



## Region Värmland

### CDG Second Round Visit 1-3 February 2010

CDG members: Steve Garlick, Fumi Kitagawa (leader), Kate Sankey

## I Introduction

### Background

The Region Värmland, in collaboration with Karlstad University, participates in the PURE project as a follow up to the previous OECD project (2005-6). The PURE project is seen as an opportunity for the Värmland Region to take the next step for regional development. Phase one of the Region Värmland's strategy has effectively been to strengthen collaboration within and between key regional actor organisations and the University in the context of the region's competitive strengths. This phase has involved establishing the appropriate and agreed regional and university infrastructure to make this work.

The OECD project provided an initial stimulus for this work and the first round of the PURE project identified particular initiatives that could be undertaken. In effect the PURE project seeks to go beyond strategic planning by assisting Värmland with particular initiatives that operationalise its planning from the ground up. Phase two effectively is taking this collaborative model into the global market place first with other relevant PURE project partner regions and then more widely to ensure there are region-wide benefits. Professor Steve Garlick, who had participated in the 2005 OECD peer review visit, identified substantial progress in the formation of regional partnerships over the 5 years since the review in 2005.

The CDG First Round Visit to the region took place in 6- 8 April 2009, some 10 months before the Second Round Visit. The outcome of the first round CDG visit in April 2009 is summarised in Regional Visit Report (RVR1) *Towards Systems of Learning*. In that first CDG report we recommended certain new initiatives be explored jointly by the region and the University in the following specific areas: ***Human capital development strategy*** and ***Regional Innovation System strategy***.

### Aim of the CDG Second Round Visit

The purpose of the Second Round Visit is twofold. First, to identify:

- what has been achieved since the Project started, what progress has been achieved, in terms of the Action Plan,
- what problems have prevented or delayed progress, and

- any new aspirations for regional engagement and development that may have grown in the meanwhile.

Second, to suggest new directions and initiatives that might enable a whole-of-region approach, thereby providing the regional impetus to reach-out and partner with other regions around the world.

In the specific context of the Region Värmland, the CDG First Round Visit in April 2009 identified several challenges for the region:

- changes in national policy for regions (amalgamation),
- changes in national policy for higher education (skewed funding and concentration threats) and
- general issues concerning innovation in the global environment.

The CDG members were specifically requested to make inputs which will be relevant to the Regional Action Plan to be developed in early 2010, based on the Regional Development Programme of 2009.

### **Structure of this report**

This short report is structured as follows.

## **II SUMMARY OF FINDINGS**

Current political economy surrounding the Region;

University and the Region;

Human Resource Development Strategy;

Regional Innovation Systems;

Regional and University Benchmarking

## **III KEY CHALLENGES AND RECOMMENDATIONS**

Implementing Innovation

Changing Academic Culture

Integrated Human Resource Development Strategy

Building Regional Intelligence

Joined up Implementation

## **IV CONCLUDING REMARKS - A WAY FORWARD**

**Appendix: Professor of Practice** – the experiences of University of Newcastle in England.

## II SUMMARY OF FINDINGS OF THE SECOND VISIT

### *Current political economy surrounding the Region*

The global economic downturn since late 2008 has been affecting the region, especially in terms of employment and industrial competitiveness. Some of the changes and challenges occurring over the last 12 months or so have to be put in perspective in terms of both short term changes and transformation due to the current economic situation, and longer term strategic direction of the region.

- Old industrial manufacturing sectors (e.g. steel, pulp and paper production and textiles) have been declining and being revitalised through new ways of working and innovation, at the same time spreading their reach through increased international competition. New skill and capability sets are required in both short and longer terms to meet these challenges. It is also expected that there will be a shortage of workforce due to the general ageing of the working population.
- Research and Innovation Bill (2008) focussed on large basic science, and issues concerning the roles of non-metropolitan based and smaller universities are not being emphasised in current national innovation systems policy. This has been recognised as a potential challenge for Karlstad University and the region, and is expected to have further implications for inter- regional inequality.
- Given the ongoing political debate about the formation of Västra Götaland, (Greater Gothenburg Region with amalgamation of neighbouring regions), there are a number of political challenges for Region Värmland and its leadership. There is a **recent trend of stronger regional planning and governance, and the increased significance of Regional Co-ordination Bodies** (*kommunalt samverkansorgan*), such as Region Värmland is recognised. **Overall, however, there are a number of uncertainties in the process of amalgamation.** See the recent OECD Territorial Review of Sweden (2010) for details of current Swedish territorial development issues. One concern brought about by the uncertainties surrounding the amalgamation discussions is that it poses some risk to the rapidly emerging Region Värmland brand that is appearing through the business cluster arrangements. It also poses a risk for the University. There is no doubt that national higher education policy is seeking larger and possibly fewer higher education institutions to boost lower levels of participation in non-metropolitan Sweden compared to international averages.

### *Regional Innovation System*

In the area of Regional Innovation Strategies, we witnessed a number of significant achievements both in terms of regional cluster organisations, and overall regional architecture to connect different strategic players, both locally and internationally.

The development of The Packaging Arena exemplifies recent development in regional collaborative approach to building innovation systems. As a key part of the Värmland regional innovation system, The Packaging Arena contributes immensely to the inter-cluster interactions and internationalising innovation architecture of the regional economy. The Packaging Arena is an environment for consumer-driven packaging development. Consumer information is made available to retail outlets that utilise the Packaging Media Lab as a living laboratory for testing out new product displays. The Packaging Arena acts as a platform organisation, linking researchers on user innovation from the Service Research Centre at Karlstad University, and developing linkages with overseas firms and organisations. The Japan desk at the Packaging Arena is important because of the close knowledge transfer links established with the Japanese packaging industry. Further international connections are growing with South Korea, China and India.

The Packaging Arena aims to make Värmland visible as a leading packaging research, design and production centre, opening doors for international co-operation and stimulating foreign direct investment into the region. These global connections would promote regional innovation processes. Indeed, The Packaging Arena is seen to play a key part for the Värmland regional innovation system, connecting leading clusters in Värmland. It is closely connected with 'Graphics Valley' in Sunne; the *Paper Province*, a well-established cluster of paper manufacturers; and an ICT innovation platform, *Compare*.

There is a new development in creative industry, taking cross-cluster approach, combining existing competences from other clusters.

The challenge identified by Region Värmland and which is included in the Action Plan is **how to foster an entrepreneurial innovation culture in Värmland**.

### ***The University and the Region***

In terms of the strategic relationship between the region and Karlstad University, one of the most important achievements over the last 12 months is the prospective appointments of professors partly financed by the Region Värmland with close links with the clusters. This is a strategic initiative taken by the region to support research activities at the University directed at furthering knowledge in strategic areas of regional significance.

There have been a number of organic as well as strategic relationships being built between the University and the Region. For example, there are PhD studentships focusing on the issues of regional innovation clusters. The Region Värmland and the University have signed a Memorandum of Understanding (MOU) with specific actions and goals; the Region Värmland meets with the Rector every two weeks to discuss areas of collaboration. The links between regional clusters and the University have developed substantially over the year. A one-stop-shop at the University for small and medium enterprises (SMEs) has been opened to make the University more accessible to firms in the region. We learnt that since the last visit, further developments have been made with the existing projects and initiatives (e.g. Key actors programme funded by Vinnova, and Children's University).

The recognised crisis due to the National Research Bill seems to have pushed the relationship between the University and the Region forward. These developments have to continue with appropriate and sustainable institutional mechanisms, leadership, and human resources development.

### ***Human Resource Development Strategy***

In terms of the Human capital development strategy, the Region Värmland has developed a number of locally based skills provisions. This will add a strategic advantage, given the recent national policy change to make the regional authority responsible for linking education and regional growth. The CDG had an opportunity to get a wider perspective on the regional skills provisions in this visit, beyond those related to the University. There are a number of locally based industry-led initiatives including programmes at the Technical College, and organisational learning approach in health and care sector. The Karlstad Technical Centre (KTC), located within the Metso Paper industrial estate is a purpose built, well resourced training establishment. The KTC offers upper secondary school technical training as well as advanced vocational education.

The University research group is conducting a strategic and action based research project funded by Vinnova, “An innovation system for the development of a systematic and strategic approach towards HRD and change management”. This aims to provide strategic HRD approach through regional collaboration.

In the Swedish education and training policy, a recent change in ‘higher vocational education’ provides some uncertainty in terms of qualification, progression, and the role of university in it.

### ***Regional and University Benchmarking***

The PURE benchmarking tools had been employed in the region, and we had discussions about the results of each of the tools during the visit. Both the regional tool and HE tool were found to be helpful in facilitating dialogues, although some of the cultural biases in the tools were noticed. One of the useful findings from the regional benchmarking tool is that “the business sector regards the regional leadership as indistinct especially when it comes to the roles and responsibilities between Region Värmland and the County Administrative Board”. This raises an issue of the perception of the business sector concerning the roles and functions of public sector organisations, and how this could be improved by better communication.

In terms of statistical data, international comparison seems to be difficult and contested due to the availability of comparable indicators and data sets. Värmland region made some comparative analysis with Jämtland, another PURE region, and neighbouring region of Dalarna, which helps to highlight a number of regional characteristics.

### III KEY CHALLENGES AND RECOMMENDATIONS

#### 1. Regional Innovation System – From Embedding Innovation Structures to Implementing Innovation and Entrepreneurship

**Värmland has been very successful in *constructing a regional innovation system*.** The challenge now seems to be how to implement it, and how to make strategies into sustainable actions. Some of the issues include: to understand how innovation happens within firms, especially in small and medium enterprises (SMEs); to facilitate internationalization of SMEs; to support ways of connecting the university research in an appropriate way with SMEs and to connect foreign investment to local networks of firms - in other words, how to *regionalise* local SMEs' industry-specific clusters and then expose them to the *international* arena. Cluster organisations and platforms would seem to be the essential instrument in making these happen. **Horizontal links between different clusters and platform organisations need to be further promoted in order to encourage new innovation and entrepreneurship.** This is particularly relevant for the creative industry sector which is already trying new ways of connecting clusters, developing entrepreneurship and competences which will need to be explored, including developing international linkages.

**Regional innovation strategies need to emphasise the entrepreneurship agenda, in dialogue with Human Resource development strategies.** Further collaboration with ALMI in terms of venture financing, and a close collaboration with foreign investment agency is needed.

#### 2. Changing the Academic Culture

The Region Värmland and Karlstad University have developed a number of collaborative working relationships at strategic level. The challenge is how to implement new innovative partnerships between the two sectors – the higher education and the regional government. Strategies are in place, and now more mechanisms are needed to ensure that stronger ties and working relationships are forged between the two sectors. At the University, closer links need to be established with industrial research within the region.

As mentioned above, the strategic investment in the new professorial appointments is a great way forward. However, changing the culture at the University takes long time, and a number of interim mechanisms would be needed, to further promote communication and flows of knowledge and people between the university and industry. More recognition and reward mechanisms will need to be introduced to encourage regional engagement as part of academic work. Encouraging exchange of professionals between the university and industry is another way of promoting knowledge flows.

For example, some of the experiences of University of Newcastle and City of Newcastle with *Professor of Practice* (e.g. industrial profession half time appointment at university) would be useful. See the Appendix for the example of University of Newcastle in England.

### 3. Human Resource Development Strategy – More Integrated Approach

**Promoting the culture of entrepreneurship seems to be the biggest challenge in terms of human resource development in Värmland.** The historical industrial structure in the region hasn't promoted entrepreneurial activities although there are new perceptions with younger generations. Entrepreneurial education at school level, technical college level and the university level needs to be strategically linked.

***A systematic approach to lifelong learning and competence building is needed.*** The Innovation and entrepreneurship agenda has to be part of the human resource development strategies of the region with vertical and horizontal partnerships. In general, in order to meet the needs of industry, **industrial placements and entrepreneurial mentoring need to be strengthened both at colleges and the university (e.g. student greenhouse).** The work and expertise of the Work Life research centre at Karlstad University should be a great asset in this respect for the region. Karlstad University should play a more proactive role in developing flexible CPD (continuing professional development) courses to meet the needs of regional industry, in close collaboration with the University's commercial consultative arm.

**Attracting young people to the region - more 'place marketing' needed** – for example, more strategic recruiting of graduates from Gothenburg might be a possibility, emphasising the quality of life the region could provide. **A place marketing strategy might be needed to attract young entrepreneurs.** For instance, experiences of The Arvika festival may be a catalyst to attract cultural entrepreneurs.

### 4. Building Regional Intelligence

In order to ensure the sustainability of on-going innovative transformation of the region, monitoring what has been achieved, both short term and long term, will be imperative.

A Regional Observatory which provides a wide range of statistics and multi-level intelligence system, including national/regional labour market analysis and global sector-based market analysis, would be a way forward, and this could be developed in collaboration with Karlstad University. Action oriented research as well as quantitative research conducted at the University could feed into such mechanisms. Centre for Service Innovation, Work Life research centre and Research Centre for Regional Development, for example, are great assets for the region. **Karlstad University can act as a think tank for the Region.**

PURE Benchmark tools could be a way to start in terms of benchmarking with other regions, but it is of limited value in terms of comparability; as Värmland has already started collating comparative data sets, a possibility of working with Jämtland to build up some data base might be explored further.

## **5. Joined up Implementation of Regional Strategies and Place Marketing**

Region Värmland has been successful in developing a regional institutional architecture and leadership. However, given the prospective political uncertainties, further capacity building of regional leadership will be required.

In order to strengthen the links between the region and the university, **a joint leadership skills development** provisions between the region and the University might be pursued. For example joint middle management CPD courses could be explored.

Regional innovation thinking should not be dominated by the public actors – rather the main actors are the businesses, and the non-governmental and community-based players.

There are a number of differences between Karlstad and the rural areas. Balance needs to be struck between the different needs in urban and rural areas.

A collaborative approach is needed in **further ‘place marketing’** - to make the region visible internationally and attract people, finance and industry.

## **IV CONCLUDING REMARKS – A WAY FORWARD**

The Region Värmland has made a number of impressive achievements over the last five years in constructing a robust but flexible regional innovation system. The appropriate institutional ingredients are already in place. In order to meet the new challenges, nurturing culture and practices of innovation and entrepreneurship is more than ever needed. In this short report, we identified the following key challenges and recommendations:

Implementing Innovation and Entrepreneurship

Changing Academic Culture

Integrated Human Resource Development Strategy

Building Regional Intelligence

Joined up Implementation and Place Marketing

The new Regional Action Plan has to be an integrative vehicle in order to achieve the goals identified in Regional Development Programme of 2009.

The CDG identifies three ‘next steps’ toward an integrated knowledge-based region. This could be done through:



- **internationalisation of RIS**, which goes beyond the collaborative regional cluster architecture;
- **development of a human capability plan** for the region to address some of the demographic concerns (eg 'brain drain') and **to strengthen the connection between education and the clusters**, especially through **entrepreneurship agenda**; and
- **Integration of cultural issues and the fostering of creative entrepreneurs** (fashion, film, art, drama, music, museums) by building a dialogue between creative people and the clusters.

## **Appendix**

**University of Newcastle** is “a world- class civic university” according to their Vision 2021. *Engagement Activities* are included in its academic promotion criteria. The University has played a central role in building Newcastle as a Science City in 2004, in partnership with Newcastle City Council, ONE NorthEast (the Regional Development Agency). The Newcastle University Business School has appointed four Professors of Practice, half supported by the university and half by ONE NorthEast.

University of Newcastle<sup>1</sup>

The role of the Professors of Practice correlates directly with the Newcastle University Business School’s strategic mission of being “at the forefront of understanding business and professional practice and policy”.

The Professors of Practice are a living pilot of Newcastle University’s approach to being a “civic university”, centrally placed within the knowledge economy. Newcastle University Business School has four Professors of Practice, all with successful track records in business and industry and all running their own companies. They bring this commercial acumen and hands-on experience to Newcastle University. The Professors of Practice work part-time, allowing them to work both in their own enterprises and in the University. A crucial element of their role, and of those who support their role, is to build and encourage relationships with a wide variety of stakeholders.

The purpose of the Professors of Practice (PoP) is twofold: to attract industry and change the culture of the university. The POPs are designed to attract PhD high-tech firm founders, in the science city theme areas.<sup>2</sup>

They are expected to have developed ideas for research that are too advanced to be pursued in their firm but that could be the basis for a university research group, to attract external funds. The optimum expectation is that all or part of a PoP's firm might follow them to Newcastle. Within the university, the PoP is expected to serve as a role model for faculty members contemplating initiating a start-up and as a link between the university's business school and science departments. These faculties are expected to work closely with the science city theme leaders, making significant contributions in developing translational activities and associated education programs.<sup>3</sup>

<sup>1</sup> <http://www.ncl.ac.uk/nubs/business/pops.htm> accessed 22 March 2010

<sup>2</sup> The themes are: aging and health, energy and environment, molecular engineering, and stem-cell and regenerative medicine.

<sup>3</sup> [http://www.bc.edu/bc\\_org/avp/soe/cihe/newsletter/Number49/p10\\_Etzkowitz\\_Dzisah.htm](http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number49/p10_Etzkowitz_Dzisah.htm) accessed 22 March 2010