

# Regional Innovation Management

- How do we develop regional capabilities and capacity for innovation?

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Magnus Rudehäll

Head of digitalisation and innovation management

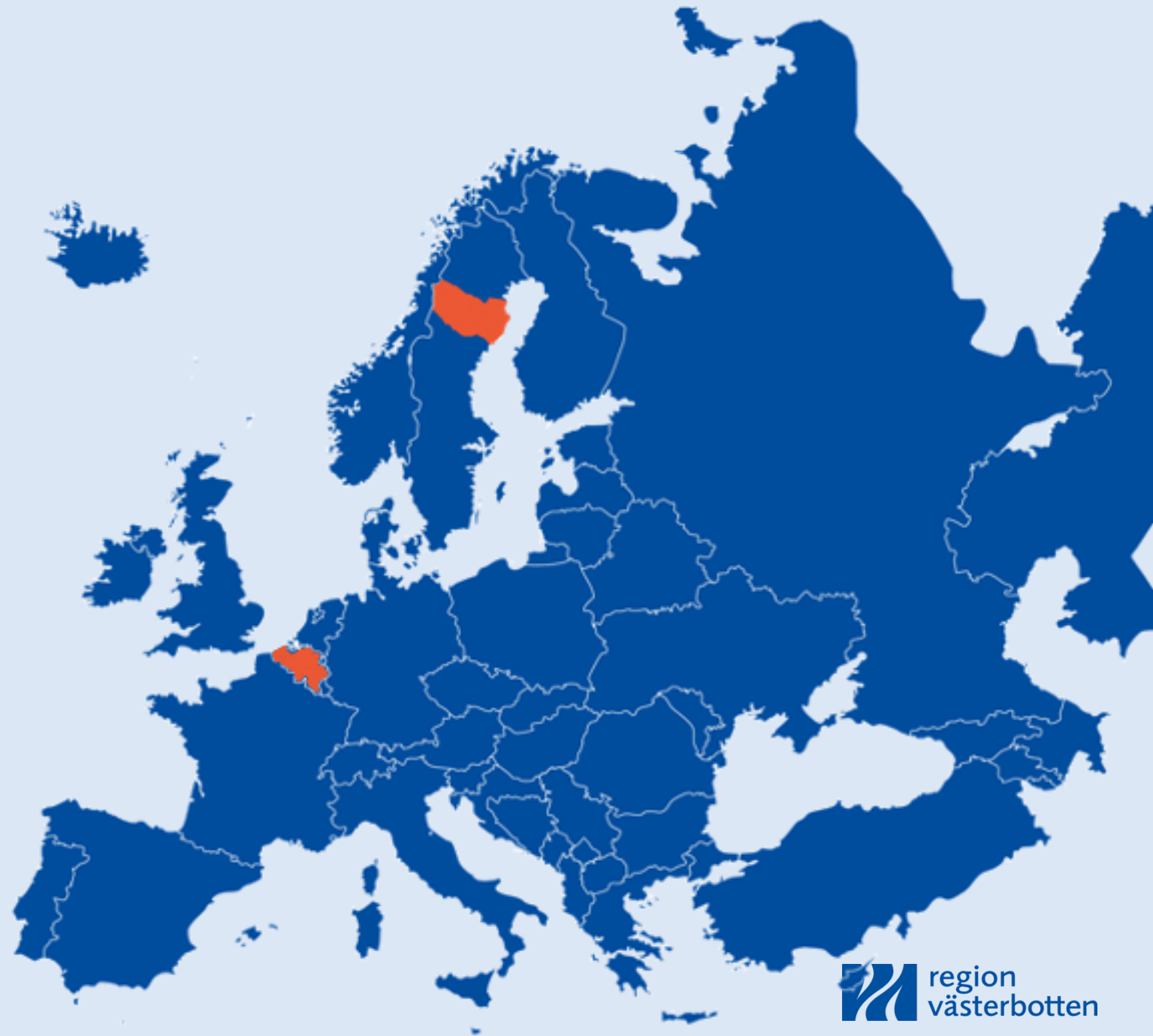
## Comparison:

### Västerbotten

Area (km <sup>2</sup> )	55 432
Inhabitants	279 340
Inhabitants/km <sup>2</sup>	5

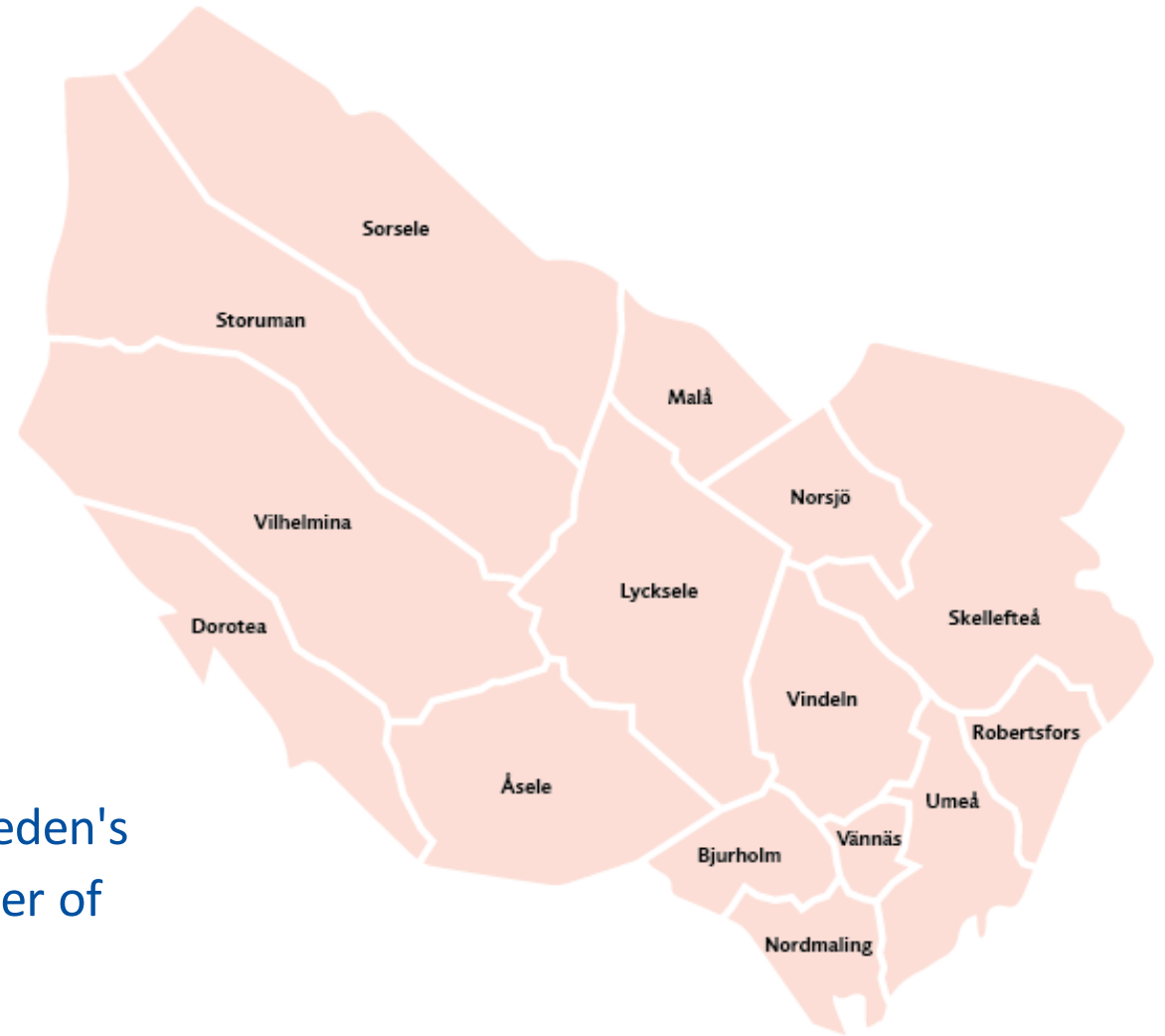
### Belgium

Area (km <sup>2</sup> )	30 528
Inhabitants	11 686 140
Inhabitants/km <sup>2</sup>	383



# Västerbotten

- 15 municipalities
- Umeå and Skellefteå are the largest municipalities, 76 % of the population lives there.
- 3 smaller municipalities with an average of 5 288 inhabitants
- With its 2 288 inhabitants, Dorotea is Sweden's smallest municipality based on the number of inhabitants.



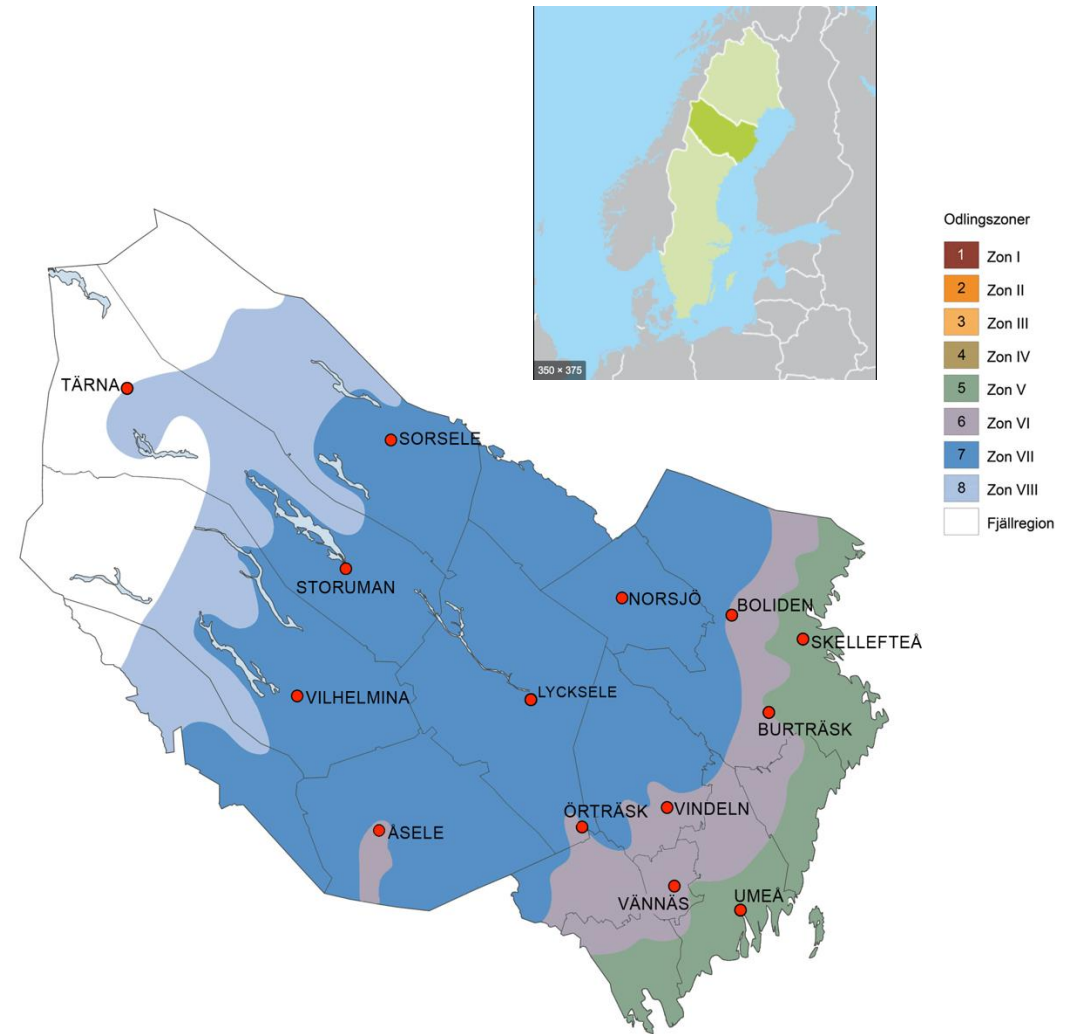
# Opportunities & challenges



Swedish championship in winter swimming, Skellefteå.  
Foto: Olav Schneider

# Challenges

- Demography - an aging population where fewer and fewer people will support more people.
- Urbanization - creates large intra-regional differences.
- We must become more residents - be attractive and create conditions for more people to move to Västerbotten.
- Regional development is about acting as a proactive “gardener”!





*Västerbotten has a strong innovation support system that is mainly located on the coast and has close links to the Swedish University of Agricultural Sciences, Umeå University and the Luleå University of Technology campus in Skellefteå.*

## The third generation of innovation policy

*Innovations that contribute to resolving the major societal challenges that characterise our time.*



1940–1990

### 1st generation innovation policy

- Linear innovation
- Focus on investment in research, research policy
- Academia and research institutes

1990–2020

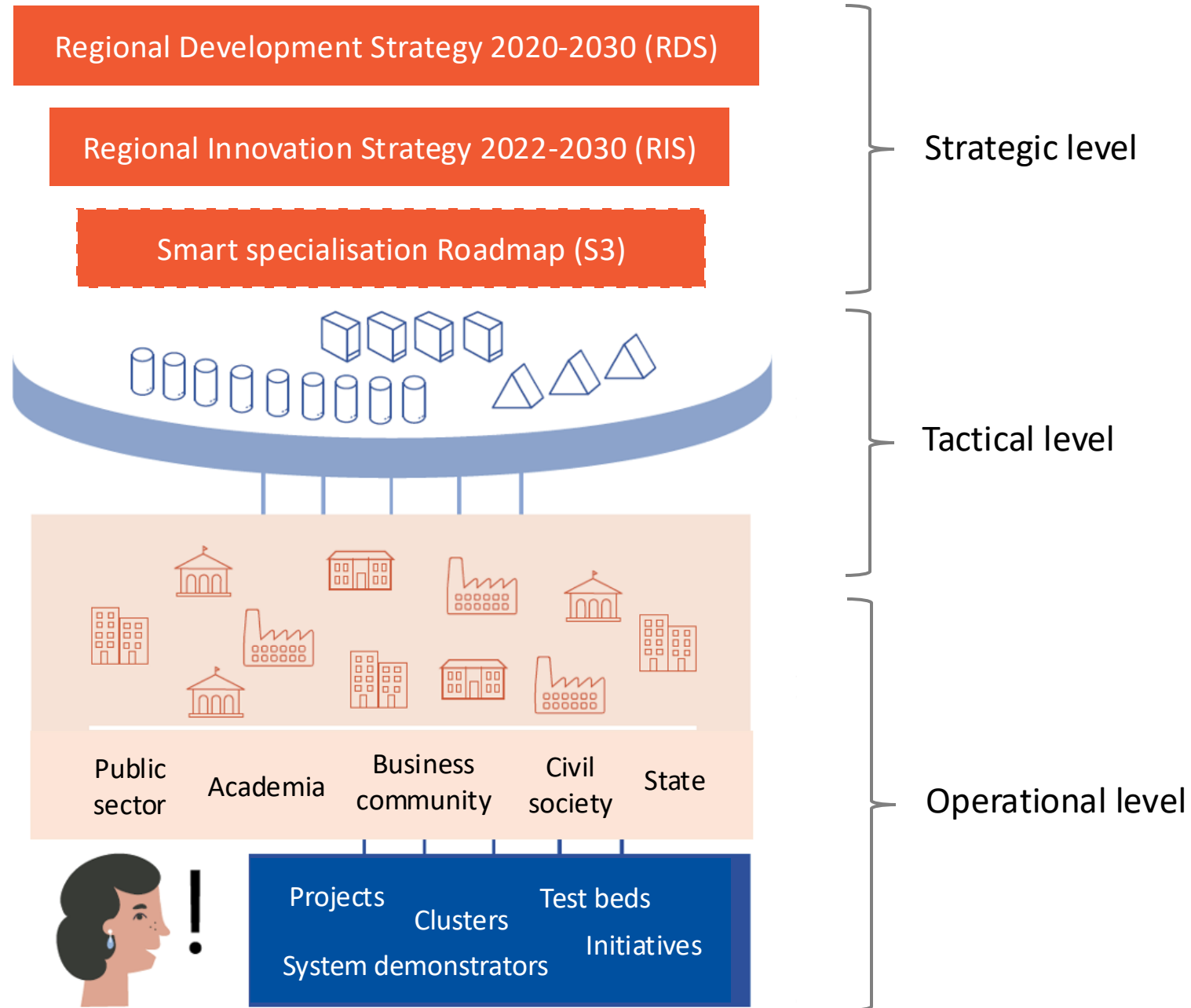
### 2nd generation innovation policy

- Innovation systems
- Focus on benefits/ commercialisation of knowledge
- Triple Helix – networks between research, business and society

2020–

### 3rd generation innovation policy

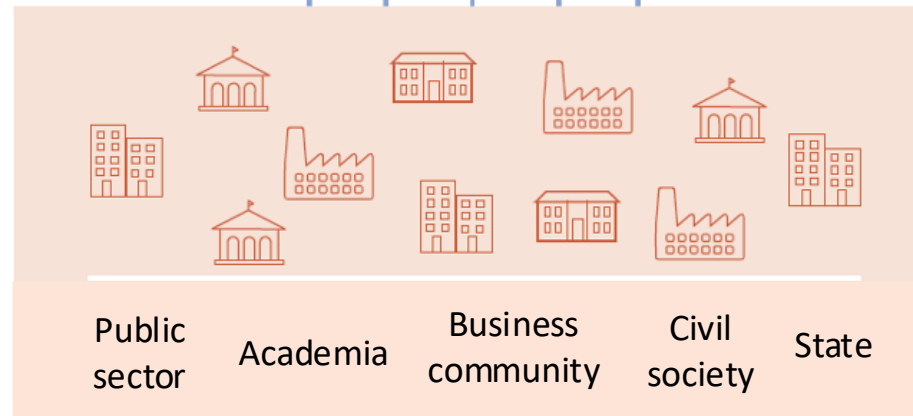
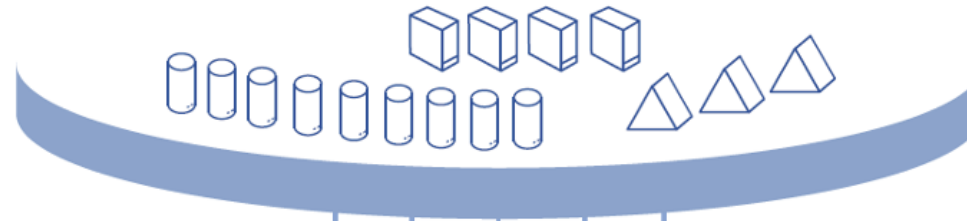
- Renewal, mobilisation concerning common goals
- Focus on societal challenges
- Quadruple Helix – broad perspectives
- Broader view of key actors



Regional Development Strategy 2020-2030 (RDS)

Regional Innovation Strategy 2022-2030 (RIS)

Smart specialisation Roadmap (S3)



Projects  
Clusters  
Test beds  
System demonstrators  
Initiatives

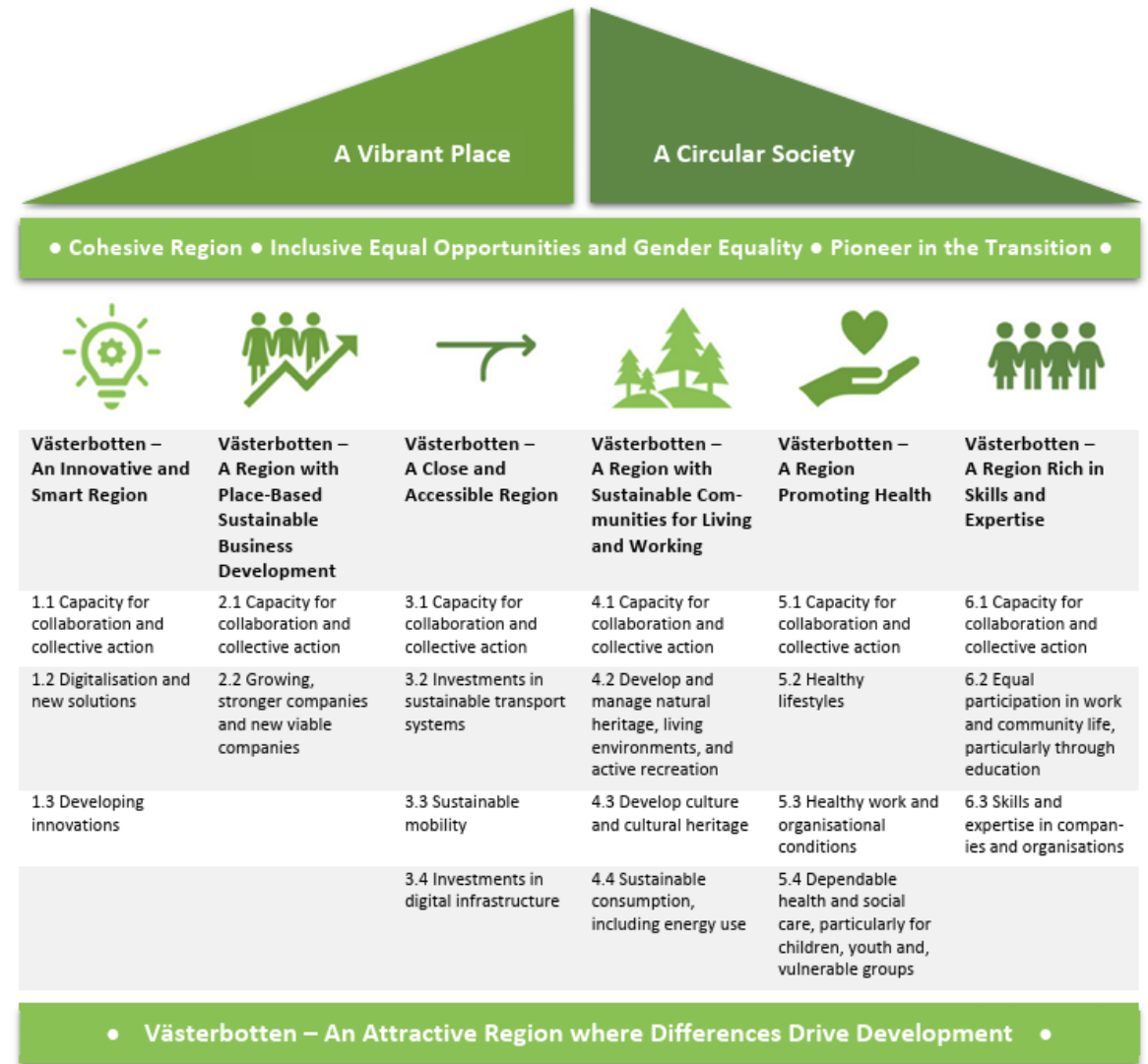
Regional Innovation Ecosystem

# Regional Development Strategy 2020-2030

*A vision, three focus areas and six priorities.*

*The three focus areas describe the perspectives that need to infuse every regional development initiative for differences to drive development and for the goals to be realised.*

*The six priorities show which areas need to be developed for Västerbotten to become a vibrant place to live and a circular Society.*





## The regional innovation strategy

Will strengthen the region's innovation power by:

Identifying priority goals and initiatives

Strengthening collaboration and interaction  
in the innovation ecosystem

Guiding, inspiring and prioritising initiatives

Being a foundation for regional innovation management,  
coordination and collaboration

# Nine areas of strengths in three categories



## AREAS OF STRENGTH BASED ON NATURAL RESOURCES

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**Forest bioeconomy**  
**Mining & minerals**  
**Sustainable energy systems**  
**Manufacturing industry**



## AREAS OF STRENGTH BASED ON CULTURAL RESOURCES

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**Tourism industry**  
**Food**  
**Cultural & creative industries**



## AREAS OF STRENGTH BASED ON KNOWLEDGE RESOURCES

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**Life science**  
**Digitalisation**

# Forest bioeconomy

- A large supply of forest, which served as a basis for innovation and development in the forest bioeconomy.
- A long history of forestry and associated expertise in industrial development and research, as well as in wood building construction and production.
- Creating cross-links between forestry and wood-related industries, digitalisation, research, technology- and innovation-driven industrial production, as well as new wood-based products for a green transition (biofuels/biochar/clothing, etc.).
- Via the Swedish University of Agricultural Sciences, a world leader in forest research, Västerbotten operates the successful research institution Umeå Plant Science Centre together with Umeå University.



Our areas of strength

# The mining & minerals industry

- In the future, there will be a greater demand for increasing volumes of metals and minerals to cope with the transition to the EU's climate goals.
- There is increasing demand for metals and minerals that have been extracted in as environmentally sustainable a way as possible.
- In a global perspective, companies are at the forefront in terms of skills, production processes and products.
- In Västerbotten, there are thus good prospects for the further development of innovations to facilitate a green transition and circular value chains.
- Metal recycling and circularity



# Sustainable energy systems

- The availability of hydropower and wind power means that companies and operations with high energy needs can establish themselves in Västerbotten as part of the global transition to fossil-free energy.
- The major establishments and investments in batteries and hydrogen have great potential to further develop electrification with energy storage technologies, which in the long run will create a cross-boundary energy storage cluster.
- At the county's universities, there is also R&D in a number of key areas, such as alternative fuels and energy, which are important for the bioeconomy throughout northern Sweden.



# Manufacturing industry

- Västerbotten is home to competitive companies with ties to the forestry industry, environmental technology, medical equipment, process manufacturing and the mining industry, to name but a few.
- Västerbotten's industry is characterised by a number of niche companies that are often focused on a global market. There is potential to connect to global value chains and be a driving force in renewal.
- Västerbotten has an automotive industry with a focus on heavy vehicles in the forestry and mining industries, which also has great potential in the electrification of the automotive industry, with innovation environments to utilise and capitalise on the global interest in becoming established in the region.



# Tourism industry

- In sparsely populated areas, the tourism industry is of particular importance for employment.
- International tourism is expected to increase. Visitors are seeking greater environmental accountability, demand quality, and are prepared to pay for a unique and sustainable experience.
- The development of a sustainable hospitality industry requires a capacity for renewal and is a significant source of innovation, not least regarding the development of new business models and digitalisation.
- Västerbotten needs to develop sustainable tourism and make it available to potential target groups, while simultaneously safeguarding our unique natural and cultural values.
- The development of the tourism industry places increasing demands on systematic and strategic work in municipalities and regions.



# Food

- One characteristic of Västerbotten's agriculture is a specialisation in milk and dairy products, and the region has several strong brands as well as examples of research-related products and innovative companies.
- Something that is unique to Västerbotten's food production is the large proportion of products that come from forestry and the land, such as reindeer, game, berries and fish, with great potential for increased processing and innovation.
- Reindeer husbandry is a niche food industry that employs sustainable farming methods, plays an important role in the Sámi culture, and contributes to Västerbotten's distinctive character in a global perspective.



Our areas of strength

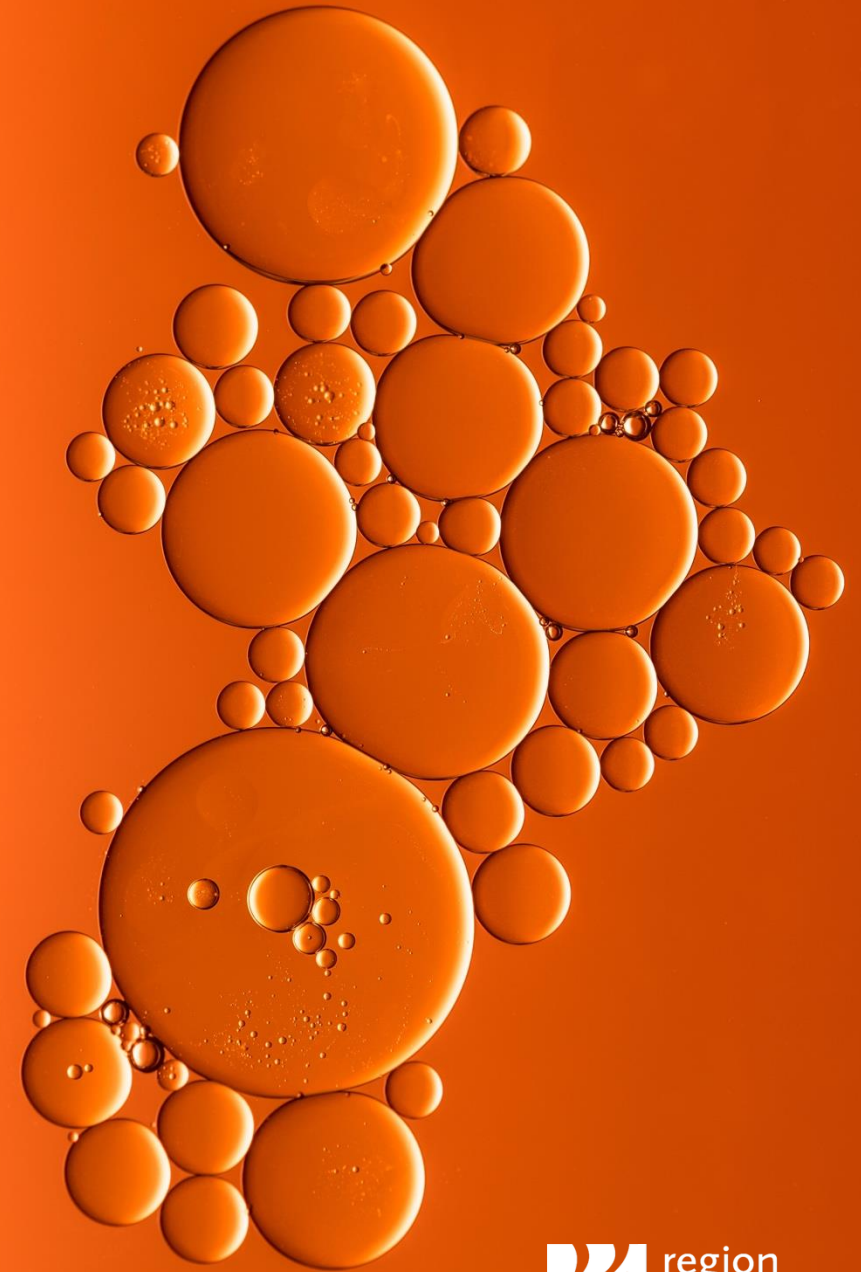
# Cultural and creative industries

- Västerbotten is home to a wide range of different types of art forms, companies and institutions in which the Sámi culture represents a unique resource.
- Västerbotten has a strong infrastructure for CCS, with public cultural institutions, professional cultural creators, a free cultural life and the non-profit/voluntary sector.
- Our strengths include design and the designed living environment, the gaming industry and gamification, with several strong companies and many start-ups.
- Entrepreneurs and companies within the creative sector are subject to natural innovation and creative capacity, especially when it comes to iterating new business models, growth strategies and forms of cooperation.



# Life science

- Life science is a strong area of knowledge in Västerbotten, with several globally competitive companies and a well-developed support system for commercialising ideas and research results and helping new companies to grow.
- Qualified research in medical cell and molecular biology is conducted here, along with well-developed biotechnology and medical technology projects with information and communication technology as support.
- The structure for clinical research and clinical trials has been built up, and in healthcare, purposeful work is being performed with the help of innovation development and partnerships in academia and the business community.
- Nobel Prize-winning genetic scissors



Our areas of strength

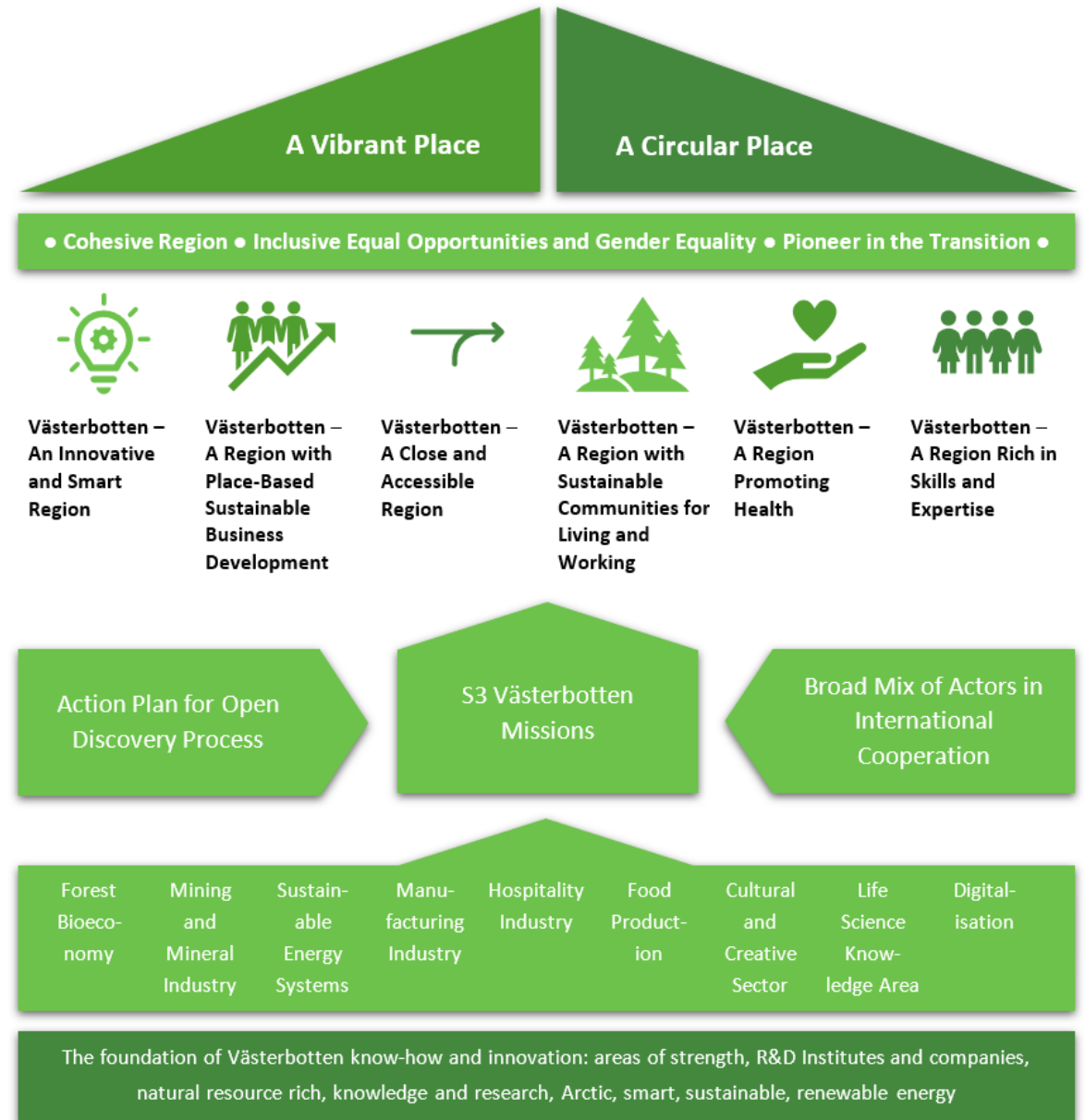
# Digitalisation

- Västerbotten is home to strong research and education environments in a number of digital areas.
- Investments in IT infrastructure mean that today Västerbotten has world-class broadband.
- A wide range of companies working with software development, gaming, infrastructure and service-based solutions.
- Digitalisation is a prerequisite for the green transition.
- Västerbotten is well-equipped to take the next step and continue to be a leader in the digital structural transformation.



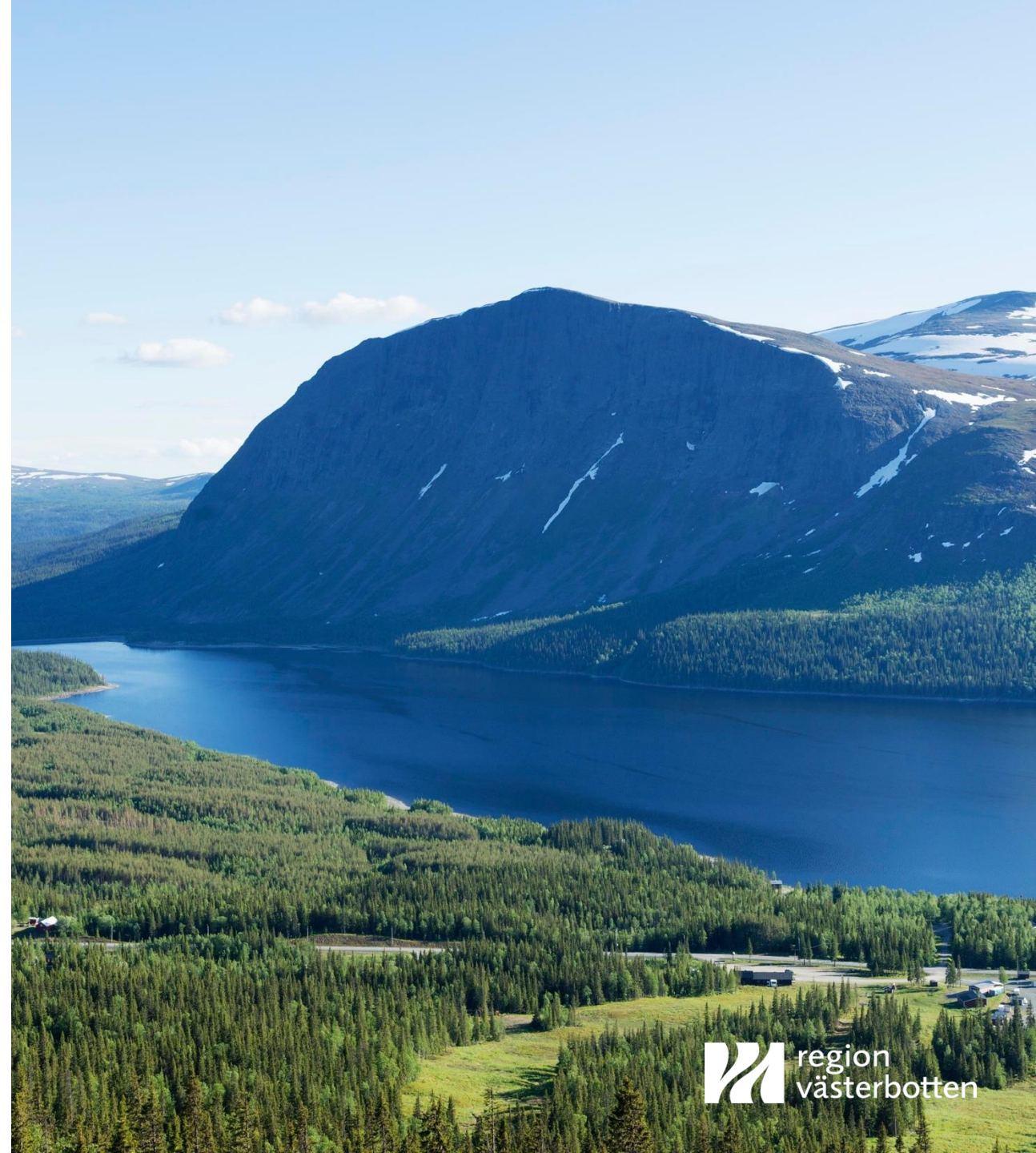
# S3 Västerbotten Roadmap

*The goal of the S3 Västerbotten Roadmap is to establish local missions of smart economic regional transformation, in international multi-actor collaboration, which contribute to the achievement of the goals for sustainable regional development*



# What is a regional innovation ecosystem?

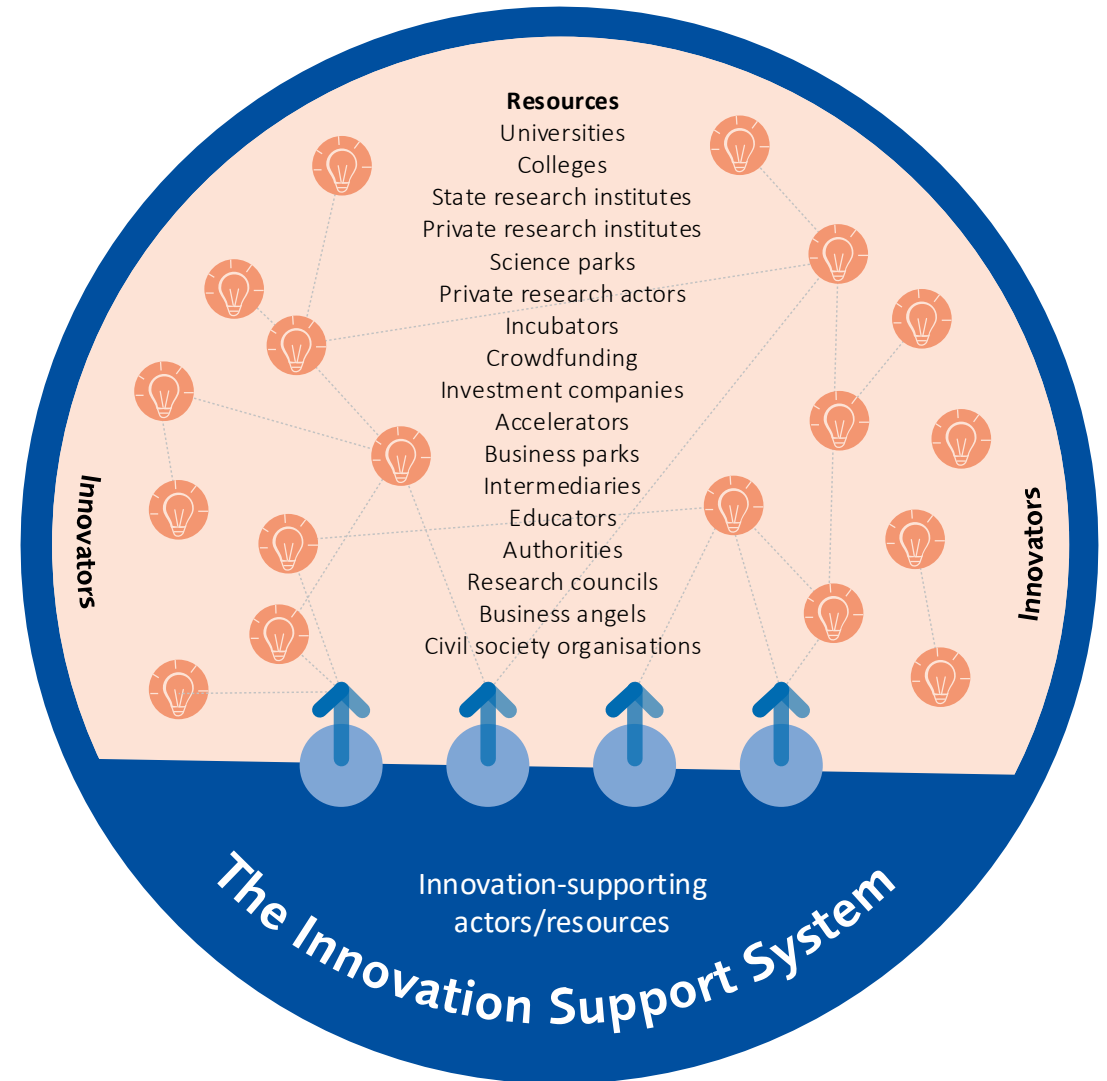
- A diverse group of actors that affect innovation capacity.
- It consists of numerous innovation systems tied to various industries.
- It consists of companies and organisations that develop and implement new ideas and knowledge environments, and public actors who demand or provide competence.
- In some cases, there is close collaboration and cooperation between actors, whilst in others they act independently of each other.



# How does a regional innovation ecosystem work?

Innovation can occur anywhere, and based on that insight, we need to create a climate that allows innovative ideas to take many different paths in order to grow stronger.

The purpose of an innovation ecosystem is to foster collaboration and cooperation within and outside the system.

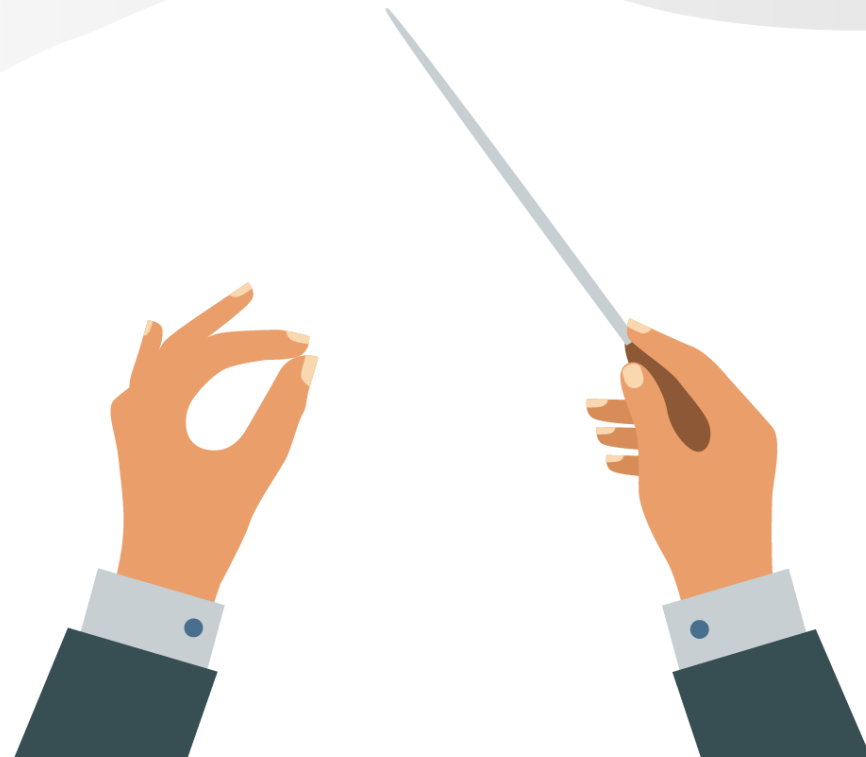


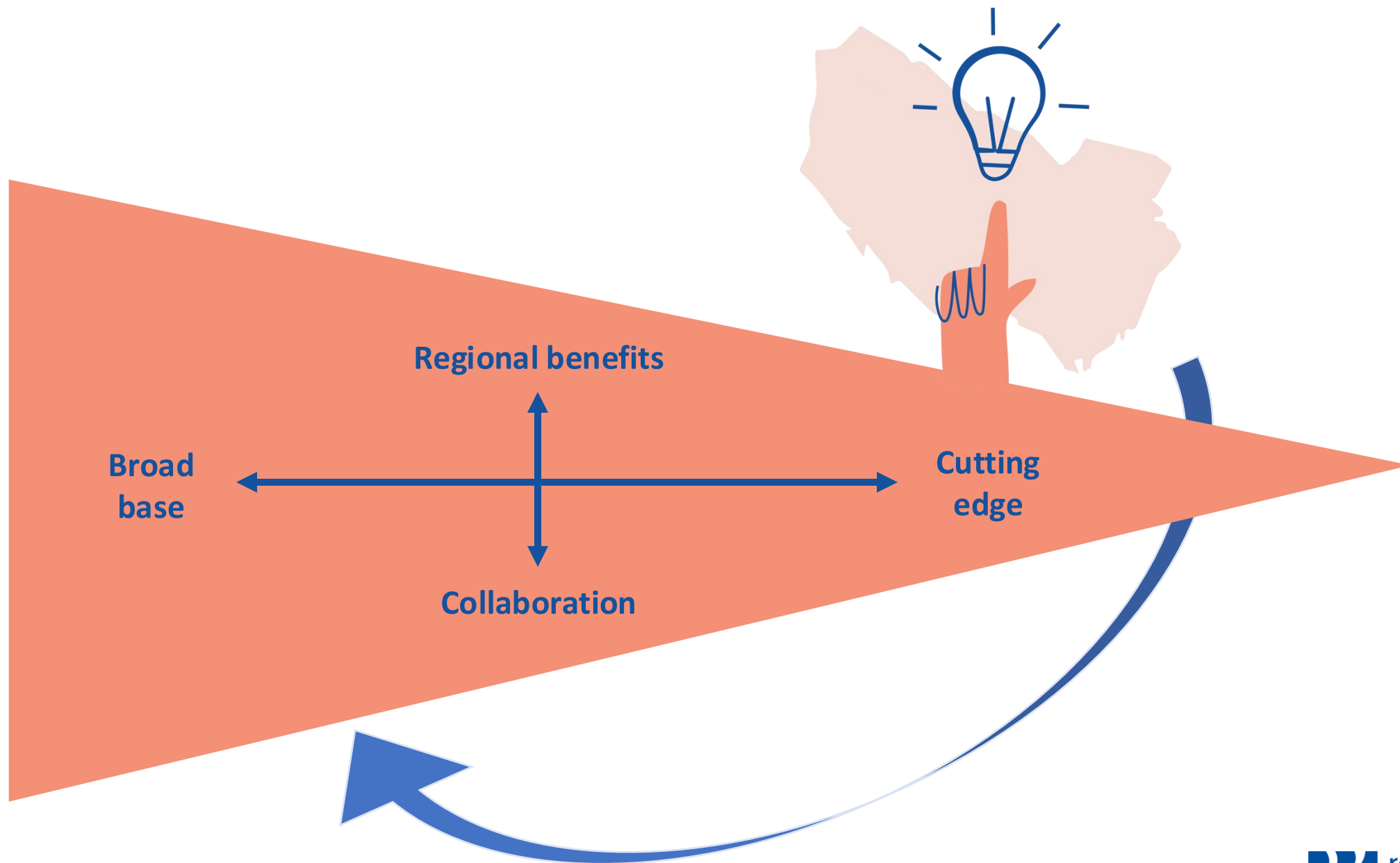
# How do you manage a regional innovation ecosystem?

Regional innovation management is not about steering and leading, but rather about coordinating and orchestrating the actors in the regional innovation ecosystem.

It is about developing and strengthening the regional conditions for innovation. Increase the ability and capacity for innovation.

Access to support and environments for innovation are, together with cooperation and collaboration, keys to success.





# Did you know that...

Västerbotten has developed a method  
for measuring a region's innovation capacity.

# The METRIC measurement model

- In collaboration with innovation researchers, we have developed the METRIC (Measurement of Regional Innovation Capacity) measurement model.
- A unique model for measuring Västerbotten's innovation capacity from a holistic perspective.
- The strength of METRIC is that it is based on both existing and new regional data.
- The measurement model measures the ecosystem based on 11 different dimensions and 66 indicators.
- The model is under development, and we are looking for more partners
- You can download the METRIC method book at [www.innovationsekosystemet.se](http://www.innovationsekosystemet.se)



# Thanks for the attention

**Magnus Rudehäll**

Head of digitalisation and innovation management

[magnus.rudehall@regionvasterbotten.se](mailto:magnus.rudehall@regionvasterbotten.se)

+46 70 608 48 88

[www.innovationsekosystemet.se](http://www.innovationsekosystemet.se)

[www.regionvasterbotten.se](http://www.regionvasterbotten.se)