainable travel solutions
- Chemicals: Safety and Sustainability by design.
- Mobility: Yara International: Worlds first battery driven cargo ship
- Textiles: Circular.fashion: it-platform for designing circular fashion
- Construction: Rebrick: cleaning and reusing old bricks

Thank you

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#EUClusterConference



Sandra Sundbäck

Paper Province

*We bring society into the future
with the help of the forest*





Gold Label
certified
cluster

A RENEWABLE RAW MATERIAL

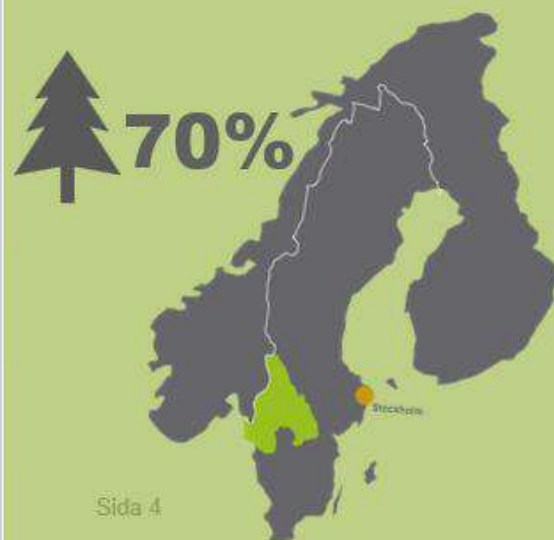
AND THE ROAD TO A FOSSIL-FREE SOCIETY



134
member
companies

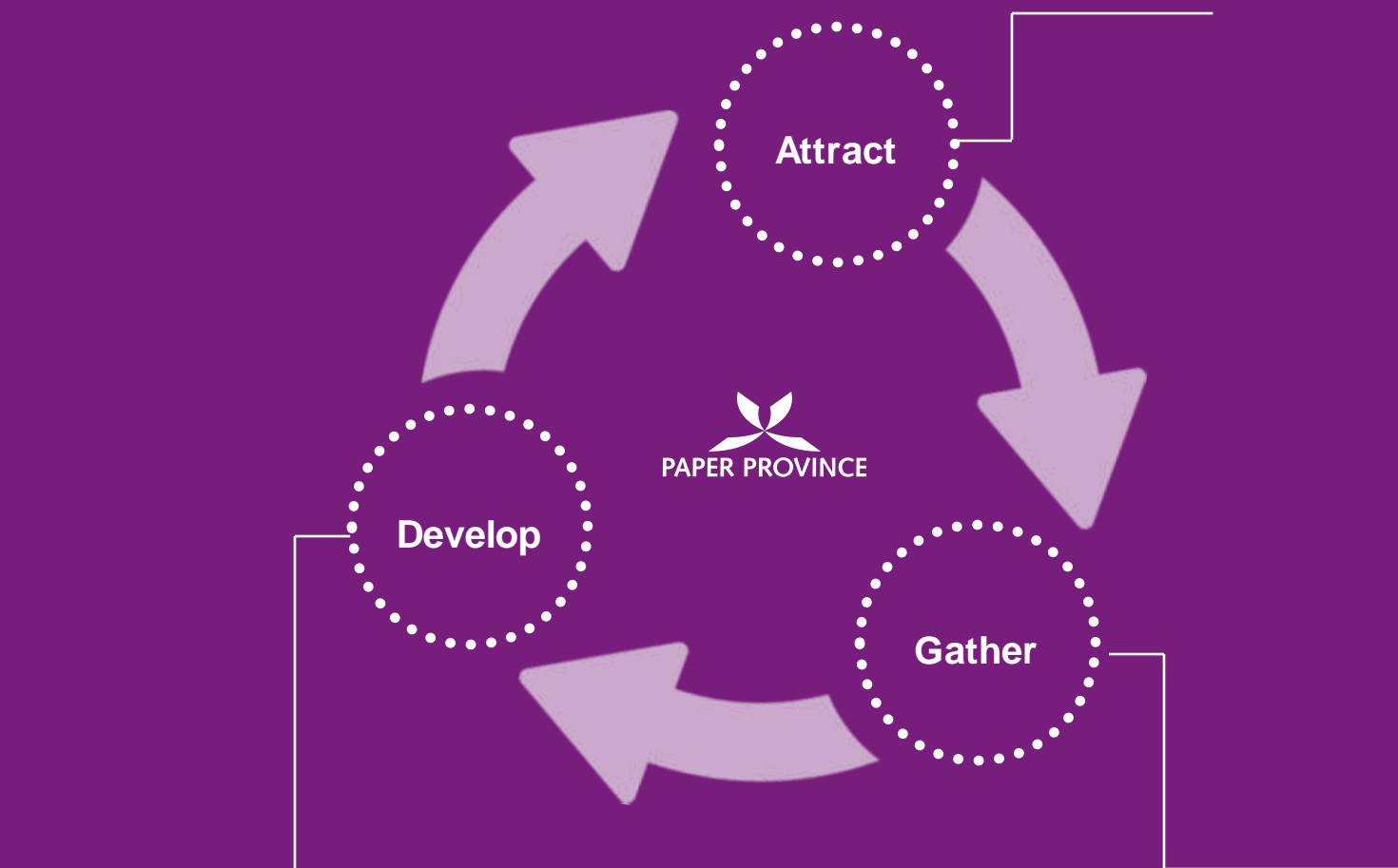


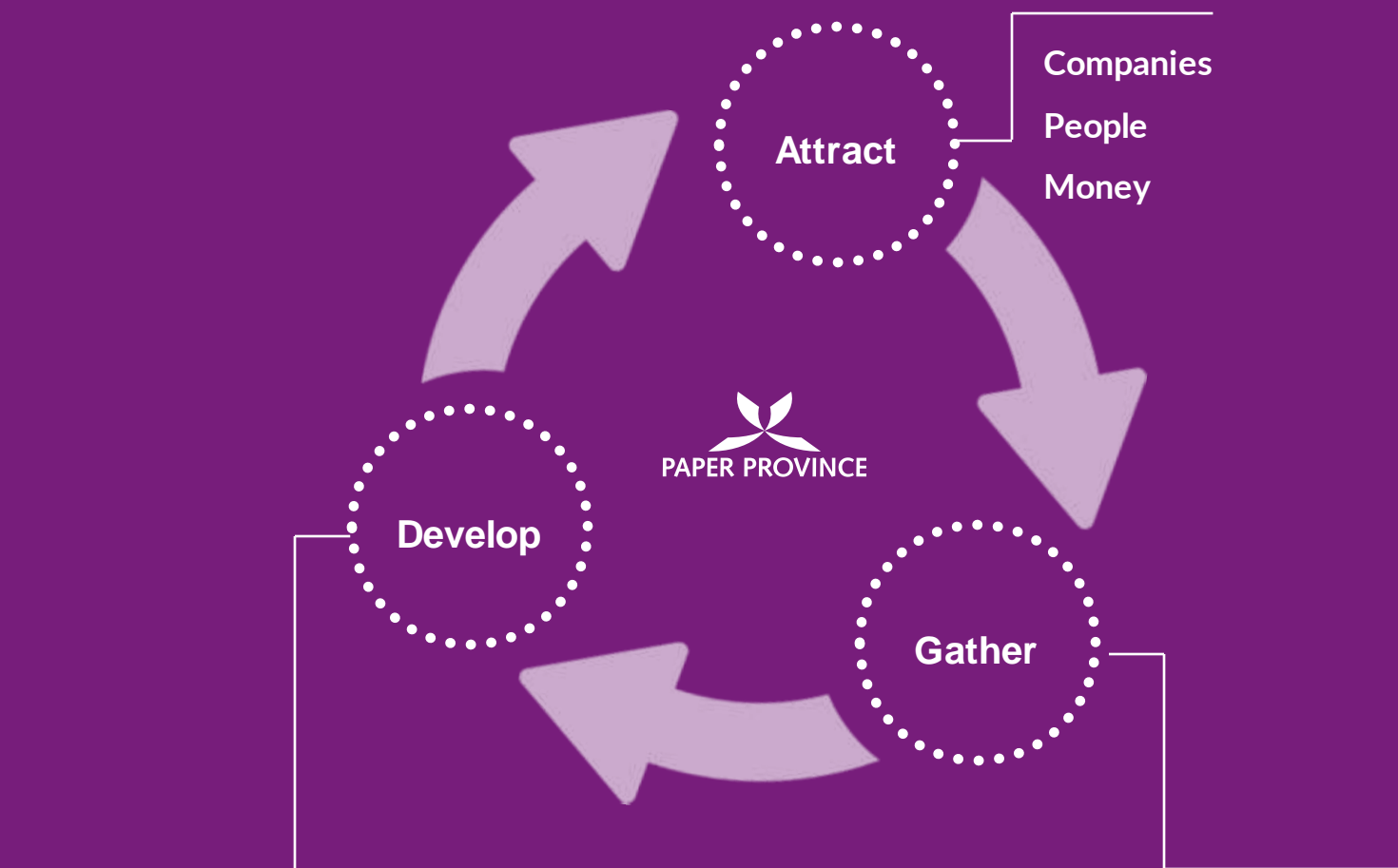
45
companies

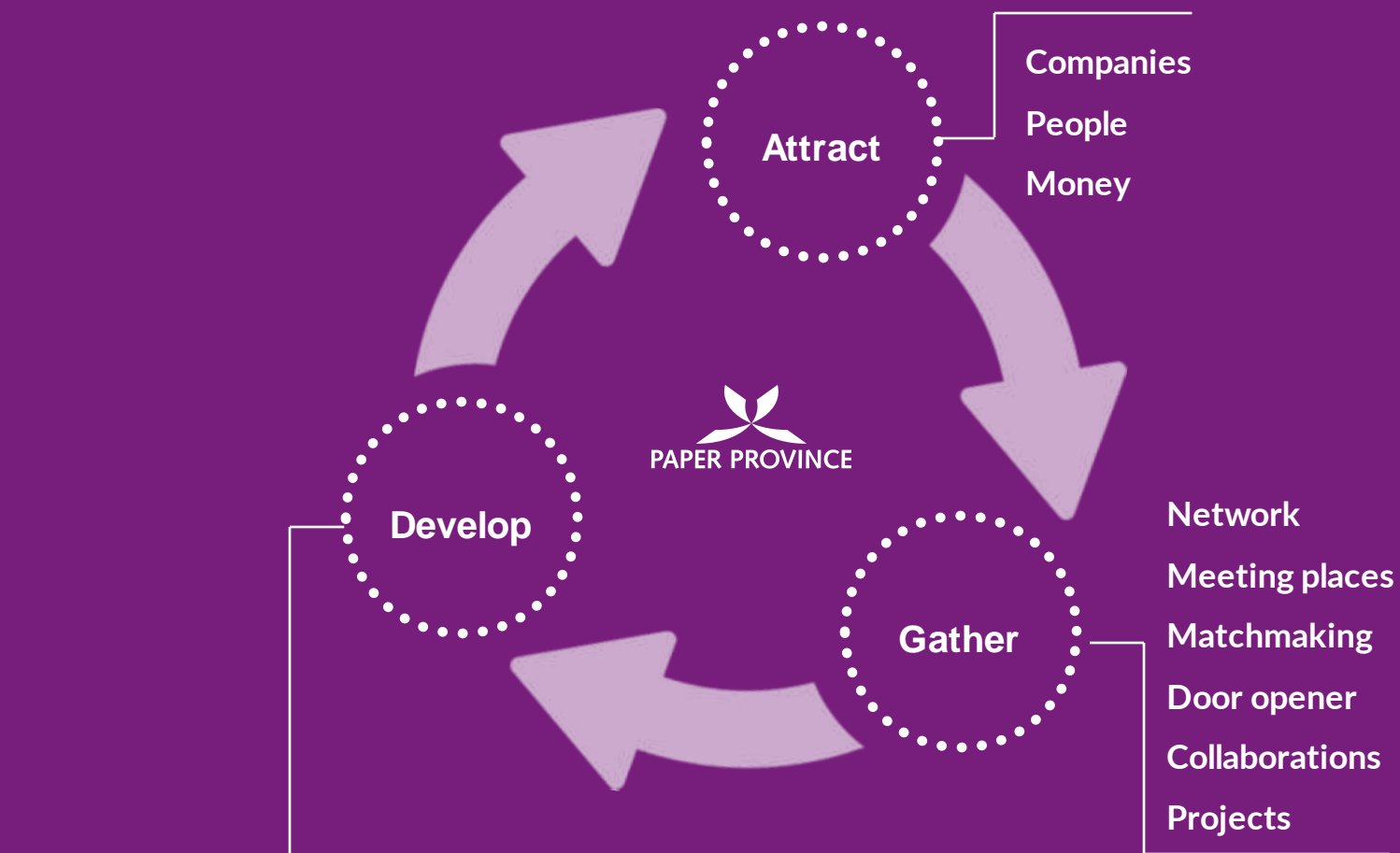


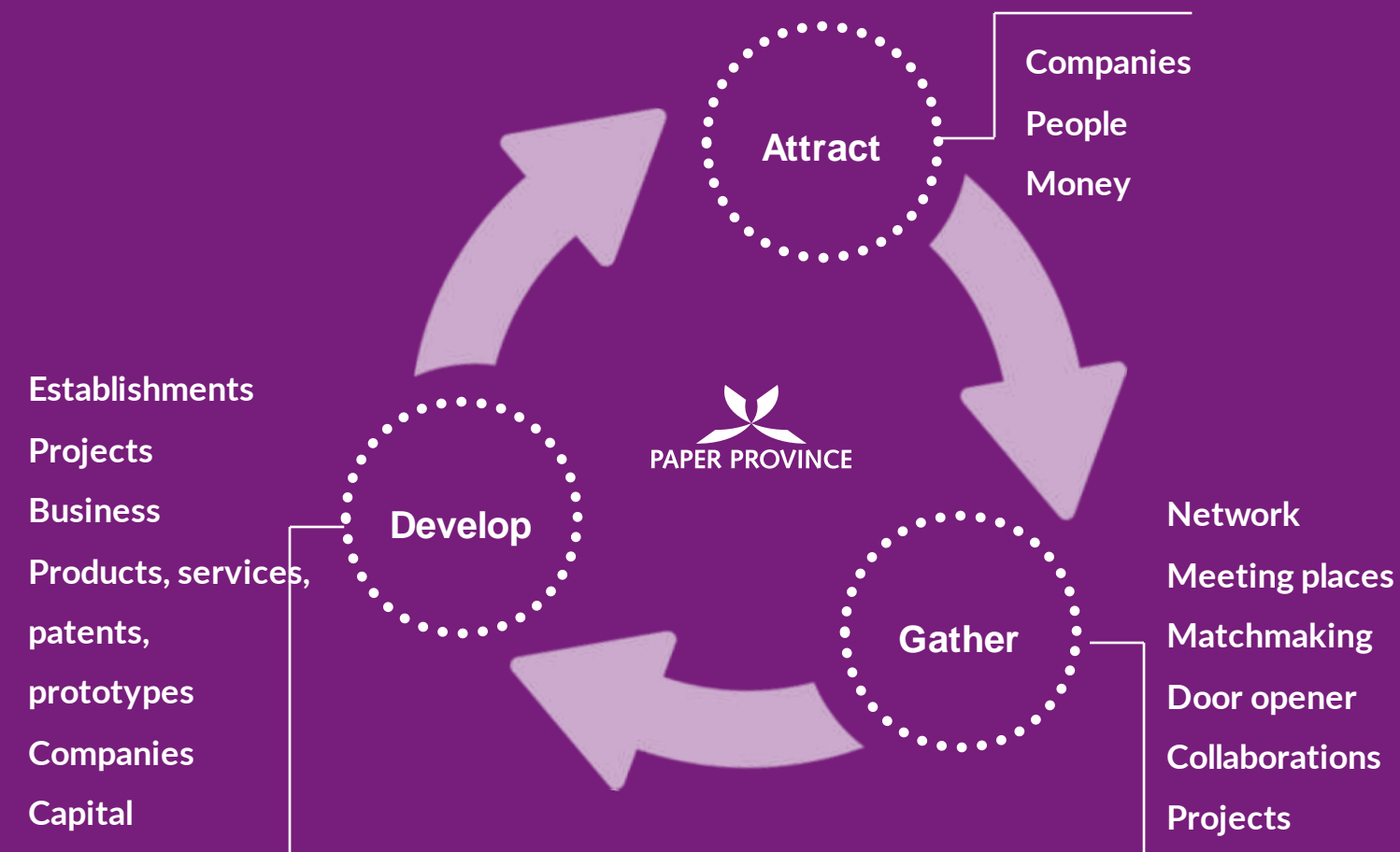
- ✓ Secure the supply of a skilled work force
- ✓ Innovation and development
- ✓ Internationalization
- ✓ Regional mobilization

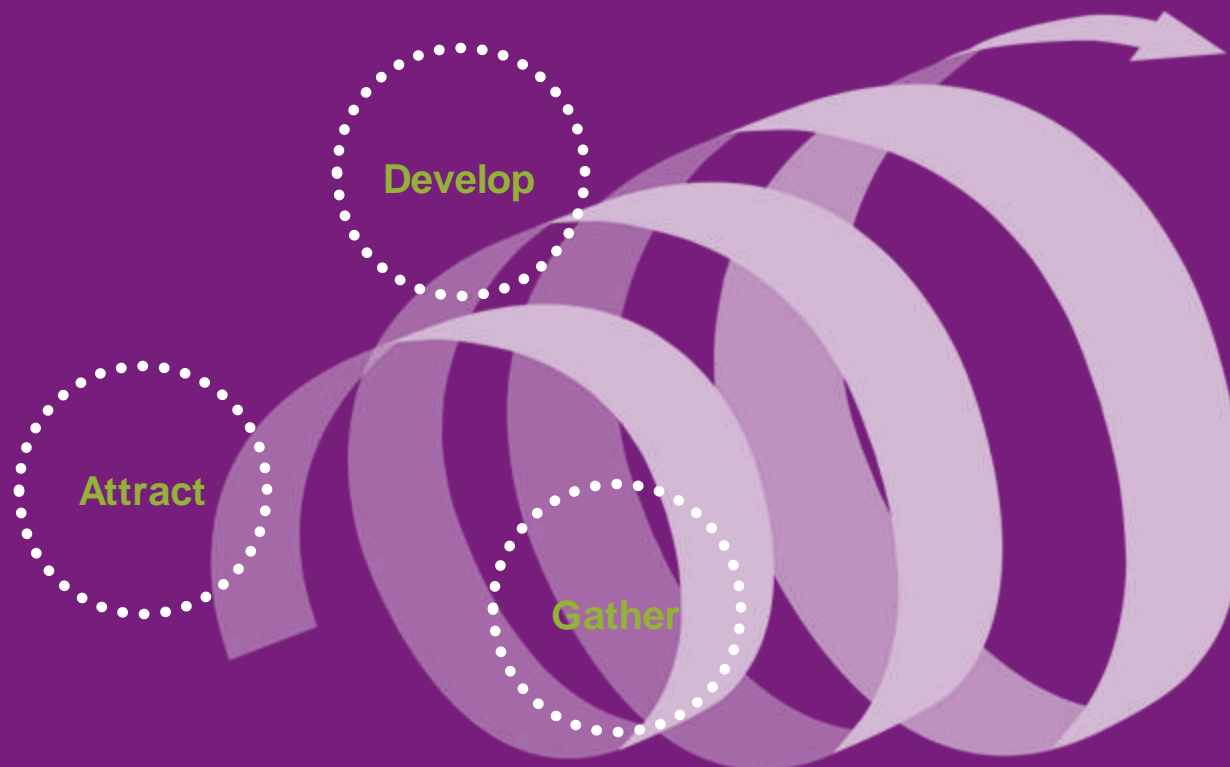












*We bring society
into the future
with the help of
the forest*



The road to
Bioeconomy
starts here



The road to
Bioeconomy
starts here



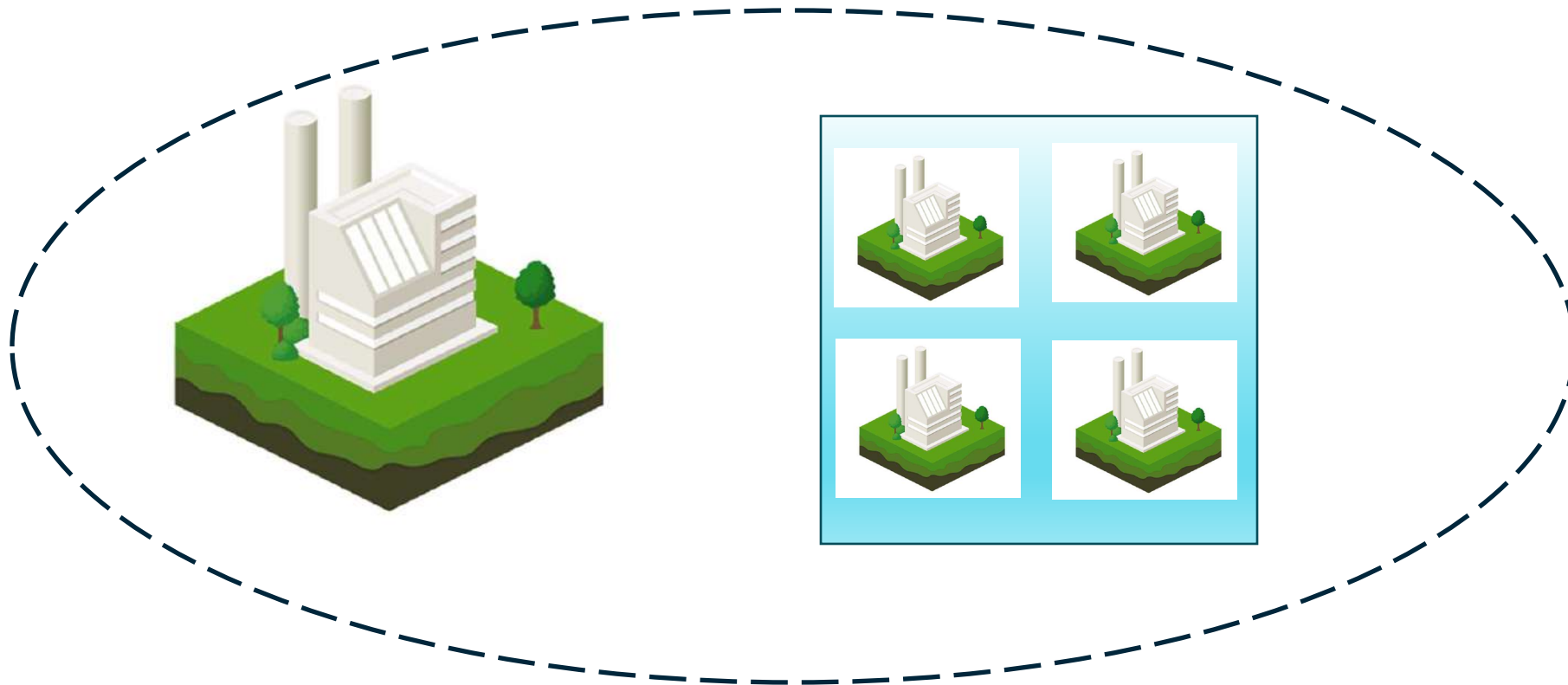
The road to
Bioeconomy
starts here



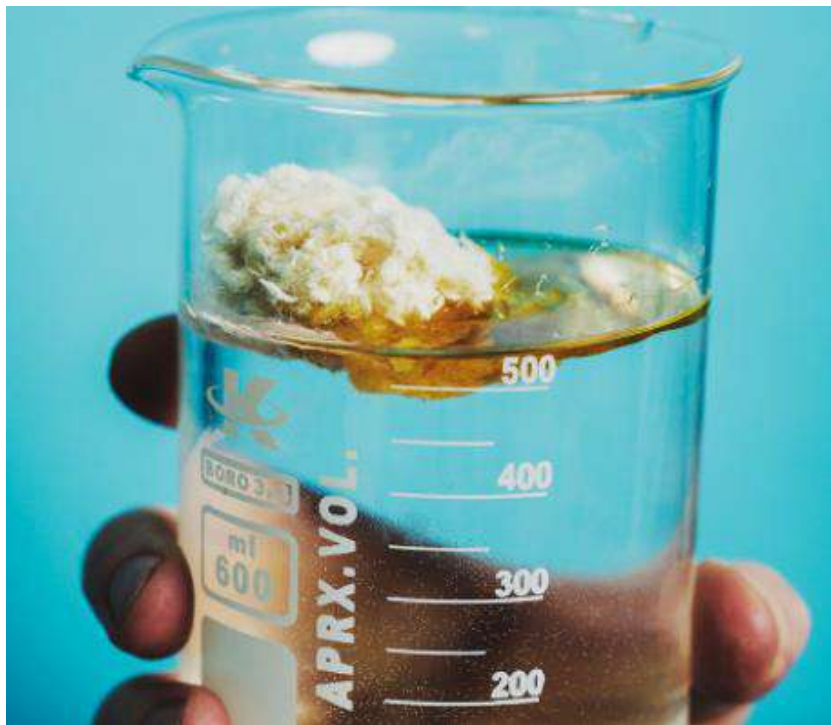
compare



Symbiotic Scale-up



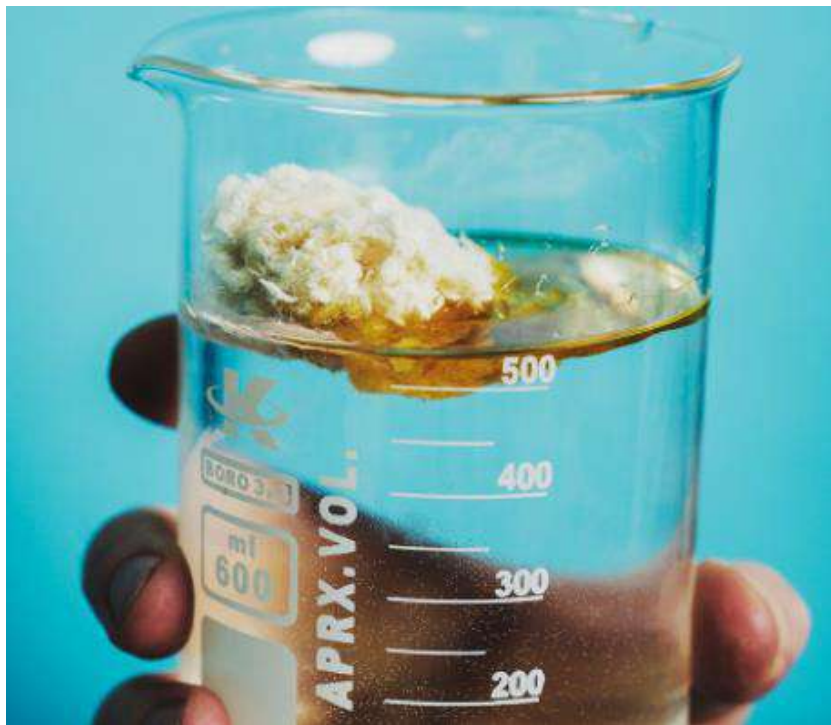
Industry Entrance Support



 **Biosorbe**



Industry Entrance Support



 **Biosorbe**

" We feel that Värmland has become the hub of the forest bioeconomy and want to be part of where it happens "

Lars-Erik Sjögren
CEO Biosorbe



THE PAPER PROVINCE

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Thank you

Sandra Sundbäck
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#EUClusterConference



Towards a resilient European automotive industry

About EACN

- Association like network since January 2021
- 24 Automotive Clusters
- 12 Countries
- > 4.500 Members
- > 2.400 SMEs

Objective:
Boost competitiveness
through collaboration!



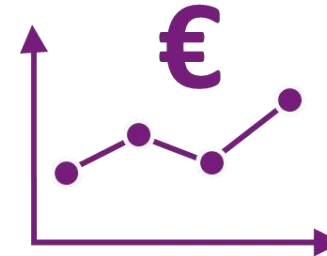
Automotive industry in Europe: Key indicators



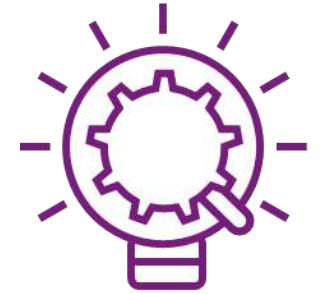
12,1 M vehicles
15,3% of WW vehicle production



3,5 M direct and
indirect employments
in manufacturing



8% of overall EU's GDP
>45bn€ trade surplus



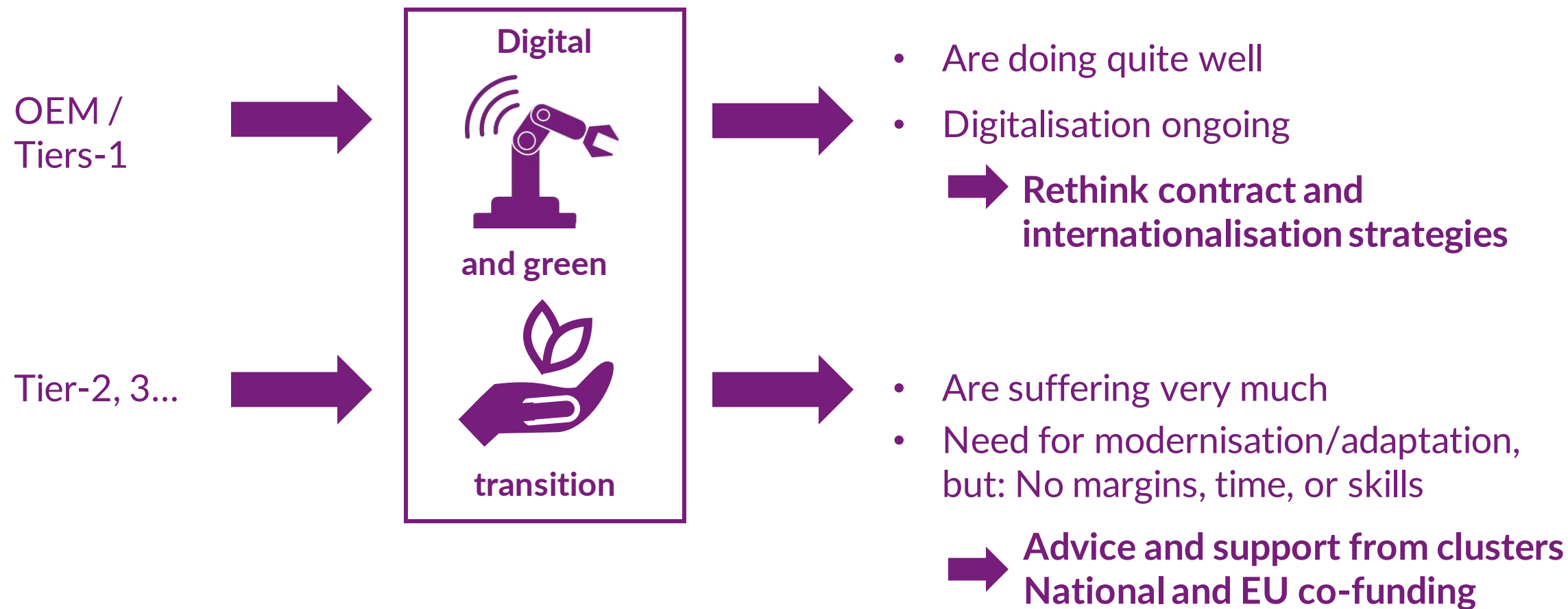
58,8 bn€
or 32% of the total EU's
innovation spendings

Figures: ACEA, 2021

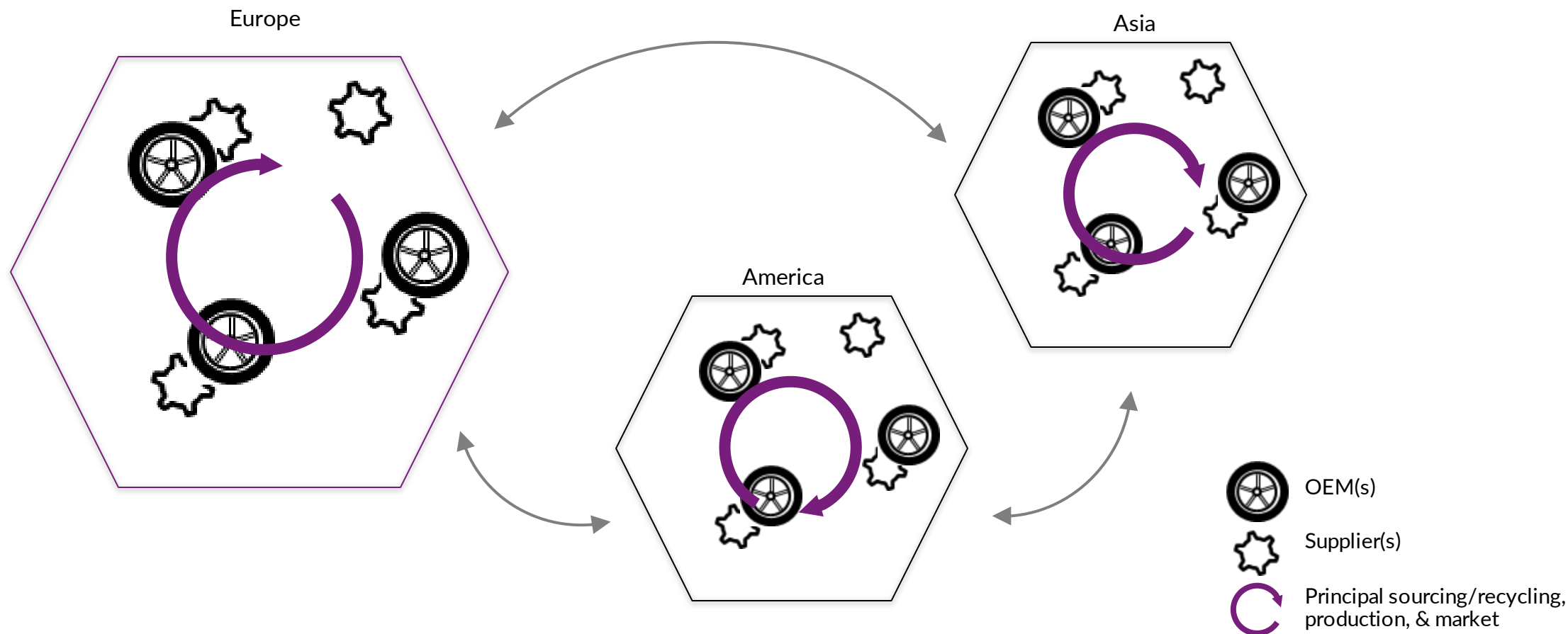
Automotive industry in Europe: Challenges



Automotive industry in Europe: Current situation



A vision for a European circular automotive ecosystem



What can cluster networks do? The example of EACN



Joint
Working Groups



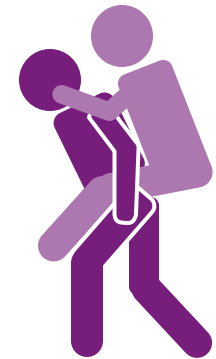
EACN
Coffee Breaks



Best practice
exchanges



Partner
search support



Support
to EU projects

Support to SMEs thanks to EU funding

Project	 European Automotive Cluster Network for Joint Industrial Modernisation Investments		 ClusterXChange	RESIST	E-BOOST
Partners	 European Automotive Cluster Network  Solutions for future vehicles & mobility  EUROPEAN AUTOMOTIVE CLUSTER   Clúster de la Indústria d'Automoció de Catalunya  silesia automotive & advanced manufacturing 	 collaboration is the driver  MOBINOV :: Automotive Cluster PORTUGAL	 WIRTSCHAFTS FÖRDERUNG NACH HELLBRUNN    AUTOKLASTR	 Solutions for future vehicles & mobility  EUROPEAN AUTOMOTIVE CLUSTER  AUTOKLASTR	
Other partners		 AUTOMOTIVE INDUSTRY NL  ZONE CLUSTER NONPROFIT LTD. 	  CLUSTER METALMECCANICA FRIULI VENEZIA GIULIA	 Growing Through Collaborative Innovation 	 DITECFER RISORSE PER LE TECNOLOGIE PERMANENTI INNOVATIVE E LA SOSTENIBILITÀ DEL BUL  Logistik-Initiative Hamburg  AUTOMOTIVE INDUSTRY NL 
Funding scheme	 ESCP.S® EACN Partnership	 ESCP.X ESCP Partnership 	Eurocluster Mobility - Transport - Automotive		

Cooperation creates added-value on cluster and network level for a stronger and greener European Automotive & Mobility Industry

Thomas Röhr
sg@eacn-initiative.eu

Meet us at the
autoklastr booth



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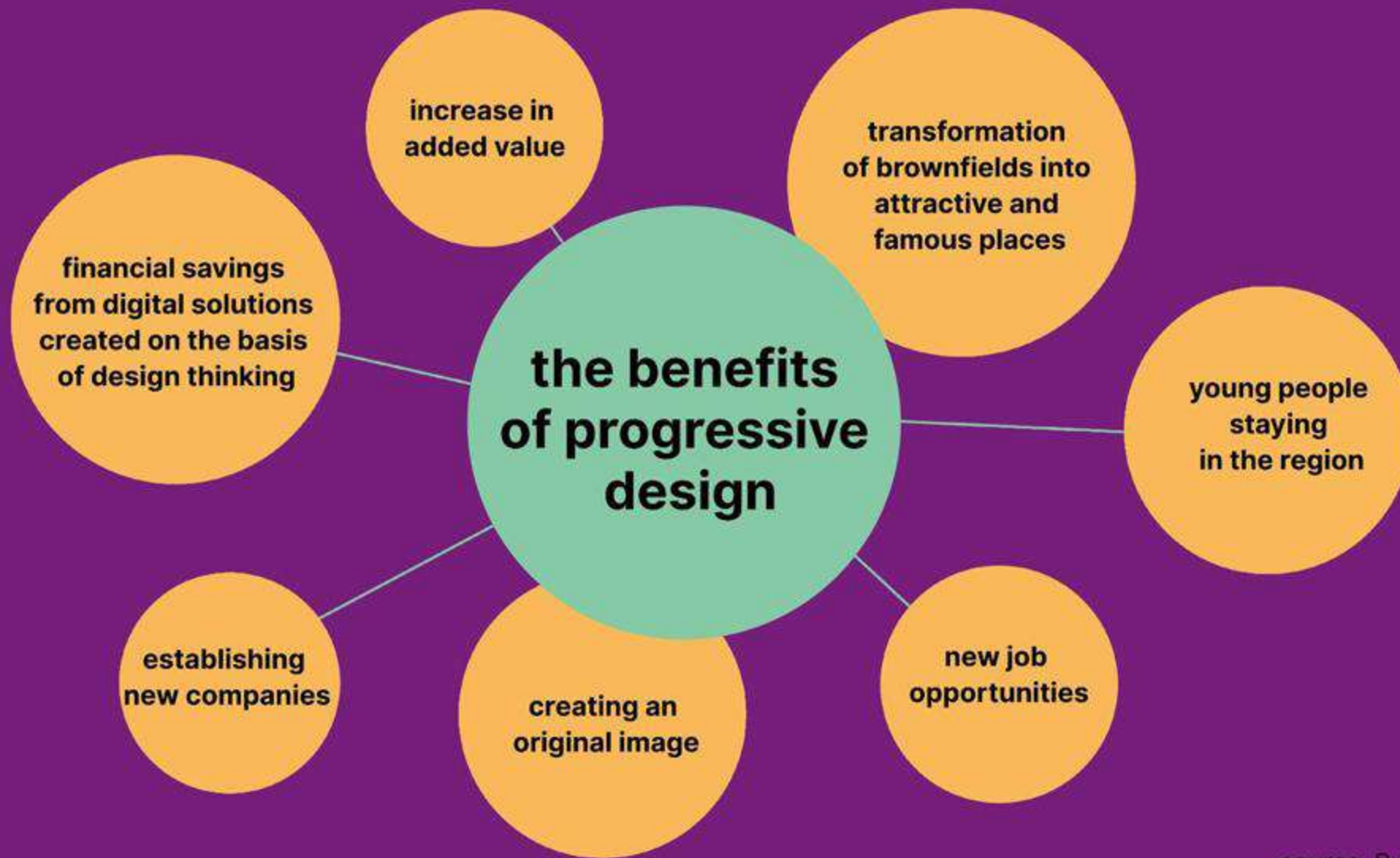


Creativity as a catalyst for up-skilling and re-skilling

WHAT CAN CREATIVITY BRING?

- Flexibility
- New ideas
- Courage to try new things
- Better ability to job changes
- Progressive design

Creativity is not just about an art or a gifted talent, it is something that we all have from birth and it is important to develop it as it will help us cope with the rapidly changing times.



source: Rut Bisková

HOW WE SUPPORT IT?

- Education in companies about the need for creativity
- Education in art school about business
- Creative clusters
- Creative co-working places
- Exhibitions
- Networking

What we do in my region Zlín:

Zlín Creative Cluster, Exhibition One hundred years of Zlín design, awards Created in Zlin, program Creatinn, creative co-working HUB 123

Thank you

Dimitri Ionescu

Director at LightMirror

What kind of skills?

- Deeptech startup in building integrated renewables for healthcare
 - Crossroad of architecture, physics and engineering-

Topics such as new lightweight materials, new coating, software development, optical and celestial physics and electronics development applied to architecture and thermal engineering.



Meet our team



ALEKSANDRA 🇺🇦
Chief commercial
officer

Zaporizhzhia National Technical University
(Ukraine)

10 years experience in energy management

Ex-Chief Commercial Officer of leading
Ukrainian energy companies



DIMITRI 🇫🇷
Chief executive
officer

School of engineers of the city of Paris
(France)

Specialist in urbanism, civil engineering

Ex-Engineer coordinating the "Promenade des
Anglais" renovation (the site became UNESCO
World Heritage in 2021)

French student entrepreneur "Grand Prix" 2019



ANNA 🇺🇦
Chief technical
officer

Stanford (USA) and École des Ponts
(France)

7 years experience in design thinking

Worked in all stages of User Experience -
from strategy, conception up to
product/service development.

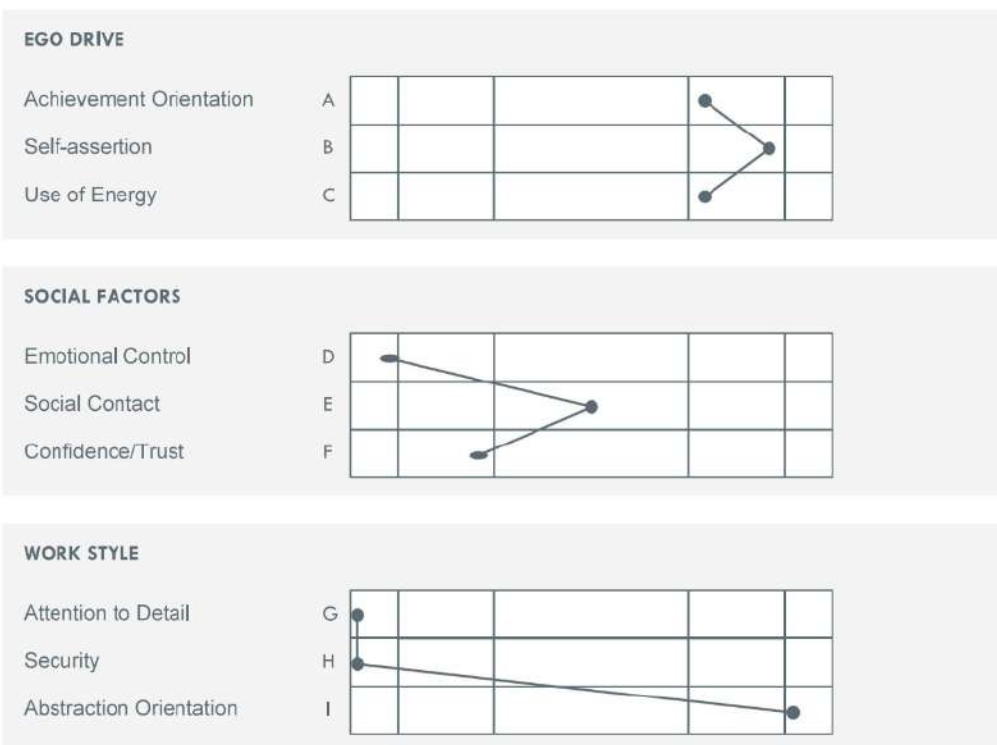
Worked in R&D of solar panels

How to attract and keep talent?

- Share the purpose.
- Communication
- Meaningful tasks
- Feeling of personal growth
- Flexible hours, everyone manage its own schedule

What helped me?

MPA analysis of the leader



YCombinator co-founder matchmaking platform



Which areas of a startup are you willing to take responsibility for? *

Design Engineering Product Operations

Which topics and industries are you interested in? *

We'll try to show you more profiles from founders with common interests.

B2B / Enterprise Energy Hardware Healthcare

How important is this to you? *

I prefer to see co-founders with some interests in common

Thank you

Skills, Clusters and Smart Specialisation in Värmland

Anders Olsson

Manager of Smart Specialisation
Region Värmland



Why Gender integration?

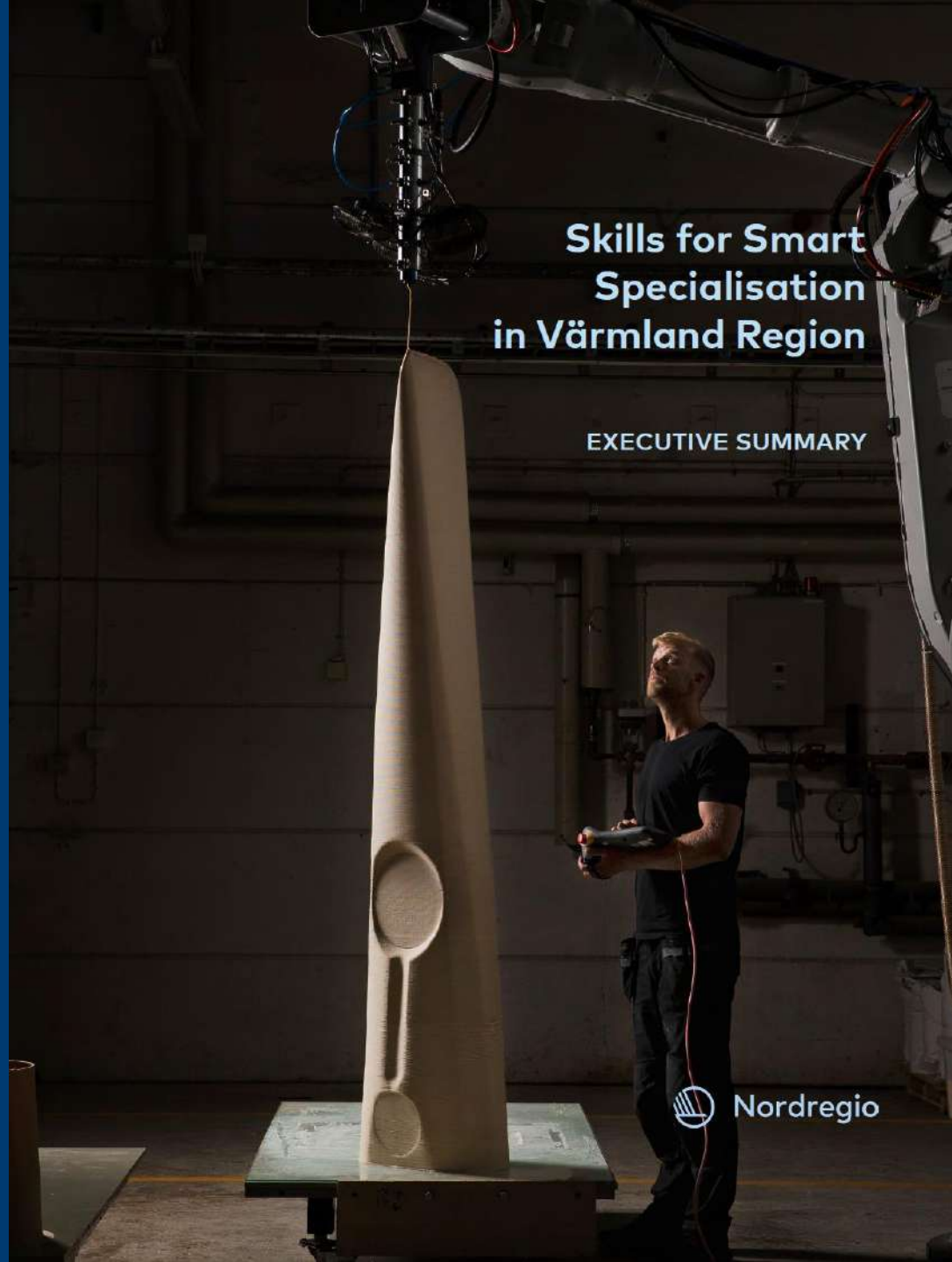
The first region in Europe to make a gender analysis of its RIS3

Why?

- Innovation
- Profitability
- Growth
- Meets one of our societal challenges

SMART SPECIALISATION IN VÄRMLAND





A logic of competence supply

Competence levels:	Basic/ Generic	Capable/ Vocational	Accomplished / Advanced	Authoritative/ Unique	For the future
Logic		Demand – Supply		Beyond the logic of demand and supply Strategic	
		Clusters			
		Clusters in smart specialisation in Värmland			

The Ten Professor Program
at Karlstad University



The Geography of Higher Education

Evaluation of the Academy for Smart Specialisation



Final report June 2020



OECD

- High acceptance and implementation levels of smart specialisation in Värmland.
- Commitment to the implementation and subsequent performance of the strategy is evident across a large range of regional innovation actors, including the regional authorities, Karlstad University and the cluster organisations in Värmland
- The strategy carries high substantive importance for the regional innovation stakeholders, confirming its transformative potential.

Initiatives on gender inclusion for competitiveness and innovation

Gender Academy



Attraktionskraft Värmland



Thank you

Anders Olsson
Region Värmland

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Up-skilling, re-skilling and retaining talent in the semiconductor industry

Christopher Frieling
SEMI Europe

SEMI Connects the Global Electronics Design and Manufacturing Supply Chain

Focused, Forward-Looking Collaboration

- Smart Mobility
- Smart MedTech
- Smart Data-AI
- Smart Manufacturing

International Standards

- Synchronize and safeguard industry
- 5,000 global volunteers
- >1,000 Standards
- >25 SEMI Standards referenced on each PO
- Interoperability, safety, EHSS, specs, tests

Comprehensive WFD Programs

- High Tech U – 237 programs, >130K students
- University connections
- Mentoring, Diversity, Equity & Inclusion, and Women in Tech



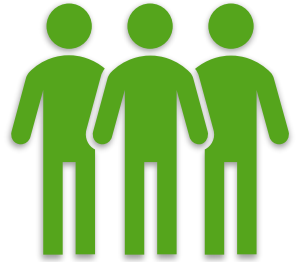
Member-Driven Global Advocacy

- Amplify collective voice of the industry
- Meet with policymakers worldwide on trade
- Promote Global Trade Principles
- Advocate for "Essential Business" status

SEMI Technology Communities

- Member companies can engage with customers and suppliers and form new business relationships
- Enables collaboration and connection between companies and colleagues
- 450+ participating companies
- 20+ technical communities

Skills in the semiconductor industry - What are the problems in Europe today?



Today there are not enough people available at the employment market with the right motivation and skills



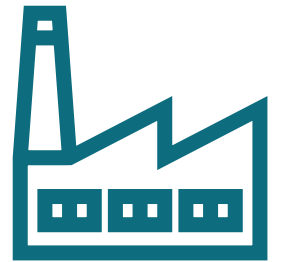
The semiconductor industry has an image problem



The sector does not reflect and benefit from the full diversity Europe's society and talents



Skills requirements are changing: There are substantial future skills missing



Industry is ramping up at a fast pace, missing staff is a bottleneck for growth

Pact for Skills on Microelectronics



Lutz Ahlborn
President
SEMI Europe



Patrick Brüssel
Director at Fraunhofer
Microelectronics Group
Fraunhofer (Germany)



Françoise Chénier
Co-founder & Chairwoman at
Mecsis, President at Händels
VTE-Association



Bernd Deutschmann
Prof. Dr. Ing. Dr. Techniker
Graz University of Technology
Institute of Electronics



Christopher Erling
Director, Advocacy and Public
Policy
SEMI Europe



Peggy Krenninger
VP Human Resources,
Automated Electronics
Robert Bosch GmbH



Cassandra Mehnert
Senior Director, Business
Development and Operations
SEMI Europe



Heeren Schuder
VP Human Resources
Infineon Group



Martin Stöckl
SVP People & Organization
Infineon
Infineon Technologies AG

→ Develop skills intelligence for the future workforce

→ Build, connect and improving the skills ecosystem

→ Raise awareness and exchange best practices on diversity, equity and inclusion

Skills strategy

Occupational profiles



Industry – University – Network

Image campaign

DEI



Thank you

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Preparing the next generation of innovators: Education and training activities by the EIT and the European Innovation Agenda

*Ingrid Rigler, Deputy Head of Unit, Innovation and EIT, DG EAC,
European Commission*

European Institute of Innovation & Technology (EIT)

- ✓ **EU body**
- ✓ **It strengthens Europe's ability to innovate on a systemic level, along the entire value chain, from education to the market.**
- ✓ **It powers solutions to pressing global challenges by bringing together education, research and business to become Europe's largest innovation ecosystem**

EIT INNOVATION COMMUNITIES



Entrepreneurial education

EIT-labelled master and doctoral programmes

- ✓ Focused on innovation, entrepreneurship, creativity and leadership
- ✓ Based on partnerships between higher education institutions, companies, research centres and public bodies
- ✓ More than 4,000 graduated students
- ✓ Will be extended to professional training and in-company training

<https://eit.europa.eu/our-activities/education/eit-community-master-programmes> &
<https://eit.europa.eu/our-activities/education/doctoral-programmes>

Higher Education Initiative (3-year pilot)

- ✓ Helps higher education institutions to become more innovative and entrepreneurial
- ✓ Plugs them into the local innovation ecosystems
- ✓ 50 projects with around 300 higher education institutions already running
- ✓ 3rd and last pilot call will be launched in Q4 2022

<https://eit-hei.eu/>

New European Innovation Agenda (July 2022)

To position Europe at the forefront of the new wave of deep tech innovation and start-ups

5 flagships, 25 actions

- 1 improve access to finance for European start-ups and scale-ups, for example, by mobilising untapped sources of private capital and simplifying listing rules
- 2 improve the rules to allow innovators to experiment with new ideas
- 3 help create “regional innovation valleys” that will strengthen and better connect our innovation players through Europe, including in regions lagging behind
- 4 attract and retain talent in Europe, for example by training 1 million deep tech talents, increasing support for women innovators and innovating with start-up employees’ stock options;
- 5 improve innovation policy-making through clearer terminology, indicators and data sets, as well as policy support to Member States

#EUInnovationAgenda

#HorizonEU

Deep Tech Talent Initiative

- ✓ Objective: train 1 million deep tech talents by 2025
- ✓ Deep Tech: applications with a strong science and engineering content, contributing to solving big societal challenge (e.g. advanced materials, biotechnology, AI, aerospace, quantum computing)
- ✓ To be launched at the **EIT Summit on 11 October**
- ✓ Training providers, employers and institutional partners can join by signing the Deep Tech Talent Initiative **Pledge**

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Cluster Booster Academy

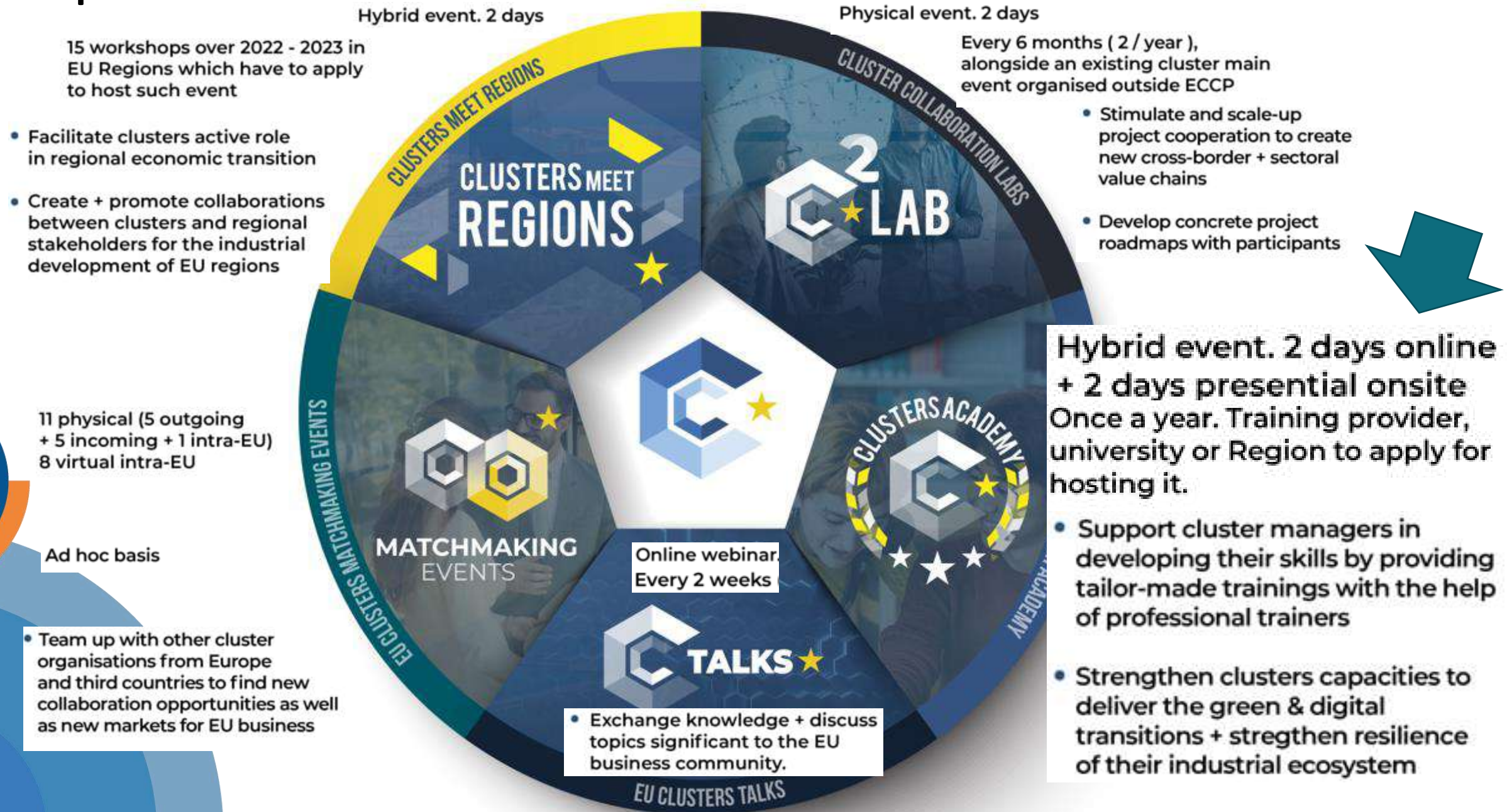
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European Cluster Collaboration Platform 2022-23

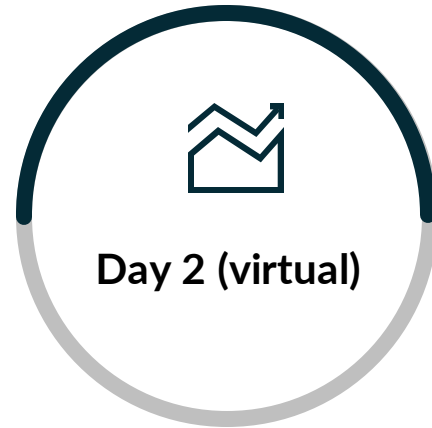


The Cluster Booster Academy covers major areas of cluster managers' interest



Cluster strategy

- Cluster needs
- Stakeholder involvement
- Change management
- Service portfolio enrichment
- Communication strategy



Business model

- Cluster business models
- Idea development for improving your business model



Problem solving

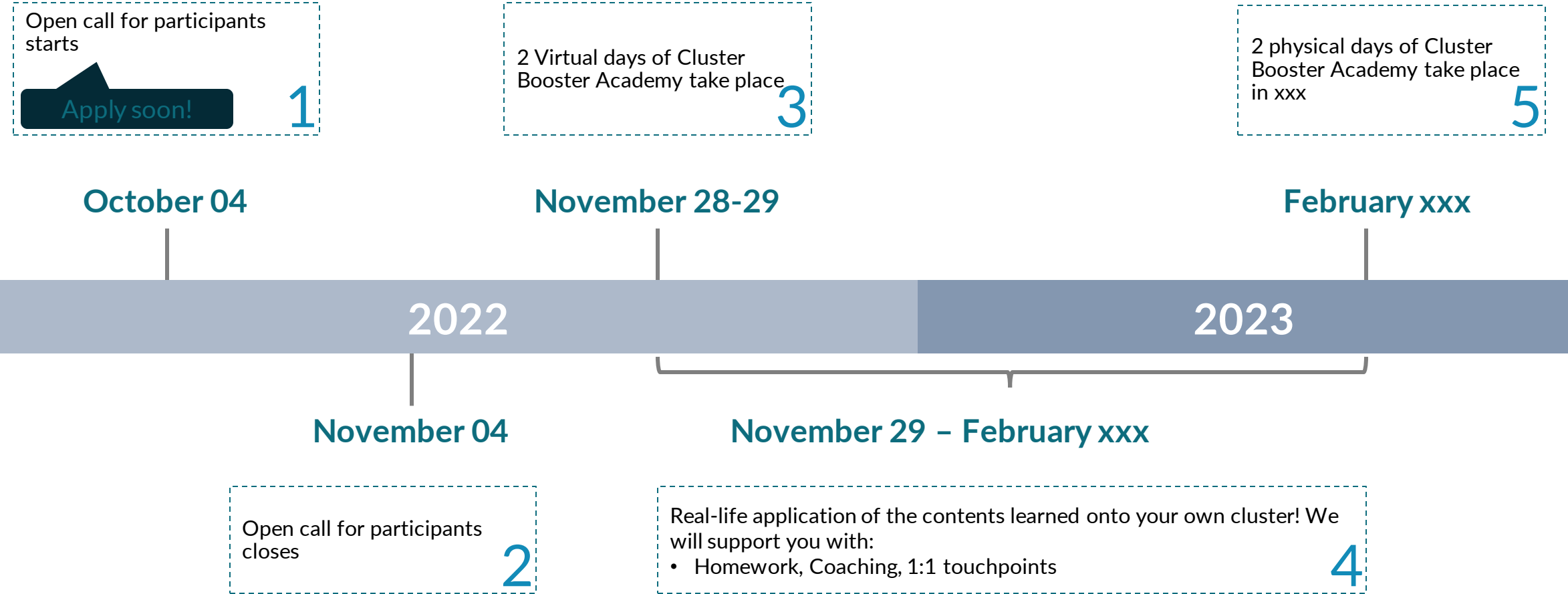
- Experience sharing
- Solution development to challenges
- Solution testing and validation



Action Plan

- Definition of milestones, KPI, roadmap
- Draft and pitch of action plan

Mark your calendars for the first Cluster Booster Academy!



Seats are limited! So, take this opportunity and join us for our first Cluster Booster Academy!

Who can participate?

Every cluster manager in charge of a European cluster is eligible for participating **free of charge** in our Cluster Booster Academy. **Seats are limited**, so applications will be evaluated against a set of defined criteria



How to apply and what to keep in mind?

The **open call for participants will open early October**, so be on the lookout for that! When you do apply, you **commit to participating** in all 4 days of training, i.e., **November 28-29, 2022, and February xxx-xxx, 2023**. The participation in the Cluster Booster Academy is **free of charge**, however **travel and accommodation costs will have to be borne by the participants themselves** and will not be reimbursed



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Why do/should we talk about gender equality and clusters?

Because...

- “By 2050, improving gender equality would lead to an increase in EU (GDP) by 6.1 to 9.6%, which amounts to €1.95 to €3.15 trillion.
- Improved gender equality could boost the long-term competitiveness of the EU economy.”

(Source: <https://eige.europa.eu/>)

Looking from the SME side

- The lack of qualified workforce = barrier for SMEs' growth and competitiveness
- SMEs have difficulties to **understand the business rationale** behind gender equality.
- SMEs lack the **knowledge to develop gender-inclusive business models** and an inclusive, **gender-friendly work culture** (correlated to “new work” approaches).
- SMEs lack the adjusted framework conditions (policy intervention – that lacks the related monitoring and evaluation instruments)



Clusters have a role to play

Where to look for (cluster) inspiration?

France



France Clusters' work on gender equality

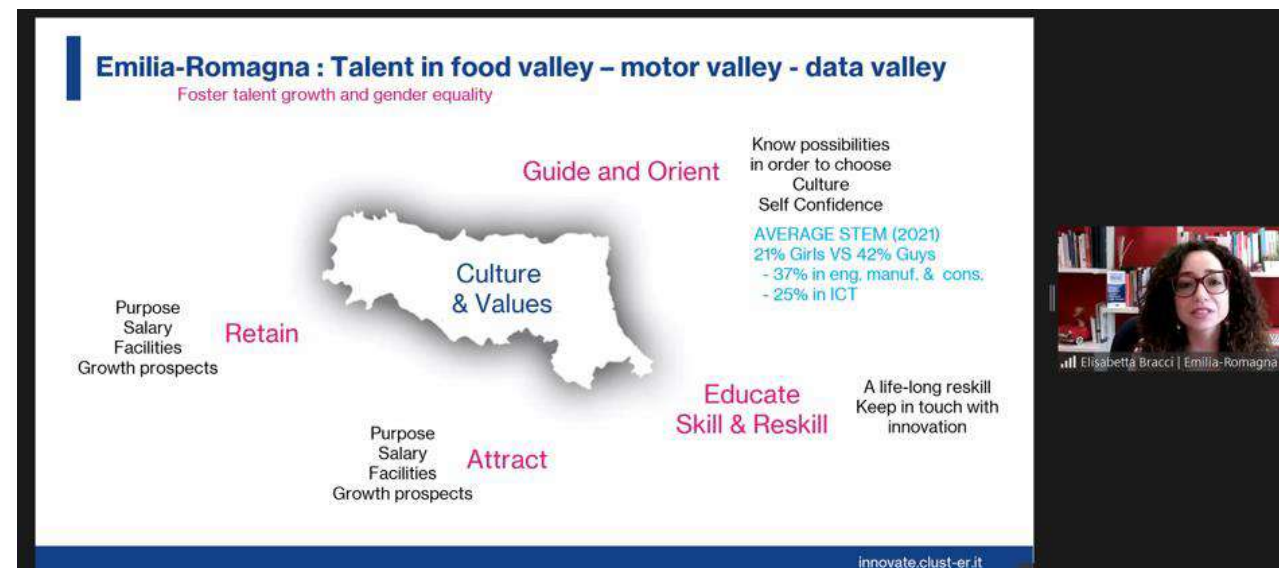
- „Female Sector Leaders“ Publication
- Thematic Trophy (Actions with impact for the feminization of the sector)
- Toolbox (good practices, arguments, etc.)



Italy



Emilia-Romagna Clust-ERs



Where to look for (cluster) inspiration?

Spain



- wants to be able to lead and support any initiative that promotes the growth of the furniture industry and the defense of equal opportunities without gender discrimination;
- has expertise in sectorial projects focused on the gender perspective, the promotion of gender equality and the development of gender mainstreaming strategies.

UNIDO



Gender mainstreaming in the cluster methodology



First steps, next steps

- Dedicated sessions at the TCI Global Conferences since 2012
- 3 dedicated sessions of the European Clusters Alliance morning sessions in 2021
- Smart Specialisation Academy and integration of gender perspective in the S3 of Region Värmland, capacity building for SMEs, clusters and policy makers
- Industry manufacturing and gender equality in the region of Navarra, strong focus in the cluster policy in the Lapland region
- Gender equality plans for clusters in the region Emilia-Romagna
- Development of tools for monitoring and evaluation
- Upcoming collaborative cluster projects (e.g., PENELOPE / Erasmus+, possibly others)
- ...

Thank you

lucia@luciaseel.eu

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Internationalisation of European SMEs

Clusters Go International success stories:

ELBE and ESECA

Jose I. Hormaeche

General Manager – Basque Energy Cluster



ELBE
EUROPEAN LEADERS OF BLUE ENERGY^o



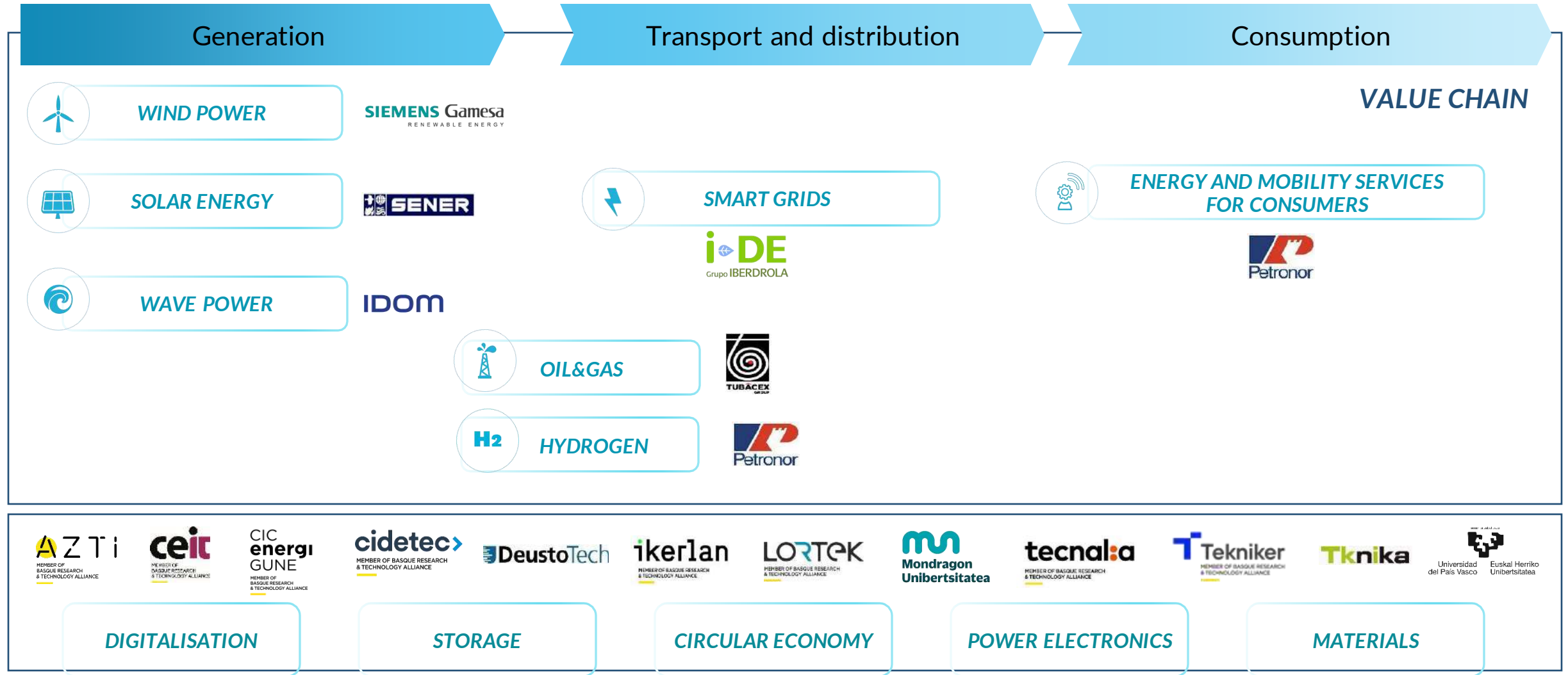
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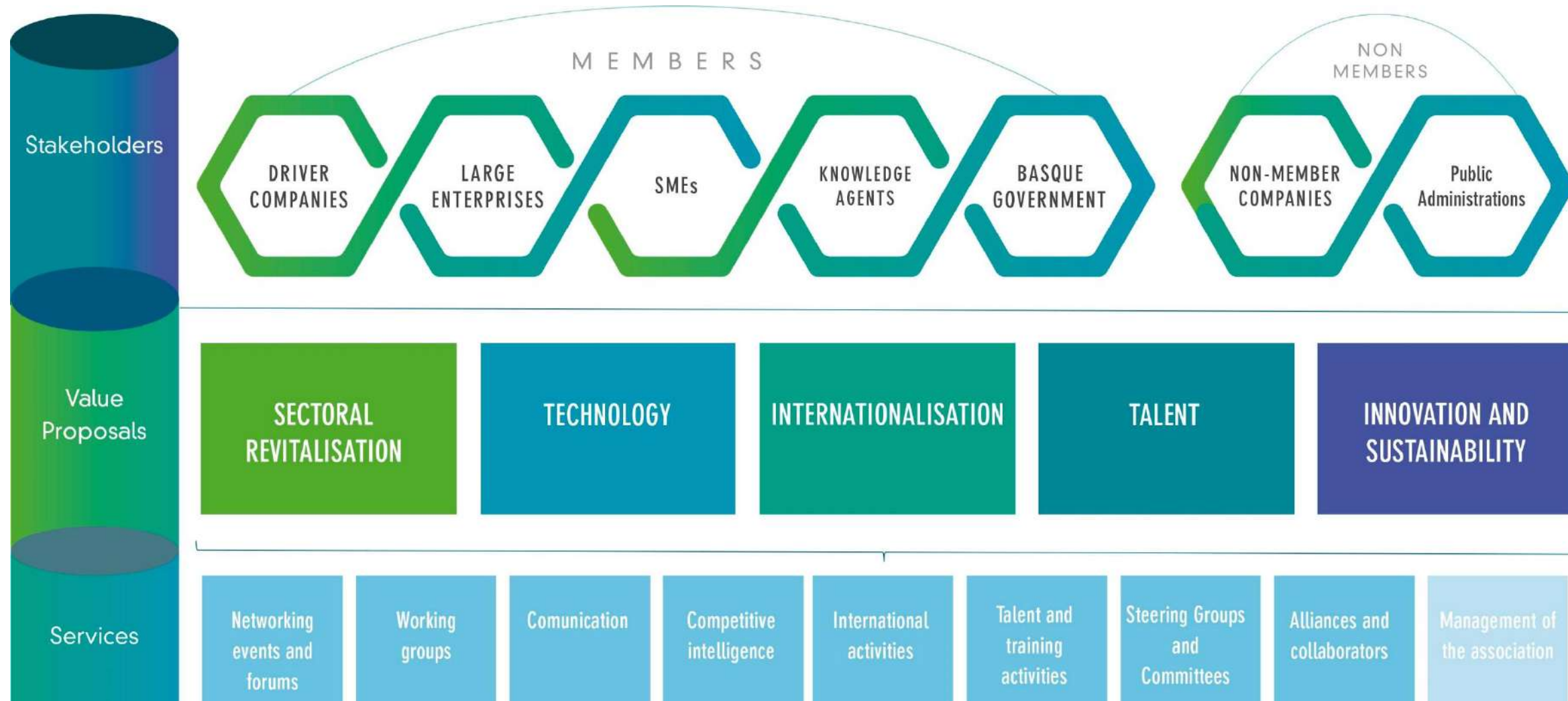
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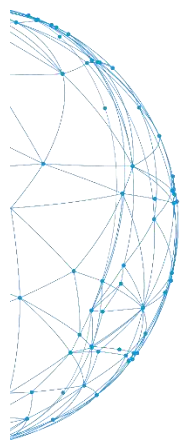
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BASQUE ENERGY CLUSTER: Strategic Value Chains and Key Technologies



Basque Energy Cluster: Business Model





ELBE

EUROPEAN LEADERS OF BLUE ENERGY^o

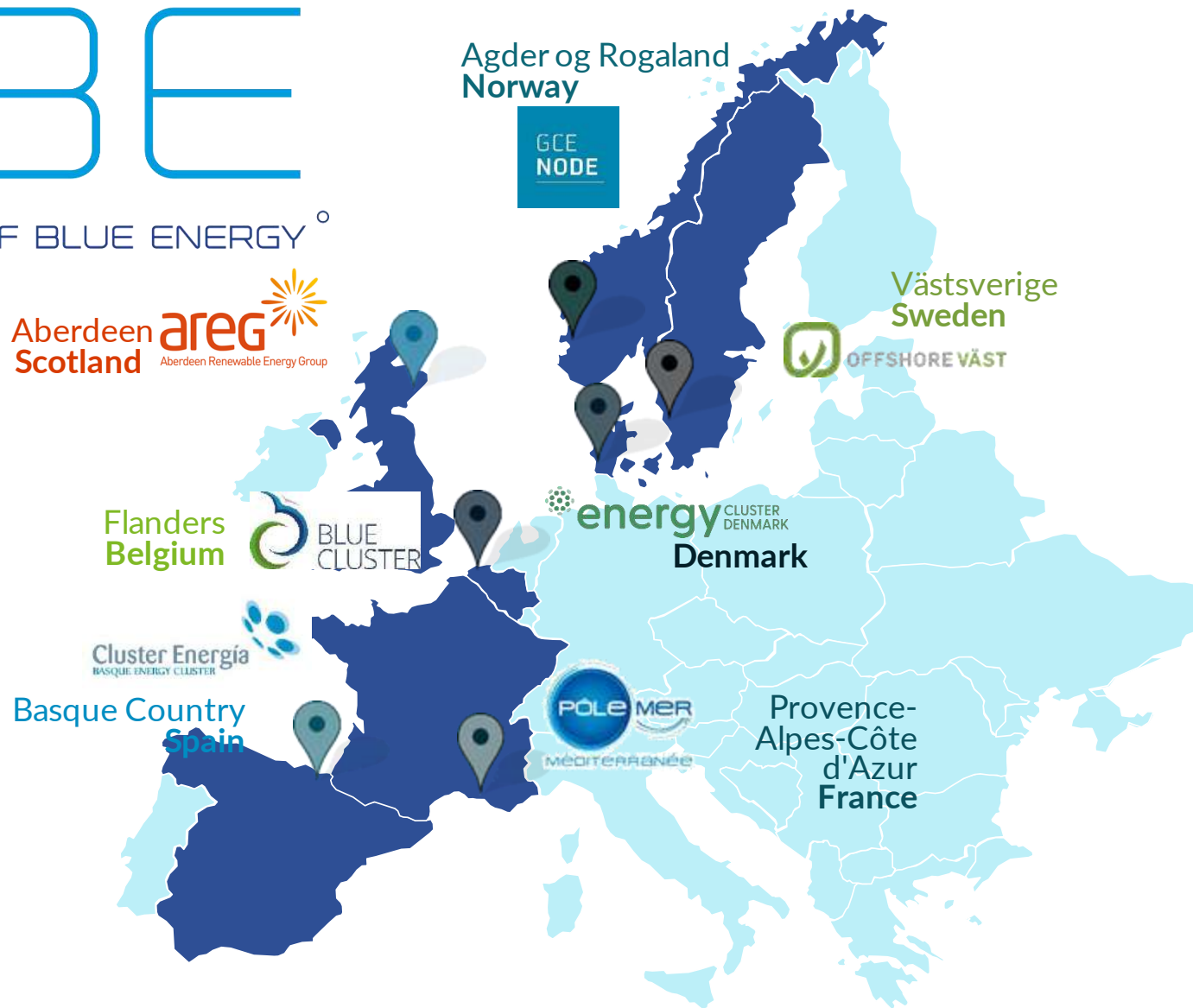


Co-funded
by the COSME programme
of the European Union



ESCPoI
ELBE
Partnership

ELBE Alliance gathers the most advanced regions in the EUROPEAN BLUE ENERGY SECTORS, with well-known key companies and projects at global scale



EUROPEAN CLUSTER
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European
Commission



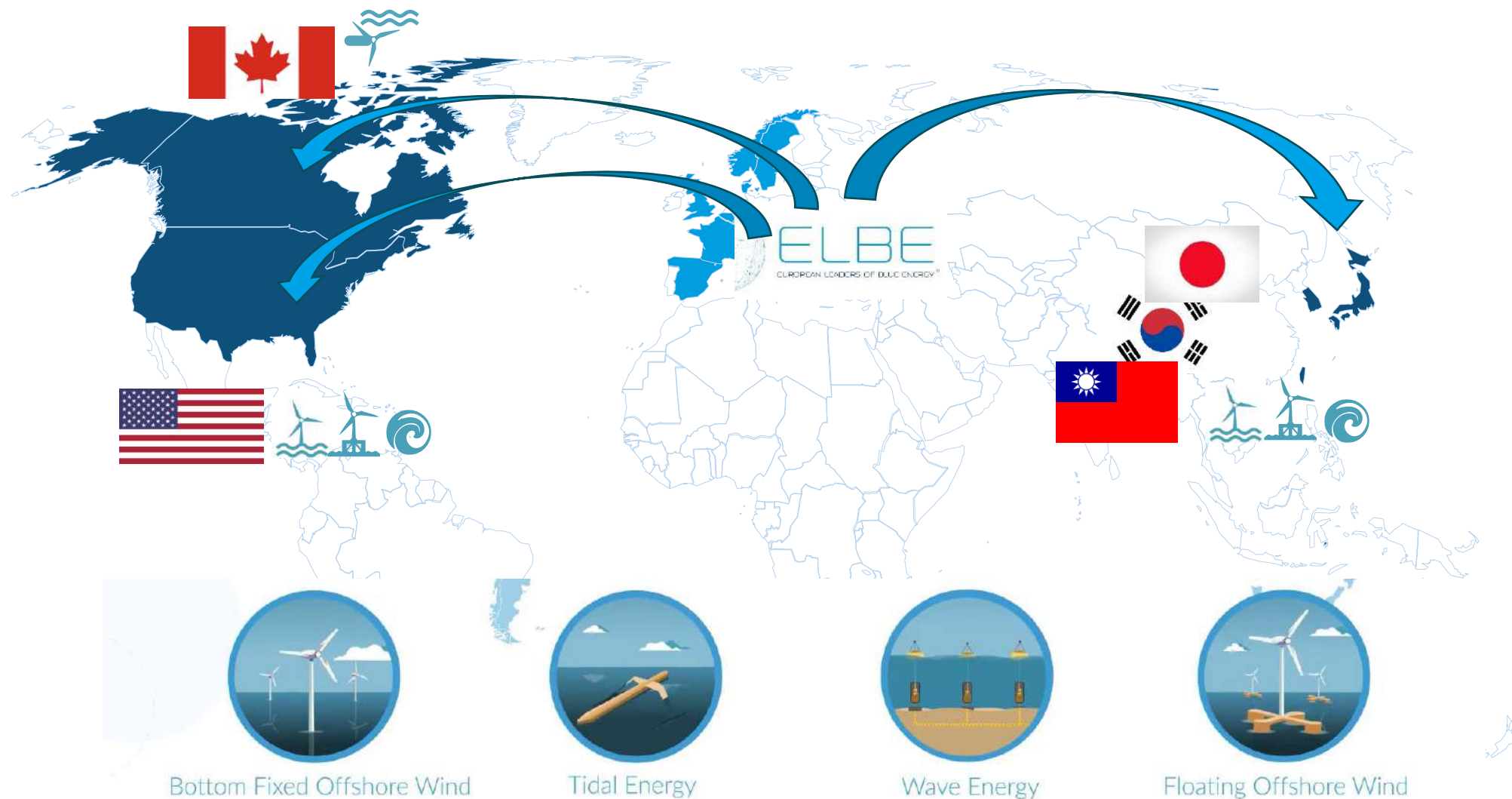
EU2022.CZ



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TARGET MARKETS OF ELBE+: COUNTRIES AND TECHNOLOGIES



KEY ACTIVITIES 2021-2022

7 Customized Market Reports

2 Exploratory Trips to Emerging Markets

5 Direct and 1 Reverse Missions

3 European Networking Events

5 Cooperation Agreements

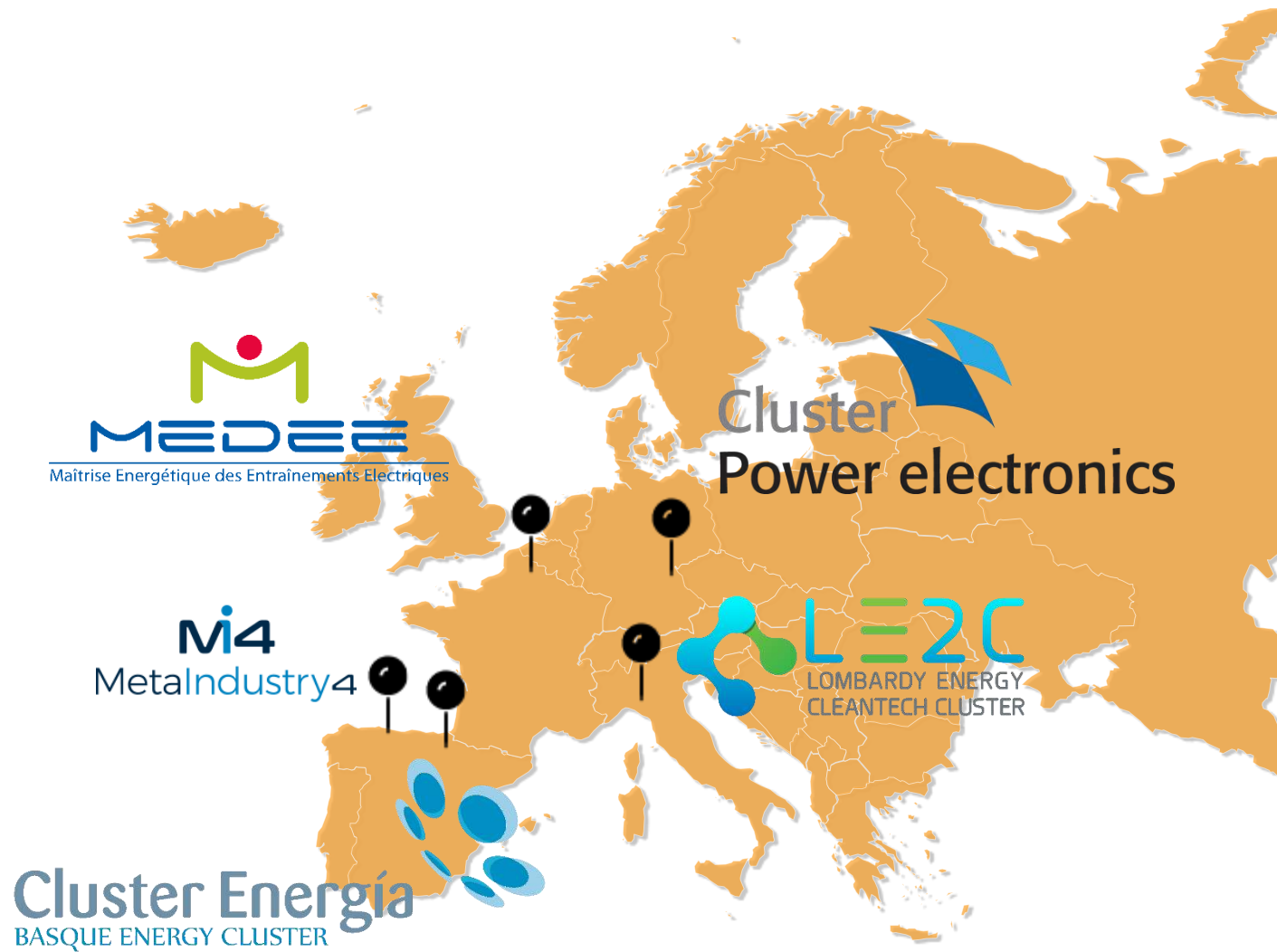
What is ESECA?

- European Sustainable Energy Cluster partnership for Africa (ESECA) is partnership formed by five Europe clusters (ACE, MEDEE, LE2C, MetaIndustr and ECPE) from Spain, France, Italy, a Germany. Together, we gather around **5 organizations and 290 SMEs**.
- ESECA project is funded by the European Commission, with a duration of 36 months (starting in September 2021) and approximately 600 k€ of budget. The project aims to contribute positioning European companies from the sustainable energy sector in sub-Saharan African markets.



The ESECA project has received funding from the European Union's COSME Programme under Grant Agreement 101035882.

Partners in ESECA





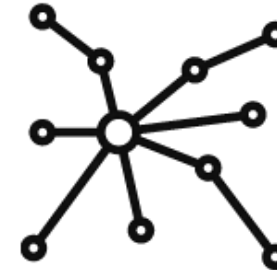
- 5 target countries :

- Senegal
- Ghana
- Tanzania
- Kenya
- Rwanda

- 4 Key technologies :



Solar, Wind & Biomass
Energy (DER)



Microgrids and Smart
Grids



Innovative metering and
digital solutions



Energy Storage

LESSONS LEARNT

Attracting companies to join the mission:

- Now is a good moment - Physical interaction is irreplaceable, companies demand face-to-face interaction
- Focus on a key market - Select a target market with dimension, growth and open to international collaboration
- Understand where the value of a cluster support lies: focus on markets to which your members have a more difficult access (geography, culture, ..)
- Experience is a plus - Clusters with a success track record in internationalization activities have it easier for bringing along members

Organizing an interesting agenda:

- Gather feedback about your members' interest – Understand what drives them to travel
- Have the proper connections – Collaborate with your Trade & investment organisations, clusters and associations from third countries
- Make the experience enjoyable – Companies like to travel together, get to know their peers and have also some social activities

Follow-up of the activities and results of companies that participate in the missions:

- Define a closed survey with clear concepts – Define exactly what type of opportunity leads or business agreements you are asking them about
- Allow confidentiality – Companies might not want to share all relevant details
- Don't let too much time pass – If you ask for results weeks after the mission, companies may have forgotten about the connection

Thank you

Jose I. Hormaeche

jihormaeche@clusterenergia.com



ELBE
EUROPEAN LEADERS OF BLUE ENERGY^o



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Internationalization of European SMEs



A success story

Ségolène LELOUTRE
Cosmetic Valley – France
Coordinator of GCC.Eu
sleloutre@cosmetic-valley.com

EUROPEAN CLUSTER
CONFERENCE 2022



 [#EUClusterConference](https://twitter.com/EUClusterConference)

26-27 SEPTEMBER 2022, PRAGUE

Get stronger as a European cluster

From 6 national cosmetics clusters ...



... to 1 European cluster

Thanks to the support of the European Union



A 4 years collaboration to keep going!

2017-2019 : Building of the cluster dynamic and definition of the common action plan

2020-2022: Implementation of the GCC.Eu Joint International Strategy



#1 : Market Intelligence

Share knowledge between clusters and SMEs

- 12 information bulletins : business, trends, technologies, regulatory
1183 SMEs receiving the bulletins
- 5 focused country market studies
1296 SMEs access the market studies
- 13 country webinars on market data, IP, inter-cultural...



#2 : Capacity Building actions

Facilitate access to international markets for SMEs and foster their engagement in GCC.eu international activities

- Trainings on Internationalization
47 training sessions / 1070 SMEs attended the trainings
- Specific Advice
24 SMEs benefited to the specific advices
- Coaching/Mentoring
21 SMEs benefited to coaching and mentoring / 10 hours



#3 : International Trade and Partnership

To organize joint business missions to international events in Europe and in targeted countries

- 4 EUtoWorld matchmaking events
- 3 Benchmarking and B2B missions outside Europe: USA, UAE, SK
42 SMEs participating

Objectives of the missions:

- Understand better the markets
- Boost the business opportunities for SMEs
- Meet targeted clients or partners (BtoB)

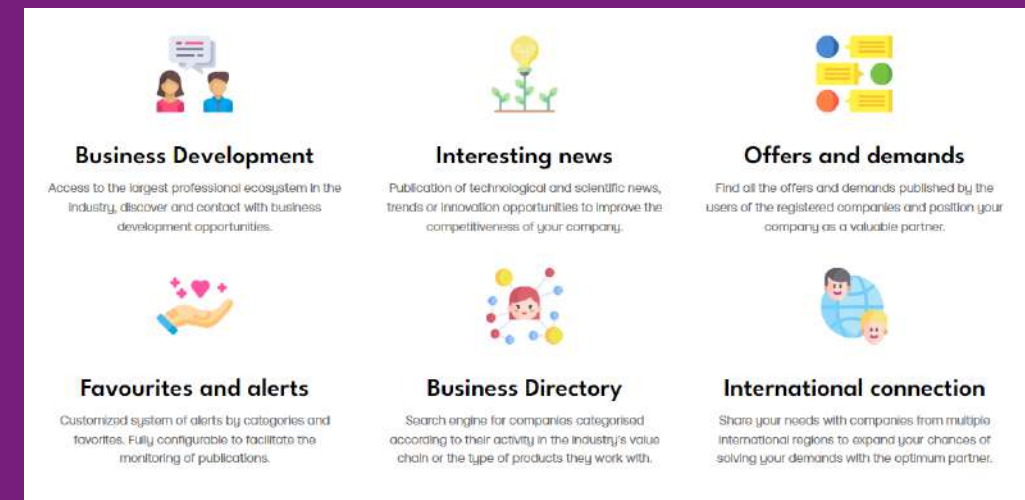


#3 : International Trade and Partnership

BtoB Business Place

Providing opportunities for SMEs to publish their offers / demands and to make virtual B2B between EU/COSME and non-EU companies aiming at international business cooperation

- 287 companies registered online
- To become an international platform



#4 : Funding opportunities

Help SMEs to find funding support

- EU and Public funding support

A booklet of funding opportunities developed with international, EU and national opportunities

- 2 Investment Forum in Europe
 - ✓ In the framework of Cosmetic 360 exhibition in October 2021 in Paris
 - ✓ Investors Forum of Beauty Innovation Days in February 2022 in Barcelona



From an interclustering to a quadruple helix cooperation

A long-term strategy

A European communication strategy



For the cosmetics industry to be recognized at a European level:
Toward a 15th European industrial ecosystem?

A common European identity to go abroad and to build long-term partnerships

To keep the leadership at an international level

Cooperation with strategic partners



Collaborations between GCC.eu
& EU cosmetics clusters
& Clusters in target countries
& Clusters of the value chain
& EU initiatives and tools
& Global Cosmetics Cluster

Strong interregional strategy



2021: Creation of a European interregional network
Go4Cosmetics (Platform S3)

Today: **ACTT4Cosmetics**
HORIZON-EIE-2022-
CONNECT-01 submitted

Quadruple helix: clusters, public authorities, research & training organizations



Thank you



Come and discover our innovative cosmetics companies and clusters

Use EU2022 to register



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Global Innovation Clusters: Transforming Canada's Innovation Economy

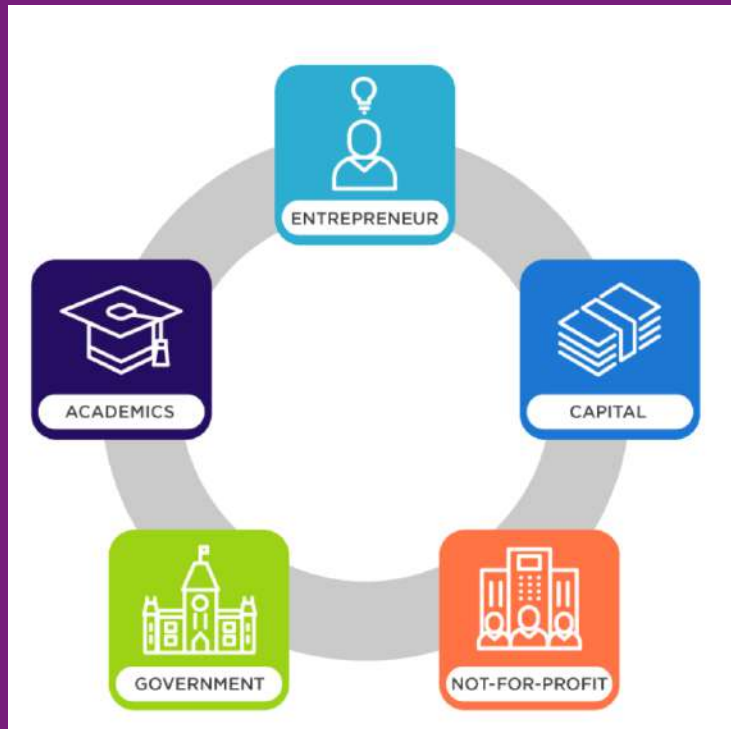
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Canada's Global Innovation Clusters



- The Global Innovation Clusters are investing almost \$2 billion to build first rate ecosystems with a global competitive edge, scale up our best SMEs and accelerate economic growth
- A collaborative approach with a focus on acceleration and industry match model
- Ecosystem development is at the forefront, clusters invest in projects that strengthen ecosystems to make them magnets of innovation activity, investment and talent

Our Evolution

Launched
2017

Momentum
2018-2021

Rebranded
2022

Current National
Presence

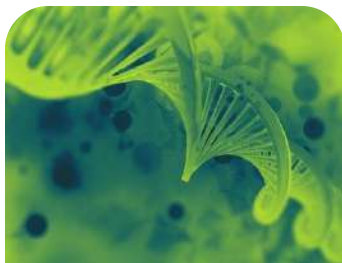
Future
Global Focus

Canada's Five Clusters



**DIGITAL
TECHNOLOGY
(BC)**
\$173M

To solve societal problems with Canadian-made digital technologies, including digital health and data commons



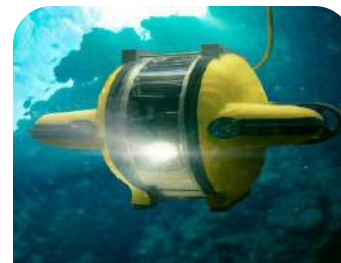
**PLANT-BASED
PROTEIN
(Prairies)**
\$173M

To position Canada as a global source of high-quality plant protein and plant-based products



**ADVANCED
MANUFACTURING
(Ontario)**
\$250M

To connect advanced manufacturing & tech to drive digital transformation in Canada



**AI FOR SUPPLY
CHAIN AND
LOGISTICS
(Quebec)**
\$230M

To boost productivity across industries in Canada by integrating AI with supply chains



**OCEAN
INDUSTRIES
(Atlantic)**
\$153M

To grow Canada's ocean economy in a sustainable, digital, and inclusive way

Key Features of the Clusters

Collaborative Approach to Strengthen and Scale SMEs

Strengthen SMEs by connecting them to customers and supply chains; helping them build strong networks, access mentorship and leverage expertise; and creating new opportunities to scale

Breaking new ground with collaborative IP

Encouraging collaboration and innovation while helping businesses grow, and leading to strong commercial outcomes

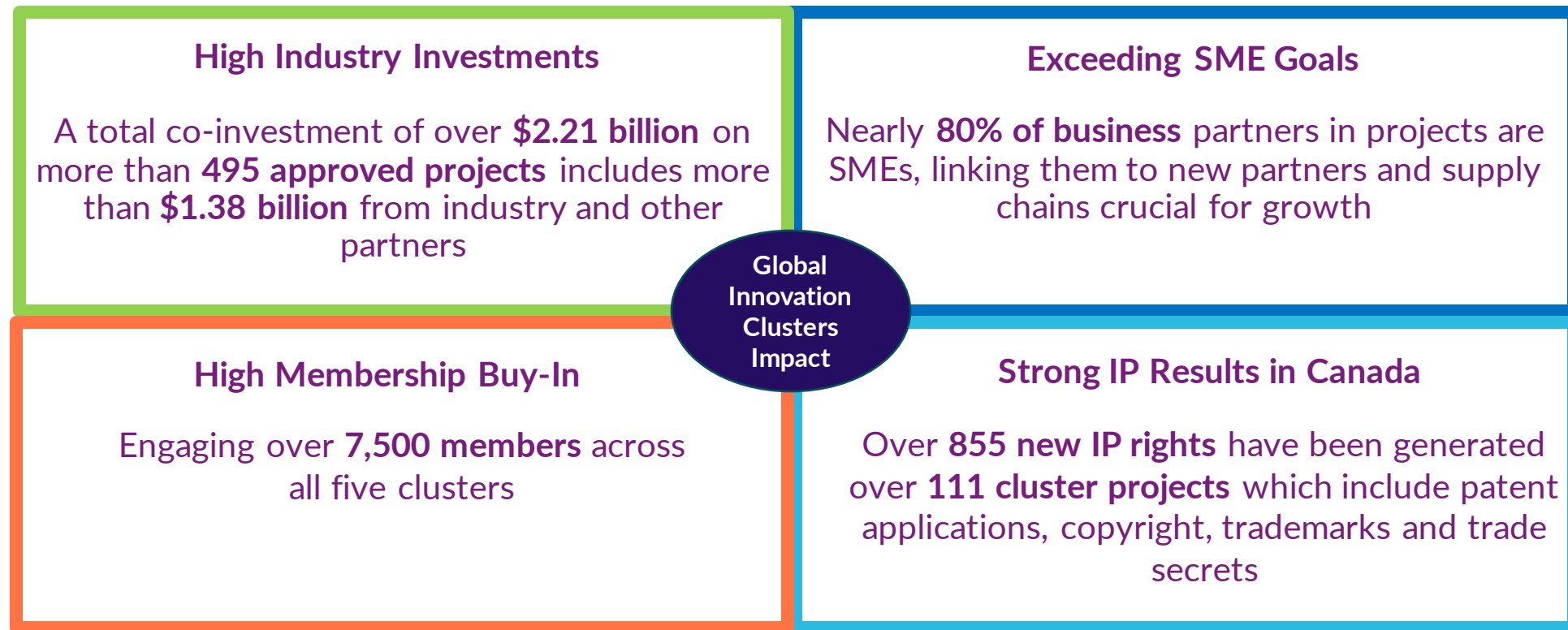
Building a highly skilled, diverse workforce

Playing a key role in building the highly-skilled future workforce needed for knowledge-intensive industries, and creating opportunities for women, racialized Canadians, Indigenous communities, and other under-represented groups.

Supporting Government Priorities

While the clusters are grounded within their respective sectors, the flexibility of the program allows for projects that align with government priorities such as clean technology, climate change, artificial intelligence, and quantum computing

Clusters are making an impact



*Based on figures last reported by the Global Innovation Clusters on June 30, 2022

Global Innovation Clusters: Success Stories

The Growth of SMEs in Canada: Changing the Way the World Sprays



Precision AI is partnering with small businesses to develop a drone-based computer vision technology that will enable Canadian farmers to reduce herbicide use.



Activating Canadian Intellectual Property: Protecting our Oceans



MDA Systems is developing new Canadian IP which combines satellite monitoring, artificial intelligence, big data analytics and data visualization techniques to track the movements of dark vessels and protect marine ecosystems.



Optimizing the Workforce: The Future of AI and Homecare



AlayaCare is developing an AI-informed software platform to give homecare agencies better planning and management tools to optimize workforces.



Reduced Carbon Footprint: Smarter Fishing with a successful algorithm



Innovasea is developing novel technologies to assess fish stock in the wild, track fish health in aquaculture operations and monitor marine life.



The Innovation Ecosystem: Advanced Manufacturing



ArcelorMittal Dofasco has led the development of Digital Ladle Metallurgy process, a digital technology platform that determines the precise temperature to guarantee high-quality steel.



Opportunities for International Collaboration

- **Global advantage:** Clusters are working to increase their global profile, capitalizing global market opportunities and attracting global talent and foreign investment.
- **Partnership with the EU:** Memorandum of Understanding on promoting bilateral industry cluster to cluster cooperation.
- **Collaboration on innovation:** Membership in a Cluster or participation in a Cluster project could offer an opportunity for European firms or research institutions to explore opportunities in Canada.



To learn more about Canada's Global Innovation Clusters

Please visit:
Canada.ca/clusters

Use **#InnovationClusters**
to follow us on Twitter

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EU-Japan Regional & Cluster Cooperation Helpdesk

A bridge for industrial cooperation between Europe and Japan

The EU-Japan Regional & Cluster Cooperation (EJR2C) Helpdesk

An initiative from the EU-Japan Centre for Industrial Cooperation

The EU-Japan Centre for Industrial Cooperation (the Centre) was established in 1987 as a joint venture of the European Commission (DG GROW) and Japan's METI

Promoting all forms of industrial, trade and investment cooperation between the EU and Japan

The Center has put in place a Helpdesk dedicated to **promote EU-Japan cooperation at the local level of industrial clusters, regions and prefecture.**

The EJR2C Helpdesk is managed by the tandem of
CEEJA (*European Center for Japanese Studies in Alsace*) on the EU side &
CLAIR (*Council of Local Authorities for International Relations*) on the JP side.





EU-Japan Centre
for Industrial Cooperation
日欧産業協力センター



EU-Japan Regional & Cluster Cooperation Helpdesk

A bridge for industrial cooperation between Europe and Japan
through an initiative from the
EU Japan Centre for Industrial Cooperation



www.ejrc-helpdesk.eu

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The first EU-Japan Regional Cooperation Annual Conference & Matchmaking

17-18 May 2021

136 participants from Europe and Japan.

19 meetings were organized with European and Japanese clusters, Japanese prefectures and European regions.



SAVE THE DATE

EU-JAPAN REGIONAL & CLUSTER COOPERATION Annual Conference & Matchmaking

European and Japanese Clusters,
European Regions & Japanese Prefectures • Major Cities



13-14
DECEMBER 2022



VIRTUAL CONFERENCE
& MATCHMAKING



DAY 1 CONFERENCE

EU-Japan Regional & Cluster Cooperation Annual Conference

From 9:00AM (CET)-12:00AM (CET)
16:00PM (JST)-19:00PM (JST)

DAY 2 MATCHMAKING

Biotechnology & Healthcare,
Environmental Technology & Circular Economy
Agri-food, Digital, Photonics & Manufacturing
Sustainable Tourism

From 9:00AM (CET)-12:00AM (CET)
16:00PM (JST)-19:00PM (JST)

Registration online soon

<https://www.ejrc-helpdesk.eu/>



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EU-Japan Regional Cooperation good practices webinar series

EJR2C Helpdesk has organised a series of best practices webinars of existing cooperation for :

- triggering
- inspiring
- expanding

Presentations and recording of the events online

www.ejrc-helpdesk.eu



EU-Japan Regional Cooperation Helpdesk
Webinar series "EU-Japan regional cooperation good practices"

"Carbon Neutrality through Smart Forest Bioeconomy"

Nagano Prefecture - Japan & Forest Bioeconomy Cluster
(North Karelia Region - Finland)

 ZOOM ONLINE WEBINAR with interpretation (ENG/JP)

Friday 17th December 2021
STARTING FROM 9:00AM (CET) / 5:00PM (JST)
Registration online : www.ejrc-helpdesk.eu



Since 2021 – 9 webinars

“10 years of win-win relations on Agri-Food innovation”

between the Kyushu Bio-Cluster and the Vitagora Cluster in France

“Evolving partnerships for renewable energy and regional revitalization”

between the Fukushima Prefecture (energy agency) and the North Rhine Westphalia (energy agency)

“EU-Japan multi-partners alliance for supporting business in health-related life sciences”

between the Osaka Bio headquarter and the BioXclusters alliance in Europe regrouping 4 biotech clusters in France, Germany, Italy and Spain)

“Concept-based regional cooperation”

between the Oulu’s healthcare ecosystem for ‘OuluHealth’ in Finland and the Kanagawa’s Healthcare New Frontier for ‘ME-BYO’

“Towards future in medical technologies - A successful EU-Japan regional collaborative approach”

between Saitama city (Saitama Prefecture - Japan) & Bayern Innovativ GmbH – (Bavarian State Government - Germany)

“Carbon Neutrality through Smart Forest Bioeconomy”

between Nagano Prefecture – Japan & Forest Bioeconomy Cluster – (North Karelia Region - Finland)

“From a regional partnership between Hyogo/Kobe - North Germany to a EU-Japan regional cooperation in medical industry”

between Foundation for Biomedical Research and Innovation at Kobe (Hyogo Prefecture/Kobe city Japan) & Life Science Nord – (Northern Germany) MAGIA2Market alliance (Auvergne-Rhône-Alpes Region - France/Wallonia Region - Belgium/Piemonte Region - Italy/Northern Germany)

“A successful regional partnership in terms of industrial policy, food industry and cultural tourism between Basque Country and Mie prefecture”

between Mie Prefectural Government (Mie Prefecture – Japan) & BasqueTrade & Investment (Basque Country Spain)

“New local government collaboration style between EU and Japan municipalities in fields of energy, agriculture, education and social welfare that transcends sister cities”

between Higashi Matsushima City (Miyagi Prefecture - Japan) & Lolland Municipality (Region Zealand - Denmark)



Short-term Mobility Programme in Japan for EU Industry Cluster Managers (Up to a 6-week stay)

Organised by
the EU-Japan Centre for Industrial Cooperation
via its Regional & Cluster Cooperation Helpdesk (CEEJA & CLAIR)

In cooperation with
The European Cluster Collaboration Platform (ECCP)

Context

The EU-Japan Centre for Industrial Cooperation will organise via its Regional and Cluster Cooperation helpdesk a “short-term mobility programme in Japan for EU industry Cluster managers” in order to support the international cooperation between industry clusters in the EU and their counterparts in Japan, and to promote the internationalisation of the EU Cluster-hosted SMEs and EU-Japan business, trade and innovation partnerships

Target audience

Project Officers / Managers / Staff in charge of Cluster internationalization working in EU Industry clusters are eligible and invited to apply by filling in pages 2 and 3 of this call and returning their reply by e-mail to ejrc@eu-japan.eu no later than August 31st 2022; up to **10 EU Industry Cluster Managers** will be selected, with up to **1 person from each cluster**. Candidates are required to include the potential Japanese partner clusters they would like to discuss with during their mission. The mission is expected to last for a period of up to **6 weeks**, with expenses for each candidate covered up to 700 EUR per week.

EU Cluster Applicants should (i) be registered on the ECCP and should provide a link of their ECCP profile in the application form, and (ii) be based in the EU Member States or the participating countries in the COSME strand of the Single Market Programme https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/smp/guidance/list-3rd-country-participation_smp_en.pdf

Objectives

The goals of this mobility programme is in line with the European Commission’s priority actions for supporting the internationalisation of EU industry clusters in the context of Japan:

- to promote and support partnering with Japanese Clusters and counterpart organisations;
- to raise awareness about the excellence of EU industry / innovation clusters with the aim to help EU Clusters bring their innovative start-ups and SMEs to the Japanese market;
- to explore various forms of Cluster collaboration with Japanese counterpart organisations in the areas of industry, trade and research and innovation.
- To contribute to the implementation of (i) the EU-Japan Green Alliance, (ii) the EU-Japan Digital Partnership, (iii) the EU-Japan EPA, and the EU-Japan Business cooperation in third countries.

New cluster manager mobility scheme

The call for expression of interest FY 2022 (until March 31st 2023 in Japan) was launched on 1st July 2022

Objective – support international cooperation between industry cluster in the EU & their counterparts in Japan

Selection of 10 candidates

This programme in Japan is expected to last for a period of 6 weeks with expenses for each candidate covered up to 700 EUR per week.

Selection of 10 European clusters for FY 2022

for going to Japan before 31 March 2023

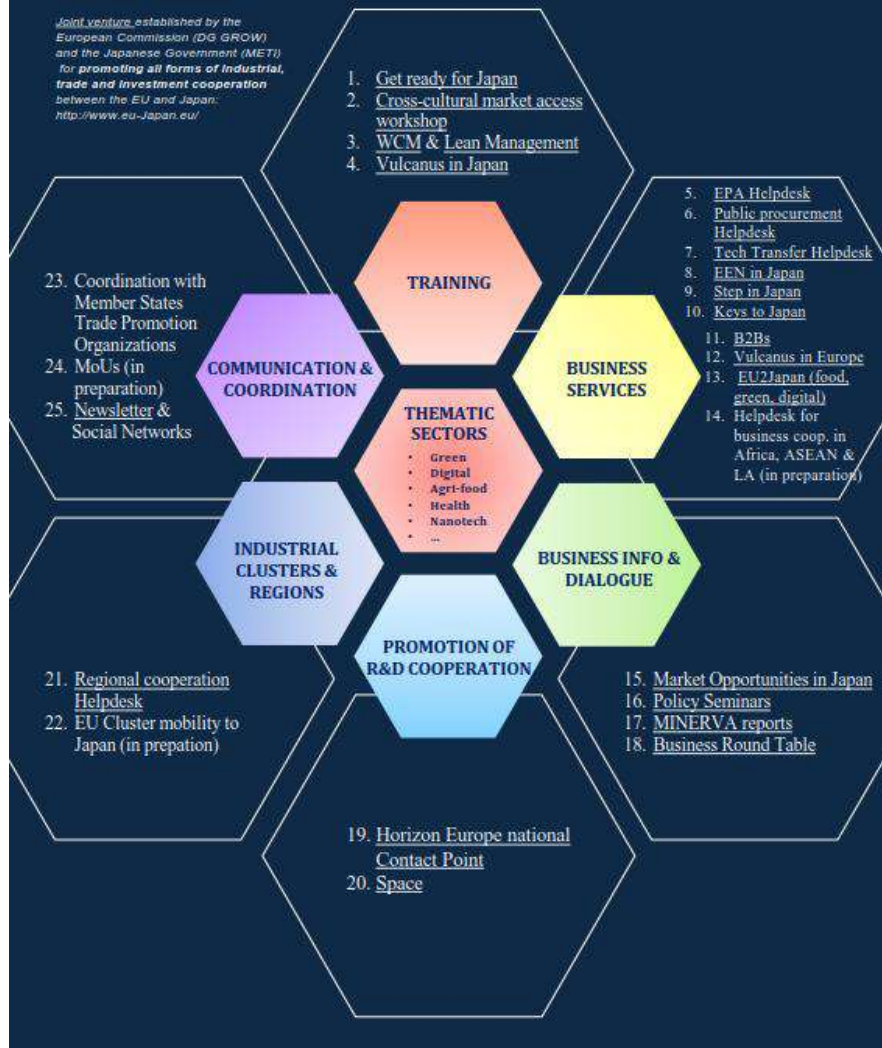
Agenda

- **Sept 22** : selection of 10 EU Clusters Managers
- **Oct 22** : dissemination of the results of the selection
- **Before 31 March 2023** : Visit of a Japanese cluster with the support of the EU-Japan Centre for Industrial Cooperation

One to one online meeting before departure organised by the EJR2C Helpdesk

EU-JAPAN Centre for Industrial Cooperation Activities in a nutshell

Joint venture established by the
 European Commission (DG GROW)
 and the Japanese Government (METI)
 for promoting all forms of industrial,
 trade and investment cooperation
 between the EU and Japan.
<http://www.eu-japan.eu/>



Contact us

Contact the EU-Japan Regional & Cluster Cooperation

Helpdesk via our offices in Europe and in Japan

www.ejrc-helpdesk.eu / @EJRCHelpdesk

EU office (Grand Est Region – Strasbourg France)

Dr Virginie Fermaud – Jean Freund – Aurélien Anthony

ejrc@eu-japan.eu



Thank you



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CHINA
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The services of the International IP SME Helpdesks Mattia Marino, 27 September 2022

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What

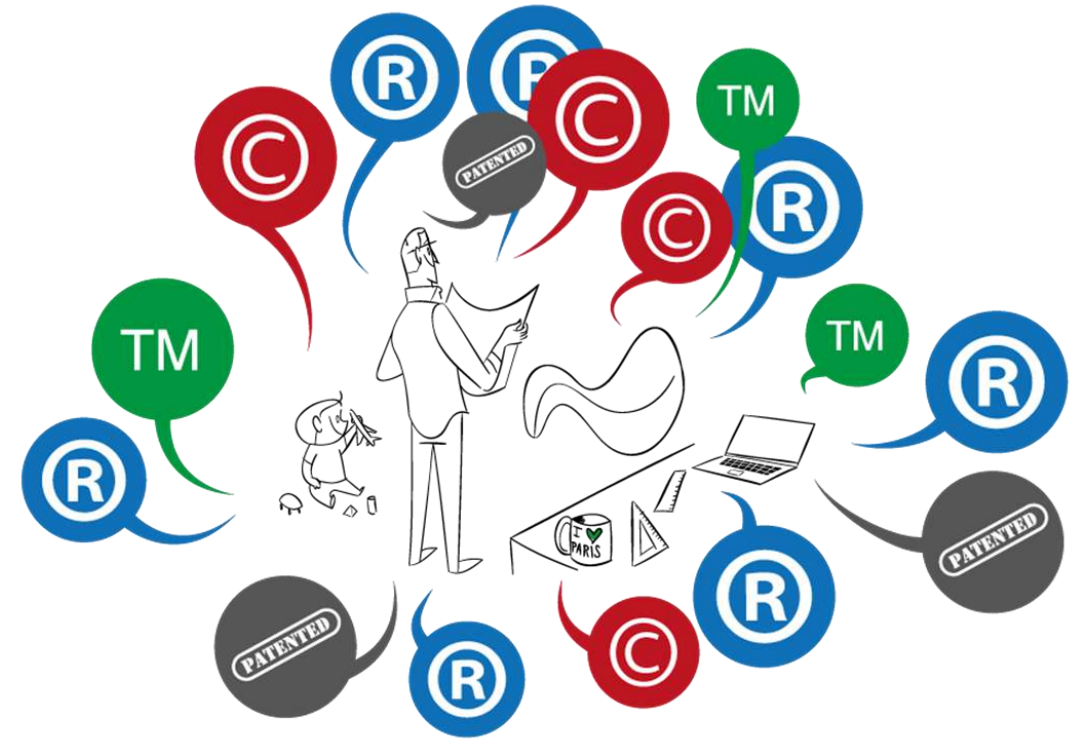
Provision of free of charge, first-line confidential assistance on IP protection, management and enforcement.



Why Intellectual Property?

To support IP capacity building along the full scale of IP practices: from awareness to strategic use and successful exploitation.

- IP is a key business assets!
- Attract new investments
- Freedom to operate in the new countries
- To strengthen EU competitiveness
- To ensure long-term impact
- Increase the willingness to enter into collaboration
- For an increased translation of IP into the EU innovation ecosystem!





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Beneficiaries

SMEs from European countries:

- Established in the regions of interest
- Potentially interested in going international and doing business in these markets
- That work with entities in the regions

Geographical coverage

- Europe
- China: Mainland China, Macao, Hong Kong, Taiwan
- **South-east Asia:** Vietnam, Thailand, Indonesia, Singapore, Philippines, Malaysia, Cambodia, Lao, Myanmar, Brunei
- **Latin America:** Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela
- India
- Africa (55 countries)





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Trainings



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Online resources – IP Tools

IP Diagnostic tool:

Self-evaluation tool for measuring your status in terms of IP management and knowledge



IP Cost tool:

Pre-evaluation of costs related to IP registration and management





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https://intellectual-property-helpdesk.ec.europa.eu/index_en



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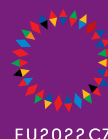


South-East Asia



Africa

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Contacts

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European IP Helpdesk: service@iprhelpdesk.eu

China IP SME Helpdesk: question@china-iprhelpdesk.eu



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Q&A

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Food & Bio Cluster Denmark

Lars Visbech Sørensen, CEO

Food & Bio Cluster Denmark

Who we are

We are Denmark's national cluster organisation for the Danish food and bioresource industry.

We are a unifying platform for innovation and growth – for Danish and international companies and knowledge institutions.

Our Mission

Our mission is to strengthen knowledge-based innovation and knowledge collaboration across the entire value chain – nationally and internationally.

We strive to be the one point of entry for companies and knowledge institutions within networking, innovation, business development and funding.

The establishment and growth of Food & Bio Cluster Denmark

The Danish government points out 14 national clusters to stimulate and strengthen competitiveness, innovation and green transition

2019



First complete year of working as a united cluster

2021



2020

Four clusters become one national super cluster

2022

- More than 386 members, including all Danish universities
- +43 employees in 10 different locations
- Project portfolio 240 million eur
- ECEI Gold certified

Key figures

Food and bio is a very large sector in Denmark.

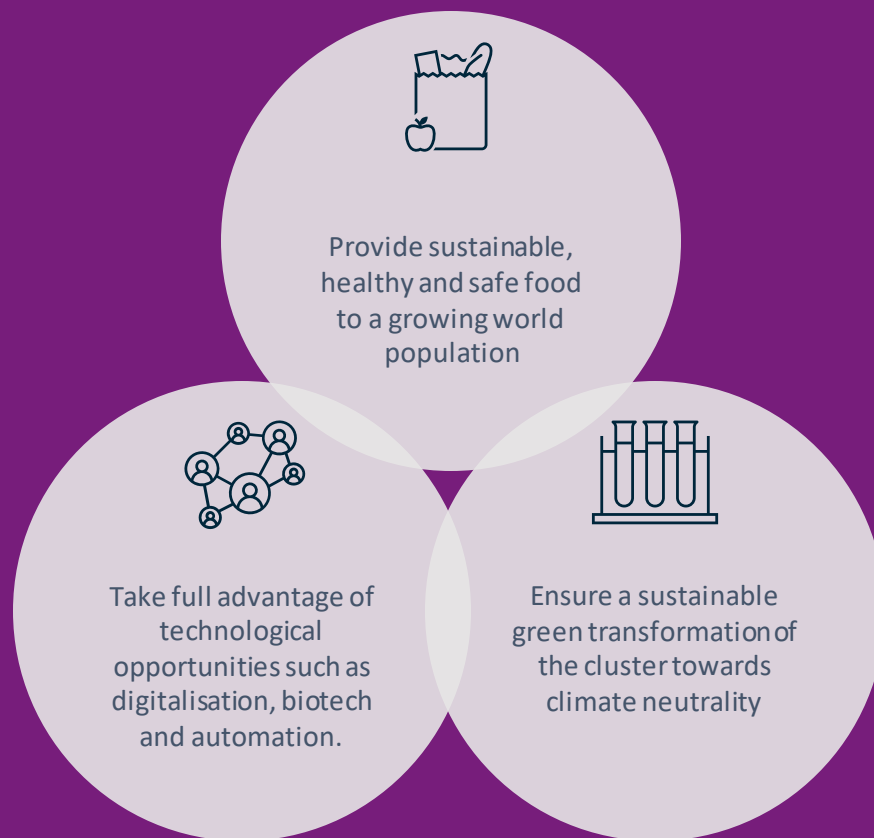
However, Denmark has a food industry where animal products play a significant role.

This is part of the burning platform that we as a cluster find ourselves on.

Key figures for Food Industry

- Employment in sector: 186,000
- Companies: 15,000
- Export of Goods: 22 million EUR
- 5.2 % of BNP

Our 3 aims - and a burning platform

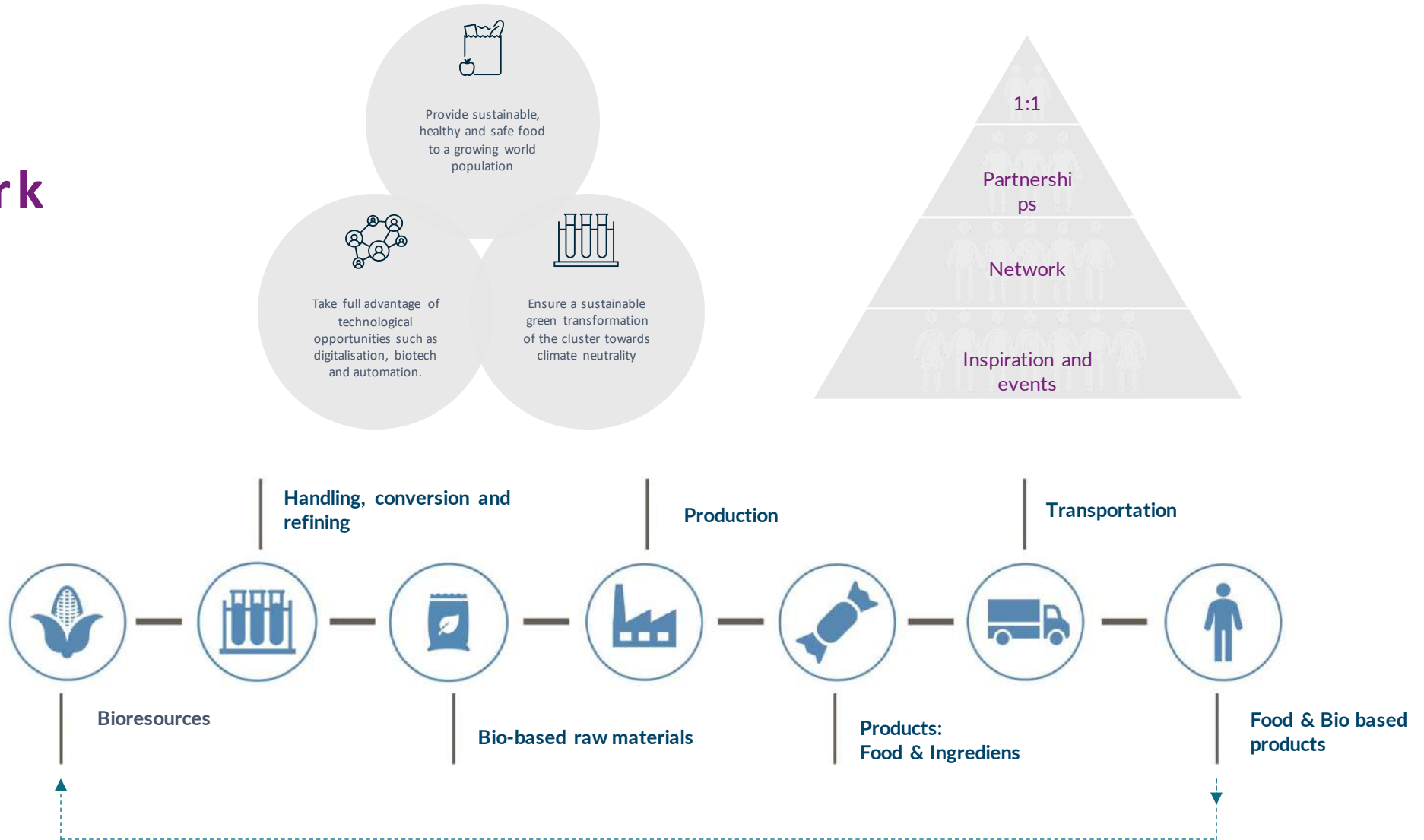


More than 25% of carbon footprint in Denmark comes from food production

What we do



Our work



Thank you

Council of European Bioregions

The lifesciences clusters' network in Europe

The Council of European BioRegions



The Pandemic context

- Pressure on companies and society as a whole
- Race for equipments, vaccines, health providers
- Clear challenges: collaboration, supply chains disruptions, competition.....



Actions and initiatives of industry and clusters that aim at strengthening supply and value chains

- ECA morning meetings
- Clusters immediate response supported:
 - ❖ Identification of the potential companies through their direct connections
 - ❖ Mapping
 - ❖ Matchmaking events at EU level, supporting Vaccine developers to get in touch with Vaccines producers
- Next steps included the real work with other networks, institutions (DG Grow, HERA, EIT Health,)

Concrete outcomes



Together for tackling the biomanufacturing & breakthrough technologies challenges **in Europe**

A European Landscape analysis to guide decision
making process to recover EU sovereignty in
Bioproduction and Medical Technology Value Chain

October 2021



Lessons learned and next steps



Lessons learned

Cross-sector collaboration

Trust towards the solutions providers and connectors (yes, the clusters!)

Avoiding silos and too narrow definitions!

Next steps must be on

Mapping, connecting, preventing. and preparedness!

And wider definition of the Health ecosystem.



Thank you

Contact info@cebr.net

www.cebr.net

Marta Gonzalez, Alberto Baldi, Anaïs Le Corvec



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Value Chain Generator and Clusters

Mateja Dermastia, CEO, Anteja ECG

Topics

Value Chain Green Transition

- Circular Bioeconomy
- Supply chains Resilience
- Value chains
- Business models

Macro-regions and Clusters

Alpen Space

- Alplinkbioeco

Danube Region

- Danube Alliance

Technology



01

Sudden and unpredictable events disrupt traditional supply and value chains

02

A system shock anywhere in globalized supply chains has a knock-on impact elsewhere

03

Any new shocks are not ruled out in the future (new COVID, new war, climate change..)

Our actions until
2030
will define humanity's
future on Earth



Increased pressure on companies

Climate change, COVID, Ukraine war

1. Input & market loss
2. Energy prices
3. Inflation

Green Deal

1. 55% decrease GHGE by 2030
2. Climate neutrality by 2050

Regulation

1. Supply chain due diligence
2. Corporate sustainability reporting directive (CSDR)



Companies seek structure approach to growth

SUPPLY CHAIN RESILIENCE AND EFFICIENCY

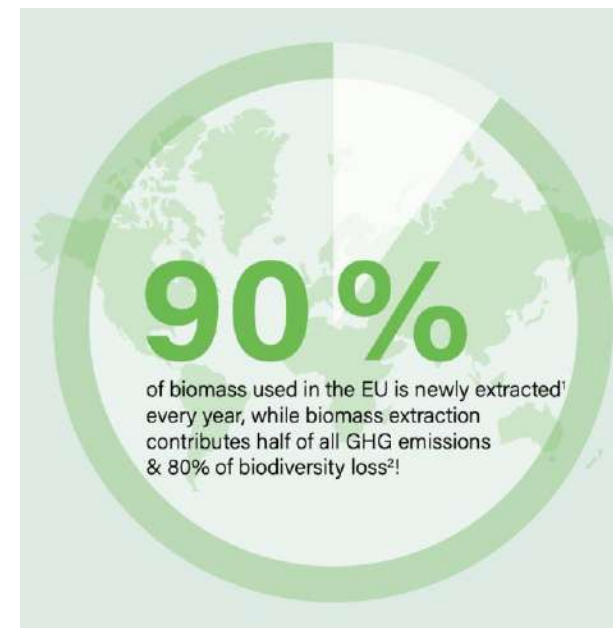
Input / Market losses

Loss of market criticality

Loss of input criticality	High	Medium	Low	Null	Grand To..
High	97	38	10	3	148
Medium	3	57	16	2	78
Low	2	10	56	1	69
Null	0	0	0	0	0
GRAND TOTAL	102	105	82	6	295

European Cluster Collaboration platform study, March 2022

GREEN GROWTH POTENTIAL



Resource utilization
Cycle view on sustainability
Reduce costs and create value.

Companies seek solutions but have no overview of

01



CIRCULAR
COLLABORTION MODELS

02



CROSS-SECTORAL
OPPORTUNITIES &
TECHNOLOGIES

03



SUPPLIERS AND BUYERS
ARE DISCONNECTED
AND UNKNOWN TO
EACH OTHER



AlpLinkBioEco

Linking BioBased Industry Value Chains
Across the Alpine Region

Recognized clusters as a driver of
circular bioeconomy development

01

Joint Masterplan on
circular bio-based
economy

02

The Value Chain
Generator

03

Pilot Experience
from the Project –
Network

2018–2021



Danube

Clusters

Operate within traditional value chains focus on innovation and research

Data

Clusters usually do not have trade related data about members' products

Network

Absence of cross-regional networks with relevant information at the firms' level



In Danube region +40 Clusters are active in bioeconomy value chains – Agroforestry, Agriculture, Food , Wood – all can play critical role in circular bioeconomy value chains

Source: Anteja, Impacts and Potentials of the Ukraine Crisis on Supply Chains Development for the Danube Region, The Danube region at the turn of the times, Ulm July 1, 2022

Value Chain Generator

Define circular bioeconomy collaboration opportunities across networks & regions

- ✓ Finds waste, by product valorisation opportunities
- ✓ Finds the nearest potential partners (suppliers, buyers)
- ✓ Find the right technologies for closing the gaps



Big Data & smart technologies

VCG.AI uses AI & Deep Learning to provide circular solutions at scale

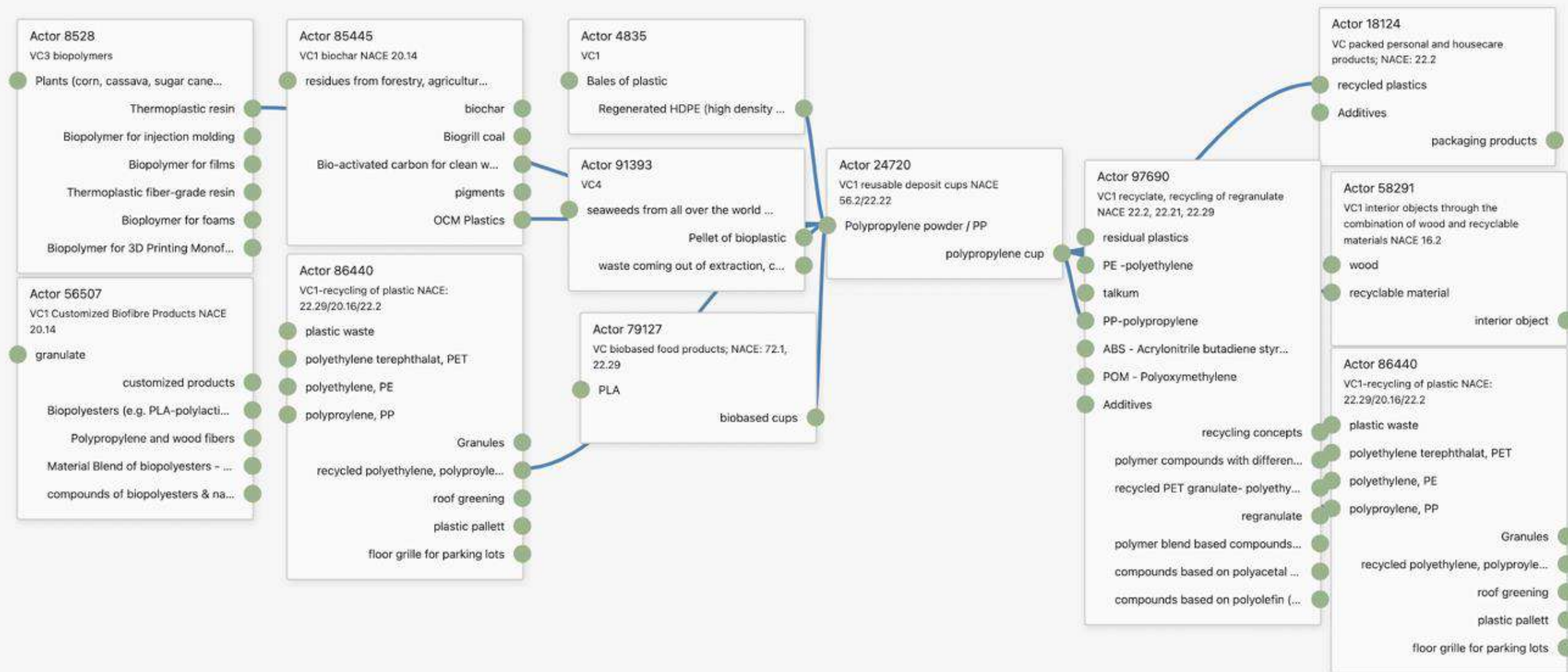
- ✓ Residuals
- ✓ By products
- ✓ Across company networks & regions



+50 Clusters
Reach - 3M
companies



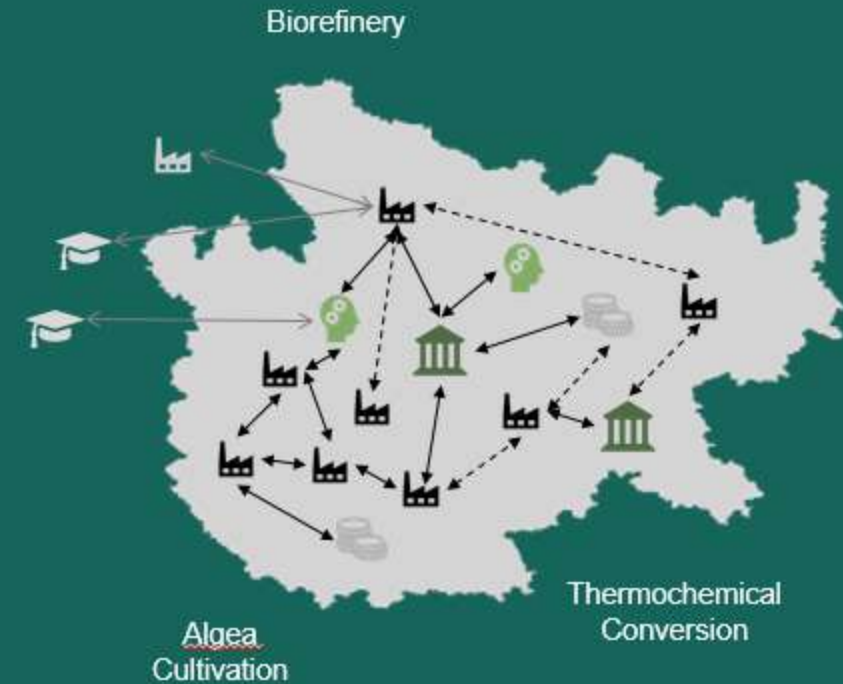
BioLink example: Use of biobased polymers for reusable cups



Regional strategies and investments

Find the gaps & close the loop:

- ✓ Analysis of the industry and production waste in the region
- ✓ What is missing in the ecosystem to transform the residuals into useful materials & products



Experience: Clusters and Companies

Case study

Brewery

Cost savings
€294k / year

Waste valorization
opportunity
€138k / year

Overall financial
impact
€432k / year



Industrial companies

VCG.AI for companies

1. Lower costs
2. Sustainability compliance
3. Value chain resilience



Clusters & Regional
developers

VCG.AI for clusters

1. Know members' value chains & challenges
2. Find solutions
3. Expand network



**“VCG.AI speeds up
the search for value
chain partners for our
members by 80-90%”**

- Chemie Cluster Bayern

VCG in practice – Clusters

BESTROCAL, Germany

Support the development of bioeconomy

Danube Alliance, Danube

30+ networks across Danube region

CEE2ACT / Horizon Europe

Knowledge transfer network for development of circular bioeconomy in East Europe

VCG in practice – Companies

Brewing / Mind4Machine

Optimization of waste streams & internal processes

Dairy

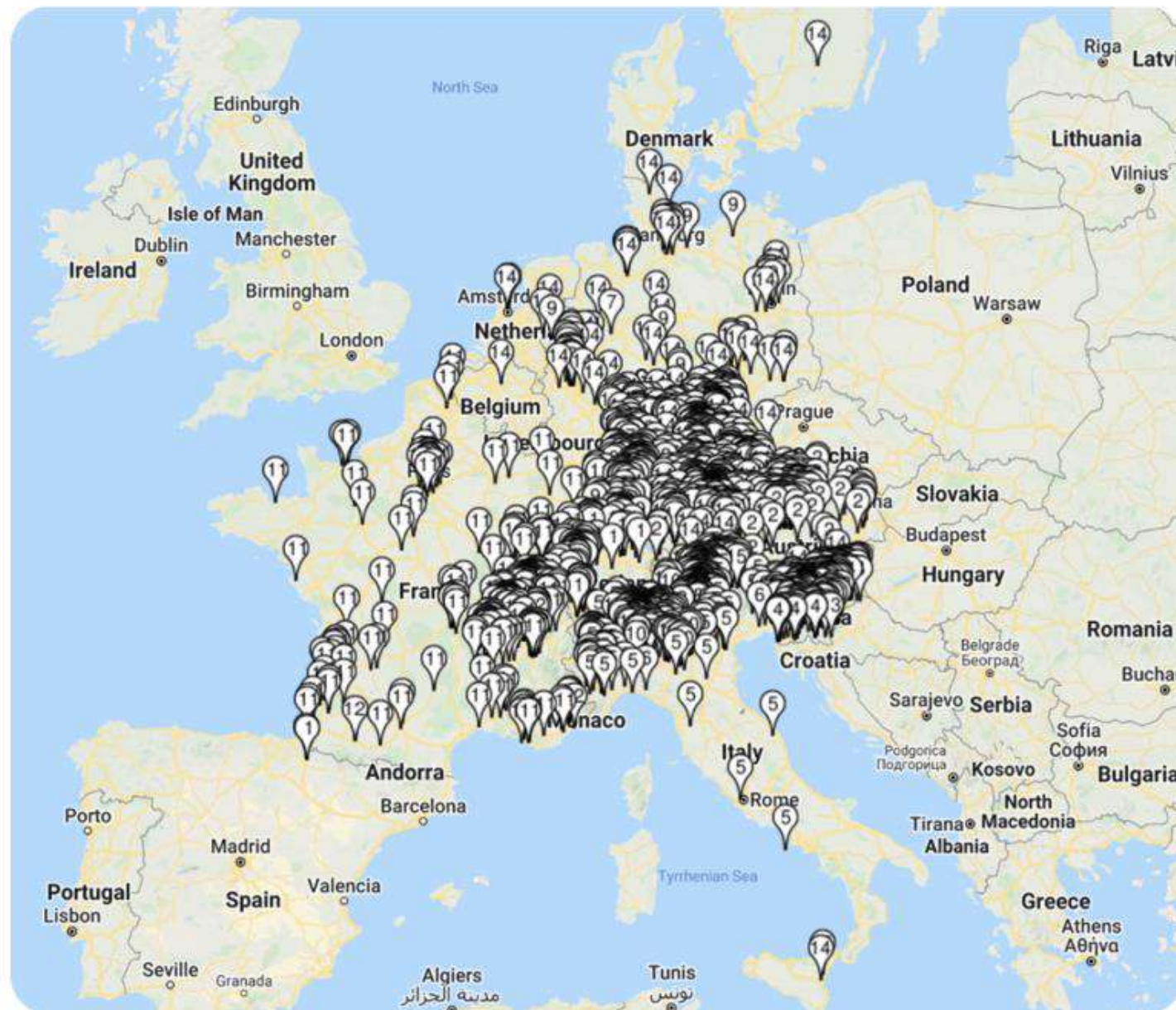
Optimization of waste streams & internal processes

Cellulose from sustainable biomass

Development of the value chain & scaling of the technology

Biorefinery for platform chemicals

Market development



Mateja Dermastia
mateja.dermastia@anteja-ecg.com

Thank you

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BioMan4r2 - BioManufacturing Eurocluster for Recovery and Resilience in EU

The Medtech and Pharmaceutical industries are major contributors to the EU economy

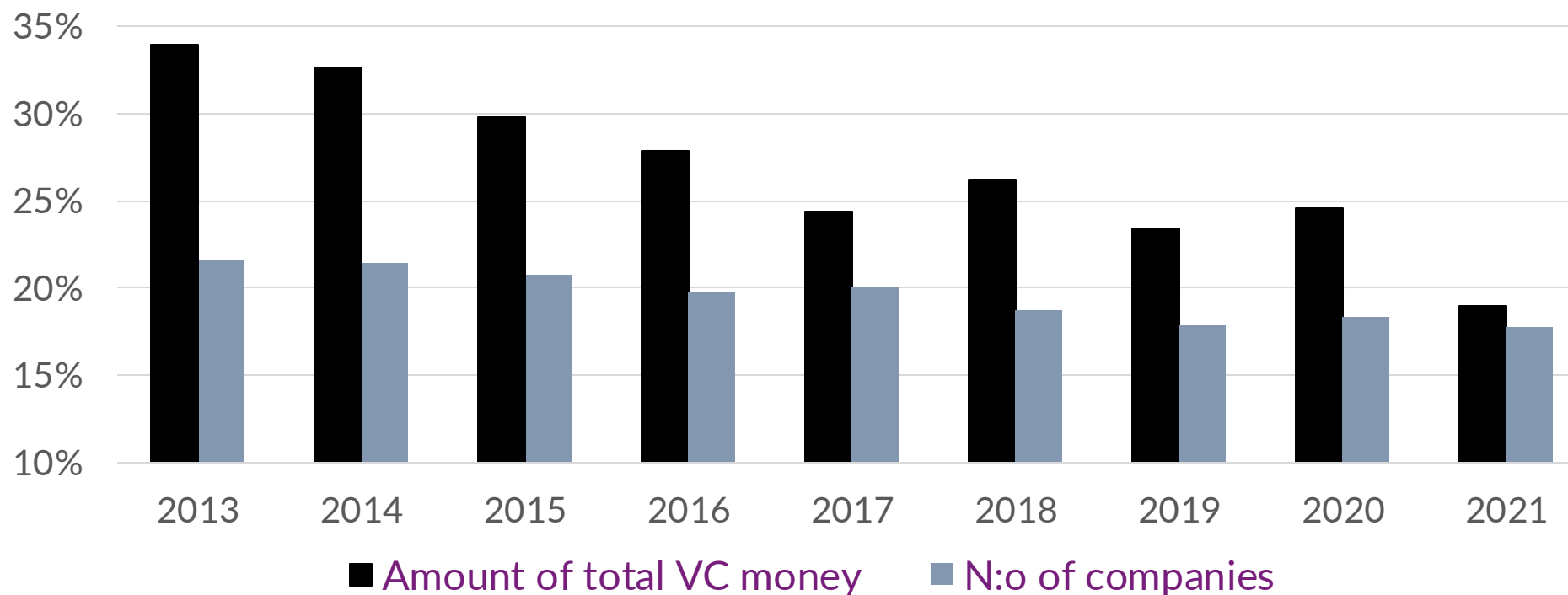
- In Europe, the Medtech sector employs more than 730,000 people.
- There are more than 32,000 medical technology companies in Europe, of which 95% are SMEs.
- The market size is estimated at roughly €120 billion

- Total pharmaceutical employment in EFPIA countries in 2021 was 840 000.
- EFPIA members spent € 41.5 bn on R&D (5-year ave. growth 4%)
- Projected pharmaceutical sales of the EU in 2025 equals to € 296 bn

Europe's Pharma and Medtech industries are highly dependent on Asia

- Until mid-1990s the US, Europe and Japan produced 90% of the world's Active Pharmaceutical ingredients (APIs).
- China is 2nd largest supplier of APIs and antibiotics to the EU27 (in volumes). The last acetaminophen (paracetamol) manufacturing plant in Europe closed in 2008.
- There are already individual projects in Europe moving the pharmaceutical industry out of Asia; e.g. Sanofi is building a pharmaceutical raw materials manufacturing site.
- Europe should strengthen the resilience of its medical technologies supply chains for instance, by incentivising a stronger diversification of critical components, chemicals, and other raw materials needed to manufacture critical medical technologies.

EU's VC investments to biotech & medtech decline



Not only the share of investments gets smaller but also the size of average funding rounds → life of EU SMEs in the sector gets harder

Source: InvestEurope

How BioMan4r2 project tackles the needs

- **Long-term strategic objective** of BioMan4R2 is to contribute towards a **resilient, circular and low-carbon Health sector economy** through making the biomanufacturing and medtech industry (BMT) supply chains more resilient, innovative and sustainable.
- **Direct objective** is to establish, develop and support **collaboration** between the SMEs, investors, and knowledge organizations, technology parks and other companies in biomanufacturing and medtech industries through:
 - establishing a Eurocluster in Biomanufacturing and Medtech and
 - launching a targeted SME Support Programme.

Who we are



EU Biomanufacturing survey by EIT manufacturing

Thank you

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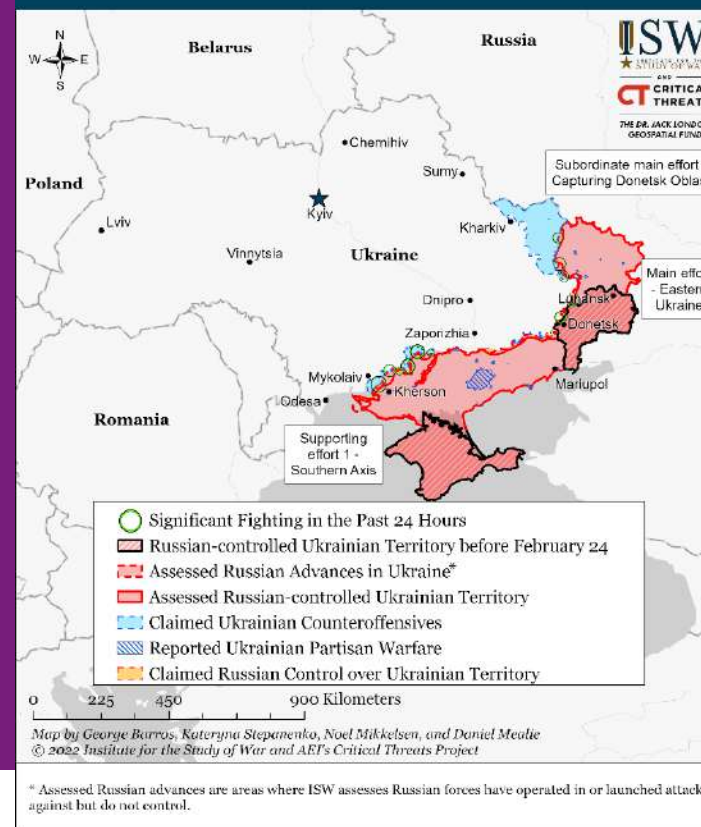
CURRENT CHALLENGES IN VALUE/SUPPLY CHAIN – WAR IN UKRAINE

Olga Trofymova, PhD, CMC
Ukrainian Cluster Alliance
Ukrainian Automotive and Mobility Cluster

Cluster environment in Ukraine

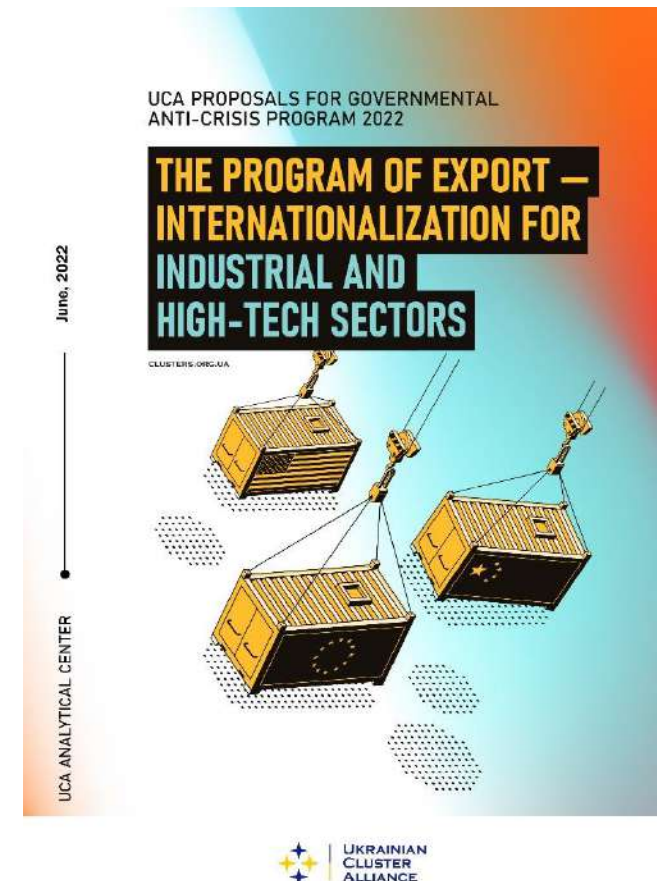
- Ukrainian Cluster Alliance founded on 24th of March 2022
- 37 clusters. Clusters migration: 10 clusters of UCA migrated from Eastern and South regions to the Central and Western Ukraine
- 1800 companies, research institutions and other entities are members of clusters
- 12 different industries
- Main fields:
 - Engineering – Automation - Machinery
 - Automotive and Aerospace
 - Agri – Food
 - Medical and healthcare
 - Textile and fashion
 - Furniture - Construction

Assessed Control of Terrain in Ukraine and Main Russian Maneuver Axes as of September 23, 2022, 3:00 PM ET



National cluster policy in Ukraine

- National Program of Clusters Development till 2027 was submitted to the Ministry of Economics in 2020.
- There were a range of meetings with Ministries and State institutions. But there is still no any approved Cluster Policy and Public support
- **Strategy of Export – Internationalization** is set-up in June 2022
- **Strategic roadmap 2022-23** is set-up on September 2022 to Clusterise Ukrainian Economy
 - Institutionalisation and Clusterisation
 - Development and Growth
 - Internal Matchmaking and Resilience
 - Internationalisation
 - Innovations and Digitalisation



National cluster association services in Ukraine

- **GR.** We lobby clusters policy in Ukraine
- **Internationalisation.** We support clusters to be at ECCP. We place needs of Ukrainian companies at ECCP forum. We build international relations at C2C Meetings. We support internationalisation of our clusters. We build international connections at B2B meeting. We promote our industries at Conferences/ Forums/ Trade Missions. We participate at B2B platforms / fairs.
- **Internal resilience.** We rebuild and recover internal value chains and do internal matchmaking
- **Capacity Building.** We share knowledge and experience at our Webinars. We help to develop clusters' models and strategies.
- **Fundraising.** We support our clusters and companies in fundraising
- **Innovations.** We promote and support innovations, start-ups and scale-ups at national and international level

Cross-cluster cooperation in Europe

- EU commission / ECCP support of Ukraine
- 12 MoU and agreements (EAC, CIMES, EuroTex, FPPP, CzechInno, CSIA, ITC...)
- Cooperation with EACN (50 B2B meetings during 4 C2C meetings)
- EIT Manufacturing – networking partner UCA
- 1st big consortium ‘EIC support Ukrainian tech start-ups’
- Promotion of I4MS /Horizon Europe (2 projects)
- Events: participation at 9 big intl events in Oct-Dec
- (total 2022 - 20+)
- The Global Economic Impact Forum on Ukraine



Ukrainian Automotive & Mobility Cluster



Who We Are?

An initiative created by the leading component manufacturers for the automotive industry. The founders of the Cluster initiative were KOSTAL, LEONI, SEBN, Kromberg & Schubert, VD MAIS, Spetstekhosnastka as well as the German-Ukrainian Chamber of Commerce and Industry. UAC is a platform that brings together manufacturers, suppliers, service companies, educational institutions, research institutes, associations and government agencies. We are a Full member of European Automotive Cluster Network!



Mission

Be a reliable partner for European automotive brands – Create a positive image of the automobile industry:
Ukraine as a reliable location for suppliers of the automotive industry, an attractive employer and driver of innovation development.



Goals

To create favorable conditions for doing business in the Ukrainian Automotive industry
To promote production localization in Ukraine
To support Industry 4.0 and Digitalisation. To support R&D, industry innovations and new business
To support Mobility and SMART infrastructure development in Ukraine

EUROCAR **LEONI** **KOSTAL**



Deutsch-Ukrainische
Industrie- und Handelskammer
Німецько-Українська
промислово-торговельна палата





Key Automotive Customers of Ukrainian Suppliers



Volkswagen



PORSCHE



ŠKODA



Mercedes-Benz



BENTLEY



RENAULT





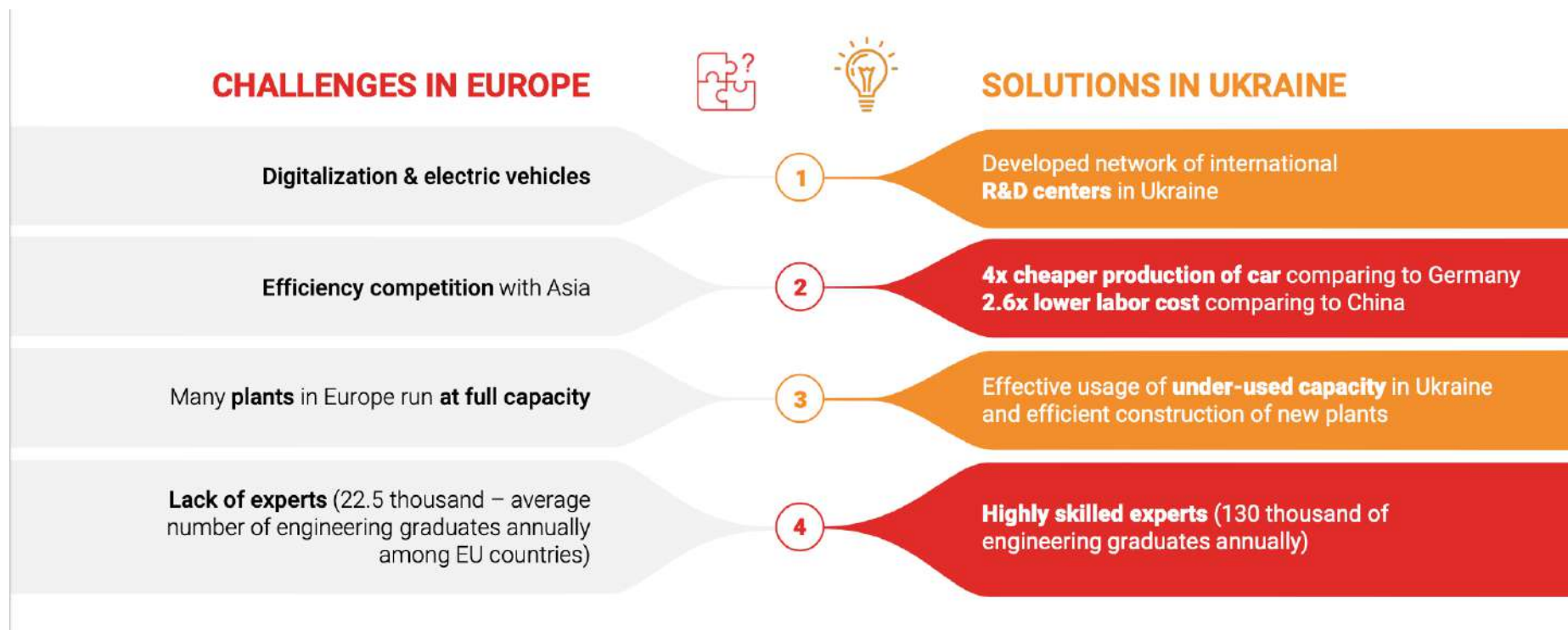
KEY AUTOMOTIVE PLAYERS IN UKRAINE



The main challenges of SMEs

- | | |
|-------------------------|--|
| 1. Orders (= jobs) | 1. Export & Internationalization / Integration into GDP / |
| 2. Logistic | Integration into any intln projects helping to survive |
| 3. Production re-launch | 2. New ways / safety vs insurance / flexibility / fuel / reliability |
| 4. Staff | 3. Financial support / Equipment / Change of output products / |
| 5. New suppliers | New business models |
| | 4. Maintain / Re-allocate / Skill up / Motivate |
| | 5. Fast change form BL & RU to EU / Financial support |

Ukraine's Opportunities



19 Free Trade Agreements



LOCATION

Transcarpathian region of Ukraine shares borders with four EU countries: Poland, Slovakia, Hungary, and Romania.

The Eurocar plant is located near the region's administrative center – city of Uzhgorod.

- 1.5 km from the border with Hungary
- 2 km from the border with Slovakia



LOGISTICS

Automotive: the plant is located near the highway of European importance, E50/M063, connecting Kyiv with the EU

Railway: Eurocar has its own railway terminal with a total length of 1470 meters, including three European-gauge lines and one European/CIS-gauge line

Air: a landing strip at Uzhgorod airport

Potential of multimodal/ container / train transportations:

- neither permits nor fees are required for using the roads in the countries of through passenger train;
- no delays at the border, in train departure, and arrival;
- scheduled traffic even on weekends and holidays

1 day

2 days

3 days

0-500 km

500-1000 km

1000-1500 km

TRANSPORTATION LOGISTICS (EUROPE)



CARS PRODUCTION AREA

Eurocar production area for passenger cars manufacturing

50k cars per year overall capacity in a complete knock-down mode (CKD) extendable to 100k cars per year.



production areas – 67k m²

electricity, water and gas supply; treatment facilities

railway terminal – 4 railway lines

adjacent logistics and warehouses

FREE INVESTMENT AREA

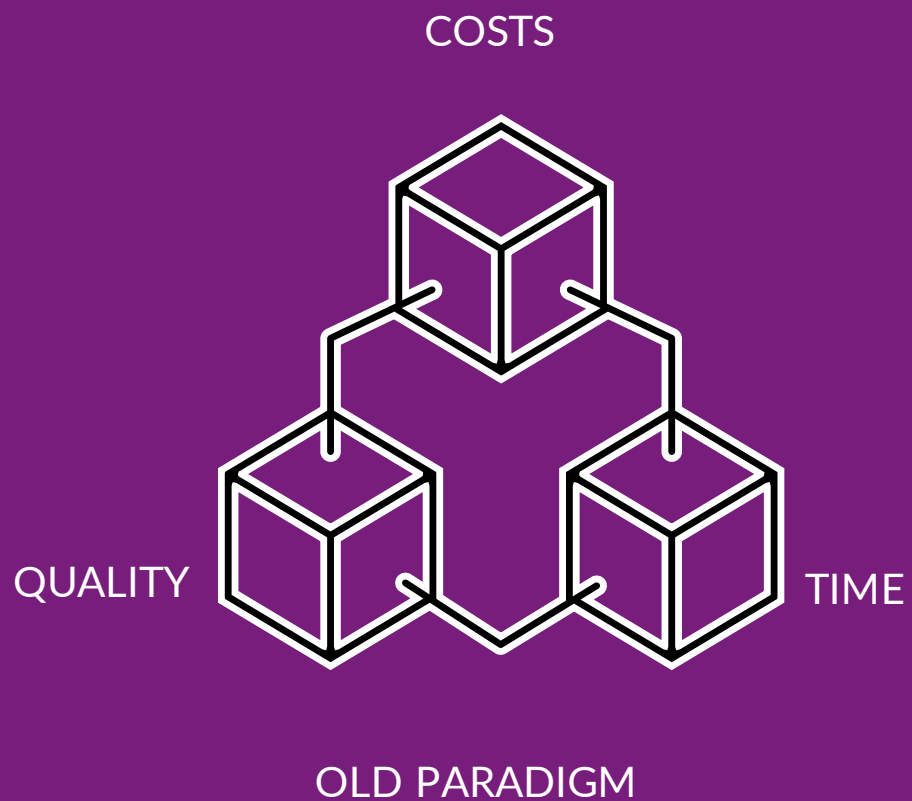
41 hectares is undeveloped territory planned for production area



production areas – 100k m²

step down transformer power station

The main Reasons to cooperate with Ukraine



LET'S BUILD COMMON AGENDA (BI-LATERAL AND REGIONAL)

INDUSTRIAL POLICY AND PROGRAM FOR UKRAINE

- Replicate your program of Industrial Development in Ukraine

ADVANCED MANUFACTURING

- Industry 5.0 agenda (exchanges, common programs, outsourcing of UA Integrators and developers)
- Industrial outsourcing / localization
- Future talents / Education

AGRI-FOOD

- Equipment and investment into processing technologies / building new plants

CONSTRUCTION – FURNITURE

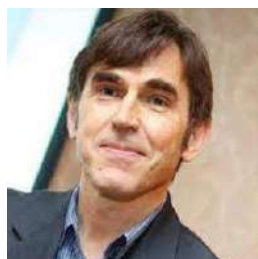
- Re-building Infrastructure and Building sectors

INNOVATION AND CLUSTERS DEVELOPMENT PROGRAMS

- Common participation in Horizon Europe and similar programs
- Cluster development programs



- Be a Participant of the Ukraine Recovery and Reconstruction!
- We are fighting for democracy and our common values.
- Include Ukrainian clusters and SMEs in your chains and programs. Cooperate wherever is possible
- We are strong! But we need your support in clustering and resilient of Ukrainian economy. We have batch of projects and willingness with capacities to implement it. Stand with Ukraine!



Alexandre YURCHAK

Head of UCA,
CEO of Association
of Industrial Automation of Ukraine

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Olga TROFYMOVA

Director of Internationalization of UCA,
Cluster Manager of Ukrainian Automotive
and Mobility Cluster

olgatok@gmail.com



#StandWithUkraine

Thank you

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Supply Chain Resilience Platform

Mantas Vilys

Lithuanian Innovation Centre
Enterprise Europe Network Lithuania

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CEO - Mr. Marius

- export markets - gone
- key ingredients - missing





Association CEO - Mr. Sigitas
- critical components - **missing**
- goods send to consumers - **lost**



THE SUPPLY CHAIN RESILIENCE PLATFORM

<https://supply-chain-resilience-platform.b2match.io/>



THE SUPPLY CHAIN RESILIENCE PLATFORM

<https://supply-chain-resilience-platform.b2match.io/>

The Supply Chain Resilience platform

Long term virtual matchmaking area

Validated by Enterprise Europe Network advisors

Beyond the EU

State of the Art: Participants

810 registered users

150+ from Ukraine

43+ countries

	Netherlands	9
	Panama	1
	Peru	1
	Poland	55
	Portugal	19
	Romania	33
	Serbia	15
	Slovakia	5
	Slovenia	4
	Spain	40
	Sweden	1
	Switzerland	7
	Taiwan	25
	Turkey	2
	Ukraine	151
	United Kingdom	1

State of the Art: Matchmaking

Product offered (200+)

Products requested (60+)

Service offered (70+)

Service requested (10+)

Partnership proposals (30+)

Expertise proposals (10+)

REQUEST

Telehandlers and mixer wagon production

Our company produces telehandlers and mixer wagons, which we export all over the world.

We are looking for construction materials (S275 and 355 steel sheets) thicknesses from 1.5 to 60 mm, from coils and from ...

Updated on September 16, 2022



REQUEST

Updated on September 01, 2022

Looking for suppliers of quality raw oleaginous fruits

Aiming to triple its manufacturing capacity, the Romanian company seeks new international business partners able to supply quality raw oleaginous fruits, under supplier agreements.

The company seeks suppliers of raw oleaginous fruits able to offer one or more of the following categories:

we are looking for new suppliers of iron good...

we are also evaluating new suppliers for mechanical and ductile iron castings, pressed steel, mild and even alloy steel sheets, rods, tubes, plates, etc



Lorenzo Selvatici

CEO at selvatici srl (San Lazzaro di Savena, Italy)

State of the Art: Results

Profile **matches** - 22876

Number of **meetings** that took place – 300+

Number of ongoing **negotiations** – 40+

Partnership agreements made – 5+

Things you could do now!

Check the **requests** and **respond** if relevant

Make yourself **visible** – publish offer/request

Be **proactive** – book meetings with registered users

<https://supply-chain-resilience-platform.b2match.io/>

Thank you!

Mantas Vilys
m.vilys@lic.lt

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#EUClusterConference



Cluster policy and Smart Specialization Strategy

Donato Iacobucci

Centre for Innovation and Entrepreneurship

Università Politecnica delle Marche - Italy

Clusters

A Cluster is a concentration of economic activities in related industries in a specific location

Key features:

- The spatial concentration of firms (**agglomeration**)
- A web of relations between firms belonging to the same production chain (**specialization**)
- A web of relations between firms and local institutions (**embeddedness**)



Clusters

Clusters are key to industrial competitiveness and innovation

Cluster policy should be at the core of industrial and regional policy

**However:
Cluster policy needs changing to sustain the digital and green transitions and cope with the challenges brought about by environmental and social sustainability**

The new cluster policy

Clusters should become a tool to facilitate regional **structural change** and **innovation** within the **smart specialisation strategy** (RIS3)

Changing models of innovation

From learning by doing and learning by interacting within the production chain (which are the main innovation mechanisms in clusters)



User-driven innovation, addressing the new societal and environmental challenges

From incremental innovations



Radical innovations which involve not only technology but changes in the competences, organization and business models

Cluster policy in RIS3: relatedness

Clusters should be considered as part of the **regional innovation ecosystem**

Cluster policy should look not only at the internal organization of clusters but also at the **relations with other clusters**

Cluster policy should exploit the **variety of clusters** at regional level and the **cross-fertilization** potential between them

Moreover, cluster policy should be aimed at promoting the **relations between clusters and research institutions** (universities)

Cluster policy in RIS3: transformation

RIS3 is aimed at promoting a transformative logic: it relies on present strengths to promote innovation and diversification

A way to sustain established clusters while promoting transformation is to look at clusters not in terms of their final output (NACE) but in terms of **organizational and technological competences**

The aim of RIS3 is to leverage on the **variety of competences** and their potential relations to promote **innovation and industrial diversification**

Cluster policy in RIS3: (inter-regional) connectivity

Clusters could be the main tools to implement the **outward looking approach in RIS3**; i.e. leveraging on competences and relations outside the regional boundaries

Cluster policy should not only linking up the main players in the regional ecosystem, but also help **overcoming regional silos**, pooling resources and exploiting complementarities with other EU regions

Cluster policy in RIS3: cluster governance

Clusters are characterized by the presence of SMEs which lack the financial and human resources to invest in R&D and interact in effective ways with research institutions.

Cluster governance may help SMEs to elaborate long-term visions for their innovative activity and **pool resources** to promote **collaborations with research institutions** and with other clusters at regional and inter-regional level.

Thank you

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Nordic Cluster trends and good practices

The Nordic ECEI Cluster Expert Network: Quality assessing 100+ Nordic cluster orgs since 2010.



Britt Sandvad



Karin N. Skalman



Tor Arne Bellika



Marit Werner



Eivind Petershagen



Anne Grete Ellingsen



EUCLES

European Clusters Excellence
Labelling Structure

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EU2022.CZ

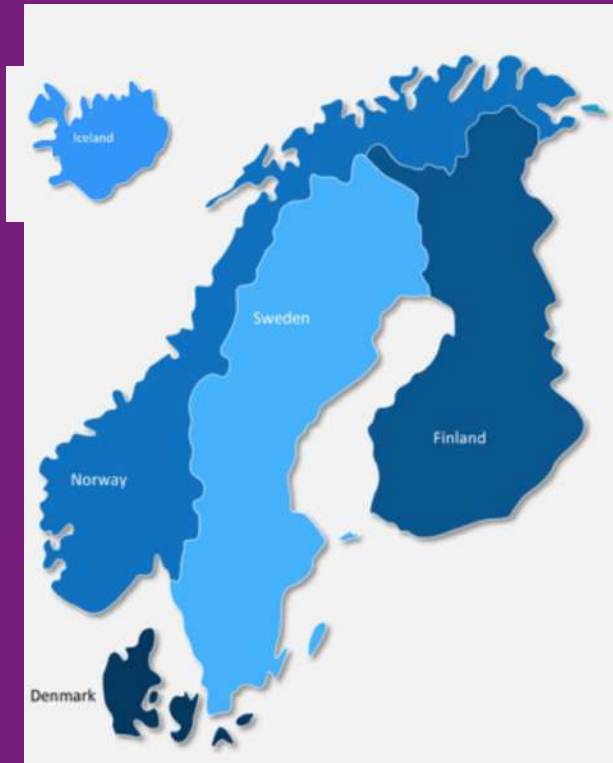


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Moving towards cluster led ecosystems

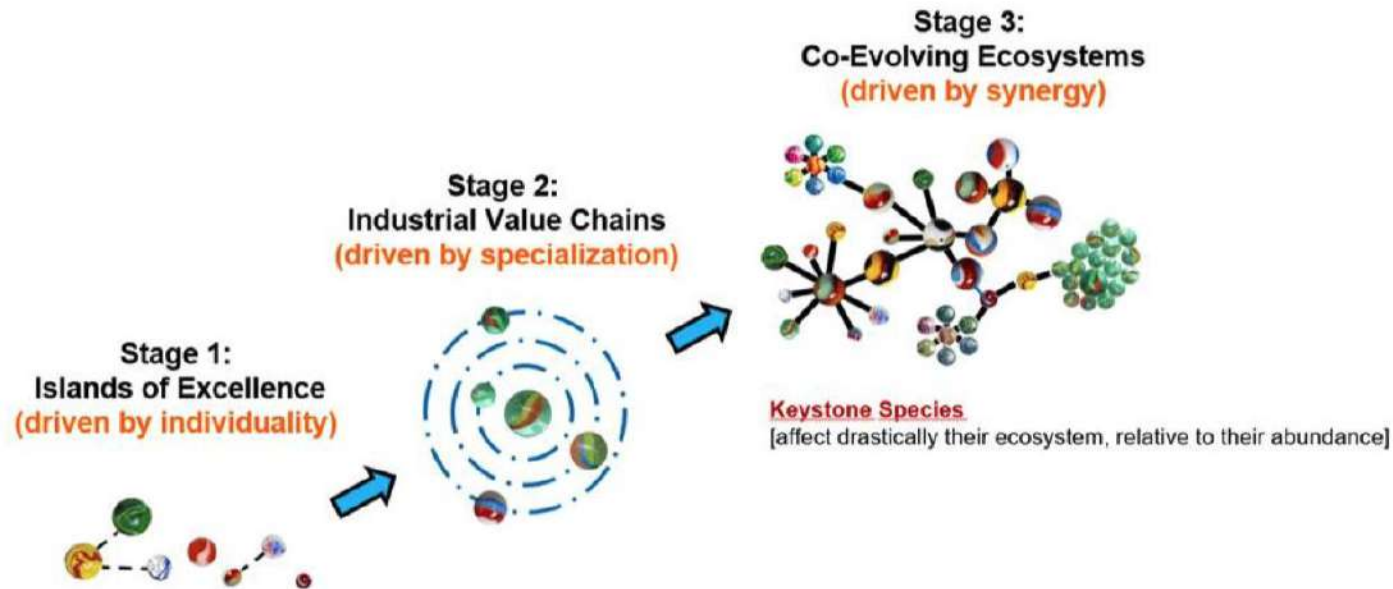
The Nordic Cluster story 2010-2022- as we see it



- All countries and regions have different policy stories and results
- Leading regions implements RIS3 through cluster portfolio
- National, regional and local(city) cluster policies get multilevel & integrated
- Capacity building services are getting more multilevel - building capacity for clusters to lead the transition
- EU Cluster policies, platforms and programs get more important (even for Non EU-Member Norway)

Nordic Cluster Trends

-Towards co-evolving cluster lead ecosystems.



Source: prof. Athanasios G. Konstandopoulos, Presentation of the European Cluster Alliance at the meeting with the Commissioner Thierry Breton on 25 June 2020

TOWARDS:

- Fewer & stronger clusters capable of internationalization.
- Cluster portfolio management:
 - not individual clusters - national & regional cluster portfolio
 - Fact based cluster and RIS capacity building more common. (Based on ECEI)
- Increased importance of high quality payable member services (Bottom Up)

Good Nordic practices observed



- Integrated national/regional cluster policies and support service schemes:
 - Denmark: from 50+ regional clusters to 12 superclusters in national strongholds - a multilevel cluster policy success story
 - Norway: Cluster Hub- Spoke policy testing
 - Sweden:-S3-pilot: integrating regional and national cluster policy & capacity building services and actively tapping ECEI cluster quality data
- Making cluster quality labelling mandatory at regional and national portfolio level
- Getting closer to members- Digitizing member support services
- Active marketing of clusters and the cluster portfolio

CASE:

Nordic cluster lead ecosystem development in batteries.

Nordic battery value chain clusters and



- Built on challenge driven transformation need
- Strong national & regional clusters along the battery value chain involved:
 - Energy, mining, recycling, process industry, battery tech
- Regions with the most mature and agile cluster orgs take the lead
- Speed is incredible, especially in regions with mature clusters and high ecosystem level of trust.
- Cross sector collaboration is the rule, policymakers understand how to use their regional cluster portfolio



Thank You!

Tor Arne Bellika

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INNOVATION
PERFORMANCE

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Enhancing cross-border & cross-ecosystem investments

Recommendations by the Industrial Forum TF4

Mervi Karikorpi, Technology Industries of Finland

Industrial Forum Task Force 4 objectives



- Identity and recommend areas of high potential for CB and CE investments
- Recommend policy measures to trigger a major investment wave, to make it the most effective and to keep it up throughout the decade
- Facilitate matchmaking of the different stakeholders and the development of joint investment agendas in the identified areas
- Strengthen Europe's global leadership in addressing the sustainability challenges (economic, climate/energy/environment, social).

How to identify areas of high potential for CB and CE investments?

Proposed criteria for prioritizing and selecting areas and initiatives for CB and CE investments

- Europe's competitive edge or high potential to achieve global leadership
- High growth potential
- Expected high impact on the sustainability goals
- A pressing need for cross-border and cross-ecosystem investments (including potential areas of high risk dependencies and unforeseeable complex problems)
- Technology readiness levels (TRL) mature enough for demonstration and piloting

Proposed general principles for the same

- A transparent process
- Min. of 3 MSs committed to increase resource allocations for CB and CE initiatives in the area(s) concerned
- A strong commitment and leadership by businesses
- Maximising the impact (ref. recommended measures)
- Public funding based more on investment logic

3 areas of high potential for CB and CE investments to focus on

- A. Transition to the production and use of clean and renewable energies** with a focus on improving energy-sector integration and strengthening local/regional clean and renewable energy valleys and their CB and CE collaboration and investments;
- B. Environmentally friendly, circular goods and data-based services** piloting with industries and businesses that show strong commitment to implement their transition pathways involving also upstream and downstream companies, technology and service providers e.g., in advanced manufacturing, digital, design.
- C. Microelectronics** focusing on virtual design platforms and pilot lines where to design and test chips at a mature enough TRLs for future applications in fields like edge AI, automotive and manufacturing.

How to make the most out of the CB and CE investments

Policy recommendations

The EU, Member States and regions, businesses and industry, research institutes	<ul style="list-style-type: none">▪ Adopt and implement a new way of cooperation and raise the bar together. Facilitate the development of a joint cross-border innovation and investment agendas and joint value propositions.
Businesses, business networks and industry	<ul style="list-style-type: none">▪ Review, update and renew your business vision and strategy to realise the opportunities related to green and digital transition▪ Increase investments on green and digital transition▪ Invest in European collaboration and joint initiatives
The European Commission and the Parliament	<ul style="list-style-type: none">▪ Ensure innovation-friendly regulatory framework▪ Increase, target and pool public funding to catalyse sustainable growth.▪ Enhance European global handprint in the digital and green transition.
The Member States and regions	<ul style="list-style-type: none">▪ Increase, target and pool public funding to leverage significant increase in private intangible and tangible investments and joint European initiatives.▪ Make the decision-making process on investment permits fast and smooth.▪ Design in a co-ordinated and participatory manner policies and strategies that boost investments and sustainable growth and focus on their implementation.

How can clusters get engaged?

A case example of CB initiative

NORDIC HYDROGEN ROUTE

- Drives decarbonization
- Supports regional economic development and viability advantage
- Enables a resilient energy future

RENEWABLE RESOURCES IN BOTHNIAN BAY

ENABLE INDUSTRIES' TWIN TRANSITION



48 GW wind capacity
installed by 2040



65 TWh hydrogen
demand exceeded by 2050



E-fuels



Fertilisers



Green chemicals



Iron, steel & metals

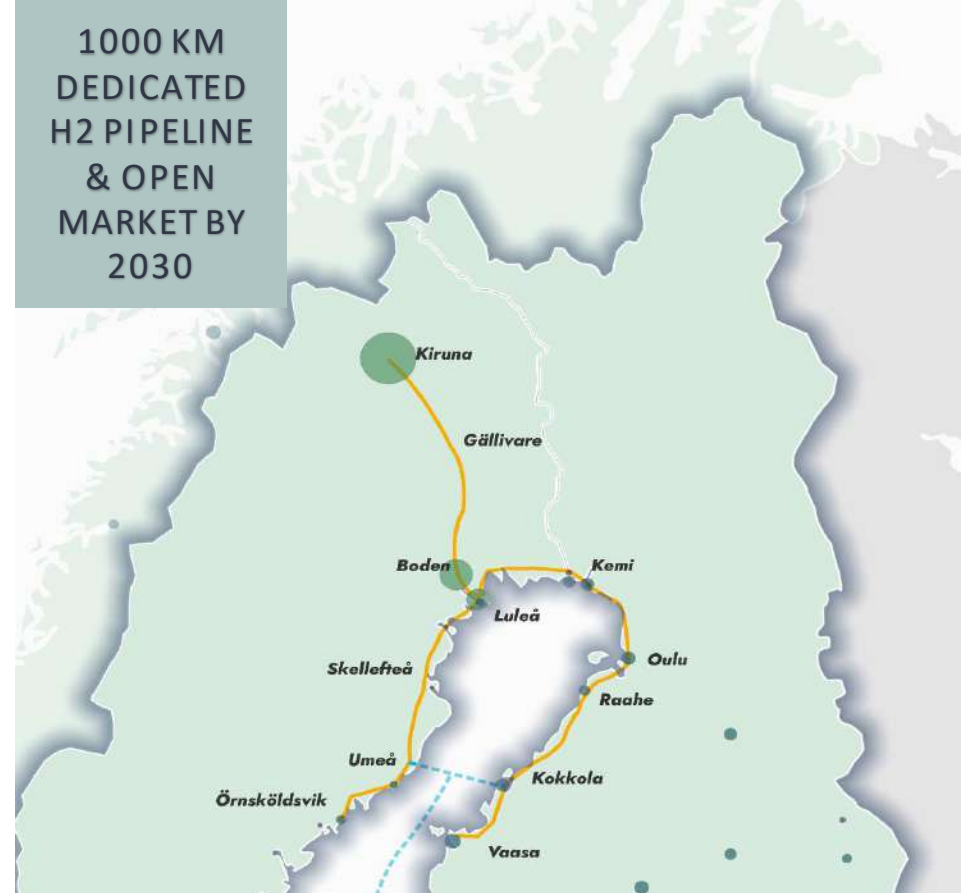
ALL STAKEHOLDERS INVOLVED

- Skills and capabilities, RDI, financing, investment permits
- Connections to other regional valleys

Source:



1000 KM
DEDICATED
H2 PIPELINE
& OPEN
MARKET BY
2030



2022-2023

PHASE 1 – PLAN

2024-2026

PHASE 2 – DESIGN

2026-2030

PHASE 3 – CONSTRUCT

2026-2030

PHASE 4 – OPEN H₂ MARKET

Next steps



MATCHMAKING EVENTS

Adopt a new way of cooperation in the 3 areas of high potential adopting the proposed criteria

- Joint investment agendas and value propositions for the more specific areas to which the partners are committed.
- Policy recommendations to be implemented.

Case examples of
successful CB and
CE investments

Feedback from the IF
members & public
and private sector
stakeholders

Finalisation of the
TF4 report



Thank you

mervi.karikorpi@teknologiateollisuus.fi



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How Clusters can be agents fostering cooperation among EU Industrial ecosystems and cross-border investments : Learnings from Interreg Europe

Marc Pattinson PLP
Innovation and Research
Expert

Interreg
Europe



Co-funded by
the European Union

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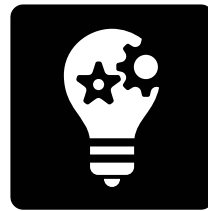
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Interreg Europe Policy Learning Platform

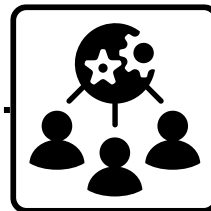
in a nutshell

Provides continuous policy-learning opportunities
through access to:

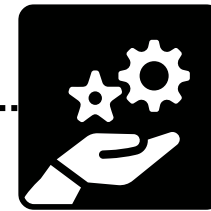
Knowledge



People



Expert support



#policylearning

Access to knowledge



- Wealth of policy solutions available



Analytical **policy briefs (over 50)**,
news and publications
eg [Clusters](#) Driving the Green and
Digital transition.

And tailored Matchmaking
services



Interreg Europe Cluster Policy brief : 14 projects

Annexe 1: Selection of relevant Interreg Europe projects dealing with cluster policies

Project	Policy Objective
CLIPPER (TO3)	To create a leadership for maritime industries
CLUSTERFY	To foster interregional collaboration and integration into global value chains
CLUSTERIX2.0	To promote cluster policies for better university-industry collaboration
CLUSTERS3	To adopt cluster policies to improve S3 implementation
INNO4SPORTS	To promote innovation for sport innovation ecosystems
iWATERMAP	To support innovation policies in water technologies
MEDTECH4EUROPE	To foster research and innovation facilities in the field of medical technologies
P2L2	To design better policies for the sector of advanced materials
REGIONS4FOOD	To promote digitalisation of the agri-food sector
STRING	To promote innovation in food clusters
TITTAN	To improve European healthcare systems for healthy and active ageing
URBAN M	To stimulating innovation through collaborative maker spaces
REMIX	To encourage smart and green mining

Access to knowledge

- Wealth of policy solutions available – cluster examples



Database **of good practices**
from across EU

- [CLUSTERFY](#) aims to foster clusters' **interregional collaboration and integration into global value chains (GVCs) with a focus on SMEs in Key Enabling Technologies.**
- [CLUSTERIX2.0](#) looks at improving **interregional cooperation and university-industry linkages.**
- [CLUSTERS3](#) aims to **adopt cluster policies to improve S3 implementation.**
- [STRING](#) aims to improve innovation policies for **food clusters while promoting stronger linkages with their regional innovation ecosystems.**

Peer learning in practice



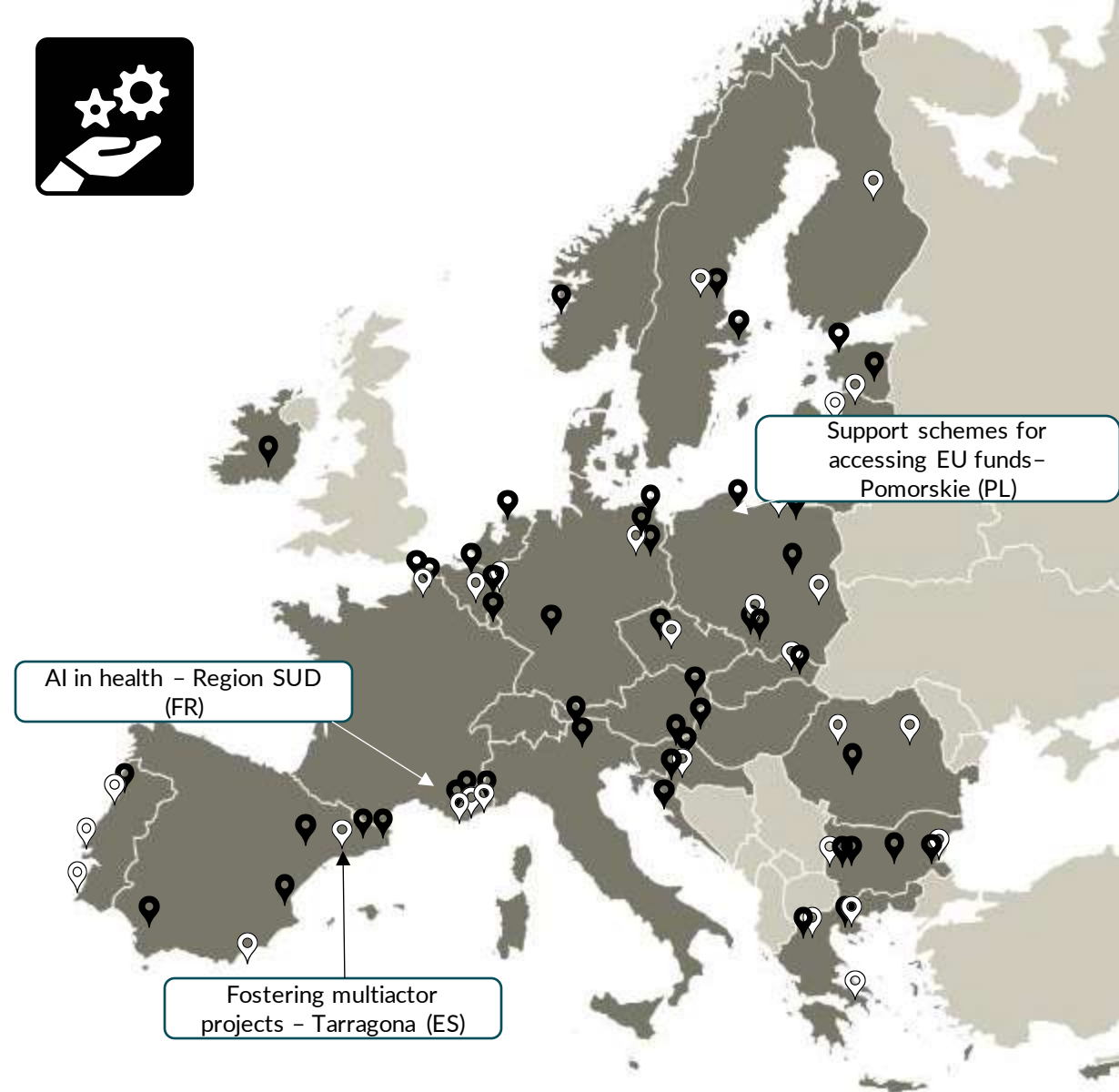
Expert support services for free
and synergies with ECCP...

📍 41 peer reviews implemented
6 peer reviews in the pipeline

📍 28 matchmaking sessions
1 matchmaking in the pipeline

Apply to benefit from expert support any time

www.interregeurope.eu/get-policy-advice



Lessons for Industrial Forum cooperation among EU Industrial ecosystems and cross-border cooperation and investments

Interreg Europe projects must produce actions plans that demonstrate how policy changes will be implemented – concrete and financed measures – **Co-design of agendas**

Interreg Partnerships have laid foundations and stimulated enhanced cooperation via various initiatives such as I3 and the Pilot Innovation Partnerships, for example in the health sector or textiles: [RESET](#) looking at greener and more sustainable production technologies - Partner contributions to Green Deal Transition Agenda and Transition Pathways

Water Technology clusters have developed strong project connections supporting closer cooperation: [IWATERMAP](#) Interreg Europe, ESCP's, INNOSUPs, S3P and now Euroclusters – with vouchers via cascade funding, and supporting EU Water Thematic Platform with strong co-investment focus.

Lessons for Industrial Forum cooperation among EU Industrial ecosystems and cross-border cooperation and investments

Interreg Europe experiences continued ...

Meanwhile the [BRIDGES](#) project takes a closer look at the Value Chain approach and the role of interregional cooperation and in particular issues to address industrial re-shoring, on-shoring, near-shoring etc and how they should be linked to RIS3 strategies

The [STEPHANIE](#) project deals with High tech sectors such as the aerospace sector and photonics and looks at how technology solutions can address societal challenges such as climate change and deliver data driven solutions thanks to interregional cooperation via quadruple helix actors;

A Community committed to cross border cooperation. Long term perspective – connect strategy and funding actors, via value chain approach.

Thank you –
Marc Pattinson
m.pattinson@policylearning.eu

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Cross-border action, cooperation and investment for (deep tech) innovation

Practical examples from EBN and the EU|BIC community of business and innovation support actors

Who we are and why we exist

165+
members

Operating in over 35 countries, covering the full spectrum of innovation sectors, and collaborating for continuous improvement and increased impact

630+
business experts & partners

Operating in over 35 countries, covering the full spectrum of innovation sectors, and collaborating for continuous improvement and increased impact

36,000+
startups

Receive support from our members. Benefiting from expertise and programmes critical to their growth.

1
official certificate

Uniquely granted by EBN to mission - aligned organisations as the only certification of quality for business support organisations originated by European Commission



From mission commitment to action

EU|BICs put sustainability, digitalisation, inclusion and social transformation at the heart of tech and innovation

Our four mission commitments:

1. Regional, sustainable economic development
2. Access to Finance
3. Quality Business Support
4. Scaling European Innovation



What our members do – practical examples (1)

Advice and co-creation of regional/national innovation policies and funding.

Action & Results: CHERRIES project - Constructing Healthcare Environments through Responsible Research Innovation and Entrepreneurship Strategies (EU-funded) - enabling Responsible, Research and Innovation (RRI) policy experiments in the healthcare sector and mobilising territorial stakeholder ecosystems in three European territories – in Murcia (ES), Örebro (SE) and the Republic of Cyprus (CY).



What our members do – practical examples (2)

Drive business growth, deeptech solution development and international cooperation through agile investment structures.

bialoom



Ευρωπαϊκή Ένωση



RESEARCH
& INNOVATION
FOUNDATION



Republic of Cyprus

What our members do – practical examples (3)

Dynamize and accelerate innovation processes for greater collaboration ability of all innovation ecosystem actors boosting capacity to bring science to the market.



How EBN drives growth

1. EU|BIC Certification: Quality Assessment and Benchmarking
2. Alliance Building and Project Facilitation
3. Advocacy and Policy Advice
4. Pan European/ global Innovation Community



Key takeaways

1. Successful implementation of recovery funds and the EU digital, green twin-transition requires **regionally rooted structures and trusted, mission-aligned intermediaries**, such as clusters, business and innovation support actors.
2. The 2020's innovation era calls for **societal transitions through challenge and demand-driven innovation policy, methodologies and funding** for targeted and selective innovation solutions.
3. Testing and validation stand at the heart of successful breakthrough (deeptech) innovation, which requires **financial and regulatory instruments spanning short run times and smaller investment tickets**.

Contact us

bram.pauwels@ebn.eu
www.ebn.eu



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#EUClusterConference



13

Interregional
Innovation
Investment
Instrument

EU Cluster Conference 2022 Prague

Birgit Weidel, HoD I, EISMEA

Interregional Innovation Investment (I3) Instrument

What	For whom	How	How much
Commercialisation and scaling up of innovation projects for the development of European value chains	Interregional Q-Helix ecosystems: <ul style="list-style-type: none">• Researchers• Businesses• Civic society & public administrations	Implemented under direct management . DG REGIO supported by EISMEA	Cohesion Policy ERDF (Art. 13) € 570 million (current prices)

Focus of the work programme 2021 - 2022

STRAND 1

- **To accelerate market uptake** and **scale up** of **innovation solutions** in shared S3 priority areas
- To support partnerships developing, connecting or making complementary use of **testing and demonstration facilities**
- To finance the implementation of a **portfolio of investment projects**

STRAND 2a

- **To develop the capacity** of regional innovation ecosystems in less developed regions (LDR) to **participate in EU value chains**
- To support LDR participation in **investment partnerships with other regions**
- To develop **value chains in LDR**
- **To improve investment readiness**

I3

Key dates

CALLS: I3 – 2021 – INV1 and I3 – 2021 INV2a, I3 – 2022 – CAP2b



**2 Calls open: I3-2021-INV1 and I3-2021-INV2a
(strands 1 & 2a)**

**23 November 2021 –
18 October 2022**



1st Cut-off date: 22 February 2022^{NEW!}

2nd Cut-off date: 18 October 2022



**Call I3 -2022 – CAP2b – capacity building for less developed regions opens
on the 15 December 2022!!**

Total budget per strand 2021 - 2022

THEMATIC AREAS



DIGITAL TRANSITION

STRANDS

Strand 1 | Focus on developed regions

Budget: € 39.8 million (2021) & € 36.7 million (2022)

Indicative Project size: **€ 4-10 million**

Strand 2a | Focus on less developed regions

Budget: 2021: € 36 million & 2022: € 32.9 million

Indicative Project size: **€ 2-3 million**

Strand 2b | Capacity building for less developed regions

Overall budget: € 28.5 million

Strand 3 | Technical assistance & experimentation

Overall budget: € 11.4 million

€ 570 million

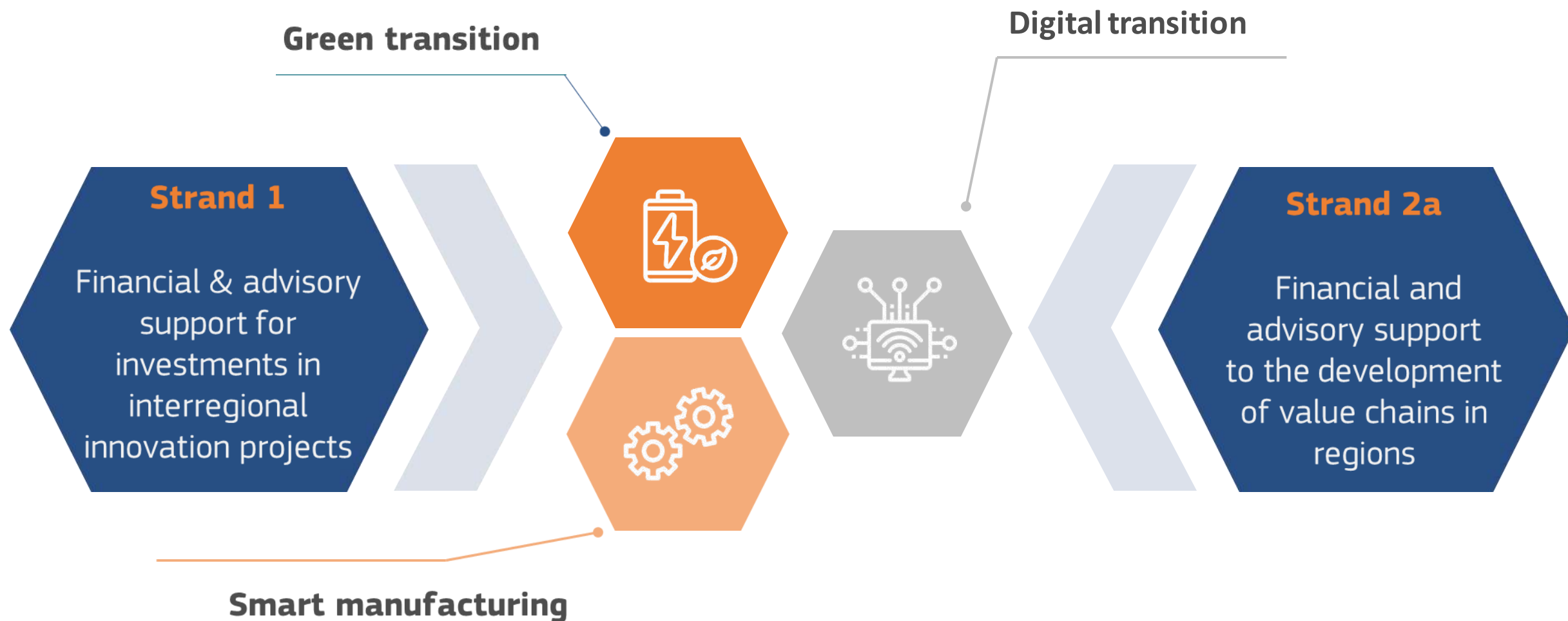


GREEN TRANSITION



SMART MANU- FACTURING

Key features: N#1 Linking EU priorities and S3



Key features: N#2 all types of innovation

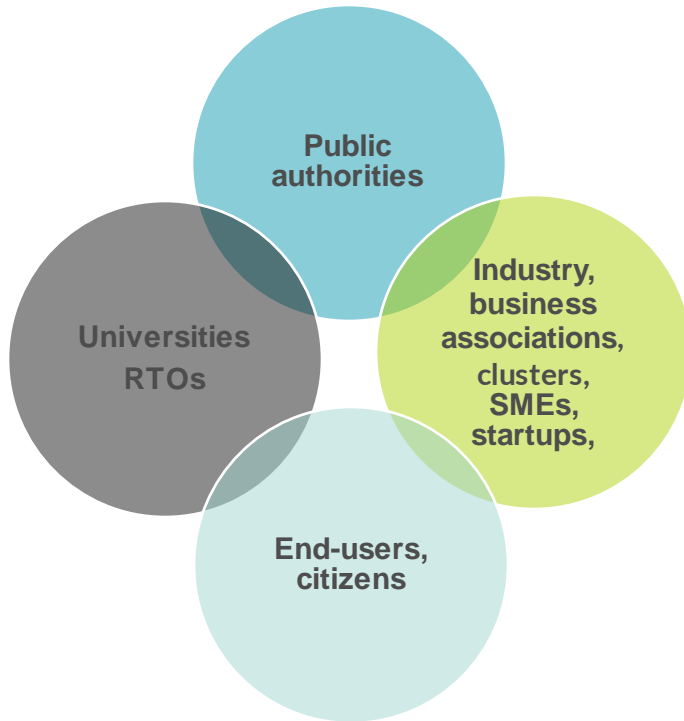
Innovation (Oslo Manual): New or improved products, processes, services, technologies or business models made available to markets, governments and society. Uptake of innovative technologies or solutions (TRL 6-9)

Product innovation	Process innovation	Marketing innovation	Organisational innovation
A good or service that is new or significantly improved.	A new or significantly improved production or delivery method.	A new marketing method involving significant changes in design or packaging, product placement, promotion or pricing.	A new organisational method in business practices, workplace organisation or external relations.

Key features: N#3 Linking quadruple helix actors across European regions

Applicants:

Q-helix partnerships on behalf of a regional / national ecosystems



Endorsed by competent bodies for Smart Specialisation

At the appropriate NUTS level

Minimum conditions in terms of ecosystems involved
(different for strand 1 and 2a)

Eligible support

FINANCIAL SUPPORT

for **productive investments in companies** (contributing to cover investment needs toward commercialisation).

Responding to needs identified in a business and investment plan, including a market analysis



ADVISORY SUPPORT

for **company driven demonstration activities** including access to networks of **demonstrators** (*testing environments*) & to **technical or scientific expertise**

For confidential services to companies (*users of testing facilities*)

13 Instrument: Next steps

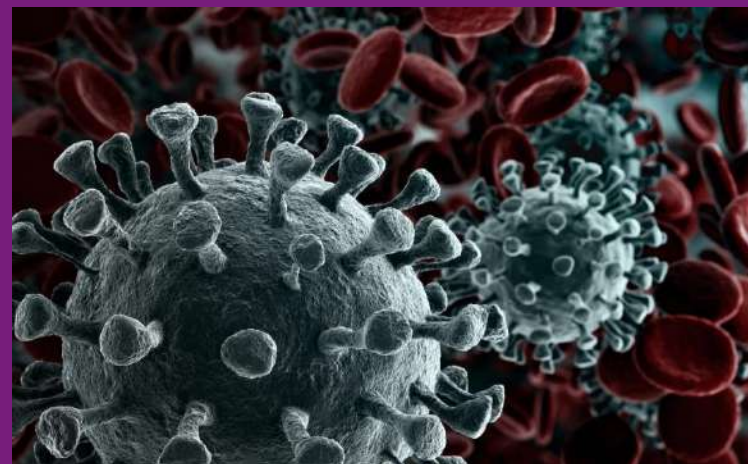
1. Preparation of the grant agreements for successful projects from the 1st cut-off (by mid-November)
2. Preparation for the upcoming cut-off (18 October)
3. Publication of the call 2b (15 December)
4. Following the adoption of the 2023-2024 WP (autumn 2022), preparation of the next generation of the calls
5. Collection lessons learnt from the first WP

Thank you

Partnerships for regional innovation

Joint Research Centre
Karel Haegeman

Crises... and opportunities

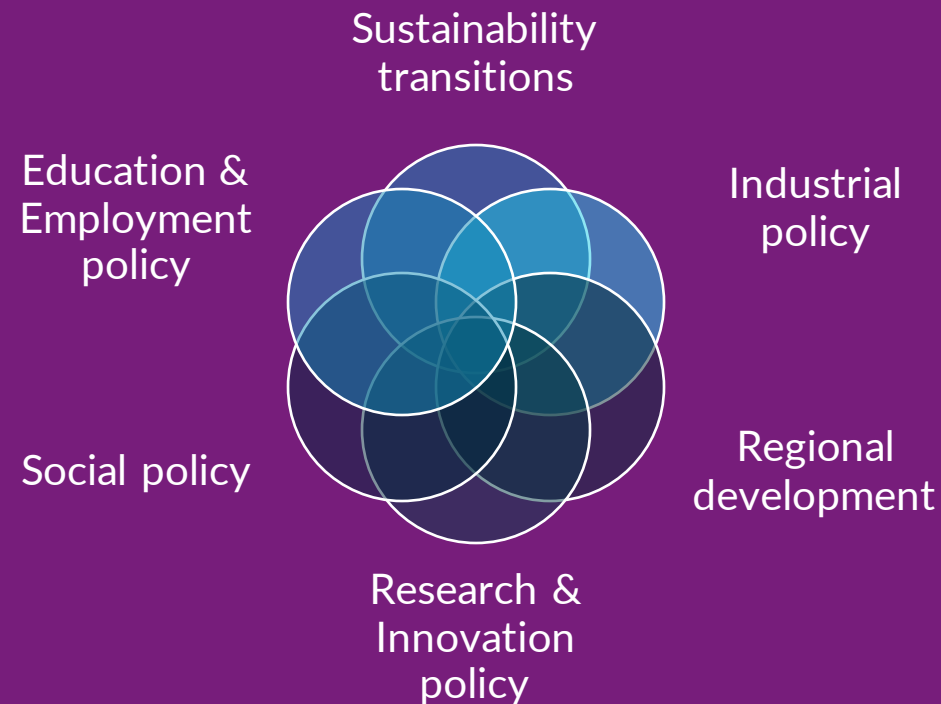


A new way of thinking

- **System level innovation and transformative innovation policy (*third frame*)** (e.g. Geels, 2002; Grin et al., 2010; OECD, 2015; OECD, 2021; Schot and Steinmueller, 2018; Weber and Rohracher, 2012)
- **Multi-level perspective** (e.g. Schot and Geels, 2008)
- **Whole-of-Government approach** (e.g. Christensen and Lægreid, 2007; Colgan et al., 2014; Kivimaa and Morgan, forthcoming)
- **Intermediaries for sustainability transitions** (e.g. Kivimaa et al., 2019)
- **Challenge-oriented innovation policy** (e.g. Mazzucato et al., 2020; OECD, 2021; Tödtling et al. 2021)
- **Multiple value creation** (e.g. Diepenmaat et al, 2020; McCann, forthcoming; Velter et al., 2020)

Partnerships for Regional Innovation

A new strategic approach to innovation-driven **territorial transformation**, based on the experience on Smart Specialisation, linking **EU priorities** with national plans and **place-based** opportunities and challenges



PARTNERSHIPS FOR REGIONAL INNOVATION

PRI pilot is a laboratory of innovation policies



A new Playbook is out

Out 17 May 2022

68 tools to foster innovation for sustainability in territories

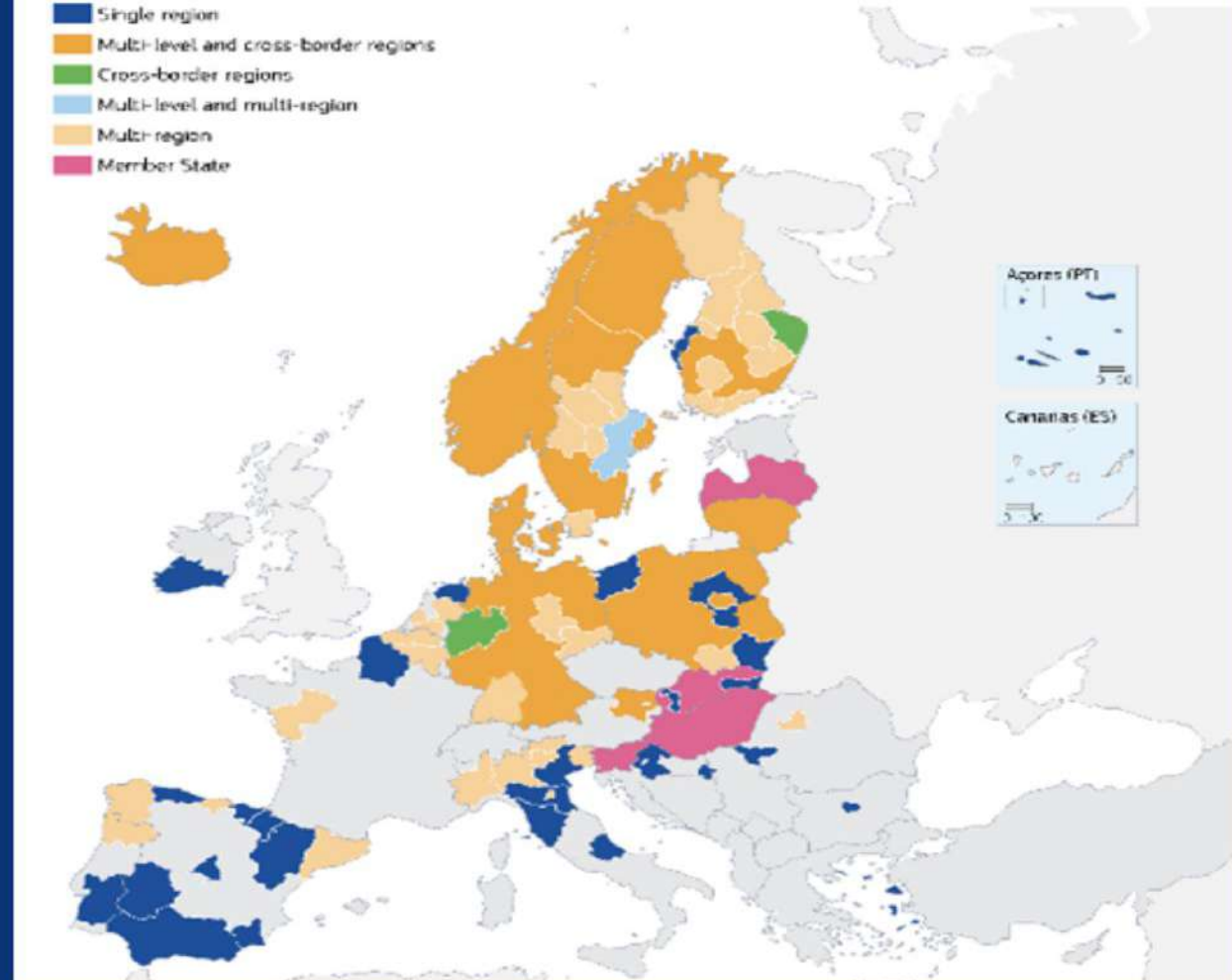
Pilot

(May 2022-June 2023)

74 territories:
7 cities
63 regions
4 Member States

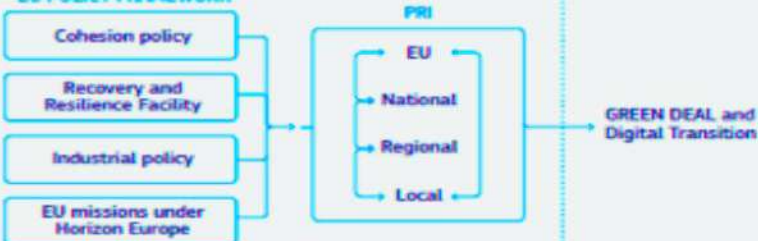


<https://s3platform.jrc.ec.europa.eu/pri>



Key concepts

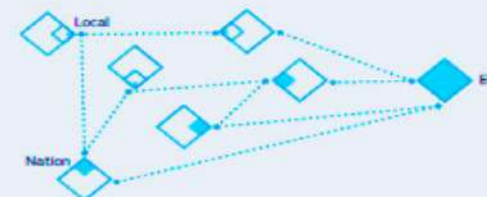
EU POLICY FRAMEWORK*



PRI approach should

- Align multiple funds/policy domains for the twin transition
- Be suitable for various levels of governance (not just regions)
- Deploy various support instruments (not just projects)
- Allow linking with European missions and partnerships (e.g. through mission hubs)

We need innovation in every region and in every country, connecting with each other, including between advanced and less advanced regions, if we are to succeed in the green and digital transitions.



PRI Working Groups

WG1 Strategic Policy Framework and Governance	WG2 Open Discovery Process and local missions (CHOIRs)	WG3 Policy and Action Mix
<ul style="list-style-type: none"> <input type="checkbox"/> Aragon* <input type="checkbox"/> Baltic Sea Region* <input type="checkbox"/> Espoo* <input type="checkbox"/> Northern Netherlands* <input type="checkbox"/> Ostrobothnia* <input type="checkbox"/> Alentejo <input type="checkbox"/> Andalusia <input type="checkbox"/> Hungary <input type="checkbox"/> Košice <input type="checkbox"/> Mazowieckie <input type="checkbox"/> Sisak-Moslavina County <input type="checkbox"/> Waterford City 	<ul style="list-style-type: none"> <input type="checkbox"/> Azores* <input type="checkbox"/> Leuven* <input type="checkbox"/> Navarra* <input type="checkbox"/> Extremadura <input type="checkbox"/> Slovak Republic <input type="checkbox"/> Podkarpackie <input type="checkbox"/> Murcia <input type="checkbox"/> Latvia <input type="checkbox"/> Gabrovo <input type="checkbox"/> West Pomeranian <input type="checkbox"/> Veneto <input type="checkbox"/> Slovenia <input type="checkbox"/> North Croatia <input type="checkbox"/> Bioregions Facility <input type="checkbox"/> Basque Country 	<ul style="list-style-type: none"> <input type="checkbox"/> Eindhoven* <input type="checkbox"/> Madrid Region* <input type="checkbox"/> North Aegean* <input type="checkbox"/> Timis County* <input type="checkbox"/> Trnava* <input type="checkbox"/> Tuscany* <input type="checkbox"/> Vukovar-Srijem County* <input type="checkbox"/> Vanguard Initiative <input type="checkbox"/> Emilia-Romagna <input type="checkbox"/> Abruzzo <input type="checkbox"/> Mid Sweden <input type="checkbox"/> East North Finland <input type="checkbox"/> Hauts de France <input type="checkbox"/> Asturias

Support to interregional collaboration

Alliance for Zero-Emission Aviation.

European Raw Materials Alliance.

European Clean Hydrogen Alliance.

European Battery Alliance.

Circular Plastics Alliance.

European Alliance for Industrial Data, Edge and Cloud.

Industrial Alliance on Processors and Semiconductor Technologies.



Interreg



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European
Commission



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Lessons from the thematic S3 platforms: Bottlenecks

Inadequate frameworks	Uneven domestic innovation investing environments
	Complex bureaucracy
	Fragmented or inefficient synergies of available funding (EU, national, regional, public/private)
	Interregional funding gap
	Lack of incentives to involve the private sector
Inefficient governance and leadership	Insufficient strong and continuous commitment and leadership
	Focus on joint innovation investments rather than on strategic synergies
	Sustainability of effort / Partnerships' fatigue
Lack of competences & capacities	Lack of relevant competences on financial, managerial, technical & legal issues
	Lack of transversal skills
	Underestimation of interregional cooperation complexity and timeframe

Industrial Forum Task Force 4

New ways of cooperation

**Coordination and participation in
designing policies and strategies**

Increase, target and pool funding

**Work with ecosystems committed to
implement transition pathways**

Task Force 4

**Investment needs
and cooperation
opportunities**

Demand-driven instruments and new policy mix for real green transition interregional cooperation

International Open Discovery Process

Interregional Green public procurements

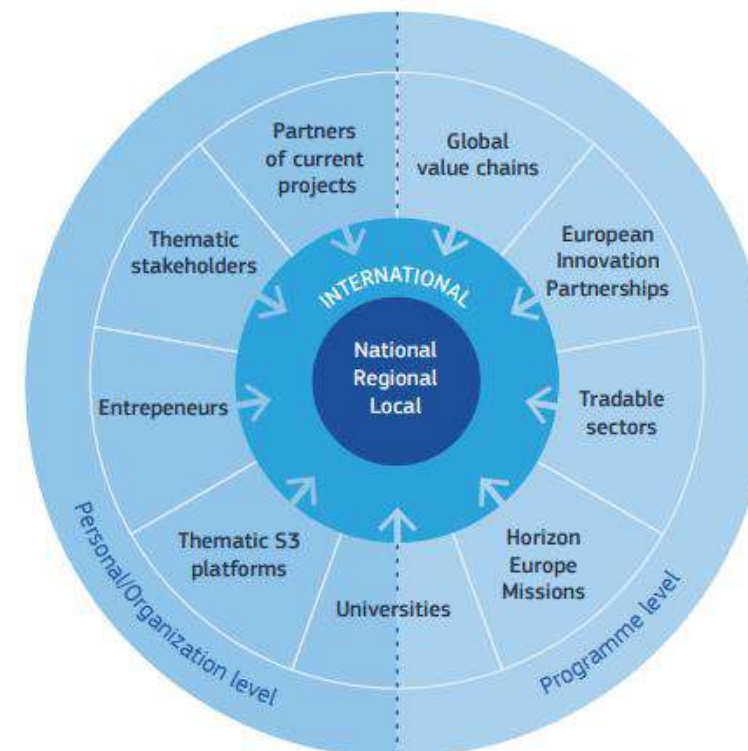
Skills Development. Open Education

Shared Infrastructures and technological infrastructures access ?

Public Sector Innovation

Interregional Sand Boxes

... ..Your proposal



International Open
Discovery Process

Thank you

Karel-herman.haegeman@ec.europa.eu

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Promoters and partners

CLOCK is an initiative born among 9 Technological Transfer Centres located in Tuscany
7 are managing a Regional Technological Cluster



Materials sector Cluster



Nautical sector Cluster



Interiors and Design Cluster



Textile sector Cluster



Life Science Cluster



Technological Center and Labs



Energy sector Cluster



Paper sector Cluster



Sectors represented

LIFE SCIENCE

- 350 companies
- 16.000 employees
- 8 billions turnover

ENERGY

500 companies
2.050 employees

YACHT

- 3.000 companies
- 18.000 employees
- 1,3 billion turnover

PAPER

- 341 companies
- 9.000 employees
- 4,9 billions turnover

TEXTILE/FASHION

- 7.000 companies
- 42,500 employees
- 3,9 billion turnover

WOOD/FURNITURE

Furniture:

- 5.500 companies
- 24.200 employees
- 1,0 billion turnover

Recreational vehicle:

- 125 companies
- 4.000 employees
- 800mln turnover

Objectives

- **Sharing** of knowledge, skills, equipment and tools to maximize productivity, avoiding duplication, with a view to economic intelligence;
- Impetus for the integration of research-training-innovation-business, through the creation of specific actions, also enhancing the relationship with universities and other research organizations;
- Enhancement of research, technological development and innovation programs, consistent with the reference strategic agendas, in line with regional, national and European development and innovation programs;
- Technological dissemination, enhancement of Laboratories and facilitation of their access and *matchmaking*, at the service of the business system;
- Identification of interdisciplinary **solutions to supply chain and sector problems**;
- Promotion of regional coordination to maximize the effectiveness of the programs, projects and actions of the signatories.

The Strategic Action Plan

Matrix of skills and identification of 'complementarity' areas

-Process of selection of strategic themes transversal to the supply chains:


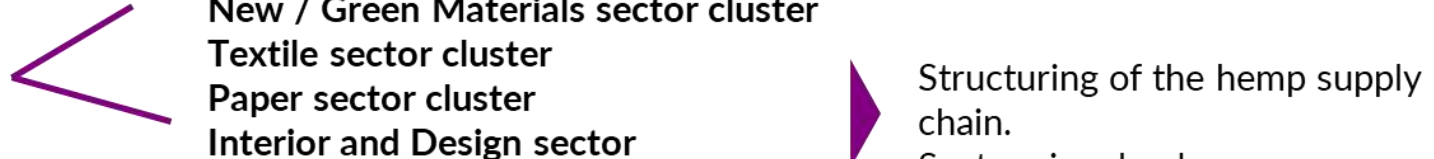
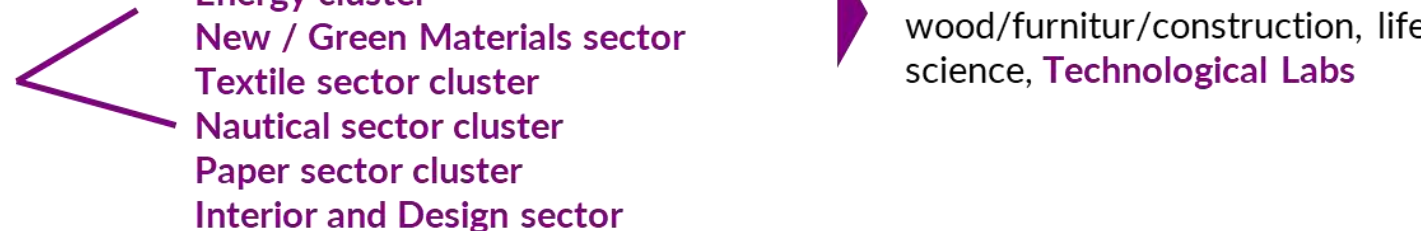
a. Identification by the Board of Directors of 3 macro-areas of business interest: sustainability, digitization, Tuscanity → Made in Tuscany.

b. Meeting with the top managers of leading companies in the supply chain (those that "make the market", and express the demand for SMEs), to define the issues and actions of interest to them within the 3 macro-areas.

c. Crossing of the priorities that emerged with the priority themes identified in the S3 of the supply chains present in CLOCK.

d. Identification of 3 strategic areas of interest, considered a priority by the largest number of CLOCK members (with higher transversality)

3 horizontal strategic topics

- the Tuscan hydrogen supply chain (S3 application areas: Energy and Green Economy and Circular Economy and digital transition and SME circular economy)

 - Energy cluster
 - Nautical sector cluster
 - Technological LabsTuscan Hydrogen valley
- the Tuscan supply chain of sustainable and intelligent packaging (S3 application areas: digital transition and circular economy for SMEs, Energy and Green Economy, Health)

 - Energy cluster
 - New / Green Materials sector cluster
 - Textile sector cluster
 - Paper sector cluster
 - Interior and Design sectorStructuring of the hemp supply chain.
Sectors involved: paper, textile/fashion, wood/furniture/construction, life science, Technological Labs
- symbiosis between sectors, circular economy and new bio-based materials (S3 application areas: digital transition and circular economy for SMEs; Smart Agrifood and Energy and Green Economy)

 - Energy cluster
 - New / Green Materials sector cluster
 - Textile sector cluster
 - Nautical sector cluster
 - Paper sector cluster
 - Interior and Design sectorStructuring of the hemp supply chain.
Sectors involved: paper, textile/fashion, wood/furniture/construction, life science, Technological Labs

Thank you