



STUDY SUMMARY

"Impact of the Covid-19 pandemics caused crisis on the operations of eco-innovative small and medium-sized enterprises and the innovation support system in Vidzeme Region"

GATEWAY
& PARTNERS

2022

Summary of the study

Study objective: To assess the impact of the crisis caused by the Covid-19 pandemic restrictions on the execution and produced results of the 2 Actions entailed in the Vidzeme Planning Region Action Plan developed within ecoRIS3, namely, “Innovation Project Manager” and “Innovation Laboratories”.

Background: Since 2017, Vidzeme Planning Region (VPR) has been participating in the Interreg Europe 2014-2020 cooperation project “Policies and measures to support local and regional innovation ecosystems” (ecoRIS3), funded by the European Regional Development Fund. The aim of ecoRIS3 is to reduce barriers for innovation and growth of local and regional businesses by fostering knowledge transfer from research and education institutions to small and medium-sized enterprises (SMEs), particularly those operating in the areas of Smart Specialization (RIS3).

Within the first project phase, lasting from January of 2017 to December of 2021, project participants were expected to produce research of local innovation ecosystems, including elaboration of regional SWOT analysis, as well as prepare regional Action Plans. As a project participant, in 2019, VPR developed an Action Plan for Further Sustainable Development of Smart Specialization in Vidzeme Region 2020 – 2022¹. The Action Plan proposed to implement 2 key Actions:

- **Action “Innovation Project Manager”:** To promote the availability of professional support for innovation projects by offering local SMEs to use services of outsourced research and development (R&D) managers;
- **Action “Innovation Laboratories”:** To support practice-based cooperation between research organizations and local SMEs with specific needs by creating a common discussion space in the form of co-working groups, which would connect all parties.

Both of the proposed Actions had to achieve concrete results. For the Action “Innovation Project Manager”, the expected result was stated as **involvement of at least 30 local businesses in the creation of innovative products** by utilizing discoveries of research organizations, and for Action “Innovation Laboratories” – **involvement of at least 2 local businesses in real-world innovation development projects** in cooperation with research organizations.

The execution timeframe for activities was from January of 2020 to December of 2021. However, given that the projects had to be implemented during a particularly challenging period for businesses due to the crisis caused by the Covid-19 pandemic restrictions, it was necessary **to identify the impact of the crisis on the execution and produced results of both Actions and assess if and how the 2019 SWOT analysis of VPR innovation ecosystem should be revised**. This document, therefore, presents the details of said study. The study

¹ VPR, 2019. Action Plan for Further Sustainable Development of Smart Specialization in Vidzeme Region 2020 – 2022. Available at: http://jauna.vidzeme.lv/upload/ecoRIS3/1_v5_Projekts_ecoRIS3_ANGLISKI.pdf

presented in this document was conducted in the period from November of 2021 to January of 2022.

Methodology:

The study aimed to assess the impact of the Covid-19 pandemic crisis on the implementation of Actions by collecting and evaluating qualitative data from the following sources:

- Interviews with 5 SMEs that participated in the Action “Innovation Project Manager”;
- Interviews with 5 innovation ecosystem experts from the key institutions supporting SMEs both nationally and regionally;
- Publicly available statistical data, information from surveys and media.

Case-based data and opinions gathered from interviews and publicly available sources was then inductively analyzed to obtain key conclusions mainly on difficulties and opportunities faced by SMEs during this period. These conclusions then served as the basis for re-evaluating and preparing revision recommendations for the SWOT analysis of VPR innovation ecosystem, developed in 2019 study Policy Instruments for Supporting Local and Regional Innovation Ecosystems for the Sustainable Development of Vidzeme Region Smart Specialization².

Study findings:

Data gathered from interviews and publicly available sources revealed the following observations:

- All participating SME’s of the Action “Innovation Project Manager” have been more or less adversely affected as a result of the Covid-19 pandemic restrictions. During interviews, the most commonly used phrases to describe the impact, were “instability”, “demand uncertainty”, “unpredictable market developments”, “changes in consumer habits”, “shortages of raw materials”, “soaring prices of raw materials and logistics services”, “risk aversion (for investments)”, “slow/chaotic process of receiving state aid”;
- The availability of human resources had not been significantly affected, at least for the interviewed SMEs;
- Transportation difficulties arising from pandemic restrictions, as well as price increases for logistics services, have significantly slowed down the process of supplying raw materials to manufacturers, leading to shortage of raw materials. The increased scarcity of raw materials has forced many manufacturers to shut down their production operations during the most heightened periods of the pandemic. But for those manufacturers still operating, processes have been slowed down due to more stringent epidemiological requirements for production facilities and the lack of available laboratory and testing facilities. Shortages of raw materials, price increases, low access to laboratory and testing facilities were also among the key barriers for successful innovation project development for SMEs that participated in the Action “Innovation Project Manager”;

² Innovation Technology Agency (2019). Policy Instruments for Supporting Local and Regional Innovation Ecosystems for the Sustainable Development of Vidzeme Region Smart Specialization. Available at: http://jauna.vidzeme.lv/upload/ecoRIS3/1_15F_VPR_ecoRIS3_Petijums.pdf

- Pandemic imposed limitations on human-to-human interactions in person is another factor that appears to mitigate innovation development at some level, especially if the project involves finding solutions to highly complex multi-disciplinary problems. During implementation of the Action “Innovation Laboratories”, the co-creation space, meant to bring together SMEs and researchers, was fully digitalized, organizing the meetings in virtual environment. The key issues that crystallized from this approach were, from one side, technological – the lack of access to rapid prototyping, laboratory and testing equipment, as well as human – such as difficulty to converse in groups and find a common ground for many people from different, often highly technical backgrounds, when being limited to talking to a single computer screen.
- Most SMEs had utilized at least one type of support instrument to mitigate the negative effects of the pandemic restrictions, but were often disappointed that support was not available when it was most needed, as well as the slow decision-making on granting the support;
- The single most required type of support for both crisis management and innovation development is the financial support. However, it is often very difficult to obtain, particularly for micro- and small-sized businesses, as revealed both by interviewed SMEs and innovation ecosystem experts. Because of the bureaucratic barriers, particularly the disorganized distribution of multiple aid programmes across different institutions, successful participation is easier for businesses with greater human resources and experience. This was also the case of SMEs that participated in “Innovation Project Manager”, as the success of the developed innovation project tightly correlated with the size and age of the company. Other problematic topics regarding support for SMEs are insufficient amount of financial aid, slow process of granting the aid, as well as low availability and/or low awareness of aid programmes targeted specifically for eco innovations;
- It was indirectly suggested both from participating SMEs and innovation ecosystem experts that it would be more convenient for companies to receive both advisory and financial support together, within one institution. The distribution of aid programmes within the existing innovation support infrastructure needs to be balanced in a way that would prioritize single contact point for SMEs.

Based on study findings, it can be assumed that the support for SMEs and facilitation of innovation development as planned in Actions would have brought a greater benefit for the involved participants if it were not for the Covid-19 pandemic imposed restrictions, as the process would have moved forward much faster. This is an important aspect, as the timeframe for the implementation of the Actions was limited to two years. As concluded, larger companies with more human resources and experience were able to gain much more from the Actions, especially the Action “Innovation Project Manager”, because they could invest more of these resources during their innovation development projects and bring the results to the market earlier, while smaller companies often did not even get to finish their projects due to lack of available resources for project continuation. In addition, as there was a direct correlation between the success of the project and the satisfaction level of project participants (i.e., the greater the success, the greater the satisfaction), it can also be supposed that the overall

satisfaction level regarding the Actions would have been higher in the pandemic-free alternative of the market. At the same time, implementation of the Actions during Covid-19 pandemic revealed many aspects of the support system for SMEs which can be improved upon, such as:

- The heightened difficulties for micro- and small-businesses to gain benefits from various support programmes, as opposed to large-business with more experience;
- The imbalanced distribution of aid programmes and the excessive number of contact points for a single company to obtain the various types of support;
- The limited availability of freely accessible laboratories, small and mobile (e.g. shippable) rapid prototyping tools and testing equipment, as well as testing spaces for SMEs, especially for those only at the stage of idea;
- The limitations of existing digital tools to effectively bring together ideas and solve problems within groups of people from different backgrounds.