

The Värmland Smart Specialisation Strategy: from planning to funding

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VÄRMLAND SMART SPECIALISATIONS

Value-Creating Services

Forest Based Bioeconomy

Digitalisation of
Welfare Services

Nature, Culture and Place
Based Digitalised Experiences

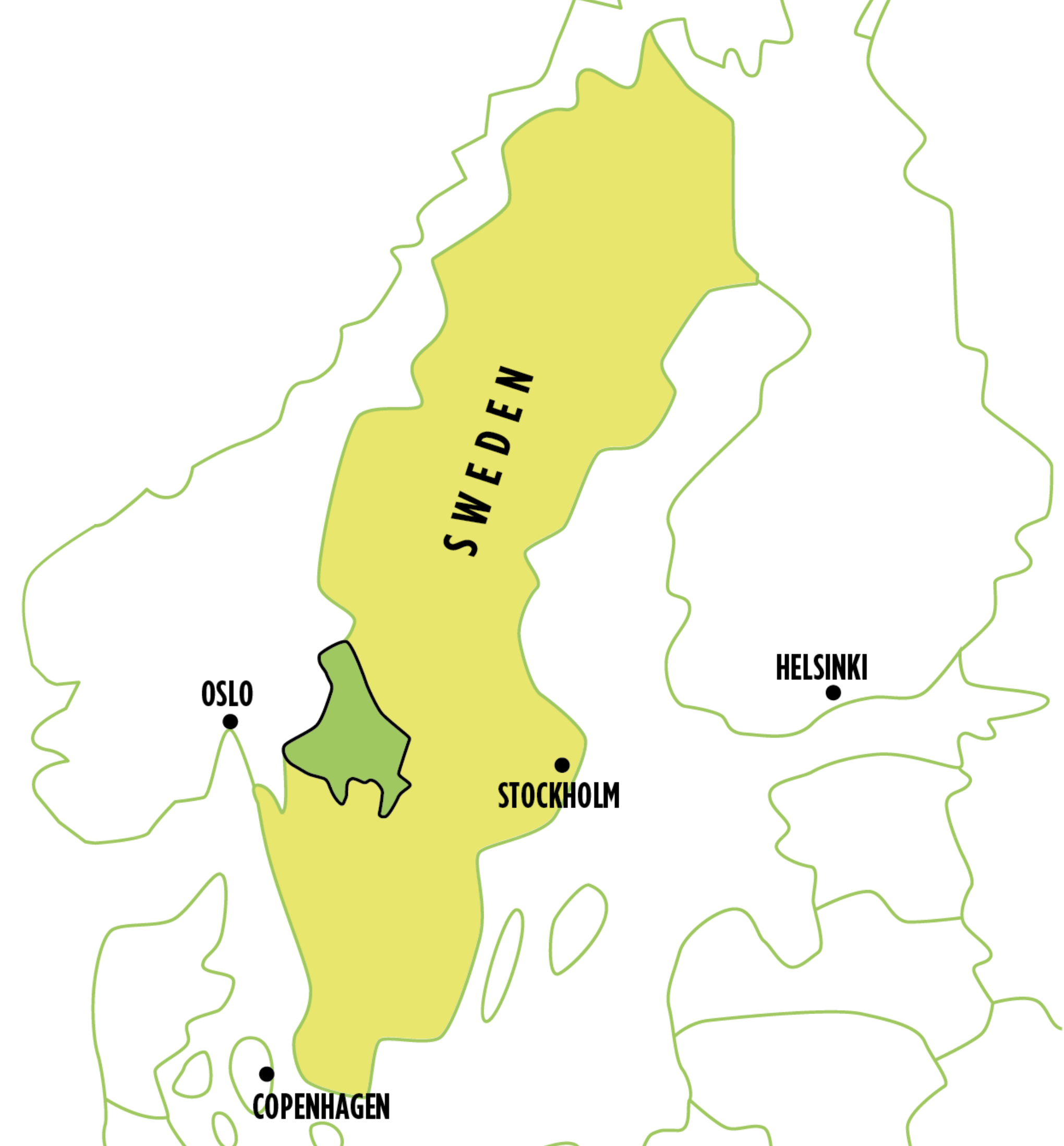
Advanced Manufacturing
and Complex Systems

System Solutions
with Photovoltaics

Region

VÄRMLAND

- 18 000 km²
- 75 % covered by forest
- 280 000 inhabitants
- Strong Innovator (EU RIS 2017)
- One dominating university
- Vänern, the largest lake in EU

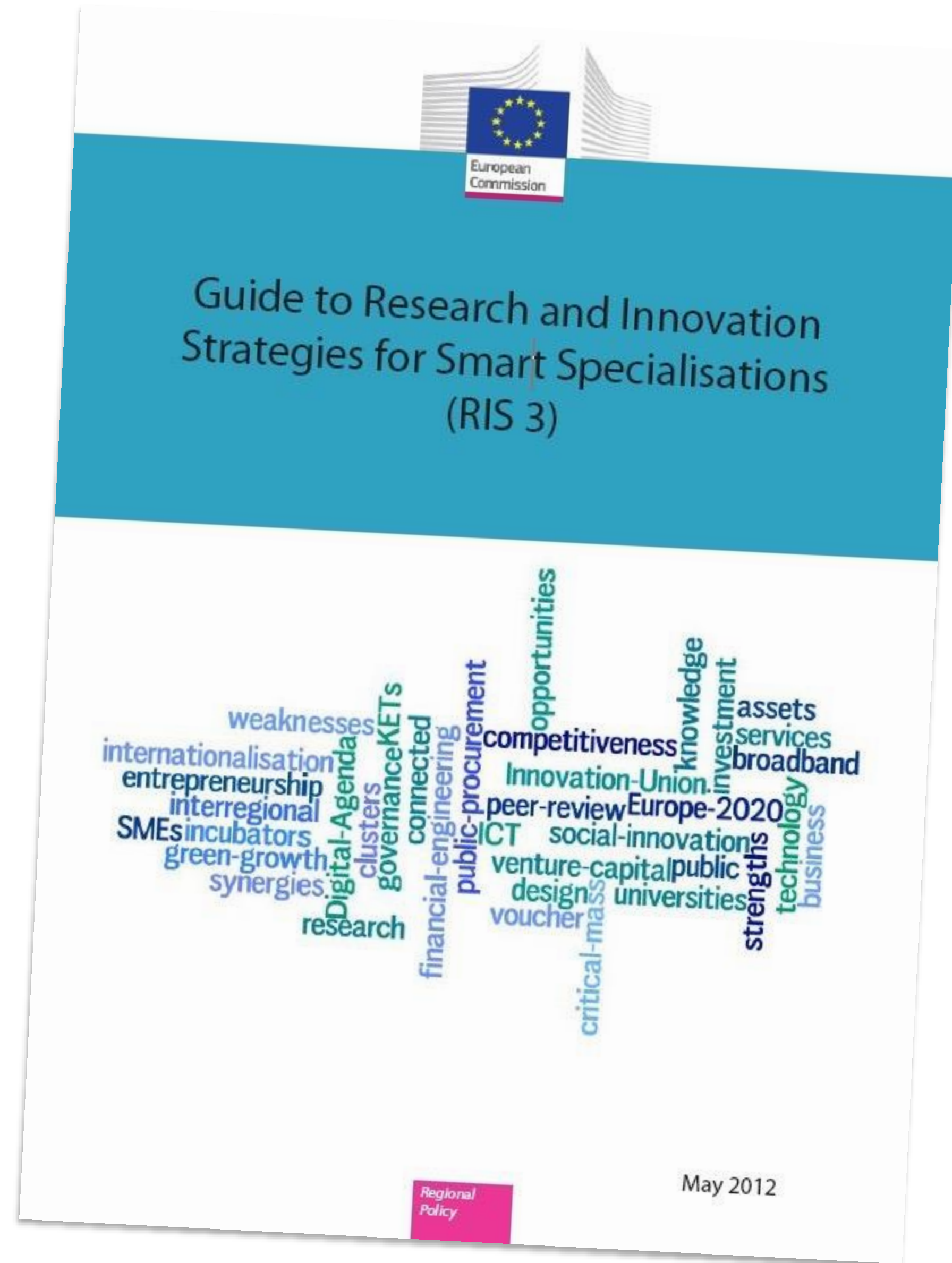




**SMART
SPECIALISATION
PLATFORM**



The RIS3 Guide



OECD evaluation Värmland

Strengthen the role of Karlstad University.

Contract - the region and the university.

Strengthen link between clusters and research.

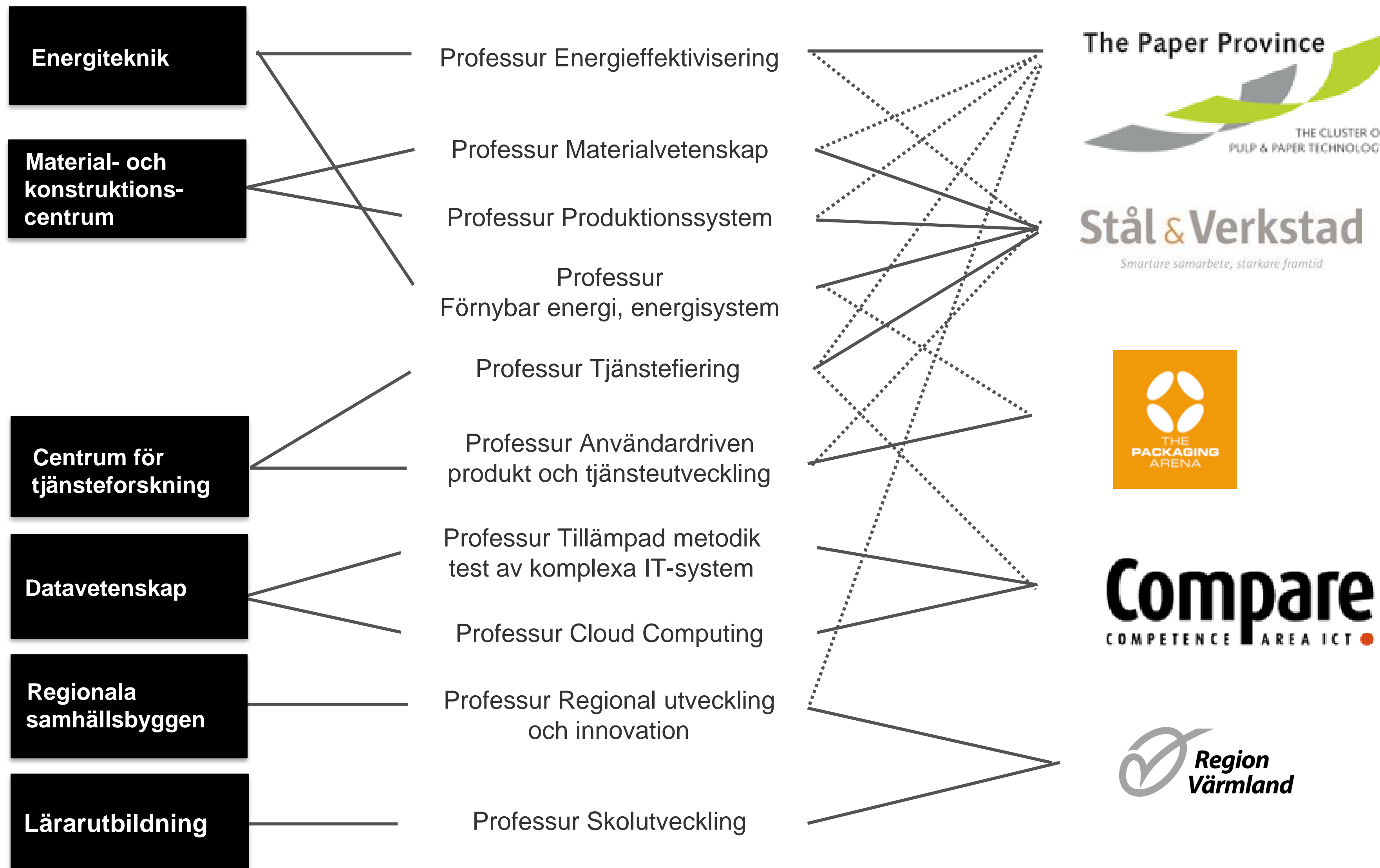
Develop a few internationally strong research areas.



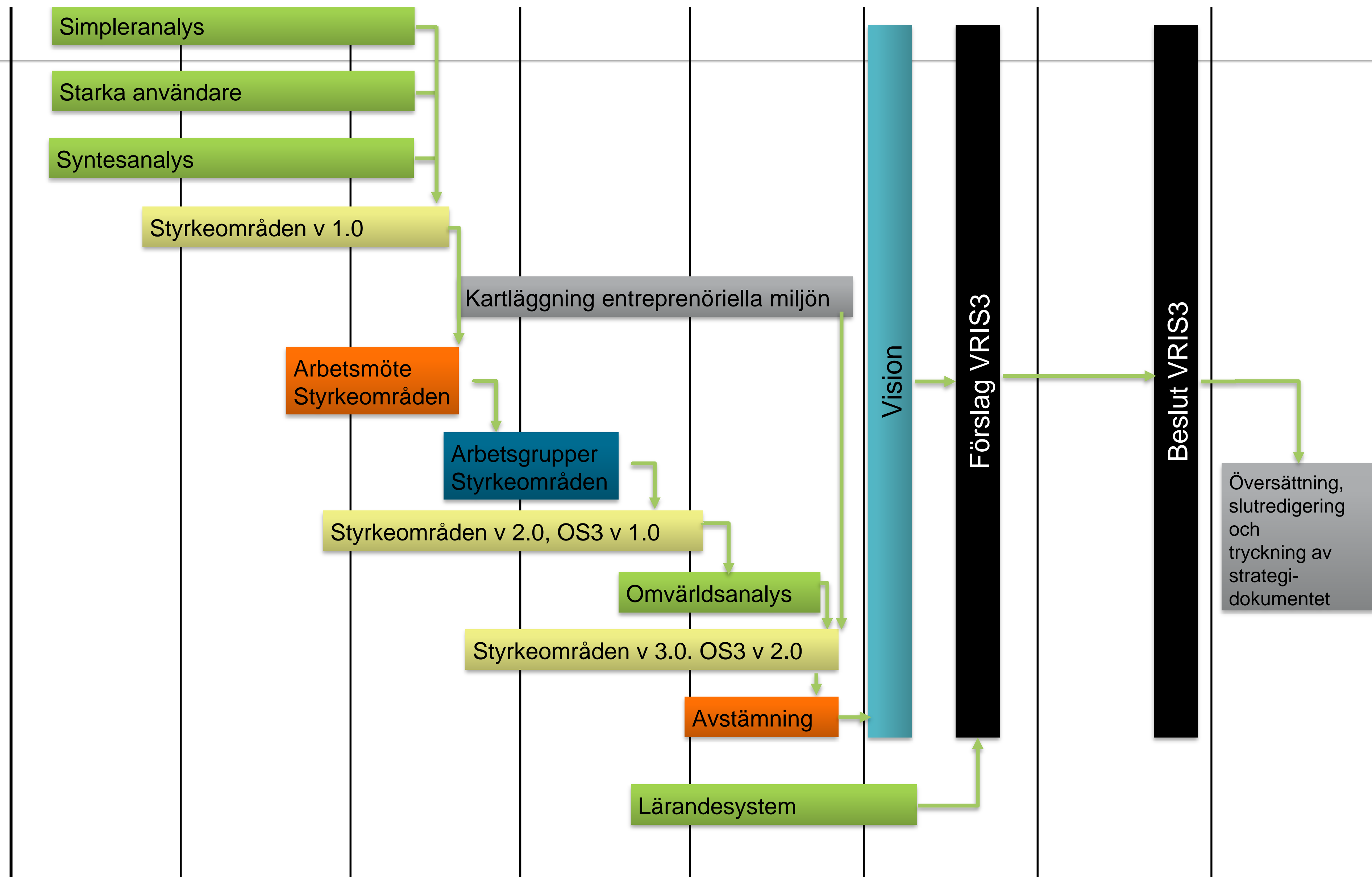
15
JUN
2006

The Ten Professor Programme

Building strong research groups - 2010-2014

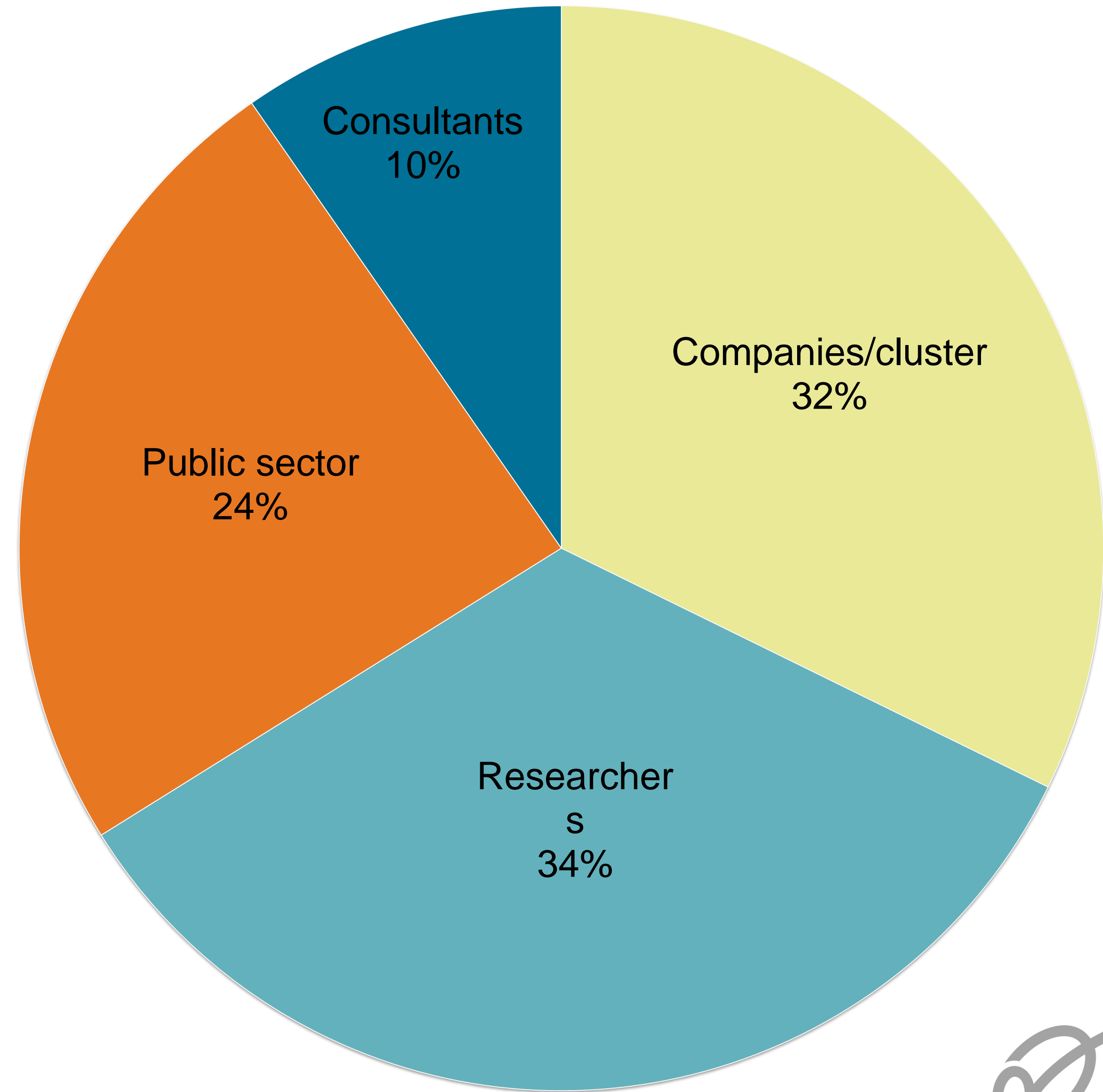


The planning process 2014 -2015



Analysis

Participants in the RIS3 planning process



Five working groups

40% women
60% men

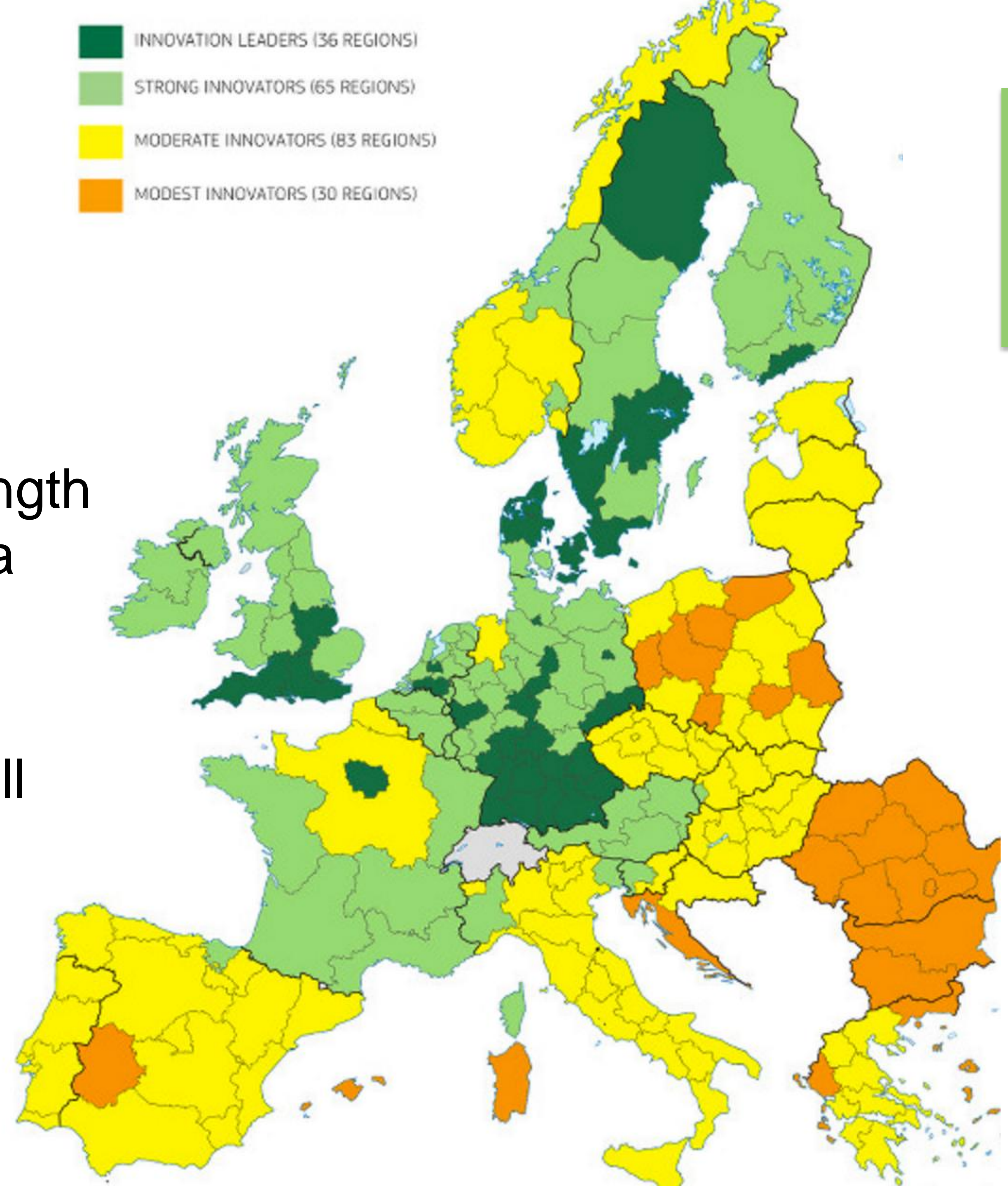
In total 60 persons

Innovation in Värmland

Värmland – Strong Innovator

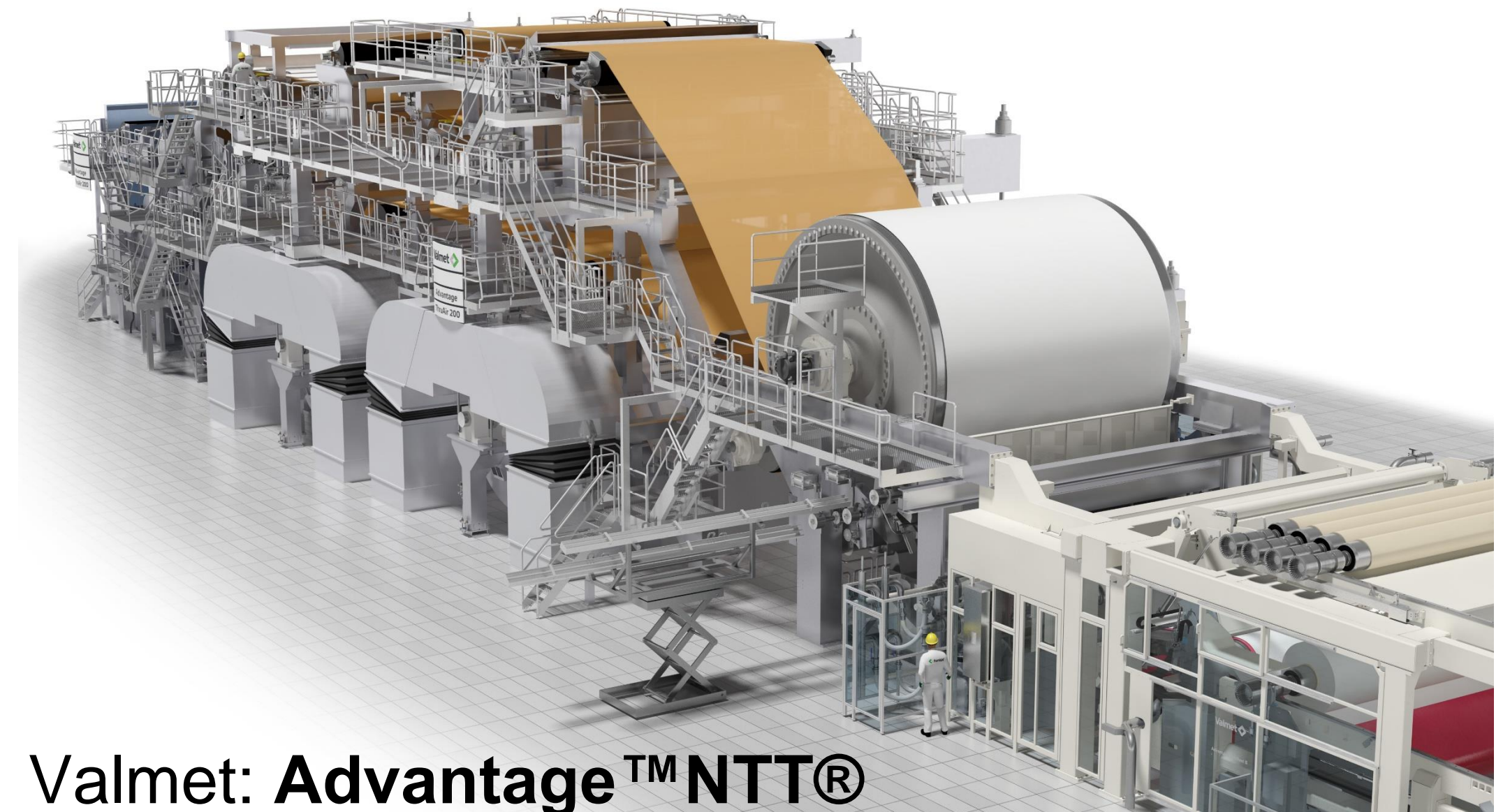
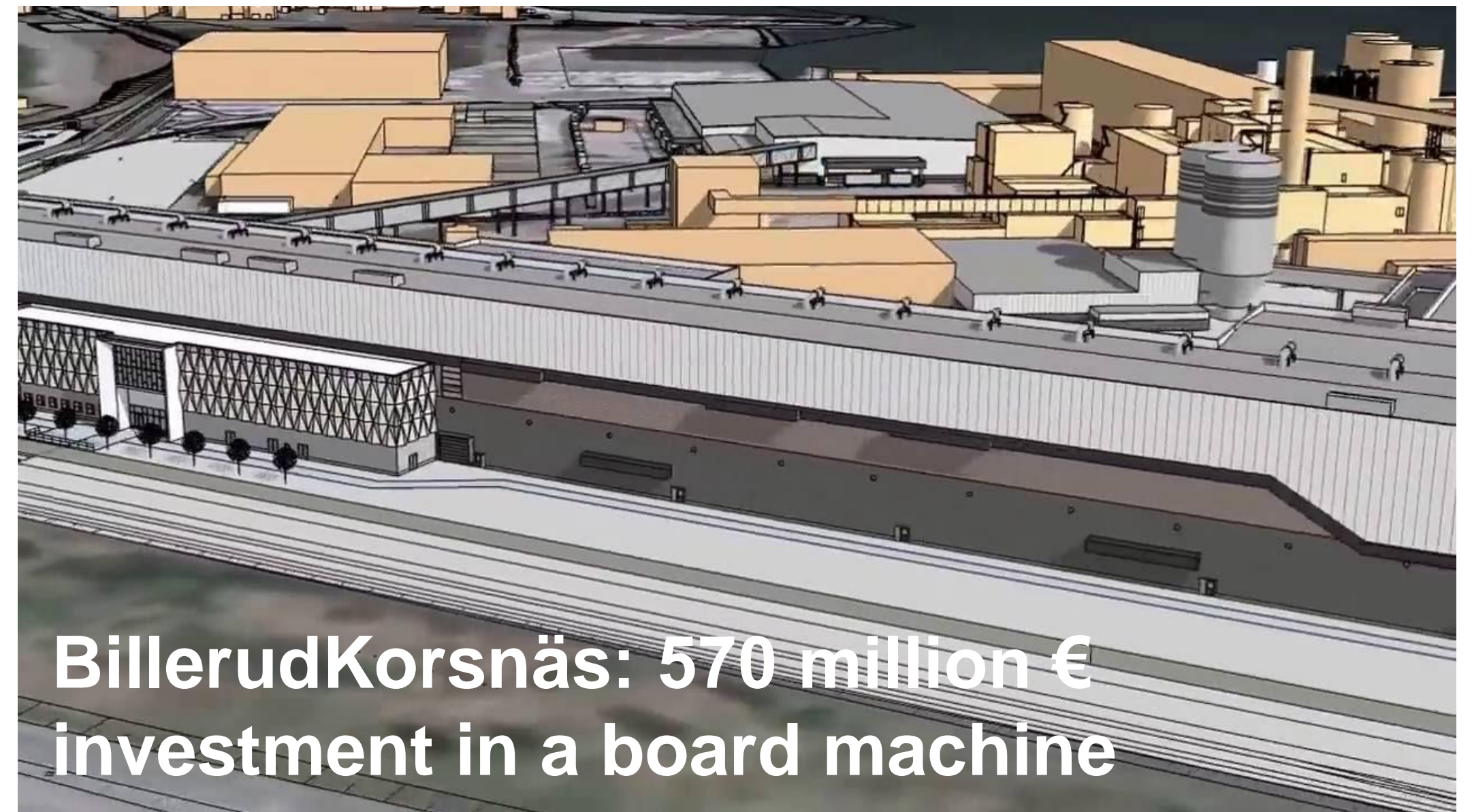
In a Swedish context innovation strength is low. But consider that Sweden as a whole is a global innovation leader.

The region's innovation system is well developed but the outputs are comparatively weak.



The region is very strong in the paper, pulp, packaging and tissue.

- Have no equivalent elsewhere in Europe.



First in Europe!

Analysis v 2
Gender updated

Strategi v 2
Gender updated

Report

Second opinion
Gender in Analysis

Second opinion
Gender in strategy

Feedback on how we
managed to integrate gender
in the Strategy.

Analysis v 1

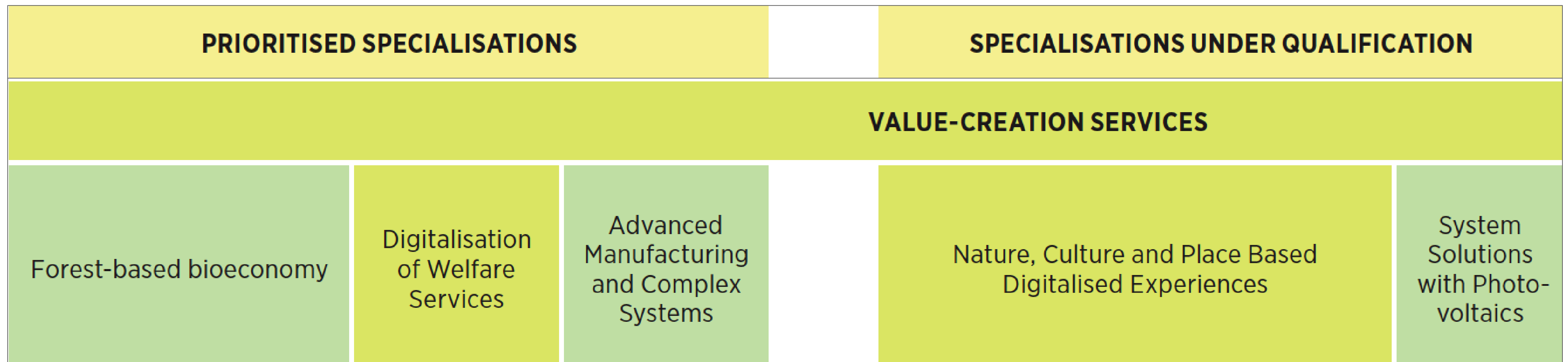
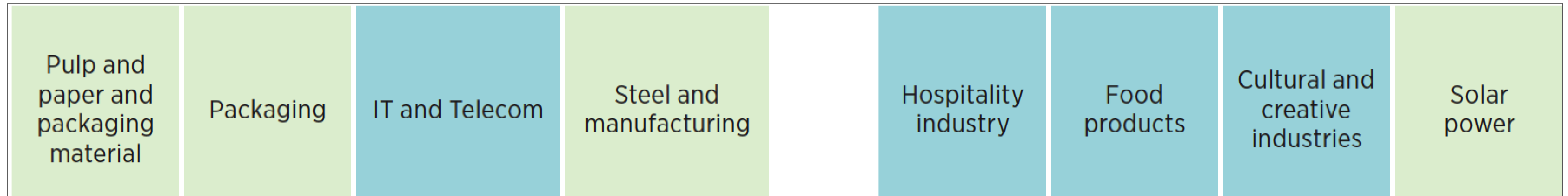
Strategy v 1

Gender mainstreaming

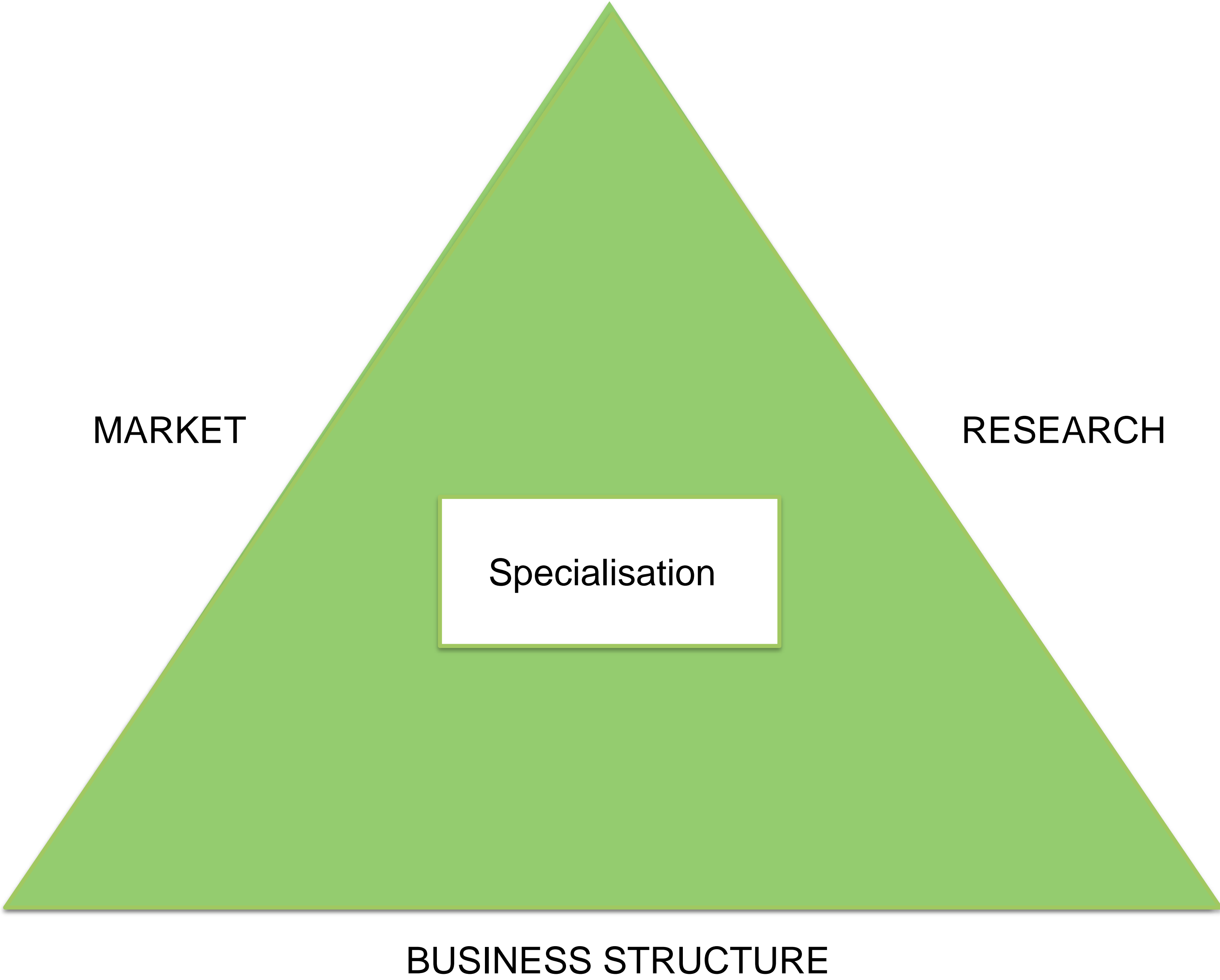
Gender integration

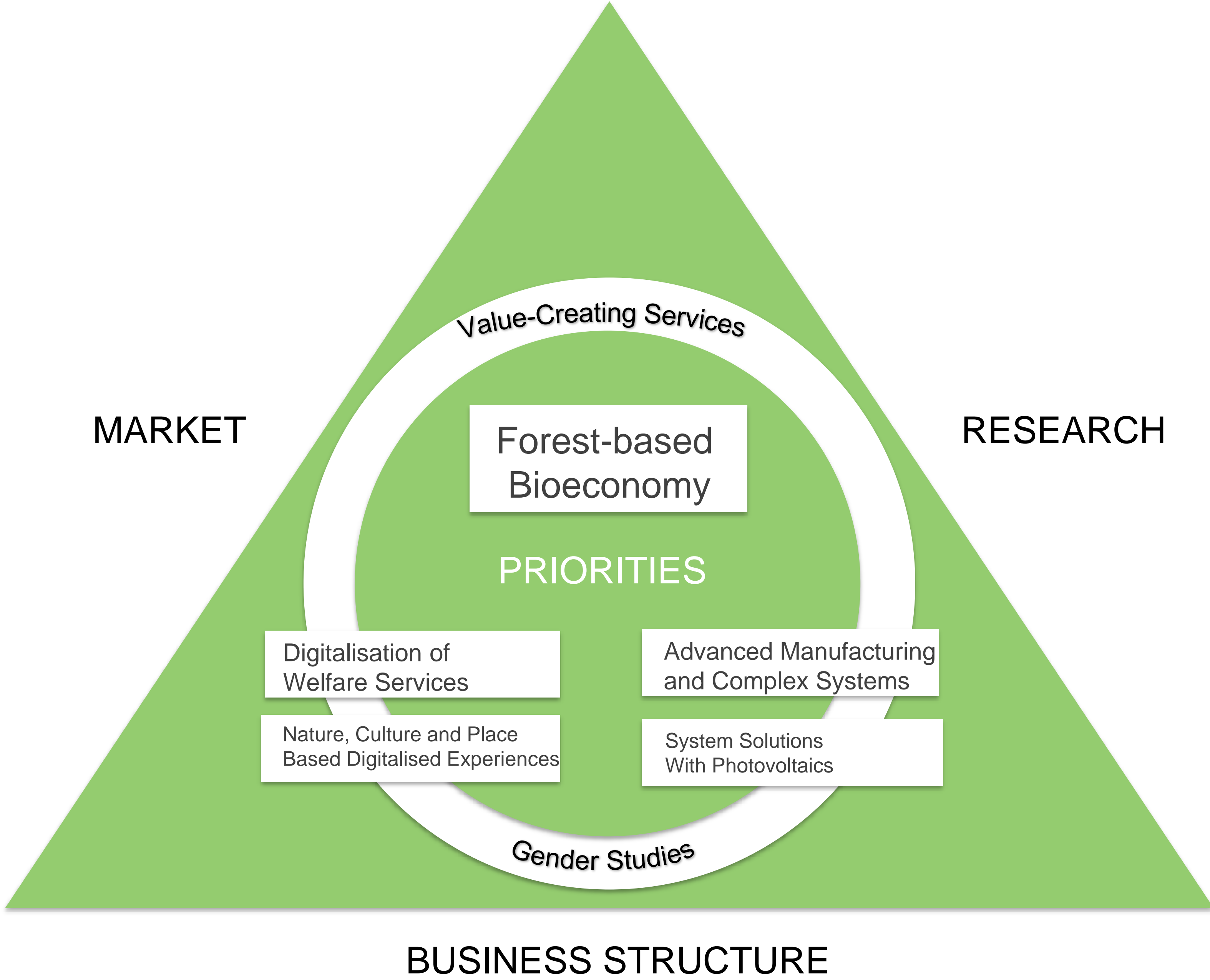
- Gender mixed groups result in higher firm performance and higher effectiveness.
- A diversity of competences provides bigger interfaces with different parts of society.
- An equal representation of women and men increase the rate of innovation.

Strong areas



Smart specialisation





MARKET

RESEARCH

Value-Creating Services

Forest-based Bioeconomy

PRIORITIES

Digitalisation of Welfare Services

Advanced Manufacturing and Complex Systems

Nature, Culture and Place Based Digitalised Experiences

System Solutions With Photovoltaics

Gender Studies

BUSINESS STRUCTURE

	FOREST-BASED BIOECONOMY	DIGITALISATION OF WELFARE SERVICES	ADVANCED MANUFACTURING AND COMPLEX SYSTEMS	PLACE BASED DIGITALISED EXPERINCES	SYSTEMS SOLUTIONS WITH PHOTOVOLTAICS
CRITICAL MASS	4 000 anställda i pappers- och massabranschen.	2 000 anställda inom IT	> 10 000 anställda inom stål- och verkstadsindustrin	3 000 anställda inom besöksnäringen.	Okänt antal anställda. Ca 50 företag är medlemmar i GEC
INNOVATIVENESS	Åtta forskargrupper på Kau. Ett institut Två större privata forskningscentra. Fossilfri barriär.	Tre forskargrupper, varav en excellent miljö på Kau. Två institut.	En stark forskargrupp. En centrumbildning. En universitetsfilial. Minst ett större privat forskningscenter.	Forskare på Kau, framförallt inom en institution (Geomedia)	Två forskargrupper, en excellent och en stark.
REGIONAL ORGANISATION	Värmlandskluster	Värmlandskluster	Värmlandskluster	Klusterorganisation men ej ett Värmlandskluster	Klusterorganisation men ej ett Värmlandskluster
INTERNATIONALISATION	Företag agerar på världsmarkanden. Visst internationellt samarbete för klusterorganisationen	Fri a norska marknaden för så väl klustret som företagen.	Företag agerar på världsmarkanden. Visst internationellt samarbete för klusterorganisationen	Företag agerar på närmarkanden i Nordeuropa. Samarbete med Norge för klusterorganisationen	Norgesamarbete. Export till Afrika.
MEETS SOCIETAL CHALLENGES	Bioeconomy, food security, forestry, clean and efficient energy, resource efficiency.	Health, demographic change and wellbeing Inclusive Secure societies - protecting freedom and security of Europe and its citizens.	Secure, clean and efficient energy, but oil...	Utvecklar turism med tanke på fler av samhällsutmaningarna.	Secure, clean and efficient energy;
ENTREPRENEURIAL DYNAMIC	Vinnväxt - entreprenöriell upptäckande process.	Tillväxt i antal företag. Söker affärsmöjligheter via tematiska satsningar och norgemarknaden.	Sökande efter nya konstellationer för nya värdeerbjudanden mha kompetenskartläggningar.	Hög tillväxt i antal företag.	Stort antal innovationsprojekt. Nya företag i ung bransch.
GENDER	Mansdominanta. Har jobbat med jämställdhet.	Vård och omsorg har många anställda kvinnor Compare jobbar med jämställdhet.	Mansdominanta. Har jobbat med jämställdhet.	Många turismföretag attraktiva för kvinnor.	Mansdominerat. Ungt har inte hunnit jobba med jämställdhet.

STRATEGY DOCUMENT

01

Värmland's Research and
Innovation Strategy for

Smart Specialisation 2015–2020



Forest-based bioeconomy

Digitalisation of Welfare services

Advanced Manufacturing and Complex Systems

Nature, Culture and Place Based Digitalised Experiences

System Solutions With Photovoltaics

VALUE-CREATING SERVICES

RISE

Paper province

RISE

Packbridge

Broby Grafiska

Sweflex

Värmland Energy Office

Regional Wood Centre in Northern Värmland

Compare

Experio Lab

RISE

Nordic Medtest

Innovation Hub Vivan

IUC Steel and Engineering

Karlstad Lean Lab

Innovation and Technology Centre in Kristinehamn

Visit Värmland

Nordic Innovation Food Arena

Compare

Form in Värmland

Glava Energy Centre

RISE

Grants and innovation Office – Karlstad University

Karlstad University

a partner in RIS3

Highest grade from national authority when rating collaboration

Granting in Horizon 2020 round 1: 32%.

Innovation office Fyrklövern, highest grade from
Ministry of Education and Research.

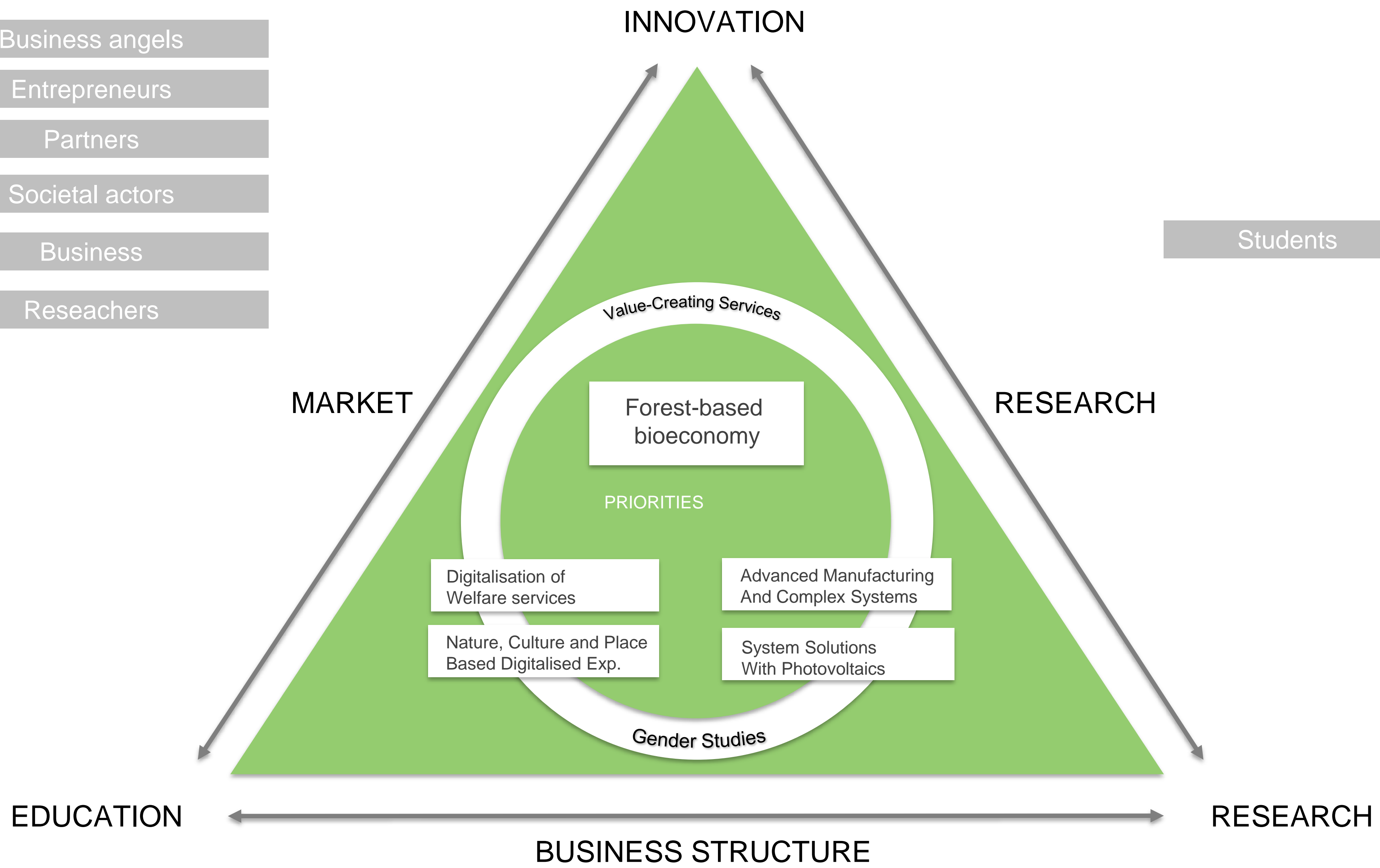




The Academy for Smart Specialisation

- Business angels
- Entrepreneurs
- Partners
- Societal actors
- Business
- Reseachers

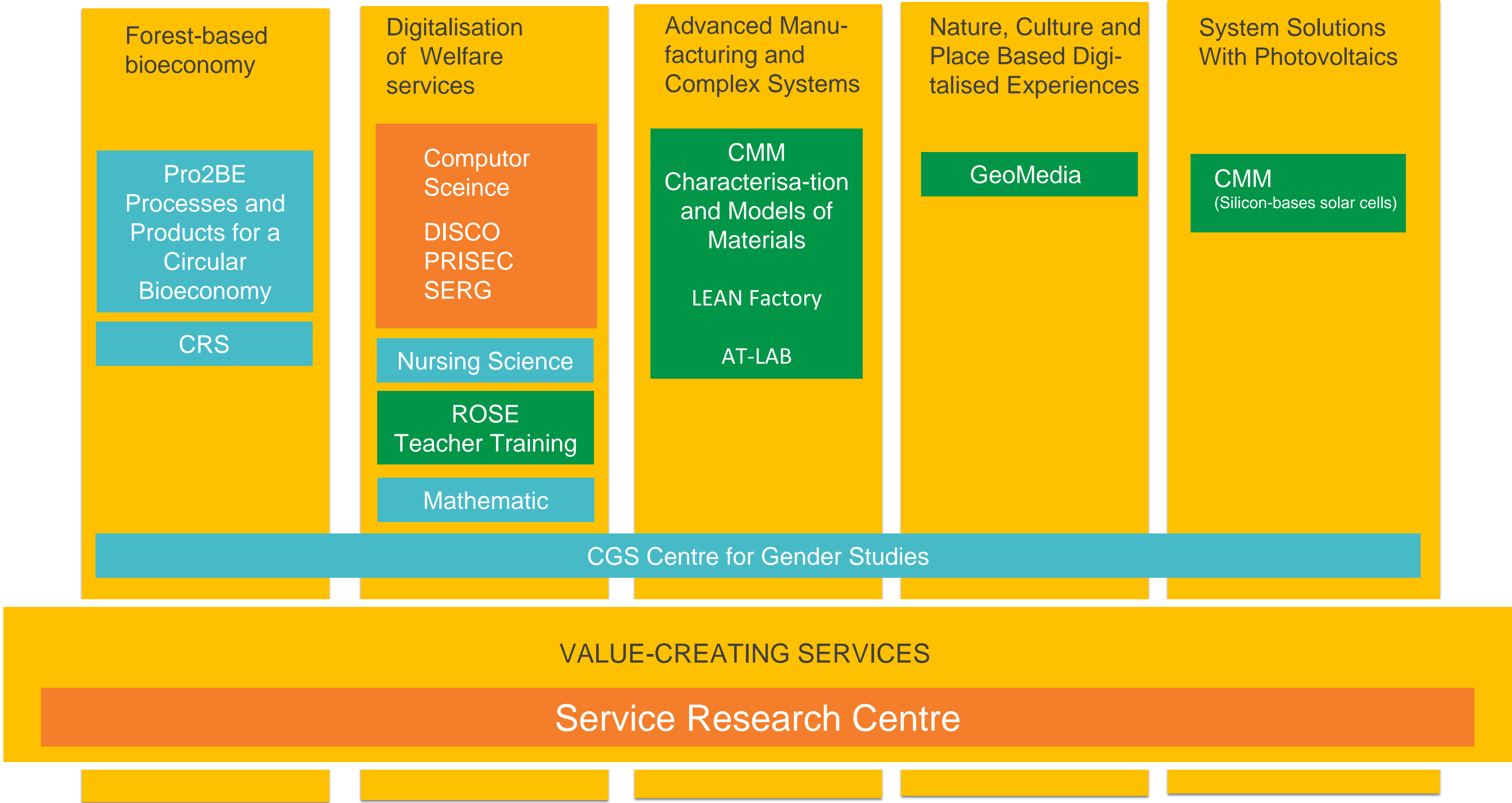
Students



PLATFORM
 Steering, strategy, processes, meetings points, internationalisation, entrepreneurship, profileing & kommunikation, GI-support, monitoring, evaluation, administration.



THE SPECIALISATION AND RESEARCH GROUPS



Marek Przeor from DG Regio:

The Academy for Smart Specialisation is a best practice in Europe on how you can connect universities to smart specialisation.

You have managed to do this more tangible thanks to the concept Academy for smart specialisation.



Funding of The Academy for Smart Specialisation in 2016-2020

5 Million € from Region Värmland.

+ > 5 million € from Karlstad University

+ > 5 million € in external funding

In total: 15 – 20 million €

En investering för framtiden



EUROPEISKA
UNIONEN
Europeiska
regionala
utvecklingsfonden

Interreg
Sverige-Norge

Europeiska regionala utvecklingsfonden



EUROPEISKA
UNIONEN



COSME

Programme for the
Competitiveness of
Enterprises and SMEs
2014-2020



KK-stiftelsen



**AKADEMIN FÖR
SMART SPECIALISERING**



**Region
Värmland**

The Academy for Smart Specialisation is a tool for transformation and renewal of the private and public sectors in Värmland and the strengthening of research and education at Karlstad University.

Expectations on the Academy for Smart Specialisation

- Supply of competence
- Major research and innovation projects
- Investments, export success and growth
- Establishment of companies and international demo and FOI environments
- International strategic alliances
- Policy impact in support of specialisations
- National and international attention

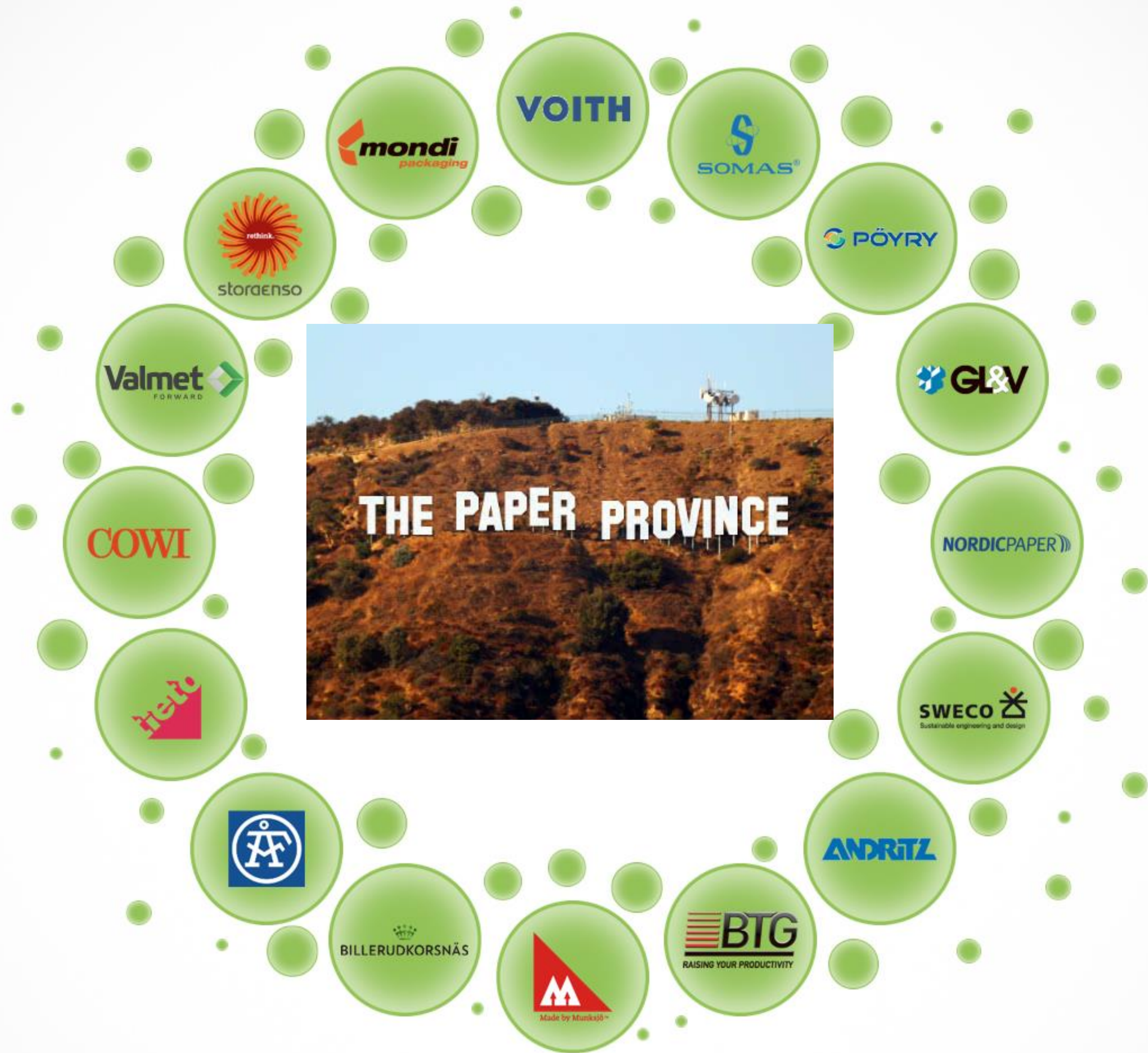
Forest Based Bioeconomy

We show the way with bio-based innovations from the forest to a fossil free sustainable society.

Make more of our long-fiber raw material.

Increase the value added from side streams.

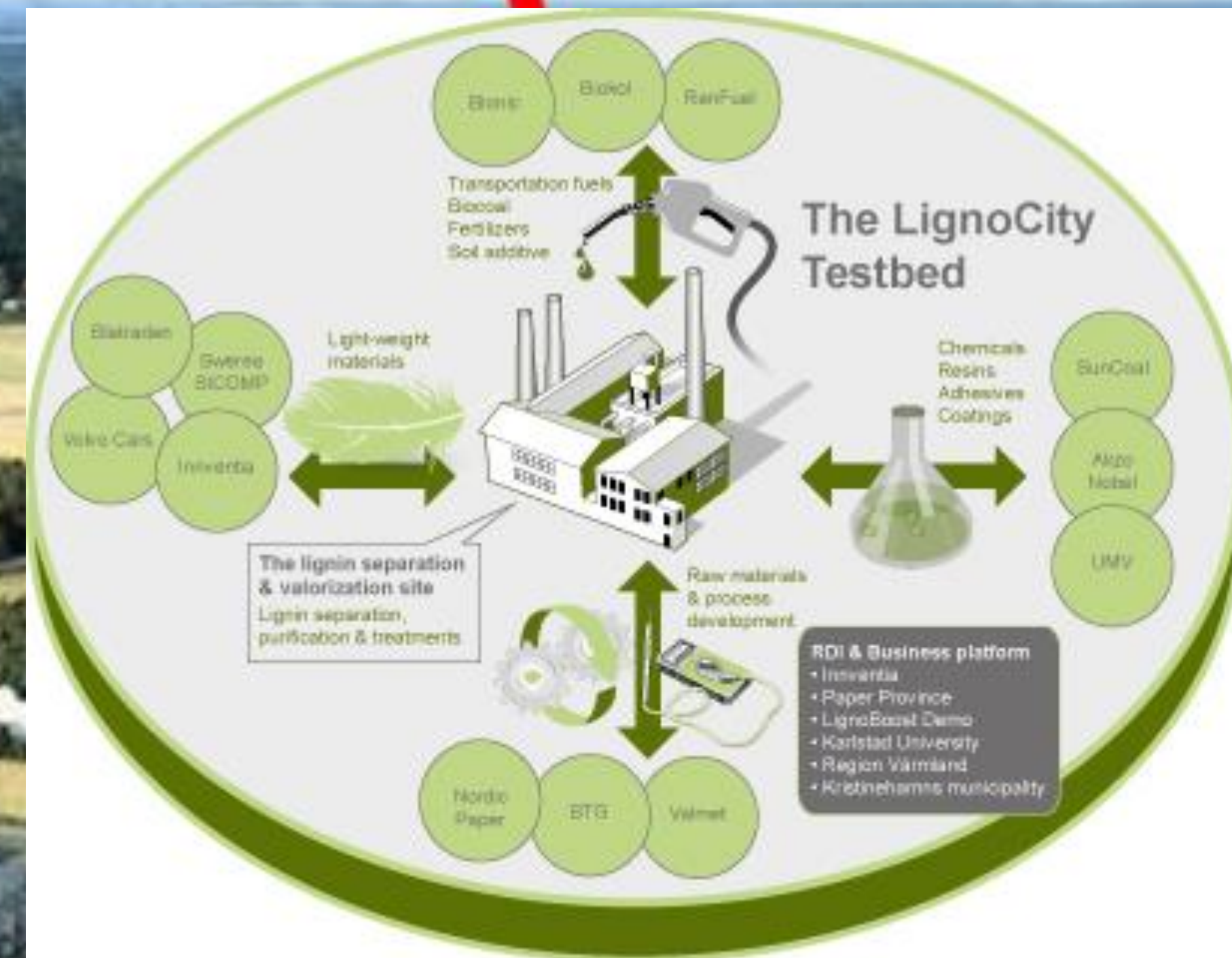






Nordic Paper
Bäckhammars bruk

LignoBoost AB
F&U-infrastruktur



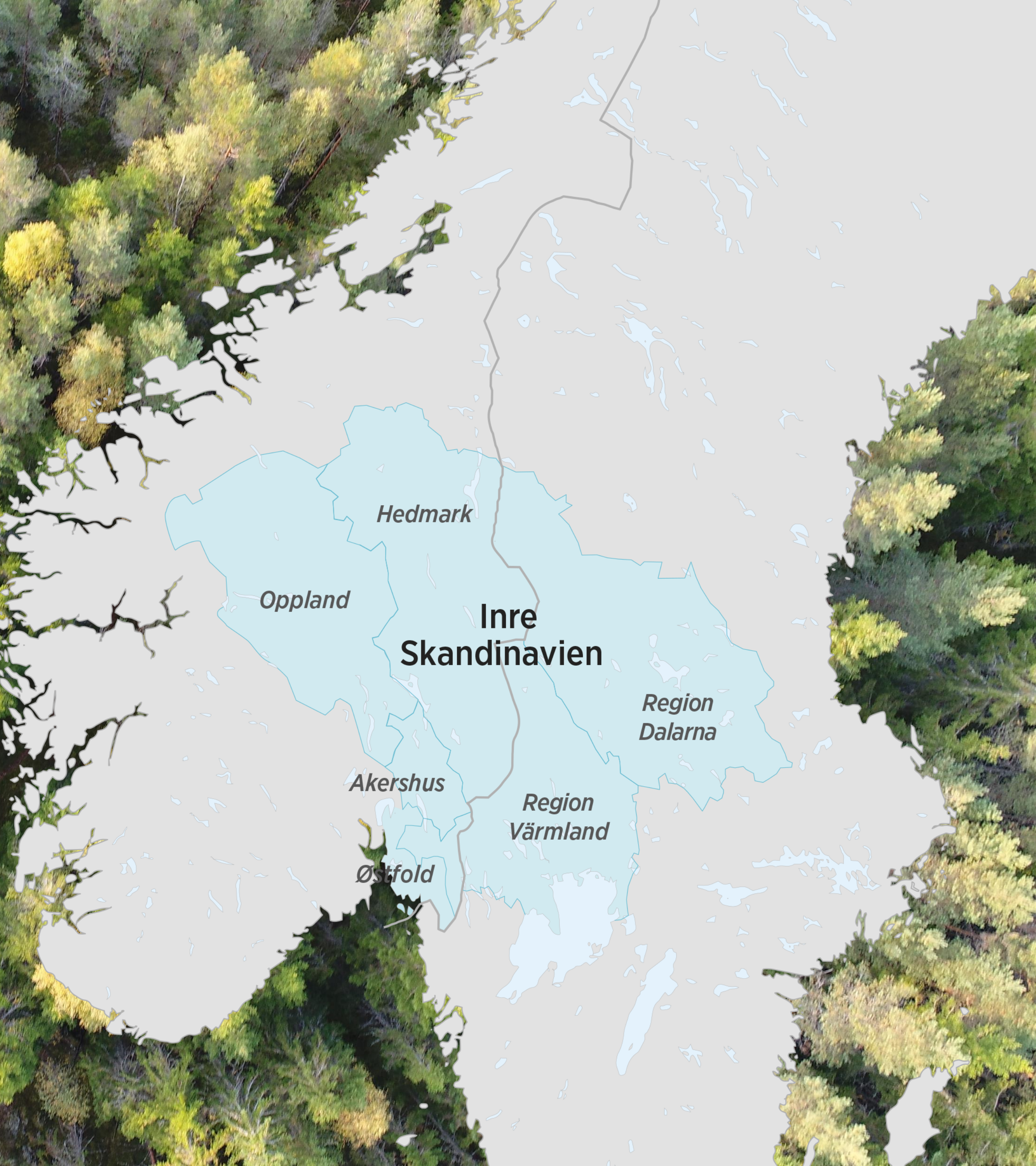
Ligno City

Region Värmland

**– The Nordic Region, which
prioritizes forest based bioeconomy
highest**

- Funding
- Policy, lobbying
- Team Bioeconomy – managers, EU Bussels office
- National and european networks
- Projects
- Communication

bioeconomy region



Hedmark

Oppland

**Inre
Skandinavien**

Region
Dalarna

Akershus

Region
Värmland

Østfold





Smart specialization in bio- and circular economy in the Baltic Sea region through enhancing cross-sectoral business-research partnerships and innovation ecosystem management.

<http://www.bsr-stars.eu>



Forest industry research at Karlstad Universitet



Pro2BE

**Research on Processes and Products
for a Forest Based Circular Bioeconomy**

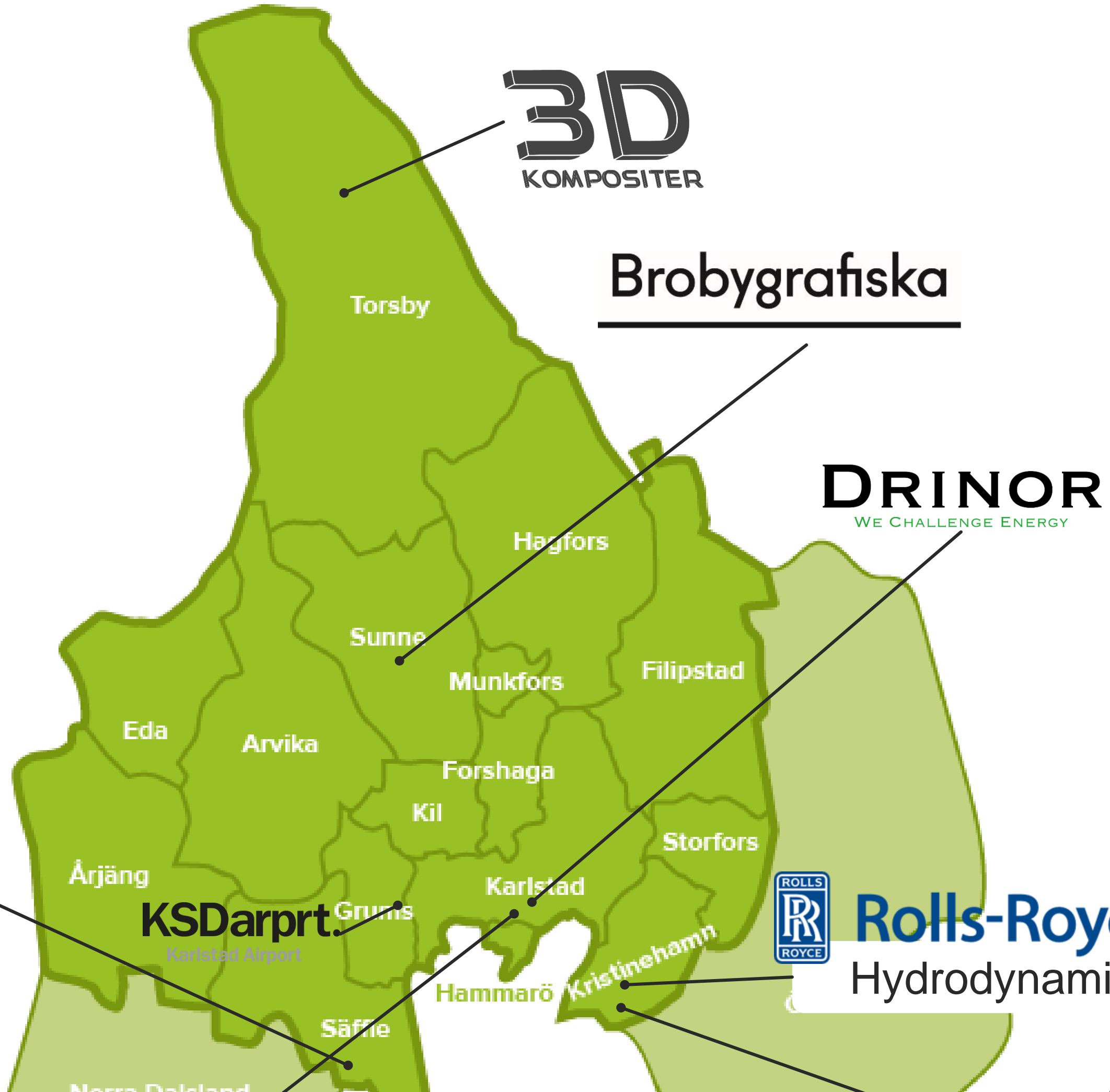
AKADEMIN FÖR
SMART SPECIALISERING



Region
Värmland

Testbäddar i Värmland

speglas i forskarmiljöer på



3D
KOMPOSITER

Brobygrafiska

DRINOR
WE CHALLENGE ENERGY

Rolls-Royce
Hydrodynamik

The LignoCity Testbed | PART OF **RISE**

UMV
Inventing for Coating & Sizing

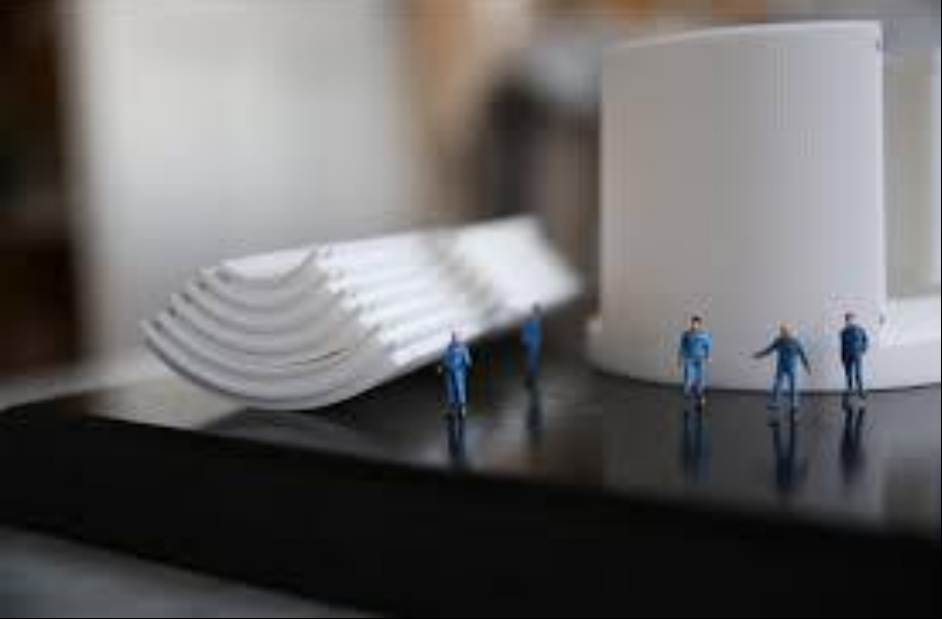
KSDarprt
Karlstad Airport



Nordic Paper
Bäckhammars bruk

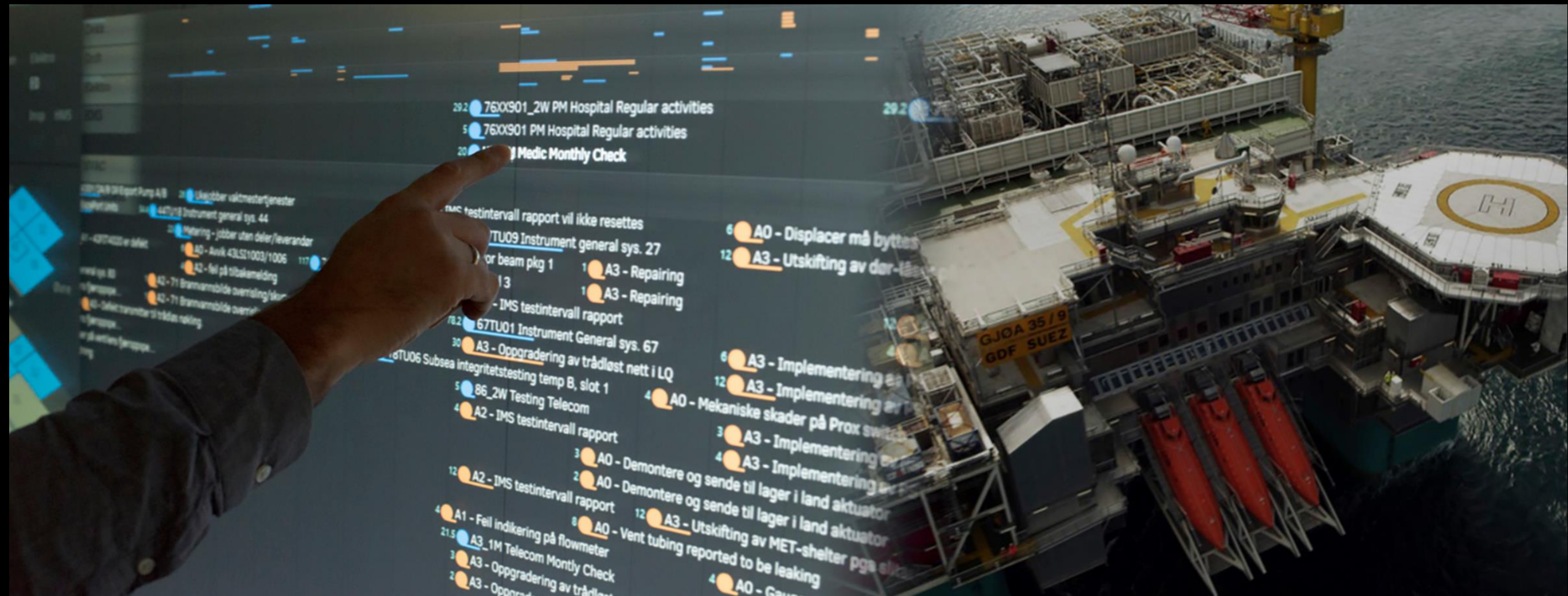
LignoBoost AB
F&U-infrastruktur





modvion®





From five years to six months

- Big consulting firms helps startups in on the plant.
- Machinery producers supports innovations.
- Norwegian industries positive when it comes to industry-relevant cases.
- The smaller industry groups take great responsibility.

MOOC - Massive
Open Online Course

Smart Specialisation Strategies



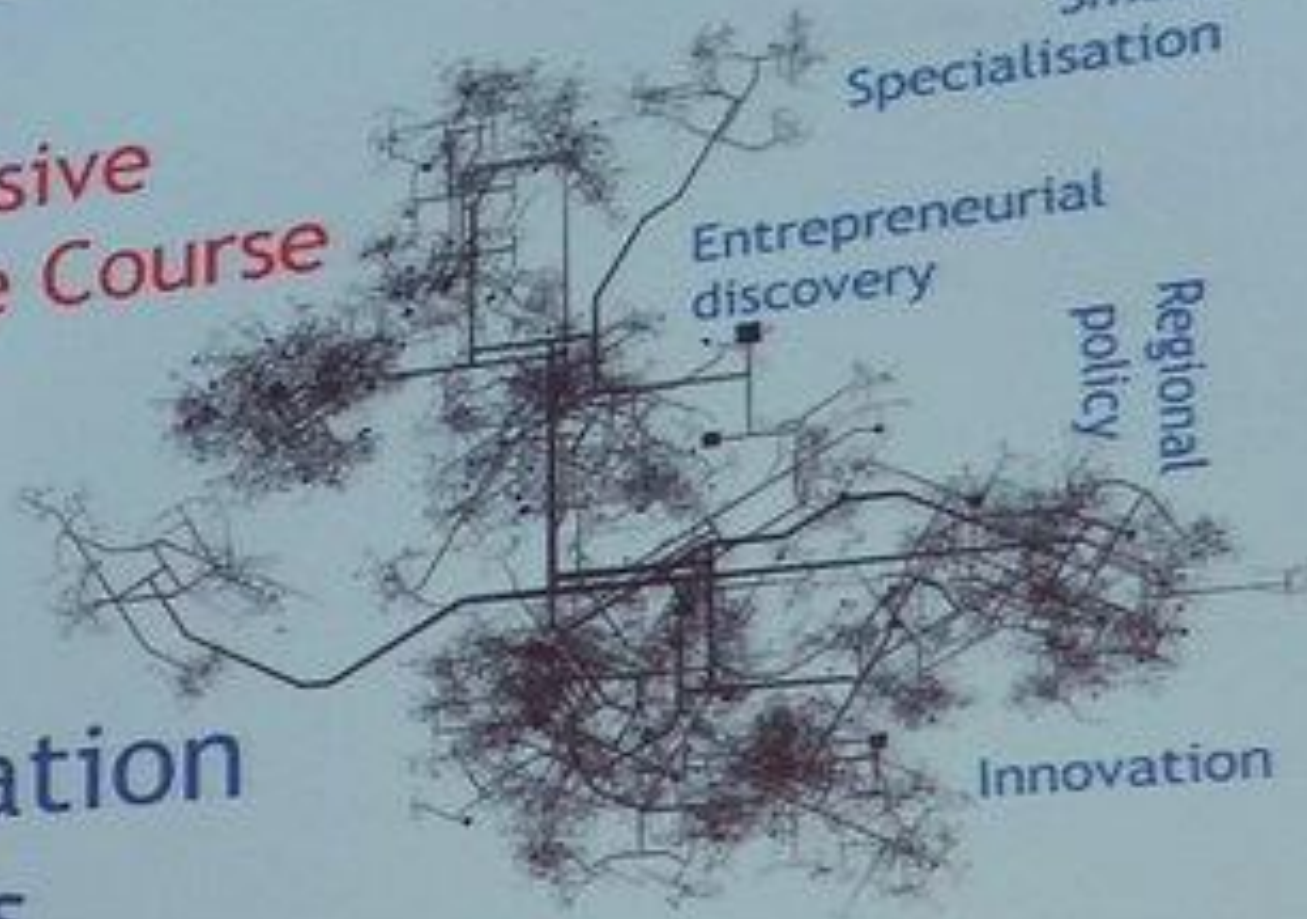
Stratégies de Spécialisation Intelligente

Smart
Specialisation

Entrepreneurial
discovery

Regional
policy

Innovation



Smart specialisering a' la Värmland

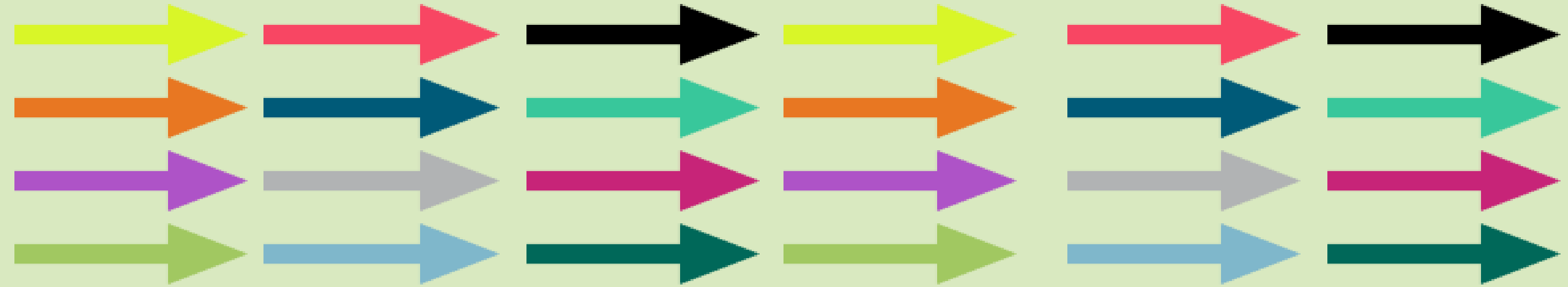
Smart ways to organise and develop existing regional assets in order to create value for users and society.

- Specializations is both about what we are good at, and what we're good for.
- Always assume a customer and user perspective in the innovation process.
- Gender Mainstreaming.
- Clusters play a central role in the entrepreneurial discovery process.
- The Academy for smart specialisation

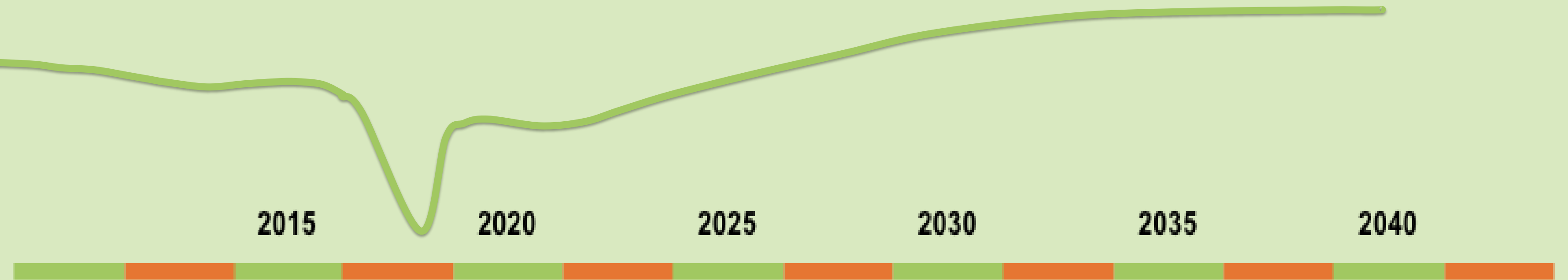


THREE SUCCESS FACTORS FOR SMART SPECILALISATION IN EU REGIONS

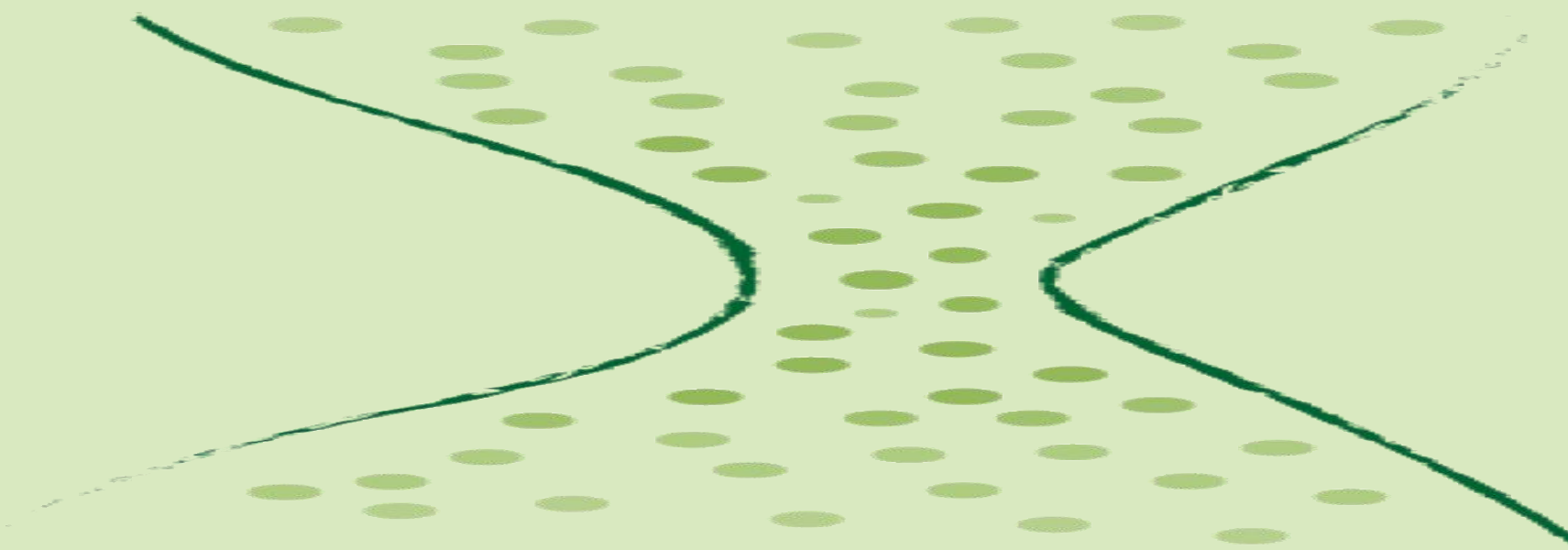
CRITICAL MASS



TRANSITION



NATIONS



MAINSTREAM SMART SPECIALISATION



Pilot

Industrial Transition Regions



REGION DALARNA

Pilotregioner

Omgång 1

- Norra Mellansverige
- Piemonte (ITA)
- Sachsen (TYS)
- Haute de France (FRA)
- Wallonien (BEL)

Omgång 2

- Cantabria (SPA)
- Center-Val de la Loire (FRA)
- Grande Estes de France (FRA)
- East North of Finland, (FIN)
- Greater Manchester (UK)
- Slovenien
- Litauen