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INNOVATION AND GOVERNANCE: ETHICS ON THE AGENDA

This issue of Nordregio News focuses on innovation and governance. What are the key issues in innovation policies and how should they be considered in governance? We view this from different perspectives, with a common focus on the interests of people, their institutions and the knowledge they bring to the table.



Different modes of innovation have different normative implications regarding whose interests and knowledge count as significant. National economic welfare is the predominant normative value driving innovation policies; which are often operationalised using success criteria such as competitiveness, economic growth and production of know-how protected by intellectual property rights. However, e.g. innovation in the bioeconomy raises questions over environmental sustainability, social justice and human rights relating to land, forests, the marine environment and water. All of these are vital to human subsistence, are limited in supply and are usually difficult or impossible to reproduce solely by technological means and capital.

In this issue, you will find an article on governing bottom-up approaches, such as social innovation – is it even needed? In rural communities, these bottom-up activities have arisen alongside traditional public tasks and now raise questions about secure and equal access to services for all. The social innovation article highlights the importance of a bottom-up approach to securing legitimacy and long-term development and provides case examples from the Nordic countries.

The article on a sustainable Nordic bioeconomy highlights the role of local and regional governments in creating sustainable (bio)economies in rural regions. Activities such as fishing, farming, forestry and energy production are attached to physical territories governed by communities with nature-based economies. They are embedded in communities with social relations and institutions that regulate matters such as resource use rights and local supply chains. Therefore, gov-

ernments must ensure that innovation policies consider the rights of present and future people to viable livelihoods and the interests of local communities, in addition to 'solving collective action problems' and counteracting the negative externalities that innovation may generate.

The smart specialisation article emphasises the role of public authorities in kicking-off smart specialisation strategies by utilising specific regional knowledge. Public authorities have the key role in utilising the know-how potential of a region – but who should be empowered in the innovation process?

The normative goals we set for innovation policies have distinct consequences for the institutional design of innovation systems. As active players in the innovation system, public authorities must be particularly careful to ensure that poor and marginalised groups in the social, economic and environmental spheres are given a voice, and that their wishes carry appropriate weight in the innovation process. This applies whether the regions are searching for smart specialisation strategies or the municipalities are seeking sustainable energy solutions or new welfare services through social innovation. It is the role of public policy and governance systems to ensure that the interests and needs of people are taken into account no matter whether they live in rural Jutland or metropolitan Stockholm. We cannot measure the results of innovation policies simply by measures of gross productivity, investment in research or the number of patents, but must evaluate their impact on different groups of people and the environment. The BSR-TeMo project is one such initiative, where indicators at the macro-regional level provide an evidence base on which to increase cohesion and reduce regional disparities. I wish you inspiring moments with this issue!

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LOCAL INITIATIVES THRIVE WITH RECOGNITION AND SUPPORT

Is it possible to govern using a bottom-up approach? And is it necessary? To succeed, even bottom-up initiatives need support and a place in the governance structure. Social innovation is one example of a bottom-up approach currently attracting attention in the Nordic countries. It is not a new phenomenon—communities have been working together for years to come up with creative solutions for the challenges they face. Recently however, social innovation has been attracting increased attention as a possible service provision solution in demographically challenged areas — especially in rural and remote areas.

BY LINDA RANDALL AND LENEISJA JUNGSBERG

Photos of different Social Innovation projects by Nordregio and Reidun Aspmo



”THERE ARE TWO SCHOOLS OF THOUGHT REGARDING THE ROLE OF THE PUBLIC SECTOR IN SOCIAL INNOVATION. SOME SEE SOCIAL INNOVATION AS A DIRECT RESPONSE TO THE FAILURE OF PUBLIC POLICIES...FOR OTHERS, SOCIAL INNOVATION IS A HYBRID PHENOMENON, DRAWING DIFFERENT RESOURCES FROM PUBLIC, PRIVATE, THIRD SECTOR AND CIVIL SOCIETY ACTORS. ”

Social innovation as a local development tool

Social innovation is a rather special kind of innovation. It is not simply a new way of doing something involving people as opposed to technology. It is an innovation produced by a community or group that strengthens the community, both through outcomes and the innovation process. Put simply, social innovation is innovation that is social in both its means and its ends. It can only be initiated through a social process, and therefore requires some level of community spirit and cohesion. However, in the process of achieving its aims, it also builds, or strengthens, the capacity of the community to respond to future challenges. As such, social innovation can be seen as having both direct and indirect benefits and as being a key driver of local bottom-up development processes. Although the concept is relatively new, activities that could be labelled as social innovation have been occurring for years.

Social innovation has received quite a bit of attention in urban areas, but is considerably less well understood in rural and sparsely populated contexts. In contrast to anonymous urban life, rural areas are traditionally associated with strong community networks. Here, communities are often deeply rooted in particular places, and the “local” dimension of everyday activities plays an important role in shaping the ties developed between community members. Such networks seem to be a particularly important source of social innovation. They are also strengthened and supported through the innovation process.

Social innovation is attracting particular attention in the context of a growing push towards increased efficiency in the use of constantly shrinking public resources. It is also seen as a potential avenue through which to address the challenges faced by rural areas as a result of rural-urban migration and population aging.

Governance and social innovation

There are two schools of thought regarding the role of the public sector in social innovation. Some see social innovation as a direct response to the failure of public policies, making it, by definition, independent from the public sector. For others, social innovation is a hybrid phenomenon, drawing different resources from public, private, third sector and civil society actors. Welfare regime contexts and forms of local governance (centralized v. localized) play a substantial role in shaping the

understanding of social innovation, and as a result, tend to vary between countries.

In the Nordic context, the relationships between municipalities and communities are often relatively closer. This results in more public-sector-led social innovation and greater involvement from the public sector, even in community-led social innovation. Much of the social innovation in the Nordic countries is initiated with at least some involvement from the public sector. Some continues to receive funding, while some find other means of financial support. In some cases, the local municipality is part of the new initiative before they hand it over to other actors.

Networks, both local and on a broader scale, are important in sustaining and scaling-up social innovation. This project found that promoting an initiative to a broader audience often results in opportunities to scale-up the original idea and even bring the same model to other Nordic countries. However, this also requires a sound financial model that may be based on income from members, public and/or private funds, sale of services or philanthropic donations.

Social innovation in the Nordic countries

In the Nordic countries, the public sector is highly engaged in developing new solutions to address societal needs. The debate about how to spend tax revenue in the most efficient ways is ongoing, and as part of their strategy to promote themselves as an attractive area to live, many rural municipalities work to engage civil society. Although it is possible to discuss social innovation in a broader Nordic context, it is also important to recognize that there are differences between the Nordic countries. “Social Innovation in Local Development in the Nordic Countries and Scotland” is a Web-based resource that provides in-depth insight into the national contexts for social innovation in each of the Nordic countries and in Scotland, along with 23 practical examples of social innovation in rural and sparsely populated areas. The project was conducted by Nordregio on behalf of the Nordic Working Group on Demography and Welfare 2013–2016, which was established by the Nordic Council of Ministers.

To learn more about these social innovations and to explore more cases, please visit: www.nordregio.se/socialinnovation.



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Example #1**Area committees in remote parts of Rovaniemi (Rovaniemi municipality, Finland)**

The municipality of Rovaniemi in Finland has established committees in its most remote areas as a way to improve close-range democracy. These area committees are responsible for the provision of certain public services (comprehensive education, culture, sports, youth services, health care information, day care, home care and local development) and the associated budgets. They are also responsible and have budgets for rural development in their areas. The motivation for this approach is that, given the aging population and long distances, local knowledge is vital to creating solutions that suit the preconditions. The first area committee was established in Rovaniemi in the 1990s, and scaled-up in 2013 to cover other rural areas of this geographically vast municipality.

Example #2**Sorø Senior Service (Sorø municipality, Denmark)**

Sorø Senior Service is a network of 60 volunteers that delivers groceries to elderly citizens who live far from grocery stores and have difficulty managing the shopping themselves. This innovation was devised by a group of retired people who met frequently for various social activities and were concerned about the implications of reduced mobility for elderly people living in more remote areas with limited public transport options. A volunteer group was quickly established with support from the municipality. The volunteers consist of retired people who have time to carry out grocery shopping for others. This service, which provides delivery once a week, is free, with groceries purchased via the Internet.

Example #3**Local solution improves Ramsjö's public meal program (Ljusdal, Sweden)**

A local entrepreneur in Ramsjö village in Sweden has taken over public meal provision for elderly residents—a service that was previously the responsibility of the municipality. This initiative was part of the Innovation Procurement X project, which aimed to test innovative public procurement as a new method for meeting societal challenges. Residents' satisfaction with the service has increased since its implementation, and the social interaction enabled by this local approach has had a positive effect on well-being. Meals are now prepared locally, which supports local development through job creation and increased revenue for the local food store. The municipality is currently carrying out a feasibility study exploring the possibility of all public services in the Ramsjö district being outsourced and run by local actors.

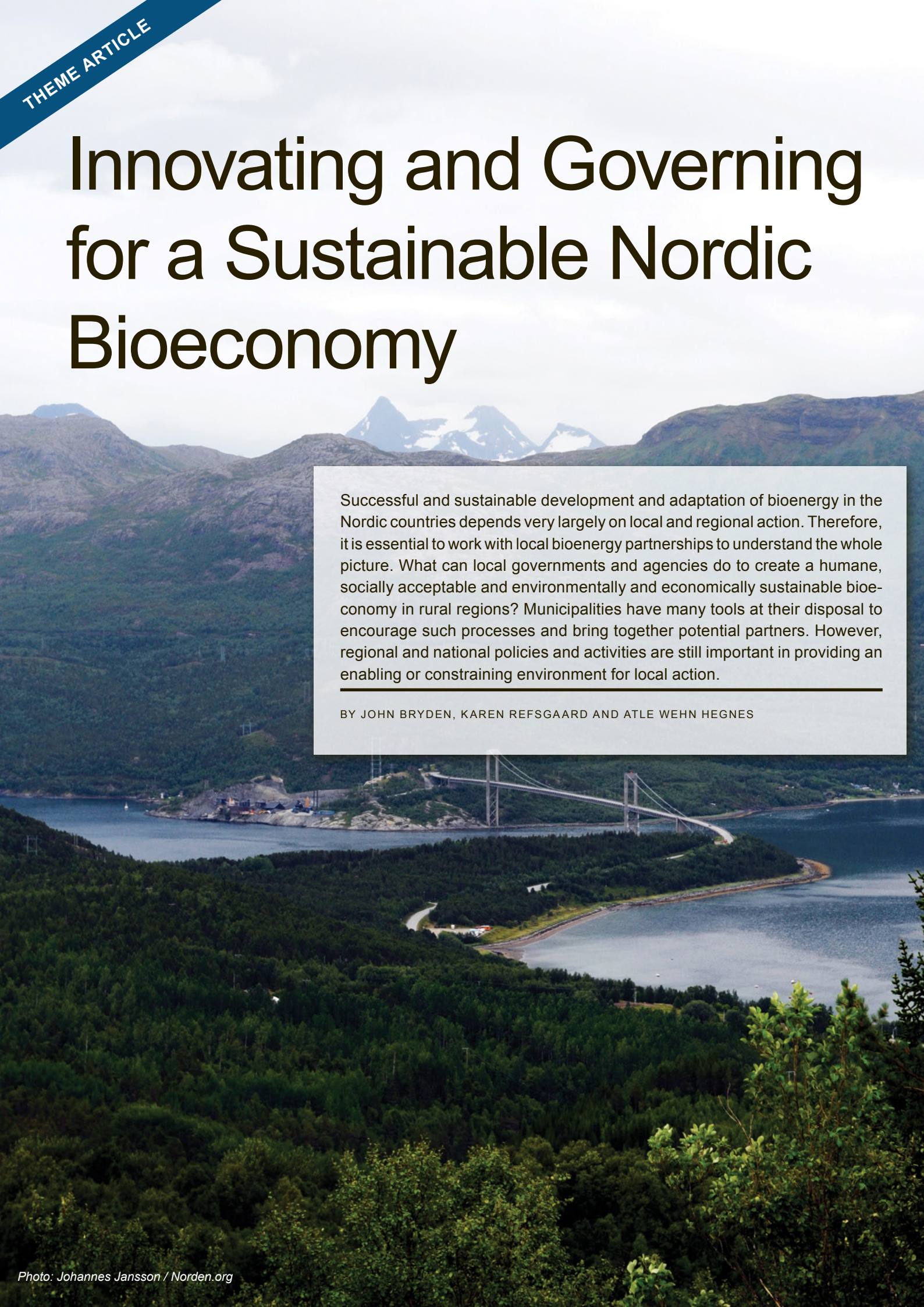
Example #4**Innovation work in Bærum (Bærum municipality, Norway)**

Bærum municipality in Norway has been working systematically to mainstream innovation in the public sector. Among the achievements to come out of this work so far is a smart grocery shopping service developed and implemented by in-home care staff. This initiative combines both technological and social innovation and is based on cooperation between the private (Kolonial.no food chain) and public (Bærum municipality) sectors. It allows service users to do their grocery shopping online using an iPad during visits from home care personnel. Groceries are then distributed to users by drivers at fixed times daily. Six hundred home care service users are presently utilizing the online shopping solution, resulting in both cost savings for the municipality and an improved experience for users. This innovation has already been applied in other municipalities in Norway.

Innovating and Governing for a Sustainable Nordic Bioeconomy

Successful and sustainable development and adaptation of bioenergy in the Nordic countries depends very largely on local and regional action. Therefore, it is essential to work with local bioenergy partnerships to understand the whole picture. What can local governments and agencies do to create a humane, socially acceptable and environmentally and economically sustainable bioeconomy in rural regions? Municipalities have many tools at their disposal to encourage such processes and bring together potential partners. However, regional and national policies and activities are still important in providing an enabling or constraining environment for local action.

BY JOHN BRYDEN, KAREN REFSGAARD AND ATLE WEHN HEGNES





To dig deeper into the question of the role of local governments, the interdisciplinary team from NIBIO in Norway – Nordregio covering Finland and Sweden, and CISA in Italy – worked with local citizens, enterprises, foresters, municipalities, and experts creating and adapting forest-based bioenergy enterprises.

We worked with local partnerships adopting and adapting bioenergy to understand the processes involved, the role of different partners, and the impacts of their activities on local economies, people, environment and climate. We found good examples of effective partnerships between local municipalities, foresters, timber processors, citizens and experts that created innovative bioenergy projects. In several cases, these projects extended far beyond bioenergy into a sophisticated bio-cluster, with bioenergy as a by-product.

Key motives for municipalities and others are the desire to be seen as ‘sustainable’ and climate-friendly, to contribute to local employment and incomes, and to create greater security of local energy supply. Although money is always scarce, municipalities can do many things to encourage sustainability processes, including bringing together potential partners, taking decisions about heating their own public buildings, regulating new buildings and investing in pipe reticulation. At the same time, EU, national and regional policies can provide greater or lesser flexibility for local action and create a policy context that can help – or hinder – local action.

The Triple Bottom Line Outcomes for Bioenergy Development and Innovation in Rural Norway (TRIBORN) research team analysed bioenergy case studies in Norway, Finland,

Sweden and Italy over a three-year period from 2014 till 2017 to understand the whole picture. The interdisciplinary team brought broad viewpoints to the study. Social scientists analysed the social and economic aspects – asking: Do people support it? Does it pay? Does it help rural employment and incomes? How is it organized? Where does the money come from? What is the role of the local authorities? What kind of mix of international, transnational, national and local policies produce the best outcomes for people, the economy and the environment?

Foresters and natural scientists looked at the impacts on climate, the natural environment and landscapes – asking: Does it reduce harmful climate emissions compared with fossil fuels, and by how much? Does it harm the existing biological diversity? Does it harm the landscape and its recreational value or people’s perceptions of it? What impacts does it have on the water system? How and why do the answers to such questions vary in different countries, regions and municipalities?

“LOCAL AUTHORITIES CAN HELP TO BUILD STABLE MARKETS FOR BIOENERGY THROUGH THEIR OWN HEATING CHOICES FOR PUBLIC BUILDINGS”

Local partnership for mutual benefit

We observed many examples in Finland, Sweden and Norway of partnerships between local foresters, enterprises such as sawmills, energy companies, local authorities and a range of experts coming together to create new district heating or biogas and biofuel systems. Typically, these entities use waste timber and thinnings, as well as municipal biowaste and other raw materials. Using this methodology, they are developing a local ‘circular economy’ to the good of the environment, people and local economies.

Local authorities commonly play a crucial role in such processes. First of all, they can provide the rationale and the motivation to create a ‘green brand’ or ‘sustainable label’ for their local communities, for example, through a strategy of relevant activities and competence. Second, they can get the stakeholders together by identifying local actors and interests and creating space and encouraging these actors to engage in a collective learning effort.

They can go on supporting such groups into appropriate partnerships to plan and invest, and helping to gain support and acceptance of the local community. Where there are information and knowledge gaps – for example on technicalities of transformation of waste to heat – they can identify people and institutions that can fill the gaps.

Most importantly, local authorities can help to build stable markets for bioenergy through their own heating choices for public buildings – offices, schools, meeting places, hospitals – through regulations for new homes and other buildings, and through investment in the central network of district heating pipes. They can also prepare tender documents in ways that help local enterprises. In these and other ways, local authorities can create a more secure and long-term climate for investors in bioenergy and other related activities.

In the wider bioeconomy context, local authorities can map the existing industrial side streams and by-products in the region in order to increase utilization of industrial waste as a substitute for raw materials by creating connections and industrial symbiosis between companies in the region.

This may contribute to developing new business opportunities based on collaborations between forestry and other industries, as in the Örnsköldsvik Industrial Symbiosis. Such collaborations can also create local research funding for the development of innovative technologies alongside applied research and linkages to high schools and universities.

Empowering local entities to reach global goals

Examples from Norway, Finland and Sweden shine a bright light on the pathway towards a sustainable bioeconomy in which local authorities are not just ‘players’ but form the keystone in building that future. Without clear and motivated action by the local authorities, the



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INTERVIEW

”KEY MOTIVES FOR MUNICIPALITIES ARE THE DESIRE TO BE SEEN AS ‘SUSTAINABLE’, TO CONTRIBUTE TO LOCAL EMPLOYMENT AND INCOMES”

bioeconomy simply will not happen. Either local people will oppose it because to them the costs exceed the local benefits, or the essential elements for its development and adaptation will be absent.

National climate, bioenergy, forestry, energy, local development, and local government policies need to recognize this. This requires a ‘joined up’ approach by the national public authorities, and an enabling and empowering approach towards the local authorities. The bioeconomy is of course about ‘science’, but it is also crucially about locally embedded people and institutions.

The Nordic countries account for about one-third of European forest resources. They are leaders in renewable energy, CO₂ taxation, bioenergy, and the development of a bioeconomy as at least a partial replacement for fossil fuels. Thus, they are important for the development of the European low carbon economy and the circular bioeconomy. Their context, interests and concerns mean that it is important that they work together in EU and international negotiations that affect the overarching policy framework shaped by the Climate Agreements and the EU’s climate and energy policies and regulations.

Forests and forest industries are important for Nordic rural and regional development, especially in peripheral regions. They are set to become even more important in the transition from a fossil-fuel economy to a bioeconomy. As managers of the forests’ bioresources and as residents in rural areas, it is crucial that the rural regions and localities get their fair share of the benefits from this development.

EU and national policy-makers have to recognize the need for an enabling framework where specific regional and local conditions can be taken into account, local authorities are empowered, and local initiative can flower. A rigid, top-down, ‘one-size-fits-all’ approach to natural, economic and social conditions may hamper the transition.

Further Reading:

<http://www.nibio.no/prosjekter/triborn>

Inclusive Innovation in the Bioeconomy. Innovation and Development. edited by John Bryden, Stig Gezelius, Karen Refsgaard and Judith Sutz. <http://www.tandfonline.com/doi/pdf/10.1080/2157930X.2017.1281209>



Interview with Erik Eid Hohle
CEO
Energigården / The Energy Farm
Center for bioeconomy in Norway

In the TRIBORN study you focused on the role of local development, why did you find the local level important?

Through some decades of work within the bioenergy sector I have experienced that bioenergy projects in most cases are initiated by local initiatives and stakeholders. The ripple effects of bioenergy projects are often clearer to see on a local level.

What can bioeconomy offer to regions and local development? Is there future potential?

There is for sure a future potential, but I believe a sustainable bioeconomy is dependant on strong value chains and interactions between the different biobased products. Food-production, products from the wood-industries etc. all create large volumes of by products than can and should be used for bioenergy production. This will gain all the biobased productions, and make them more sustainable in both economic and ecological terms. At the same time this will create more jobs within refining biomass in general on a local level.

What would you say is a good starting point for a region when they wish to renew their governance or find new solutions for industries (e.g. support bioeconomy)?

The region needs to define and organize the local initiatives and stakeholders from the start, either they are representing the public, agriculture and forest interests, industries and others that are needed to take the bioeconomy production further. Roles and tasks must be well defined and distributed.

What was the main factor holding back innovation and new solutions when you studied the rural areas of Norway?

Lack of national support programs and regulations that could stimulate local stakeholder groups, attract green capital and investors and attract the education and research institutions to enter this market. Local and regional interest groups need longterm based support and predictable conditions from the national authorities and political sector if they want the bioeconomy sector to grow.

Did you find significant differences in advancing regional bioeconomy if you compare the Norwegian examples to other Nordic countries?

Unfortunately yes; Norway has lacked the support the other Nordic countries have had from the central authorities in this sector. This is mainly due to factors mentioned in the above answers. Lack of national level support can of course also be explained by Norway’s rich energy resource situation based on hydropower, mineral oil and natural gas. Norway has because of this a longer way to go than our Nordic neighbours in order to reach the bioeconomy goals. Through programs well coordinated by the national and regional stakeholders we can succeed, but it will take some more time to reach these goals compared to our neighbour countries.



Photo: Benjamin Suomela / Norden.org

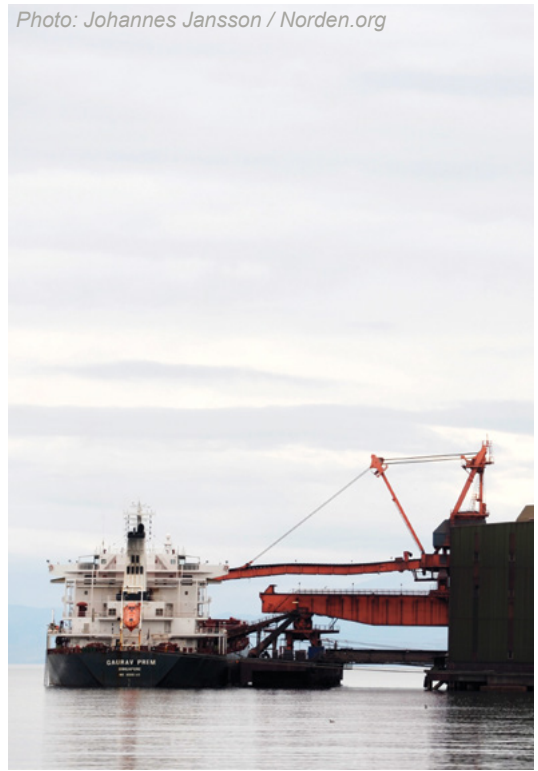


Photo: Johannes Jansson / Norden.org

INTERVIEW



**Interview with
Risto Poutiainen**
Region Mayor
Regional Council of North
Karelia, Finland

Why are you so enthusiastic about innovation in governance?

In governance, you need to renew yourself and follow what is going on around you. Good governance is part of regional competitiveness. The Nordic states have a tradition of good governance. It is our responsibility to continue that process and renew our governance.

One always hears that money is tight, resources are scarce, and bureaucracy is abundant in the region. How do you innovate under these conditions?

Nowadays, innovative processes take place at the regional, national, and global levels through collaboration and networking between different actors. Engaging with these networks and clusters is of essential importance.

Moreover, from the regional perspective, we have effectively managed to put forward public sector collaboration to ensure that scarce resources are used productively. One benefit of being a relatively small region is that we are agile and adaptable when it comes to dealing with emerging policies.

How do you push for innovation in your administration and region?

In Finland, we are undergoing the biggest regional and municipal reforms since 1865. The idea of these reforms is to strengthen political power and self-governance in these 18 regions so that we can face the coming challenges. However, at the same time, it is a question of good and transparent cooperation between both the regions and municipalities and the regions and the state. We all have our own role to play, but we have to make everything function together. Innovative operating models and experiments are part of that process. This makes it possible to implement new and innovative ways of acting.

Why is the advancing bioeconomy important for regional development?

In our regional smart specialization strategy, we have three spearheads, and the forest-based bioeconomy is one of them. We have also carried out long-term strategical work since the 1990's in North Karelia. In a nutshell, this strategical work focuses on the workplace and the regional economy, on the ecosystem and high-level expertise, and on climate change and the environment. We have achieved good results via this strategical work and focus on the ecosystem.

What is your short- and long-term vision for the Pohjois-Karjala region in terms of bioenergy?

Our goal is to be a completely fossil oil-free region by 2030 and a heating oil-free region by 2020. Our target is to increase the annual turnover of the bioeconomy sector by one billion euros by 2025 (currently 1,7 billion euros). We also want to increase the use of wood energy to 64% (currently 51%) and the use of energy from renewables to 82% by 2020. This also means that we will have to reduce greenhouse gas emissions by 80% (from 2007 to 2030). We are currently on track to achieve these targets.



**CREATING INNOVATIVE AND
RESILIENT REGIONS THROUGH
SMART SPECIALISATION
– BUT HOW?**

Increasing regional resilience through innovation and concepts such as smart specialisation is high on the regional development agenda at both the European and Nordic levels. Economic and social resilience in the Nordic regions is most commonly linked to the ability of regions and societies to counteract and adapt to external shocks such as the financial crisis and structural changes related to, for instance, global competition and the restructuring of industries. Innovativeness today is linked not only to technological development, but also to the creation of new services and social innovations to address issues such as the ageing population and the integration of immigrants, as well as to seizing the opportunities arising from refining and reusing natural resources. An agile regional innovation system is often linked to the region's ability to respond to external shocks and to renew itself amidst global fluctuations and structural changes.

BY NELLI MIKKOLA



A call for place-based innovation strategies

To encourage resilience and innovation across European regions, in 2010, the European Union (EU) launched the concepts of Smart Specialisation Strategies (S3) and Research and Innovation Strategies for Smart Specialisation (RIS3). Today, the concept of smart specialisation is both a core pillar of the EU Cohesion Policy agenda and a precondition to be addressed to receive funding from the European Regional and Development Fund.

Briefly, S3 is strategic approaches to economic development with the aim of adding support for research and innovation. They involve the process of developing a vision, identifying strong potential areas of the regional economy, developing multi-stakeholder governance mechanisms, setting strategic priorities and using policies to maximise the development potential of a region.

The S3 approach brings in the territorial dimension of innovation policies and challenges European regions to evaluate their regional strengths, competitive advantages and resources, and consequently, to engage in a joint regional process with the aim of boosting the so-called entrepreneurial discovery process and cross-sectoral innovation. The S3 approach articulates place-based local development policies by promoting closer integration between research and innovation policies and territorial policies.

By engaging in dialogue and co-operation between business, knowledge environments, public authorities, and civil society concerning the opportunities, challenges and synergies related to the society and markets, new innovative products, services, networks and governance models are expected to emerge.

By engaging in dialogue and co-operation between business, knowledge environments, public authorities, and civil society concerning the opportunities, challenges and synergies related to the society and markets, new innovative products, services, networks and governance models are expected to emerge.

Where are the bottlenecks for implementing smart specialisation in the regions?

The first analyses of the implementation of smart specialisation strategies in the European regions have also pinpointed certain challenges. Whereas parts of Northern Europe have already been working with regional innovation in a cross-sectoral manner since before the smart specialisation approach was introduced, areas of Southern Europe seem to have benefitted most from this

concept, which has helped them to crystallise regional competitive advantages and niches and to build bridges between actors and sectors for joint innovation processes. The picture appears more challenging in Eastern Europe, where the smart specialisation approach has been partially crippled by a lack of local preconditions for innovation (e.g., the adaptation of enabling technologies is at a lower level).

In addition, governmental and institutional settings are not always suited to the S3 approach, which advocates for multilevel governance and consideration of local peculiarities. On the other hand, the S3 approach has also served as an opportunity to reconsider the administrative structures and to innovate new approaches for more inclusive governance and stakeholder engagement.

The regional S3 processes can also become distorted because of the interlinkages that exist between policy prioritisation at regional, national and EU levels. Both regional practitioners and academics have underlined the risk that regional and local levels may have the tendency to replicate what is thought to be strategic at the national and global levels. Although this might be beneficial in terms of attracting funding for regional projects, it may undermine the in-depth process of identifying and upgrading regional strengths and building a resilient regional economy. However, the first mappings of S3 priorities across European regions do indicate that the diversity of chosen priorities and themes is wide.

While implementing well-designed S3 policies may enhance the position of regional expertise and businesses in the global markets and value chains, global developments tend to be out of policymakers' control; thus, even the most thought-through S3 approaches can be rapidly altered by decisions taken by, for example, multinational companies and actors.

The S3 approach argues for the strong incorporation of regional and local businesses into the joint innovation process and highlights the potential vested in cross-sectoral collaboration between businesses. This can lead to new business ideas and solutions that emerge from joint ventures between different sectoral businesses and services. However, small and medium-sized companies are often limited in their resources, so getting them engaged



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in the creative, experimental S3 processes can impose a challenge. The risk is that the so-called entrepreneurial discovery process in the region becomes too dominantly driven by public sector actors such as regional authorities and research institutions without sufficient input from entrepreneurs and businesses.

What can regional authorities and policies do?

Translating the somewhat ambiguous S3 concept into actual policy frameworks and concrete actions at the regional level is not a simple task. The role of public authorities and policy instruments for the facilitation of the smart specialisation approach is vitally important.

On the one hand, their role is to facilitate debate and dialogue between actors and sectors, and through this discussion and mapping exercise, to find legitimacy for the regional prioritisation of focus areas and projects. On the other hand, the regional authorities can play an important role in advancing and co-steering the process of smart specialisation and entrepreneurial discovery by adjusting and using regional strategies and funding for the benefit of these processes. At the same time, the regional authorities and policymakers need to put serious effort into getting the regional businesses on board the smart specialisation train and demonstrating the benefits of the S3 approach for industry and entrepreneurs.

What is to be understood by the word 'specialisation' in the term 'smart specialisation' has created something of a buzz in the European regions. Does it mean narrowing down and prioritising the strongest sectors of our regional economy, or diversifying and letting all the flowers bloom in a strategic manner? The latter is an approach that would in fact connect with the argument that diversified economic structures tend to be more resistant to external shocks. As smart specialisation is a relatively new concept, we still lack longer-term evidence regarding the success of different S3 design and implementation approaches. At the same time, it is worth bearing in mind that specialising and diversifying are not mutually exclusive terms. Promising S3 approaches seem to arise in regions that have been able to re-evaluate their own strengths, rethink the ways they work with them and engage in a truly place-based, inclusive process that also aims to address societal challenges as part of the innovative processes.

Joint learning and exchange of good practice play a role in specialising smartly

A vital element in composing sustainable innovation strategies for smart specialisation at the regional level is the identification of opportunities for mutual learning and the exchange of practices from other regions.

Joint learning and peer-review processes are central to S3 design and implementation; exchanging experiences, comparing approaches and discussing challenges and solutions with other regions can assist policymakers in designing policy tools, actions and interventions that are best suited to their region.

This learning can take place in several contexts. The focus may be on the side of policy development and innovation governance (as in the HIGHER project presented in the info box), on sectoral themes such as renewable energy or agri-food (as in the thematic Smart Specialisation Platforms for regions, launched by the European Commission) or on business engagement (as in the BSR Stars S3 project also presented in the info box).

One option for peer learning for S3 is to start by identifying regions that share similar structural conditions that are relevant for innovation-driven development (social, economic, technological, institutional and geographical characteristics). As these characteristics affect the way innovation and economic evolution occur and cannot be easily changed in the short term, this method is expected to create a realistic basis for comparing the approaches and performance of the regions. Therefore, collaborating and comparing S3 policy measures with regions facing similar challenges can be very instructive and provide concrete proposals for further S3 measures.

In conclusion

The relationship between smart specialisation and regional resilience is a subject for further investigation, and more empirical evidence will be generated in the years to come as European regions proceed in the implementation and development of their S3 approaches. Nonetheless, well-planned policy measures – preferably co-ordinated and harmonised between regional and national levels – that advocate for inclusive and interactive region-specific smart specialisation strategies have the potential to strengthen the regional economy and innovation system, and consequently increase regional resilience.

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Innovating in a laboratory. Photo by Oddleiv Apmeseth / Norden.org



Nordregio's ongoing work on smart specialisation and transnational collaboration

HIGHER – Better Policy Instruments for High Innovation Projects in the European Regions

Nordregio is one of the nine European institutions that collaborate in the framework of the Interreg Europe Programme for the implementation of HIGHER. The project aims to improve the innovation framework and the smart specialisation strategies of different EU regions. HIGHER will analyse and exchange experiences and good practices on the management and implementation of regional policy instruments that are designed to promote innovation projects between research centres, industry and public authorities.

The HIGHER project has two main goals: first, to achieve innovative models of public–private partnerships suitable for mobilising investment in related smart specialisation areas; and second, to foster entrepreneurial discovery in driving the innovation process of the policy instruments. This will be achieved through an analysis of nine policy instruments (one from each region involved in the project) to promote the innovation projects under public–private partnerships. The partners of the project will evaluate these instruments and attempt to identify their main weaknesses, thereby developing a learning process to overcome the main obstacles and enhancing better and more efficient implementation.

Through basic methods such as workshops, study visits and thematic summits, and through methods such as joint analysis, peer reviews and e-learning modules, the different regions will exchange experiences and good practices for the future improvement of the policy instruments of each region.

<http://www.interregeurope.eu/higher/>

Smart specialisation in the bio-, circular and digital economy in the Baltic Sea Region

Nordregio is also part of a project called BSR Stars S3, which seeks to enhance sustainable growth opportunities in the Baltic Sea Region, focusing on the fields of the bio-, circular and digital economy. The project stimulates transnational and cross-sectoral partnerships, develops integrated innovation support infrastructures and innovation management tools and increases the capacity of innovation actors to utilise smart specialisation strategies (S3).

BSR Stars S3 is part of the EU Strategy for the Baltic Sea Region under the BSR Stars flagship on innovation, clusters and SME networks, co-ordinated by the Nordic Council of Ministers.

<http://www.baltic.org/project/bsr-stars-s3/>

Local Smart Specialisation Strategies (LS3) for small, remote communities in the Northern Periphery and Arctic

Nordregio is the project leader for the REGINA project which targets regional innovation in the Nordic Arctic and Scotland with a special focus on regions with large scale industries. The project represents an innovative model for developing Local Smart Specialisation Strategies (LS3) for small, remote communities in the Northern Periphery and Arctic area with large-scale, resource-based industrial development. The LS3s will support local authorities in their efforts to maximise the benefits and minimise the vulnerabilities caused by industrial development.

<http://www.reginaproject.eu/>

RISK AND RESPONSIBILITY IN RURAL REGENERATION

Learning and innovation for transformative processes in regional governance

How can public policy-makers and administrators remain prepared for, and at the same time secure local democracy, in transformative processes towards green growth expectations? The huge challenge in public management is to reach the practical stage of social innovation before the next planning process scatters the human resources. The main objective in public planning is to utilise green policies to benefit the inhabitants. This task has become increasingly demanding in rural districts. To boost regional competitiveness, the continuous challenge of joining forces is difficult in a landscape of vast distances and scarce resources.

BY JANKA STENSVOLD HENRIKSEN

An accelerating frontier

A continuing challenge in public planning is to reach the implementation phase before the next planning process begins. This challenge is expanding at a growing rate as the demand for new solutions increases. Digital and technological development is outrunning the local governance capacity to remain prepared when planning for future generations. The pressure to exploit windows of opportunity builds up while a system of parallel processes creates a lack of consensus. The gap between the expectations of national policymakers and the implementation capacity at the local level is apparent. When lengthy decision-making processes result in compromises that make everyone (un)happy, this is not preparing rural districts for the increased demand and growing competitiveness of a green transformation. It is time to innovate the system of governance to allow innovation in the future.

Rural regions in the city's main frame

In response to the pressing challenge of sustainable growth, Innovation Norway (the government funding for start-ups in Norway) has announced that the world has placed an order upon the Norwegian society. With reference to the U.N.'s 17 sustainability goals, public and private leaders are urged to be innovative in delivering what the world needs. There are new demands in terms of social challenges following globalization, urbanization and digitalization that offer great opportunities for growth and prosperity. Rural districts are part of long-term city development in Norway and the competition to be an attractive rural region is increasing. Dynamic regional transformation demands new methods for

cross-disciplinary solutions across geographical boundaries. This transformation might present and release great potential for growth and value change, although challenging ownership across territories of identity raises complex issues embedded in local democracy.

Our human destiny is inextricably linked to the actions of all other living things. Respecting this principle is the fundamental challenge in changing the nature of business (Paul Hawken).

The main task in municipal governance is to provide social services and deliver solutions for the citizens. This responsibility includes planning for future sustainability for the local community. An important element then lies in highlighting the attractiveness for new entrepreneurs and residents. The competition involves not only offering something alternative to urban living, but also in offering something different than the next local community neighbour. However, embarking on a regeneration of rural living to achieve a competitive advantage is not without risk. Regional policymakers and decision-makers must consider the next generation when encouraging co-operation between local governments, businesses and civil society. To be competitive, rural districts are dependent on reaching out to their competitors for co-operation.

Co-operative competitiveness

If everyone is equally good at everything, nobody has a competitive advantage. Innovation in regional development is still dependant on human resources, entrepreneurship, community spirit and joined forces from the



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“IN MAKING THE WORLD A BETTER PLACE, WE SHOULD BE PLANNING SOMETHING GEOGRAPHICAL” (NEIL SMITH)

bottom up. To elevate innovation in different disciplines to a satisfactory level, regional forces have to power up. Combining the stake of resources and the risk of ownership can lead to solutions and social capital with real impact. How can local and regional facilitators activate platforms for better cross-disciplinary interaction and make sustainable choices simpler for citizens? The city of Oslo has been a good example of a compact city since the 70s. Due to expansion, however, the city is now experiencing a range of growing pains in order to remain economically, environmentally and socially sustainable. The city is now undergoing a transformative process of developing sustainable urban districts, to enhance their green profile, elevate culture and reconnect with nature.

The 2015 WWF review of sustainable urban districts present 11 cases of holistic design all results of planning processes, which started in the 1990s. In other words it takes long term planning to regenerate an urban environment and it can very quickly be outdated and costly to reverse. Regardless, it is equally important to zoom out, see the greater Oslo Region connected, and then look at the work in each of the 78 member municipalities. There are several arenas for public, private and civil organisations to interact and generate projects on ground level. Oslo even has a Nordic incubator for social innovation run by the private enterprise SoCentral. Their social innovation business idea is based on their experience with systemic interruption in community planning. They currently have a portfolio of social innovations addressing specific social or environmental needs, all of which economically sustainable. The projects are initiated either by SoCentral, municipalities, entrepreneurs or any socially responsible actor in collaboration with all stake-holders.

Considering the rural region of Hadeland as part of the greater region of Oslo city, it offers as an alternative life style choice to urban citizens. This strategic choice alters the scale of competition and makes our regional next door neighbour, Hurdal - the sustainable valley, an asset. The municipality of Hurdal aspires to be a zero-carbon society within 2025 and has embarked on the development of a climate smart city centre, eco village, local supply of wood for construction, local food management and a local sustainability festival. Hadelands long term focus on sustainability has led to village centre developments, piloting projects for innovation, tree building profile, a local food brand and an active start-up scene. County officials go to Hadeland for “climate safaris” to inspect wooden public buildings, visit energy saving homes and experience art in restoral architecture. Hadeland has electrical bicycle rental, a Folks museum conveying development history and Norways only Energy farm targeting the local awareness. Hadeland is now in the process of adopting a new climate plan. The work is organised by the official climate advocate, who initiates citizen contribution through a series of climate workshops. The preconditions present in Hadeland, along with its location, make it well-placed to become a sustainable rural district of Oslo. It all depends what story the community wants to tell in 20 years time.

Platform for risk-taking in public management

From a regional perspective, our primary task as connectors in transformative processes is to translate knowledge for policymakers to develop informed long-term plans. Second, there is a demand for sharing resources to power up interdisciplinary co-operation across regional borders. Third, the outcome must be focused on local turnover that engages in people’s everyday lives to generate social innovation. We need new navigation tools to visualise the future value change and utilise the space of possibility to minimise the apparent risk. Sharing ideas for a greater purpose is becoming the new normal in start-up environments across Europe. Local communities might think more like entrepreneurs to prepare for the future and embrace the concept of closer co-operation with their competitors. On the larger scale, the least risky action will be to share the risk of denser competence environments to extract local gain. The opportunity must be grasped to focus the distinctive qualities of a place.

The same call for action appeals to the community spirit and civil society to stake their local resources. Local policymakers and decision-makers are urged to focus their resources and join cross-disciplinary forces to investment in the future. It is important for policymakers to make informed decisions, and informed place-making for citizens is a key element. With the local resources at stake, it is important to highlight the potential gain and value change. Risk-taking in an intercommunal context challenges the established operational lines across geographical borders. The different operational levels invoke different sectoral strategies that end up in the same municipal administration causing conflicting priorities of resources. How a community distribute its social resources is as important as how it reallocates its annual budget. The right combination engenders prosperity, but demands more risk-taking. To enhance the potential growth, regions have to scale up and consider the bigger picture, while creating a platform to do so is a challenge left to chance.

Risk-sharing and social innovation

Can local communities implement holistic policies by translating, sharing and utilising knowledge? The rural regions are being challenged to take a strong position in the transformative process of creating sustainable cities. To deliver social, economic and environmentally innovative solutions for future citizens, they are urged to power up and join forces. This means co-operating with their competitors to achieve suitable attractiveness and provide alternatives to the cities in their region. The risk involved demands innovating the system itself and innovation can no longer be left to chance. One of the tools here is connectors that translate knowledge, utilise social solutions and dare to engage in dynamic interaction to satisfy new demands. Another is risk-sharing and social responsibility across geographical boundaries to release the potential for growth, value change and social innovation.

Macro-regional territorial monitoring – A strong foundation for cross-border governance?

BY LINDA RANDALL AND LINUS RISPLING

Innovative governance is not only about outcomes – creative approaches to data collection, interpretation and dissemination are also vital. By thinking about data in novel ways we can cast a new light on old issues, promote cooperation between different actors and provide a solid evidence base for new ideas. The territorial monitoring system for the Baltic Sea Region (BSR-TeMo) is a great example of a project that has done just that. Its aim is to inform the spatial development of the Baltic Sea Region by delivering policy-relevant insight based on regional level data covering a broad range of indicators. The system has recently undergone an expansion to improve its alignment with EU policy for the region, making even more useful as a tool to support cross-border cooperation on policy issues.

The territorial monitoring system for the Baltic Sea Region (originally titled ESPON BSR-TeMo) was developed in 2014 through a process facilitated and funded by ESPON. It was developed in close collaboration with end users, combining scientific knowledge with input from policy-makers and other professionals. As a result, it is uniquely placed to provide macro-regional understanding that transcends both national and disciplinary boundaries. National policy-makers at Visions and Strategies around the Baltic Sea (VASAB) have identified a number of links between spatial policy and other fields of public intervention and responsibility and, based on these, have developed a number of policy briefs to inform the development of cities in the Baltic Sea Region.

More recently, thanks to funding from Tillväxtverket, The Swedish Agency for Economical and Regional Growth, the scope of BSR-TeMo has been extended to improve its compatibility with the EU Strategy for the BSR. These adjustments make it particularly useful for monitoring progress towards the strategy's three main objectives: Save the sea, Connect the region and Increase prosperity. Understanding patterns relating to these indicators at a macro-regional level has great value. It allows us to identify which regions around the Baltic Sea are encountering challenges and which are experiencing positive development, providing a solid evidence-base for future policy actions to increase cohesion and reduce regional disparities across the Baltic Sea Region.

These maps provide an example of one of the indicators under the objective Increase prosperity. They show the change in net migration in Baltic Sea Region countries before and after the financial crisis. The maps demonstrate that, while the population as a whole has been growing constantly during the last years, this growth has been unevenly distributed across the region. The populations of regions in Lithuania and Latvia have been particularly affected, with substantial population decreases since 2009.

The latest edition of BSR-TeMo also includes an Index on Regional Potential for the Baltic Sea Region, providing insights into the relative performance of each region within the entire BSR macro-region. Find out how your region scored at: www.nordregio.se/temori.



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