

BACKGROUND VÄRMLANDS RIS3

VÄRMLAND IN THE EUROPEAN COMMUNITY

The basis of smart specialisation is regional. In Värmland, the Region Värmland is responsible for leading the RIS3 process. This shall be done in concert with the national innovation strategy, Europa 2020, the government's research and innovation proposal, the national strategy for regional growth and attractiveness 2014-2020, as well as at the regional level, the Värmland strategy.

SMART SPECIALISATION À LA VÄRMLAND

This strategy shall serve as a tool for development and growth in Värmland which is sustainable and inclusive. The aim is for the strategy to be a matter of importance for all key groups in Värmland who work with innovation within Värmland's specified areas of specialisation, but also for groups in Sweden, Europe and on an international scale.

The strategy will be a tool which will help us in Värmland to focus to achieve our goal. It is a means for unveiling the potential we have for innovation and growth. This will also aid us in profiling work and to build the brand name of Värmland. With this strategy we can gain more visibility in Brussels and take a more authoritative approach.

Smart specialisation involves creating competitiveness within a range of areas and at the same time helping to face societal challenges. The specialisations therefore deal with what we are good **at** and what we are good **for**. For this reason we have chosen to formulate the specialisations as a number of value propositions - promises, to customers/users, and to society.

Värmlands interpretation of smart specialisation:

Smart specialisation is a smart way to organise and develop existing regional assets¹ in order to create value for users and society.

In short, **the smart way to create value!**

Users could be customers in the form of consumers or companies in the value chains. They could also be users of various types of services, for instance within publicly financed organisations or the non-profit sector. Value in this situation includes the users' expressed and latent needs. There can be a huge difference if the user or customer is a woman, man or girl, boy. Creating value for society is also a way to contribute to finding solutions to society's challenges².

In order to be smart in creating value, we have created a sixth specialisation - Value-creating services. This specialisation shall permeate the work method in the other five specialisations so that we always base the innovation work from a customer and user perspective.

¹And advantageously add external, European resources and by connecting us into global value chains.

² See the section on societal challenges further down in the document.

The starting point has been to create an innovation strategy for business. But the content of some of the specialisations has entailed dealing with innovation of the public sector's own services or products for which the public sector is the customer. For example, this could involve bio-based products which replace fossil-based products in health care or digital services in the care and education sectors.

Gender mainstreaming

The goal has been to create a gender-mainstreamed innovation strategy for smart specialisation. This is the first time an approach has been taken along those lines. There is a correlation between companies and industries with more gender equality, and profitability³. So it pays to attach a gender perspective to innovation and growth. This can have a number of different reasons and vary from industry to industry. Gender equality leads to better decisions being made in the company.

Calculations indicate that gender-mixed personnel groups in 2012 will have twice as much of a chance of exceeding management's expectations of their performance as personnel groups consisting solely of male staff members. Having women in company management increases a company's profitability. Equality improves the opportunities for all personnel to be able to develop their full potential.

Staff diversity gives the company greater contact interfaces with various sections of society and a larger recruiting base. The probability for innovation is almost twice as high in a company with gender equality in the staff.

One of the societal challenges of the strategy is to contribute to finding solutions for: Europe in a changing world - an inclusive, innovative and reflective society.

In this case, including women and men to thereby contribute to finding innovative solutions.

In Värmland, as in the rest of Sweden, the labour market is heavily gender segregated. This is also true within industries in which women and men start their own businesses. There is a corresponding development in the academic world. There is a connection between more gender-equal companies and industries and profitability. It is therefore important to have a gender perspective in terms of innovation and growth.

For growth to be sustainable - as EU 2020 also indicates - then it must also be gender equal and inclusive for everyone in Värmland, both women and men. The strategy should indicate the current situation for women and men in Värmland's innovation climate as well as the consequences of the prioritisation in the strategy.

The Värmland Region worked in the following way with the gender mainstreaming of the strategy: analysis methods to ensure that the gender perspective - number of women and men - has been applied to the extent it is possible and that the gender statistics have been a vital tool. We have applied a gender-equality perspective throughout the mapping work in which not only awareness of gender is prevalent but also a direction towards a more gender equal innovation and corporate climate in Värmland. We have also applied a gender perspective - an understanding of which attitudes and traditions are of import within various areas. The consequences that different decisions have on women, men, girls and boys has been a central theme in our assessment of inclusive sustainable growth.

During the work on the strategy, there has been a discussion surrounding the strengths and challenges existing in relation to gender equality in the choice of prioritised areas for the

³ Refer to "It is worth it" by Franzén, Lärkeryd etc.!

future strategy. Intelligence analyses and other preliminary work have been studied by experts on gender equality. In the prioritising efforts, gender has been included as a variable to take into account in the presentation of areas of strength. The participation and expertise of the people behind the process has also been of import - even if it has been difficult to steer the volunteer-based participation.

These efforts have produced a process model for how gender mainstreaming of innovation strategies can possibly be achieved. It will now undergo evaluation and improvement. The Värmland Region is happy to share the lessons learned.

CONDITIONS IN THE REGION FOR INNOVATION

The Värmland Region is part of the NUTS 2 region, North Central Sweden. Värmland borders Norway and the East Region and is thus a border region in the EU. Proximity to Oslo, Norway is an important pre-condition for business and employment.

The population of the region in 2014 was 274,691 inhabitants and the population grew from 2009 to 2014 by 0.5%. Värmland is wrestling with challenges in issues such as slow population growth, a low level of education, low wages and a low degree of employment compared to the average in Sweden. Companies in Värmland are dependent on good communication due to the long distances to the large urban regions. Compared to other regions, Värmland is home to large tracts of forest resources which is promoted as a strength in the Värmland strategy and for the forestry industry in the region.

The public sector provides most of the jobs in Värmland, followed by the manufacturing industry and the steel and retail trade industries. The labour market is gender segregated both horizontally and vertically which means that women and men find themselves in different sectors and industries and in different positions within one and the same industry or workplace. In the case of business and entrepreneurship, most men in Värmland operate businesses in farming, forestry and fishing while most women operate companies offering cultural and personal services.



Image. **Värmland's position in Northern Europe.**

Business in Värmland is concentrated around a few dominant industries where it is also traditional to organise into clusters and networks. The biggest industries in Värmland are the pulp and paper industry (approx. 4,000 employees), IT (approx. 2,000 employees), steel and

engineering (>10 000 employees) as well as the hospitality industry which is growing the fastest (approx. 3,000 employees). Research and innovation is underway within these industries both in companies and within the academic world. A vital piece of the business networks is a well developed infrastructure for corporate services offering everything from basic services to knowledge-intensive consulting services. These companies often deliver services to a number of different industries which makes them important bearers of knowledge and expertise in the region.

Karlstad University is a relatively young school formed in 1999. It was a teacher training college in 1843 and grew to become a university branch and then into a college. The curriculum was characterised by a culture of cooperation in which the school regards itself as a world class university with international connections at the same time it has strong ties to the region and with many areas of research which closely match the business life of Värmland.

The regional innovation support system has developed in stages from the turn of the millennium to the present and consists of public organisations, clusters, businesses, the university and institutes in close cooperation. Examples of cooperation and initiatives for the future include:

The cluster organisations Steel and Engineering, Compare, Paper Province and Visit Värmland.

10 new professorships at Karlstad University with a strong connection to the clusters. Prioritising at Karlstad University of five strong research environments of which four have a definite connection to business in Värmland. Setting up a Grants and Innovation Office at Kau which is also part of "Fyrklöver" a national innovation office set up by the Swedish government.

Innovation platforms such as Brobygrafiska and Swe Flex within flexography and packaging design as well as the Glava Energy Center in the solar power sector.

Innovation Park in Karlstad brings together companies and organisations related to innovation and growth.

Establishment of SP Technical Research Institute of Sweden and the Inveractive Institute in the region.

Paper Province has been named a winner of the Vinnväxt competition, which will involve a ten year commitment in developing a forest-based bioeconomy in the region.

The Värmland County Council's commitment to innovation in health care through the Vivan innovation sluice and Experio Lab as well as Nordic Medtest for raising the quality of Swedish e-health.

This is described in more detail under the heading "The Innovation Support System" later in the document.,

The region is politically governed by the Värmland County Council (health care), the Värmland County Board (environmental monitoring, plans, corporate support) and Region Värmland (regional development, public transportation and culture etc.).

Innovation

A synthesis of a number of innovation indices⁴ indicates how Värmland positions itself as an innovation region in Europe. The overall picture is that innovation in Värmland is low in terms of Sweden as a whole but this should be considered against the background of the fact that Sweden is one of the top nations in the world in the area of innovation. In fact, in some respects, Värmland is ahead of the EU as a whole.

It is also worth noting that Värmland's collective index value has remained relatively steady from 2004 to 2010 and indicates a comparatively good balance between the three main parameters: fundamental conditions, market capacity and renewal capacity. The parameter - renewal capacity - has undergone the strongest growth and it is also Värmland's best relative position.

Today, Värmland offers excellent conditions for achieving innovation in the region but the ratio is low in relation to abilities. In other words, the region has a well developed innovation system but the result (output) is relatively weak. This is mainly due to the education level of the region, a unilateral business community and a low proportion of entrepreneurs who carry knowledge and expertise into the market in the form of new goods and services. The number of new business start-ups in the region is low which inhibits the conditions for a dynamic business community and the creation of new jobs.

Companies in Värmland have relatively low overhead costs related to research and development but costs for innovation which are not R&D-based are high. This is an indication that companies in Värmland have a good capacity for creating innovation more by relying on technologies and innovations which have already been developed elsewhere and less by developing entirely new product and process innovations themselves. This would lead Värmland to be described as a "follower" region in terms of innovation strength.

THE RIS3 PROCESS

The task of developing a regional research and innovation strategy for smart specialisation was given by Region Värmland's council when they approved the organisational plan for 2014. The work was then conducted from March 2014 up to and including March 2015. Developing and producing a document of this type is an assignment carried out within a context of previous and existing processes, programmes, plans and strategies. It is possible to track efforts by industries and efforts which were intended to be cluster initiatives and established research environments from the first regional growth strategy in 2005 by way of, for example, the milestone represented by Värmland's participation in an OECD project⁶ from 2005 to 2007 up until today's Värmland's strategy.

Work on this strategy has therefore started with a review of existing analyses, an updated statistics analysis of the strong industries in Värmland and a review of the strong research environments, in, primarily, Karlstad University. These analyses then formed the groundwork for formulating a number of areas which were considered robust because they are a combination of a competitive business sector and outstanding research. Other factors considered included the need for growing markets, market actors in the region who could be

⁴ Reglabs Innovationsindex 2013, EU Commission's Regional Innovation Scoreboard 2014, Service Innovation Scoreboard 2014, EU's Innovation Scoreboard, Global Innovation Index and the World Bank's Innovation rank.

⁵ Värmland's regional growth agreement: Business oriented work for Värmland's growth strength.

⁶ Supporting the Contribution of Higher Education Institutions to Regional Development.

a driving force, entrepreneurship within the area and that within the area it was possible to contribute to solutions for urgent societal challenges.

In order to gain an idea of the international positioning for these areas, a business analysis was conducted. Five to six areas remained as candidates for smart specialisations. In some of the workshops involving the groups concerned, swot analyses were done and then visions were formulated along with proposals for efforts to achieve the visions. In the end, the work produced proposals for six smart specialisations. One transverse specialisation: Value-creating services, and then five vertical specialisations: Forest-based bioeconomy, Advanced manufacturing and complex systems, Digitalisation of welfare services, Nature, culture and the area's digitalisation experiences as well as Systems solutions with solar power.

In conclusion, a gender analysis was done along with a gender adaptation of the strategies. Researchers from the academic world, managers and employees from cluster companies, cluster organisation boards and employees, employees in institutions, management for innovation platforms and employees in public organisations have taken part in the process through workshops and consultations of documents. A total of more than fifty people participated of whom almost 40 percent have been women and just over 60 percent men. So far, the work has progressed through the first four phases in the Sevilla platform's planning model. These phases are Analysis, Process, Vision and Priorities. What remains to be done is to, under Process, supplement with a description of how the implementation of the strategy will be organised, under the Policy mix stage to draw up plans of action including goals, and in the final phase, Monitoring, devise a plan for follow-up, evaluation and learning. This also includes re-evaluating prioritisations at regular intervals.

ORGANISATION AND ROLES

Regional development often involves processing areas where one individual actor is insufficient for solving a problem; finding a solution requires the participation of many. For this there is a context involving globalisation, foreign ownership of companies, economic integration and increased importance of knowledge and technology. One consequence of this is a reduced level of control.

Regional leadership in such an environment puts to the test the level of knowhow, relationships and a network at a local, regional, national and international level, the ability to mobilise, guide and negotiate, financial opportunities, communication and processing expertise, gender mainstreaming etc etc. But also the ability to be able to delegate responsibility and authority based on the requirements of the assignment. It is necessary to be able to shift initiatives to someone with more detailed knowledge on what is required and what it is possible to achieve. Essentially, leadership which affirms the entrepreneurial discovery process. At the same time, the democratic perspective must be a part of it.

The Swedish government has established an innovation council headed by the Swedish Prime Minister and consisting of representatives from the government, business, research and labour market parties. The Government Offices of Sweden would encourage the regions to assemble forums with whom the national innovation council can carry on a dialogue.

By European standards, Värmland is a small region. As a result, the number of actors in the innovation support system is limited. There is a strong culture of cooperation and many of these actors are known to one another. The region has therefore neither the capacity for nor the need for an extensive formal organisation for implementation of the strategy.

Since Värmland has established cluster organisations with clear connections to the specialisations, there are actors with the ability to take a leading role in the implementation.

Part of the task of developing proposals for plans of action will be to offer suggestions on the organisation and control of the implementation.

In parallel with the planning work, Karlstad University and Region Värmland will draw up an agreement of cooperation, within research primarily, but which can also encompass education and training. The aim here is for the agreement to be based on specialisations in VRIS3 and in that way to become a part of the implementation.