

In this 5th Newsletter of the LARS project we report on the work on policy transfers between regions. Regional economic performance is fostered by well-targeted policy instruments and it may well be that transnational learning is the fastest path to policy development.

We report on the activities of the period, methodological challenges that we have faced but also on policy advice we can share.

In addition to reporting on past work we are also looking forward. The European Green Deal (GD) is a well-founded and ambitious initiative, but how do you deliver on the GD in the regions? With the GRETA-project extension proposal we seek to pilot a way to combine smart specialisation with the need of a green transformation.

Contents

What is the LARS Project?	2
Learning Among Regions in Times of the Corona Pandemic	3
Tapping into Finnish experiences when establishing a Regional Development Agency in Panevėžys	4
Together towards a stronger Industry 4.0 development - Panevėžys and Jakobstad	5
Exchange of good practices in Lahti	
– What was learnt and what was shared?	6
Boosting the European Green Deal through Smart Specialisation	8
Achieving common goals: GRETA met SeeRRI in Barcelona	11
The EU City Science Initiative:	
Workshop for Circular Economy in Hamburg	13
Using the DPSIR-framework to identify good practices	15
LARS measuring ICT and energy in Pomorskie region, Poland	17
Transnational Learning Seminar 5: Thoughts on Policy Advice	19

What is the LARS Project?

11 partners from **8** regions in **8** countries

**LARS helps the public sector lead
Smart specialisation processes in their regions
and connects innovation networks across regions**

**Project duration:
October 2017–September 2020**



BSR STARS
Innovation in the Baltic Sea Region

The six steps of LARS

1. Mapping of strategies in order to select the final intervention areas
2. Triple-helix gap analysis with the purpose of finding deficiencies and also good cases of innovation networks functioning
3. Matching partners in functioning transfer networks based on the “good” and “bad” practices
4. Learning on the transfers, essentially an innovation context analysis
5. Piloting new activities in the regions with the purpose of improving the innovation networks
6. Communicating the findings with a view on the wider implications of the project

The LARS partners

Regional Council of Ostrobothnia, Finland
University of Vaasa, Finland
Region Västerbotten, Sweden
Regional Council of Päijät-Häme, Finland
Hamburg University of Applied Sciences, Germany
Lithuanian Institute of Agrarian Economics, Lithuania
Ministry of Environmental Protection and Regional Development, Latvia
Lithuanian Innovation Centre, Lithuania
Oppland County Authority, Norway

Associated partners

CPMR Conference of Peripheral Maritime Regions
Office of the Marshal of the Pomorskie Voivodship, Poland

Learning Among Regions in Times of the Corona Pandemic

Jerker Johnson, Regional Council of Ostrobothnia

The Europe coming out of the Covid-19 pandemic will be a different one. Huge amounts are currently being spent all over in Europe with the purpose of keeping the economic wheels rolling. In Finland it has been estimated that the debt share ratio to GDP will rise to around 70%.

When we come out of the Corona crisis the European Green Deal designed to tackle the larger global climate challenge has not disappeared anywhere. The EU-commission has argued that it will be necessary to mobilize a sum of 1.8% of the GDP annually until 2030. This in order to finance the necessary environmental investments needed for a green transition aimed at slowing global warming.

In times of the pandemic we see increasingly that politicians, with a few notable exceptions, are turning to science for advice on how to deal with the crisis. In the field of economic development, it is not so clear-cut since there are political differences in what we perceive as "development". Nevertheless, economists have argued, whatever it is it will need resources and therefore economic development has many times been proxied with GDP.

It has been estimated that 80% of the growth in GDP stems from innovations. Launching the policy towards Smart specialisation the innovation concept has been broadened, we are essentially speaking about factors contributing to productivity growth. Innovation may be driven by science but also by dissemination of

good practices from one region to another. In fact, some of the most low-hanging fruits might be found in transnational learning.

The challenge is huge, but using a well-known metaphor there is only one way to eat an elephant – one bite at a time. The LARS project is on its final leg and has had its bite from the elephant. The project has successfully applied a methodology of 4H innovation network gap-analysis and matched partners. Partners looking for new solutions are matched with partners with proven well-working innovation partnerships. The next step will be the GRETA-project extension proposal where we seek to pilot environmental considerations in the innovation analysis.

The project has also contributed to a twinning outside the scope of the planned activities. Formal analysis within the project has also contributed in a will to learn more on the partners. This in order to receive a better understanding of the background and to get to know the stakeholders. This prompted a visit from the Lithuanian Innovation Center to Finland to learn more among partners on ways of working.

For the Newsletter we asked the partners to reflect on the study trip why it was conducted and what they have learned from the partners, in a twinning between Panevėžys, Jakobstad and Lahti.



Tapping into Finnish experiences when establishing a Regional Development Agency in Panevėžys

Tautvydas Pipiras, Lithuanian Innovation Center

Panevėžys county aims to establish a Regional Development Agency, which seeks to increase the region's attractiveness by creating measures to promote entrepreneurship and a business-friendly ecosystem, implementing projects that encourage young people to choose technological sciences in Panevėžys and strengthening cooperation between science and business institutions.

In order to achieve better results, it is useful to find out how similar initiatives are implemented by foreign development agencies abroad - what challenges and good practices accompany their daily lives. Representatives of Panevėžys City Municipality and Panevėžys Vocational Training Center together with Tautvydas Pipiras, Project Manager of the Lithuanian Innovation Center (LIC), visited the Ostrobothnia and Päijät-Häme regions in Finland.

During the visit, organized in the framework of the international consortium nurturing the potential of regional innovation LARS, representatives of LIC and Panevėžys region had the opportunity not only to meet but also initiate joint projects with representatives of business, higher education and vocational schools and specialists of Finnish regional development agencies.

"Finland has many years of experience in integrating the needs of business and industry into the education system. Schools, vocational training centers, colleges and universities - all institutions work together with the common goal - to train and educate professionals and curious professionals who meet the needs of the future market. Companies that we were able to visit: Beamex, Kemppi and Oilon are excellent examples of this, demonstrating how high value-added companies work with educational institutions and local authorities to create a sustainable and mutually beneficial Industrial 4.0 ecosystem in the region. These examples of Finnish regions are especially relevant for our case in Panevėžys, which seeks to strengthen the region's potential and international competitiveness", said Vytautas Kalinauskas, Project Manager of the Urban Development Depart-

ment of Panevėžys City Municipality, who participated in the meeting in Finland.

"By implementing the LARS initiative in the Baltic Sea region, we are helping the Panevėžys region to identify areas where the region's innovation ecosystem could be improved. We are also working together to find good examples that enable the creation of innovative value chains involving local companies and educational institutions in the region", Tautvydas Pipiras from the Lithuanian Innovation Center concluded.



Visiting calibration equipment and software developer Beamex in Jakobstad.

Together towards a stronger Industry 4.0 development - Panevėžys and Jakobstad

Daniela Mårtenson, Centria University of Applied Sciences

Expectations were high in Jakobstad when the Panevėžys county and Lithuanian Innovation Center visited Ostrobothnia. For the sub-region, the possibility to benchmark with a similar region with a diverse industrial setup is an interesting opportunity.

For the educational stakeholders the opportunity to find future partners with similar challenges and interests and is a driver for developing new ideas.

The discussions with the local vocational school Optima, the best vocational school in Finland eight times since 2009 and Centria University of Applied Sciences (UAS), with the nationally most satisfied students three years in a row, have hopefully provided the Panevėžys region with new ideas on further development of

their educational institutions. The theme of the discussions centered on how to raise students' interests also for practically oriented studies, important for the regional industry. The meeting with the Centria UAS and other regional stakeholders prompted ideas for different new cooperation through projects between the stakeholders.

The programme for the Lithuanian delegation also included company visits to the Snellman, a company working in high-quality meat production industry and to the company Beamex, with an expertise in calibration equipment and software. The discussions with both companies showed a passion for development in these companies and how a business can be hugely successful, even globally, coming from a remote part of the world. The discussions were rewarding both for the guests and the hosts.



Visiting food manufacturer Snellman, the largest private employer in the city of Jakobstad.

Combining the best practices from different regions with similar challenges and looking into the experiences of the vanguard companies can be a path of co-development in a world facing the challenge on the Industry 4.0 and the need to strengthen the regional innovation ecosystems.

The visit was useful also in the sense that it forced us hosts to analyse and verbalise the factors behind our past success but also shortcomings in our development efforts and future challenges. This in order to be able to present them to the visitors and discuss our innovations contexts. The common discussions

work as a useful mirror and forms a part of the discovering new development needs in a region.

“The visit gave us a glance into both a lot of similarities but also into opportunities and challenges that we have in common. Panevėžys, a region in a small country with a past rapid development in the business sector, could give a lot of opportunities for benchmarking and common projects in the future. Especially the producing industry and their R&D-development would really be worth a return visit with a larger team” concluded Fredrik Sandelin from Jakobstad Region Development Company Concordia.

Exchange of good practices in Lahti – What was learnt and what was shared?

Riika Kivelä, Regional Council of Päijät-Häme

Following the visit to Ostrobothnia, the experts from Lithuanian Innovation Center and from the region of Panevėžys met with business developers and company representatives in Lahti, Päijät-Häme on 20th–21st of February 2020.

The meetings formed part of LARS project activities and was organized by the Regional Council of Päijät-Häme. The aim of the visit was to exchange experiences and learning among the stakeholders

During the LARS project, both the partners from Päijät-Häme and from Lithuania have identified some similar bottlenecks in their regional innovation processes and business environment. One of the common bottlenecks is a lack of skilled and educated workforce for SMEs. More particularly, how to attract young people to remain in the region, study and work in industry. Another significant and common challenge is that companies expect more value from the cooperation with the universities and the public sector than that they have received so far. For these challenges we were looking for answers at the meeting arranged in Lahti.

The Regional Development Company LADEC Ltd hosted a meeting with presentations from the Päijät-Häme Grain Cluster and Mechatronic Cluster, Lappeenranta University of Technology, LUT, University research platforms and the Innovation Ecosystems project called Next Step. The presentations elaborated on the importance of LADECs role in combining SME's needs with funding possibilities and the expertise of business developers



Study visit in LAB University of Applied Sciences, TechLab in Lahti, Finland

and universities. For the Lithuanian Innovation Center, the publicly owned organisation model hopefully provided some ideas for consideration when establishing their own Regional Development Agency.

Both the Lahti and Panevėžys regions have many similar challenges to attract and hold on to skilled workforce in the future. Cooperation between companies and universities was the topic in discussions with LAB, Lahti University of Applied Sciences. The LAB lecturers Teijo Lahtinen and Reijo Heikkilä presented the UAS research and development activities and laboratories as well as their cooperation model with companies.

The company perspective on the cooperation was obtained visiting the companies Hartwall Ltd, Oilon and Kemppi. The companies are working in close cooperation with universities and vocational education institutes regionally and the visit provided practical examples on the cooperation.

In summary, we learned from Lithuania the importance to engage in the challenges provided by Industry 4.0. The Päijät-Häme region could apply some elements on how the public sector, for example the Regional Council and other funding organisations could be a more proactive actor in regional innovation processes. The public organisations could take a stronger role in leading and encouraging companies to use student projects and master thesis as their RDI resource.

Concluding among the participants on the challenge of skills policies, if we want to get young people to be interested in technological sciences it requires multi-channel communication outreaching the target group and closer cooperation between companies and different levels of education, including even elementary schools.



Study visit to welding company Kemppi in Lahti, Finland

Boosting the European Green Deal through Smart Specialisation

Dimitri Corpakis, Friends of Smart Specialisation

On December 11, 2019, the European Commission presented its ambitious new proposal for a European Green Deal. This was a powerful culmination of a policy debate that started earlier that year when the new European executive took shape and defended its new policy priorities before the European Parliament.

The drive towards a “Green Deal” had already started earlier in the United States, where the Democrat congresswoman Alexandria Ocasio-Cortez presented her own vision¹ for a progressive new plan for the future, taking into account the major sustainability challenges facing the planet. Her vision promoted an integrated approach encompassing the economy and society promised to provide radical solutions ahead. Although the EU approach does not follow exactly the same directions, it retained part of its rhetoric and also some of its ambition for a different pattern of growth that would respect the environment and the planet while creating opportunity for everyone. In the words of the European Commission “...The European Green Deal is about improving the well-being of people. Making Europe climate-neutral and protecting our natural habitat will be good for people, planet and economy. No one will be left behind.”²

The European Green Deal (EGD) is thus the **new growth strategy for the EU**³. As a growth strategy it has several components that need to work together, while being diverse and difficult to coordinate. Interoperability of different sectors and areas that need to be activated, followed and monitored is by definition complex and difficult to achieve, yet crucial for the plan’s success. Given its importance, the EGD capitalises heavily on inputs

The CPMR (Conference of Peripheral Maritime Regions) Baltic Sea Commission Working Group for Energy and Climate (ECWG) is working closely with the LARS project with the purpose of communicating the project findings for political consideration.

The European Green Deal (GD) needs to involve the regions and to build on the framework of Smart specialisation in order to achieve a green transformation of Europe. On the ECWG-meeting in Brussels on 3rd March Dr Dimitry Corpakis elaborated on the topic, and we asked him to further develop the ideas presented.

Dr Corpakis has a long-standing career as a Senior Official at the European Commission (EC). He is currently retired from EC but is a very active member of the Brussels-based Friends of Smart Specialization network.

of research and innovation, where a lot of possible solutions and future openings for new developments will hopefully come from. But the plan also recognises the importance of addressing specific sectors that are crucial for the success of any effort focusing on saving planetary resources, enhancing the circular economy while maintaining the competitiveness of the European economy. The Communication introducing the EGD admits that this unprecedented transformation will ‘require a strong policy response at all levels’ and significant investment efforts.

However, the Communication says little on how the strategy will be delivered at the local and regional level. This is not totally surprising since, traditionally, the major EU policy plans are conceived as more top-down solutions, requesting and expecting the adherence, cooperation and commitment for delivery from local economies. For reasons of consistency, however, one could expect a more comprehensive approach in the case of the EGD, involving, in particular, a variety of stakeholders that are all ac-

1 <https://ocasio-cortez.house.gov/gnd/resolution> accessed on 18/04/20

2 https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en#documents accessed on 18/04/20

3 COM(2019) 640 final, Brussels, 11.12.2019

tive in regional, innovation, environmental and industrial policies to name but a few. These stakeholders have been actively engaged as of 2011⁴ in the design and delivery of smart specialisation strategies at regional or national level, in the context of their regional innovation ecosystems. Smart specialisation (S3) has been a cornerstone for articulating complex development plans at regional level and the delivery of the EGD can never ignore such a reality. Despite this, the Communication does not refer to S3 at all.

Therefore, this short paper argues that a successful implementation of the EGD can only be achieved with a smart governance mechanism. Smart Specialisation has been a new policy approach for targeted investments prioritising new directions in the economy for more than 10 years.⁵ Therefore, it is arguable that the EGD can ill afford to ignore the demonstrated potential of smart specialisation to mobilise place-based innovation efforts for transformation goals.

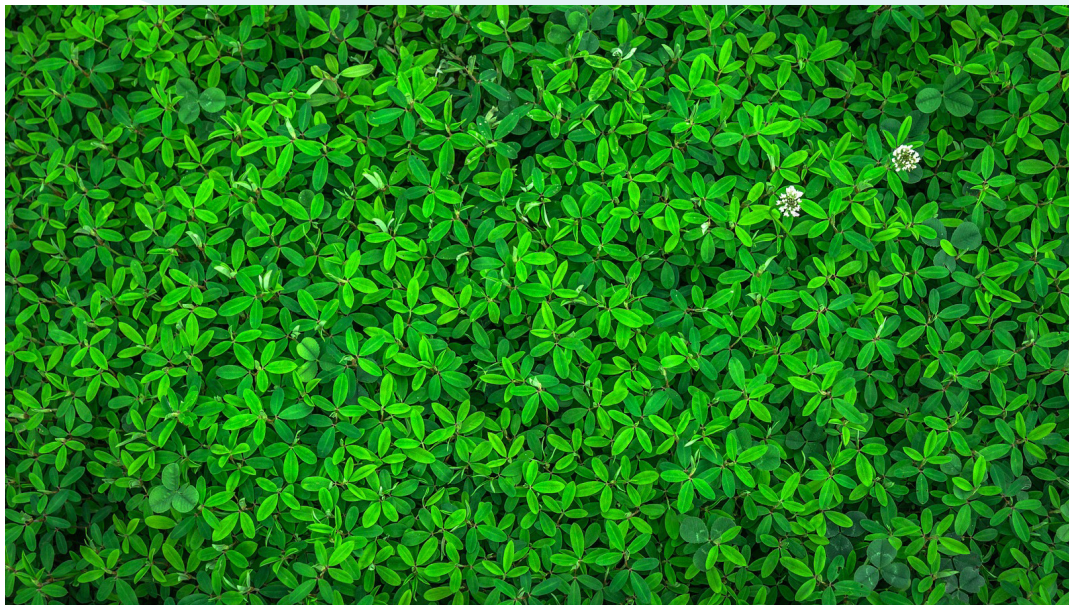
Faced with the unprecedented challenge of systemic change needed for becoming a climate-neutral continent and the huge investments that this requires, the Green Deal Communication has called upon all policies to contribute and has given direction to investments in a broad range of areas. Smart specialisation strategies that prioritise new growth opportunities for all regions in these domains cannot be neglected in such an approach. However, to step up this role in the EGD, the smart specialisation approach has to move forward towards its core mission: the alignment of strategic investments across Europe guided by 'smart complementarities' in new value chains.

A policy approach for alignment

A systemic challenge such as the Green Deal needs the mobilisation of all resources and all actors all over Europe. Smart specialisation has exactly this mission: identify new future activities based on the unique characteristics of all places. The transformation of the growth model is a transformation of the speciali-

4 <https://s3platform.jrc.ec.europa.eu/> accessed on 17/04/20

5 'Smart specialisation strategies can ensure a more effective use of public funds and can stimulate private investment. They can help regions to concentrate resources on few key priorities rather than spreading investment thinly across areas and business sector...' Regional Policy contributing to smart growth in Europe 2020 COM (2010)553 final 6 October 2010.



sation structure of our economies. To avoid fragmentation and capitalise on the diversity of European innovation eco-systems, smart specialisation is a key delivery mechanism for the new growth strategy. It can combine the directionality of the EGD roadmap with the search and co-creation path (entrepreneurial discovery) towards sustainable growth in all regions. Inter-regional partnerships will also play a key role in leveraging the alignment of place-based strengths.

A governance model, both for bottom-up co-creation and for European coordination

The EGD I requires new strategic governance capacity for transformation: a European model distinct from the dominance of monopolies or state bureaucracy. The failure of the Lisbon Strategy to guide the EU's transition to a leading knowledge economy was one of the drivers of smart specialisation. Smart governance is a key component of success and needs to be taken into account when discussing the implementation mechanism of the EGD.

The European Semester can be used for macro-economic coordination, but for coordination at micro- or meso-economic levels (strategic value chains), the role of smart specialisation strategies cannot be underestimated. We are moving a long way from the 'Open Method of Coordination'⁶ to a governance of a more integrated European innovation system. The role of political leadership at all levels (in particular, regions and cities) to give directionality to the efforts of European citizens in places where they live, work and invest, is a key factor for success.

A truly co-investment endeavour

The huge investment efforts for green transformation starts by the capacity to shift existing budgets in new directions that are identified as promising for the future. But strategic prioritisation in times of radical change can only work when all budgets move in the same direction (given well informed analysis and ev-

idence-based decision processes) and when smart specialisation becomes 'smart complementarity' achieving common goals. The commitment for co-investment across borders in joint demonstration of solutions and in complementary nodes of new value chains has an entrepreneurial dimension and needs political guidance, but the financing system should evolve in the same direction. Therefore, the new taxonomy to facilitate sustainable investment should recognise the spill-over potential of co-investment as benefit, instead of evaluating projects separately. The EGD and smart specialisation are both transformational policy frameworks. Where smart specialisation is in search of directionality, the EGD can benefit from place-based dynamics. This combination benefits a federative European approach to transformation. Therefore, the policy framework of the EGD must take smart specialisation explicitly on board.

Smart specialisation emerged first of as a mechanism to avoid fragmentation and duplication of public investments in research and innovation efforts in the latter stages of the Lisbon Strategy that aimed to make Europe 'the most competitive and dynamic knowledge-based economy in the world'. Later it succeeded in placing transformation on the agenda of 120 regional innovation strategies. At the start of an even more ambitious journey this legacy should not be ignored.

The Friends of Smart Specialisation invite all engaged stakeholders, at all policy levels, to take co-ownership for integrating a reinvigorated smart specialisation approach in the new growth strategy of the EU. Smart specialisation should be mainstreamed as a priority-setting approach for public-private transformation investments in real places, in all territories of the EU, through searching and implementing smart 'complementarities'. Coupled with the needed directionality of new European growth strategies, smart specialisation could be a blueprint for mobilising the much needed co-investments for the future of Europe.

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⁶ https://ec.europa.eu/culture/policy/strategic-framework/european-coop_en accessed on 18/04/20

Linked to the theme of the article see also the paper on "The Green Deal and Smart Specialisation" available at: <http://www.efiscentre.eu/wp-content/uploads/2020/03/The-Green-Deal-and-Smart-Specialisation-draft-2-v4-final.pdf>

Achieving common goals: GRETA met SeeRRI in Barcelona

Åge Mariussen, University of Vaasa

Until quite recently, innovation policies assumed that all innovations, by definition, are desirable. After all, innovation is based on science applied for economic purposes. What can possibly go wrong? Lots of things, obviously.

Global economic growth, driven by the wrong kinds of innovations, is extracting resources from the earth in un-sustainable ways. Innovation driven growth contributes to increasing CO₂ emissions, creating global warming. The signs of danger, in terms of new weather patterns with warm and wet winters, pollution of the Baltic Sea, frequent storms, melting ice caps and increased flooding, are clear and loud. There is wide-spread loss of biodiversity. In short, Mother Earth is knocking on our door. We must listen. There is an urgent need to take UN sustainability goals seriously in innovation policies and strategies.

This is a great new opportunity when it comes to innovation policy making. We should turn innovation processes and money in the direction of sustainable, green growth, by combining regional strategies, environmental policies and science for innovation approaches.

The new European Commission has launched a high profile initiative,

"The huge investment efforts for green transformation starts by the capacity to shift existing budgets in new directions that are identified as promising for the future. But strategic prioritisation in times of radical change can only work when (...) smart specialisation becomes 'smart complementarity' achieving common goals."

*Friends of Smart Specialisation,
in a separate article in this newsletter*

SeeRRI is a H20, SWAFS-project (Science with and for society, see: <https://seerri.eu>) and the Region of Ostrobothnia is connected with the project as a NAT (Network Affiliated Territory). On the 13th February the LARS-partners Åge Mariussen and Antti Mäenpää from the University of Vaasa and Jerker Johnson from the Regional Council of Ostrobothnia participated in the project co-creative workshop in Barcelona, Spain.

Green Deal. The aim is European Green Growth. So far, this initiative is mainly between the Commission and the member states. The initiative is promising, but as pointed out by the Friends of Smart Specialisation (see another article in this newsletter), member states are busy with lots of other things these days, and the Commission needs help from the regions. The Friends of Smart Specialisation points out that this requires that the EU Commission, member states and regions work together across sectors to create "smart complementarity". This includes crossing the sectors between science policy (Horizon), Structural Fund policies supporting regional Smart specialisation strategies, and environmental policies.

This is where the Barcelona meeting between GRETA and SeeRRI comes into the picture.

The Interreg Baltic Sea is expected to finance the GRETA (Green Transformation. A policy tool for Regional Smart Specialisation) project, coordinated by Regional Council of Ostrobothnia. GRETA will use the Green Deal initiative to drive Green Growth within our BSR regions, based on the Smart Specialisation platform. In doing so, GRETA will combine environmental policies and regional development strategies.

The SeeRRI - GRETA alliance opens up the science policy agenda of Responsible Research and Innovation (RRI). Responsible Research and Innovation (RRI) means that UN sustainability goals are taken into consideration in designing innovation strategies. The S3 platform in Ostrobothnia is a part of the SeeRRI network of territories. The core of this wide-reaching network is Nordland, Catalonia and Lower Austria. SeeRRI is coordinated by Nordland Research Institute in Norway, with Austrian Institute of Technology as an important partner. SeeRRI aims to create a European model for regional, sustainable innovation ecosystems, based on Smart specialisation principles. SeeRRI is funded by a Horizon 2020 program supporting RRI, (Science with and for Society). SeeRRI and GRETA combines science policy, regional strategies and environmental policies.

Building on cooperation with SeeRRI, GRETA aims to develop policy tools for sustainable Smart Specialisation strategies in BSR, supporting green transformation in ways, which are aligned with the EU Commission Green Deal.

GRETA partners are from Finland, Lithuania, Latvia and Sweden. Based on the LARS BSR project, GRETA partners have developed methods to identify, analyze and overcome challenges (gaps in quadruple helixes) limiting growth. Green transformation requires new multi-level and cross sector forms of coordination. By combining the outcomes of SeeRRI and LARS, GRETA will develop, test and disseminate new policy tools able to create green growth in circular economy and energy production.

The main objectives of Greta are

- 1. to enhance the partners' institutional capacity to use Smart Specialisation strategies in green transformation and green growth in the intervention areas (value chains, clusters) studied in the LARS project.***
- 2. to involve relevant stakeholders in decision making and co-creation of strategies. In addition to innovation system stakeholders involved in LARS, GRETA will involve relevant stakeholders (experts and institutions) for environmental issues.***
- 3. to develop tools for green transformation and green growth. Green transformation driven by Smart specialisation strategies requires quadruple helix involvement of civil society actors and bottom up co-creation guided by UN sustainable development goals.***

The EU City Science Initiative: Workshop for Circular Economy in Hamburg

Ivonne Stresius, Hamburg University of Applied Science

At the 21st of January 2020, the LARS partner from the Hamburg University of Applied Science took part at a co-ordination meeting as part of the City Science Initiative organised by the Senate Chancellery of the Free and Hanseatic City of Hamburg (FHH).

The City Science Initiative is an initiative launched by the European Commission (EUCOM) and the City of Amsterdam, under which cities that were very actively involved in Horizon 2020 projects during the expiring funding period, are asked to share their experiences and formulate proposals for the future. Cities have participated under-proportionally in the European funding programme Horizon2020 (2014-2020), which is ending in 2020. With the initiative, EUCOM - the responsible Directorate General Research & Innovation and its Joint Research Centre – wants to improve the introduction of cities to the successor programme Horizon Europe. Moreover, linked to this, the question how cities can tackle their challenges in cooperation with science will be addressed. Explore the needs and priorities of cities in terms of evidence-based policymaking will be explored. Five central

topics are the basis of this initiative and the Free and Hanseatic City of Hamburg was asked by the Commission to structure the exchange process for circular economy (CE).

A group of different stakeholders from science, research and public administration were invited to the meeting. Participants from different universities in Hamburg (HAW, TUHH, UHH) working with the topic of CE, the State Ministry of Environment and Energy (BUE), the State Ministry for Economy, Transport and Innovation (BWVI), Waste Management Department (SRH) and from the Senate Chancellery (SC) attended the meeting.

To give an input to the discussion several CE projects were introduced to the participants. For example the HORIZON 2020 projects “FORCE – Four Cities Cooperating for Circular Economy” and –“CIRCulT – Demonstrating systemic urban development for circular and regenerative cities” were presented and insights were given from the project LARS and the network “Circular Frysland” as a good practise example.



The discussion started with the question: How can the city and science jointly address the social challenge of recycling management?

Building on the input on Circulair Frysland and from the LARS project, the participants first discussed the establishment of a network on CE in Hamburg. It was generally seen as positive that the SC enables the exchange on this topic. Nevertheless, there are already many networks of experts on the topic - for example the Fab City network. One challenge would be to combine the already existing initiatives. Other networks, such as the Climate Campus, could serve as a blueprint for a city-wide network on CE.

The second topic discussed, was the possibility of circular value chains in Hamburg. Depending on the amount of the respective material flow, cycles could be organized regionally. The relatively large quantities of building rubble and bio-waste for example were suitable for regional recycling solutions; the situation seemed to be different, for example, regarding plastics and electronic waste. These material flows are usually organised on a supra-regional level.

FHH has some established instruments for the promotion of CE such as the Hamburg Waste Management Act (2005) and the waste management plans. These established instruments, however, usually only refer to one section of the cycle, namely col-

lection & recycling, but only partially focus on the other sections of the cycle such as design, reprocessing or distribution and use of secondary raw materials. An important set of instruments is seen in the guidelines for environmentally sound public procurement (2016/2019). Here, for example, the public sector could be obliged to use secondary materials in urban development.

The EU City Science Initiative CSI aims primarily to explore how science and the city can work together within (EU) projects. During the exchange it became clear that many of the issues addressed are reserved for political decision-making. Nevertheless, (EU) projects offer the opportunity to address certain challenges via pilot projects and to provide scientific support.

As a next step, SC will invite the European CSI network to Hamburg.

Using the DPSIR-framework to identify good practices

Johanna Leppänen & Jerker Johnson, Regional Council of Ostrobothnia

The LARS project aims at piloting good practices (GP), working in one regional innovation system, into another regions innovations system in order to strengthen triple-helix cooperation. Identifying and sharing GPs is a rather common approach in projects to achieve inter-regional learning.

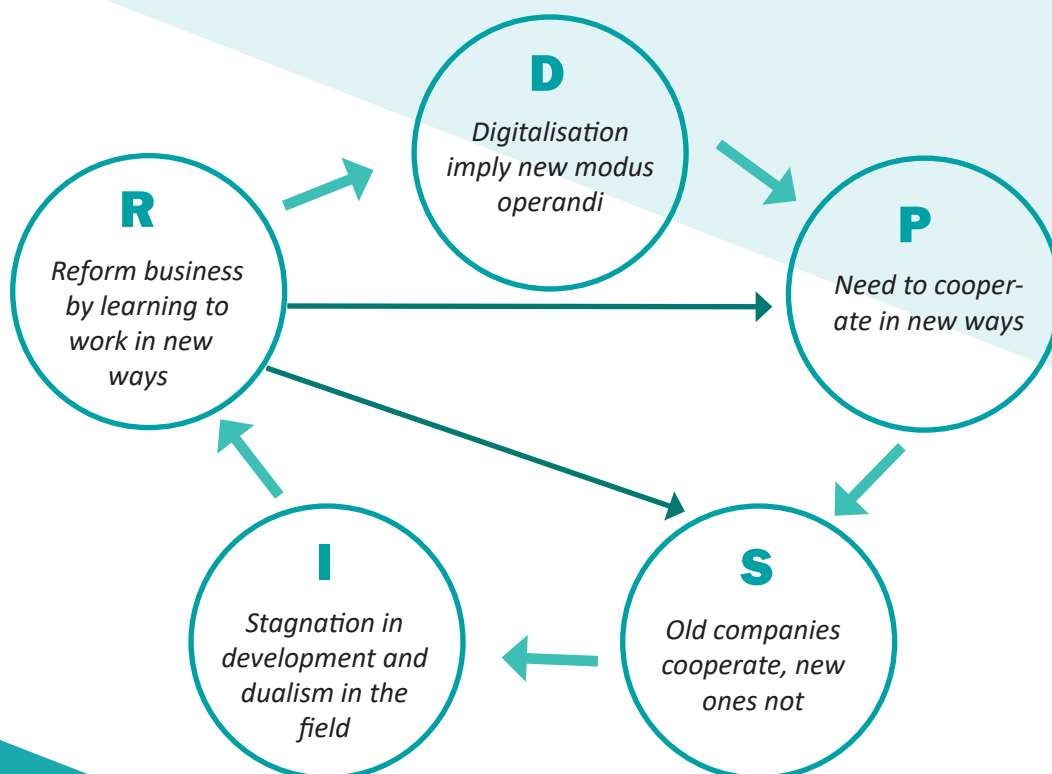
The GP is context-bound in the sense that it refers to an identified need in a receiving region. Still, the problem remains on how to describe the GP in a way that it is well understood by a receiving region. A very general description will not serve to understand the quality of the GP; while a too specific description will make the transferability of the GP more elusive.

In this issue of the LARS Newsletter we have an example from Lithuania showing that the work done within the project trig-

gered a study visit to Finland with the purpose to learn more on the presented GPs. This is of course an ideal way of proceeding, but at the same time a very costly way of working.

To tackle this dilemma the Regional Council of Ostrobothnia decided to experiment with the DPSIR framework to see if this method could function also when describing GPs. The DPSIR (drivers, pressures, state, impact and response model of intervention), introduced by the European Environment Agency, is a causal framework for describing interactions between society and the environment,

The model has been criticized for being a reactive framework where the public sector responds to drivers in the environment, in this case the innovation environment. Nevertheless, in small regions like Ostrobothnia we find that we need to respond to the digital revolution and present responses. One example is the



project Co-Protolab¹ that forms a part of the innovation platform of the University of Vaasa.

Co-Protolab is a physical and virtual platform for quick experiments. The platform has been developed for industrial services in collaboration with universities and companies. Co-Protolab brings together key competences related to development of industrial services: industrial processes, IoT and information management, service and interaction design, and protection of immaterial rights (<http://www.muova.fi/en/yhteistyö/projektit/co-protolab-2017-2019/>).

The DPSIR-framework was tested on a total of five projects considered to represent good practices. The tested projects were cooperation within networks of companies, also cooperation between companies and universities. The tentative conclusion of the work was that the framework may very well be applied in describing interventions in the innovation environment. The

DPSIR-framework also considers how the Response answers to the Pressures and to the State. As such it is a description of the consistency of the intervention. This may also be taken as a quality declaration of the response. Given these conclusions, the DIPSR-model may be a valuable approach to reveal the underlying logic and characteristics of the GP and thus also enhance transferability and inter-regional learning processes.

¹ Experimenting with the DPSIR was made analyzing five different projects financed by the Regional Council of Ostrobothnia through ERDF-funding. The result of the work is found in the Master's thesis of Teemu Saarinen, available at: https://osuva.uwasa.fi/bitstream/handle/10024/10716/UVA_2020_Saarinen_Teemu.pdf?sequence=2&isAllowed=y



The CoProtolab platform demonstrating its tools for visitors

LARS measuring ICT and energy in Pomorskie region, Poland

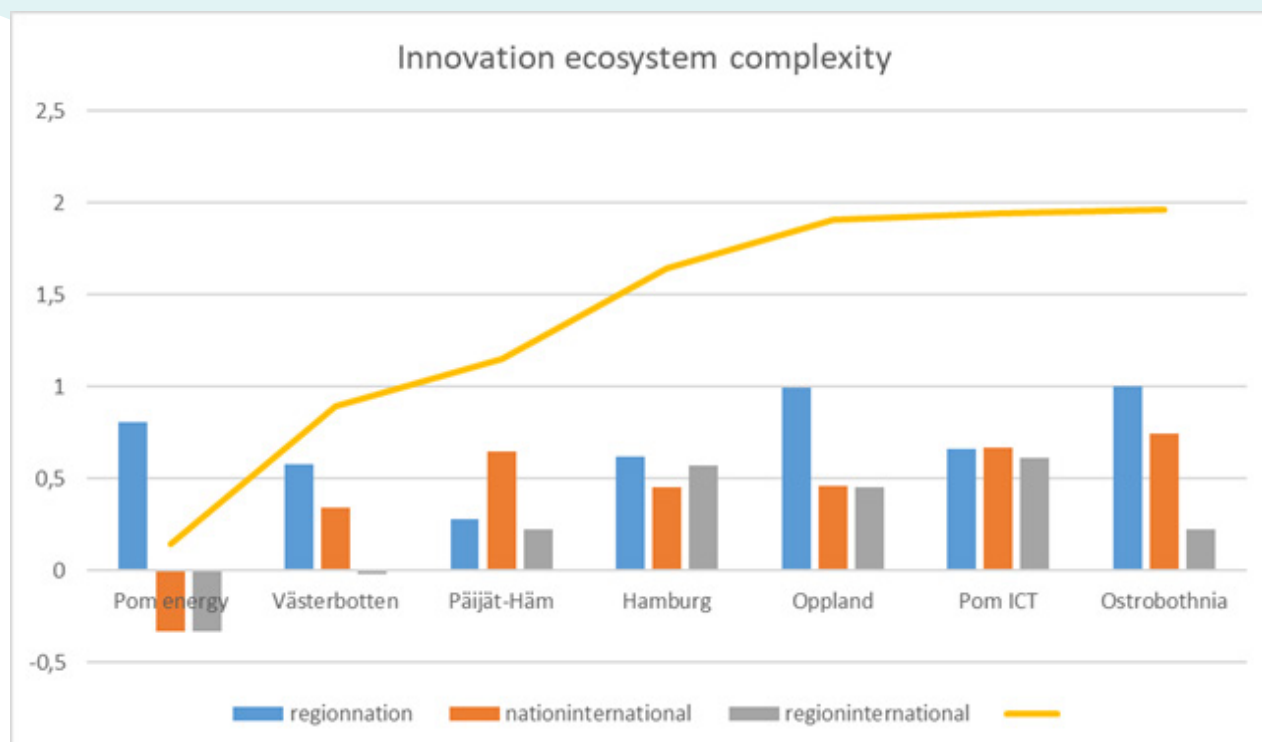
Åge Mariussen and Seija Virkkala, University of Vaasa

How can we understand networks in the core clusters, Energy and ICT, in Pomorskie in comparison to other LARS cases? How well connected are universities, public sector institutions, companies and NGOs in the Pomorskie region with each other, inside the region, to the national level and to the global level?

Poland had a sophisticated innovation strategy before Smart specialisation, and a lot of work has been done in order to prepare and implement smart specialisation. Based on their in-depth knowledge and analysis, the Pomorskie Marshall Office selected the most relevant smart specialisation priorities (sectors) for the case study: ICT and energy. After a procurement organized by University of Vaasa, one expert was selected (TECH-ACC, CEO

Przemysław Michalak). The expert was working with our guidance between October 2019 and January 2020. The expert made altogether 13 interviews on ICT consisting of 3 company, 3 public sector, 3 university and 4 NGO representatives. The energy sector report based on 13 interviews consisting of 3 company, 4 public sector, 3 university and 3 NGO representatives.

The LARS project has carried out a survey in Pomorskie region with the same method as applied in other project cases. Here we present results where we measure strengths of networks through answers of questions of “how important” relations are. If the importance of relations as innovation partners within and between helices and across several geographical levels is high, the innovation ecosystem may be seen as complex. High com-



plexity may be explained by several factors, such as the technology of the cluster, the value chain, and so on. As we will see below, different clusters had different geographical profiles. But over-all, high complexity may also be seen as a sign of resilience and innovation capacity.

The figure “Innovation ecosystem complexity” on the previous page shows new factors based on the strengths of relations between regional and national Quadruple Helix actors (region-national), between national champions and international actors (national-international) and between regional and international actors (regional-international). Since the cases studies of Lithuania and Latvia did not include data on regional level, they are excluded in the figure. The yellow line is summarizing these three factors, as a proxy for over-all innovation complexity.

According to the report of TECH-ACC, the energy sector in Pomorskie region is very diverse, this sector contains of high number of topics. On one hand, it is great to test innovations, but on the other hand, this sector likes stability and security. The large companies have problems with innovation so they are eager to cooperate with small and agile innovators with the benefit for both (high score on regional-national). There are not so many gaps among companies. The largest are among themselves and especially on international level, since energy companies act rather locally. The largest gaps among universities are distributed more equally; companies want quick results, which often cannot be achieved. Universities and companies have different priorities. Gaps in cooperation with public institutions arise mostly from the lack of tangible effects.

As we see from the figure, Pomorskie energy has strong links between regional and national QH actors (the region-nation indicator). However, both the national (national-international) and

regional (region-national) level actors within this cluster have weaker contacts with universities, companies, NGOs and public institutions broad. In this respect, they are somewhat similar to Vasterbotten and Oppland.

According to the report of TECH-ACC, the ICT sector in the Pomorskie region is well developed and it is one of the strongest points in the context of careers and employment in relation to overall IT industry in Poland. Tri-City (Gdansk, Gdynia, Sopot) has evolved in the past few years as one of the hottest location points for international companies. The informants desired to integrate even more and become more open to outside initiatives. ICT companies favor other companies as innovation partners: they subcontracted R&D activities to other companies rather than to universities.

The importance of companies on a regional and national level is more important than on the international level. Cooperation with regional self-government is rated highly both by the companies and universities. Universities also are important to companies, there are very active NGOs in Pomorskie region and they cooperate closely with companies, but the latter see them as networking and address book kind of partners.

As we see from the figure, Pomorskie ICT has an over-all score on innovation ecosystem complexity which match Ostrobothnia and Hamburg. Both Pomorskie ICT and Hamburg have a high level of international contacts among companies who are well connected in the region (regional-international). The figure also illustrated the weakness of Ostrobothnia in this respect. Here, the networks between regional and global actors are weak.

Transnational Learning Seminar 5 Online Seminar



Thoughts on Policy Advice

Johanna Dahl, Regional Council of Ostrobothnia

In late April, the LARS project held its fifth partner meeting and transnational learning seminar. The meeting was originally scheduled to take place in Riga. However, due to the corona pandemic, the partners met digitally. Still, the two-day meeting was a success and the partner eagerly shared insights and results from their past work in the LARS project.

The project has now finalized its fifth work package focusing on policy transfer. The projects results are now coming to life as partners have analyzed how the good practices identified in one region could be implemented through pilots in another region. To assure a successful transfer, the partners have looked at contextual factors of the good practices and policies, created a roadmap for implementation and mapped barriers and resistance to strategic change.

The LARS connectivity model – a new policy innovation

The LARS project builds upon a connectivity model that has been used to discover gaps in cooperation in the regional innovation system. The model enables a bottom-up policy approach. Stakeholder interaction is at the heart of the model. Moreover, in selecting stakeholders to involve in the entrepreneurial discovery process, aspects of urgency, legitimacy and power have been evaluated. The results of the project show the capacity of the model in creating involvement and proactiveness as well as a joint vision among stakeholders. These are important factors for achieving policy changes in the regions.

In comparing the regions, the results show that the entrepreneurial discovery process works differently depending on the level of cooperation in the innovation ecosystem. In larger and more fragmented ecosystems, there is a need to focus more on detailed stakeholder analysis and building up trust and coop-

eration throughout the process. In other words, trust-building among different actors need to be in place in order to achieve policy changes later-on in the process.

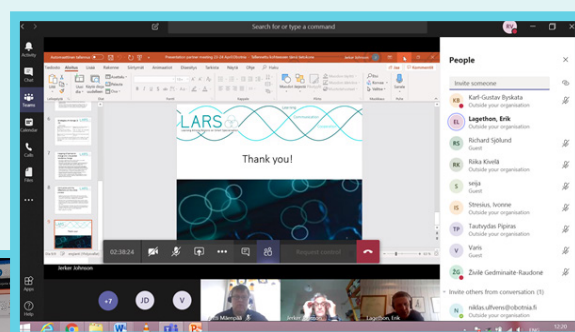
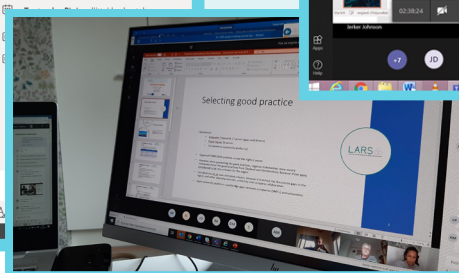
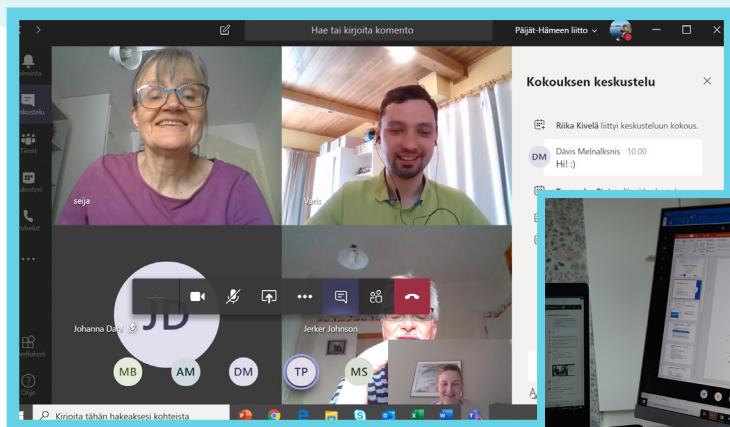
Finally, the results show that the connectivity model acts as a valuable means for getting in-depth evidence on place-based issues that are important to invest in and problems that need to be solved on a regional level. This methodology is therefore of particular importance and use in multi-level governance. Insights on how regions are implementing smart specialisation in practice.

The LARS project provides valuable insights on how regions are implementing smart specialisation in practice as well as on the role of regions in driving green growth in new industries.

It is important to build up an institutional role in dealing with transforming society towards a green shift. Moreover, the partners' work shows the importance of mapping barriers and resistance to strategic change in implementing new policies. In

this way causes for unsuccessful outcomes may be detected. Drawing upon these results, a wider conclusion is that the project's approach towards identifying risks and barrier to changing policies with the planned measures would be beneficial to also apply more widely, for example when planning new programs. The project also reveals, that the process of identifying and transferring good practices and implementing pilots based upon these serve as low-hanging fruit to achieve policy changes. Therefore, this approach should be further capitalized on. This may particularly be of advantage among innovation followers in Europe by contributing to an overall European innovation productivity growth.

With these insights in mind the project now moves on to the sixth and final part. In this work package the partners will continue to work with implementing pilots. In addition, the project will further elaborate on the results and communicate findings through several policy briefs and statements.



For more information about LARS, please visit

www.lars-project.eu

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