

# BUILDING REGIONAL RESILIENCE TO INDUSTRIAL STRUCTURAL CHANGE

ACTION PLAN for Lithuania: To be implemented and monitored from August 2022 – July 2023

Lithuanian Partner

Project Partner: Lithuanian Innovation Centre



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Introduction	3 -
Lithuania	
General Foundation Project information	
Policy Context in Lithuania	
ACTION 1 – Use regional innovation strategies to integrate manufacturing industry into digital and green value chains: Creation of Industry 4.0 Lab	
Background to Action 1	
The Inspiration for the Lithuanian Action Plan	
Endorsement of the action plan	





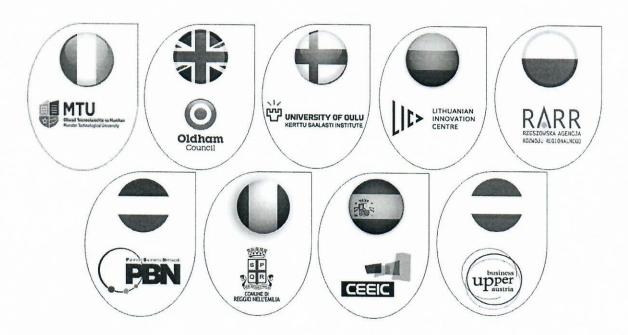
#### INTRODUCTION

FOUNDATION is an Interreg Europe funded SME Competitiveness project that brings together nine partners in a consortium led by Munster Technological University from 1/08/2019 to 31/07/2023. Presently, across Europe, public bodies are pressed by an increasing need to provide preparatory support to the economic ecosystem in advance of the closure of anchor firms in their region which act as significant employers. The impacts of a closure of course go beyond direct employees and ripple, wave like throughout the regional services sector and economy. Management of such anticipated structural change requires proactive renewal of business approaches and policy supports. Regions are encouraged to introduce pilot projects based on their own strengths and to provide appropriate business supports for the re-alignment of the regional industrial base. This proactive approach by regional stakeholders is critical to building the resilience of these regions and enabling them to adapt to change.

The importance of SMEs and start-ups to the regional economy is widely recognised in terms of the provision of employment, contribution to GDP, driving innovation and supporting regional resilience. It is imperative that the relevant regional stakeholders keep informed, inspired and equipped to provide the appropriate SME and start-up supports, particularly in regions anticipating structural change.

FOUNDATION links its project partners to develop Regional Action Plans. It is imperative that industry players, business support organisations and policy makers understand how their ecosystems work and when faced with shocks (firm closures) to collaboratively develop alternative growth and employment through supportive policies and programmes to boost SME competitiveness. Key project activities included the exchange of experience and learning through interregional events (4 workshops, 4 seminars and 9 study visits).

#### **Foundation Project Partners**







#### LITHUANIA

The <u>Lithuanian Innovation Centre</u> is the Lithuanian partner representing the Sostines and Vidurio ir Vakaru Lietuvos regions

County: Panevezys

Administrative centre: Panevezys

Size: 7,878 sq. km2

Population: 211,190

GDP: 11,8 thousands per capita (2018)

% of Unemployment: 8.6% (2020)



The Panevezys County is comprised of 6 districts (6 Local Authorities with Panevezys City Council), that involves 11 cities. It covers 7,878 sq. km representing 12% of the landmass of the country. The Region's main urban centres are the cities of Panevezys, Kupiskis, Rokiskis, Birzai, Pasvalys. With an average population density of 27 persons per sq. km it is predominantly a rural region.

A number of Universities, Institutes of Technology and research centres, both private and public, help drive and support the innovation potential of the region. Each school in Panevezys has a robotics club, as all the municipalities of the Panevezys region have agreed on the strategic direction of Industry 4.0 for the region. Panevezys is known to have the largest concentration of Norwegian investors. Here you can find the Norwegian Scan Investment industrial park, which was established by the Norwegian government. The park has been attracting furniture producers from Norway since 2000, culminating in the establishment of a complete chain of furniture producers from all over the world.

#### Labour Pool

Labour pool	98 600
Employees in manufacturing	24 000
Unemployment rate	8.6%
Average labour costs	1 137€



Resident population at the beginning of 2020 211,189



at the beginning of 2020 7,878 km<sup>2</sup>



Population density at the beginning of 2020 26.8 per 1 km<sup>2</sup>



Number of cities/towns



Administrative centre Panevėžys city (Population - 85,885)







## GENERAL FOUNDATION PROJECT INFORMATION

Project: FOUNDATION

Partner Organisation: Lithuanian Innovation Centre

Country: Lithuania

NUTS2 region: Vidurio ir Vakaru Lietuvos regions

Contact person: Tautvydas Pipiras Email address: t.pipiras@lic.lt

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### POLICY CONTEXT IN LITHUANIA

The Action Plan Aims to Impact:

☐ Investment for Growth and Jobs Programme

☐ European Territorial Cooperation Programme

□ Other regional development policy instruments

Name of the policy instrument(s) addressed: Recovery and resilience fund (2021-2026)

Under thematic priority (TO1) "Competitive and advance Lithuania" (in the application form it was mentioned the priority of previous 2014-2020 program "SME competitiveness") the objective of the instrument is to support the capacity of SMEs to grow in regional, national and international markets and to increase their innovation and productivity. The part of this instrument that could be specifically selected for this project is related to the support for the digitalization of SMEs, where SMEs are supported to implement different novel solutions to increase their productivity and competitiveness. However, the OP 2014-2020 that was referred in the application form is no longer applicable because it set the framework for the resources to dedicated research and development as well as innovation priority areas until 2021.

The OP Recovery and resilience plan for the for the period 2021-2026 has been already approved by the European commission on 2020, currently all relevant stakeholders are involved to consult the Managing authority (Ministry of Economy and Innovation) on the preparation of the design and implementation of resilience and recovery measures, therefore there is a good opportunity window to make an impact on the development of this new instrument. It would be important to incorporate the aspect of resilience into the RRP for the period 2021 to 2026 which will contain a number of objectives and measures for supporting digitalisations and investment in innovation and new technologies in the SME base. This will provide the extra support to the regions, which are experiencing major closures and structural changes. Lithuanian innovation centre is involved in the working group which is responsible for the development of the new policy measures for the thematic priority "Digital Transformation". The Lithuanian Innovation Centre expertise is used to develop new measures especially for the digitalisation of industrial SMEs.

Currently, Lithuanian manufacturing industries are experiencing big challenges in relation to the processes of Industry 4.0 happening in Europe and the whole world. Lithuanian manufacturing sector is dominated by low and medium-low technology sectors, which generate ¾ of total output of Lithuanian manufacturing industry. The dominance of low-tech sectors in Lithuanian manufacturing, coupled with a rapid increase in labour costs, poses a significant threat for business competitiveness





in the future. The process of industry automatization in the EU is moving fast and is clearly visible in a number of EU member states. It is already creating significant differences between the trends in manufacturing output and employment in manufacturing.

In some cases, a significant increase in manufacturing output is accompanied by a visible decline in employment in manufacturing sectors. However, in Lithuania these processes are catching up pretty slow and it puts a significant pressure on the competitiveness of Lithuanian manufacturing sector, which can lead to the closer of many big companies. Thus, there have to be means to address this issue from two sides: Firstly, there is a need to have policy instrument which support the transformation of industries and prevent the closure of the big companies. Secondly, there needs to be a support tools and measures, which would help for the regions to cope with these changes and facilitate the smooth transformation.

#### Context:

According to the CE DESI 2021 Report, Lithuania ranks 14th in the EU in terms of digitalization, from the perspective of the five relevant indicators, with a score of 51.8 compared to 50.7 EU average. Which indicates that Lithuania still has room to improve the digital skills of its population and invest in the reskilling and upskilling of its labour force. Also, the share of SMEs with at least a basic level of digital intensity, cloud services and big data usage are below the EU average. Despite e-commerce turnover being higher than the EU average, the adoption of e-invoices is decreasing and is lower than the EU average.

As our regional analysis proved, the challenges of digitization are different for every SME, the needs for support measures need to be adapted according to their level of digitization and their size. The adoption of new technologies is rather low and correlation between diverse solutions and current business operations or business expansion is sporadic.

Among obstacles in capitalizing digital solutions Lithuania identified:

- The low level of digital skills among employees.
- Lack of knowledge regarding the benefits and ease of use (ready-to-use) of current digital solutions is significantly low
- The Level of digital intensity, cloud services and big data usage are below the EU average.
- Lack of funding and in correlation, lack of dedicated advisory support for decision making regarding investments in digital technologies
- Accessing knowledge regarding digital solutions available and demonstration to their use and applicability

Thus, the digital transformation of the regional economy is a top priority for ensuring and improving the resilience of Lithuanian regions especially those that have a critical mass of manufacturing companies.

In the case of thematic priority 1 "Competitive and advance Lithuania", aimed at supporting the adoption and integration of innovative technologies in both the economy and public sector, the following investment goals have been identified and integrated with the National Operational Programme 2021-2027 for Lithuania:

- Reap the benefits of digitization for citizens, businesses, research organizations and public authorities (facilitate open data initiatives, increase digitalisation and connectivity)
- Support for digitalization of manufacturing process to enable transition to Industry 4.0





- Strengthening the sustainable growth and competitiveness of SMEs and job creation in SMEs, including through productive investment
- Develop the skills needed for smart specialization, industrial transformation and entrepreneurship

ACTION 1 – USE REGIONAL INNOVATION STRATEGIES TO INTEGRATE MANUFACTURING INDUSTRY INTO DIGITAL AND GREEN VALUE CHAINS: CREATION OF INDUSTRY 4.0 LAB.

#### **BACKGROUND TO ACTION 1**

Lithuanian Innovation Centre joined the Foundation project in order to actively participate, share and learn about measures and initiatives at regional level aimed at supporting the resilience of regions and SMEs. LIC has engaged regional stakeholders both public and private organisations to learn and discuss about the challenges and opportunities that digitalization could cause for the local micro-enterprises and SMEs, and what kind of support measures could be offered by national and local public organisations to address the main challenges and facilitate the digital transformation which leads to the more resilient regions.

In 2020, the LIC with the support of stakeholders carried out a regional analysis to get a better understanding of the needs and challenges facing SMEs with their resilience and digital transformation. The analysis found that:

- The cooperation between the business and science organisations should be strengthened, especially in digital and green transformation areas. To intensify the potential of the research sector by directing it to the improvement of small and medium-sized enterprises' business processes, increasing the export opportunities of their products
- The quadruple helix cooperation should be facilitated, especially public-private cooperation. Through initiatives such as open-data sharing and active monitoring regional government should improve the business environment in accordance to projected business needs.
- Development of resources to enable companies to adequately prepare for external risks are needed. Specific consultancy services and tools should be offered in the regions that could help SMEs to identify areas for digitalisation, green transformation and which skills staff and managers are lacking.
- Knowledge gap: the primary barrier for implementing IT-related process improvements is a lack of awareness of the solutions available and of their potential benefits. With the rapid pace of change in digital technologies, many companies have difficulties deciding when to invest, up to what level and in which field of innovation. Regions should carry out intensive dissemination of good practice in the area of technological development and innovations, implement pilots that would provide test before invest services.
- A new systematic, indicator-based resource planning process must be introduced into the operational functions of regional development councils, which would make it possible to anticipate possible regional shortcomings and areas for new investment.
- Funding Gap: SMEs cannot always access the funds either from bank or grant aid to invest in technologies which would lead to increased productivity or access new markets.





More attention should be paid to companies' access to financial support measures and increase flexibility in meeting existing obligations. Furthermore, for some SMEs digitalisation is considered as a cost factor and not seen as an opportunity.

The main objective of LIC in the context of the Foundation project is to enable SMEs to exploit digital and green technologies, also to improve the capabilities of both private and public organisations on individual and organisational levels to take advantage of digital and sustainable technological solutions which would allow to boost their competitiveness in the international value chains. This could be achieved by creating a financial measure under the RRP programme that supports industrial SMEs that aim to start digital and green transformation.

Correlating the regional resilience needs and gaps in the innovation ecosystem regarding smooth transition to digital and green economy identified within regional analysis, with the financial priorities addressed by national policy instruments, LIC defined 2 actions under the umbrella of Foundation project:

ACTION 1 - Use regional innovation strategies to integrate manufacturing industry into digital and green value chains: Creation of Industry 4.0 Lab.

#### THE INSPIRATION FOR THE LITHUANIAN ACTION PLAN

In developing this action plan, Lithuanian Innovation Centre together with national and regional stakeholders adopted learning outcomes from bilateral study visits and by reviewing Good Practices published by partner regions. In particular, the following projects in partner regions are notable and worthy of consideration for the application of solutions and support measures in the RRP for 2021 to 2026.

Partner good practice	How this good practice could contribute to the actions developed in our Action Plan
Oldham: Greater Manchester local industrial Strategy	The strategy (GP) could be a great example how the regions should plan their responses to the economic and technological changes, as well as other global forces such as an ageing society and the need to transition to clean growth, while raising productivity and earnings.  Lithuanian has developed three different roadmaps/strategies: industry 4.0, green transformation and connection into global value chain. But it was identified that all these directions should be taken into consideration at the same time, thus we want to learn from GM industrial strategy how to find connections between them, that should lead to more creative and highly productive manufacturing sector.
	One of the pillars in the Greater Manchester local industrial Strategy is the "Made Smarter" approach which supports SMEs in the manufacturing sector to develop and adopt





digital and environmental technologies to boost productivity, revolutionise manufacturing processes and accelerate commercial growth. This approach bring together a network of existing distributed Digital Innovation Hubs (DIHs), strategically selected to best serve the challenges of each local business community. The program is used to demonstrate how the industrial and manufacturing sector can be positively transformed by applying industrial digital technologies. The demonstrators are regionally organised and provides a key accelerator for the diffusion of industrial digital technologies. By initiating this new instrument in Lithuania (Industry 4.0 Lab) we aim to establish the same structure that exist in Greater Manchester region, we want build digital technology demonstration centres that would serve SMEs from prioritized sectors defined in the Industry 4.0 roadmap. MTU The strategy (GP) could be a great example how Regional Enterprise Plans the regions should plan their responses to the economic and technological changes, as well as other global forces such as an ageing society and the need to transition to clean growth, while raising productivity and earnings. Also, how Regional plan could be connected to the competitive funding streams. Emilia-Romagna The good practice is providing a panel of services The PID-Punto Impresa Digitale within the hub such as the mapping of the digital maturity of businesses through two types of assessment, specialist assistance and one-toone meetings with companies, providing infrastructure for testing. Companies can utilize seminars and training events to acquire the basic knowledge on digital technologies "Industry 4.0 The services (digital maturity audit, seminars and training events on aquiring digital technologies) that are mentioned in the GP will be involved in the services list of the new instrument (Industry Lab 4.0). Biz-up The GP is a good example of quadruple-helix RIC - Innovation Center for Research and cooperation on the development of Industry 4.0 Education - Upper Austria ecosytem. The management team ensures constant collaboration with universities. technical and vocational colleges, institutes and





other organizations, as well as with independent researchers, experts and knowledge carriers.

While preparing a technical specification of Industry Lab 4.0 call we are paying significant attention to the role of quadruple-helix cooperation, one of the requirements for the applicants is that they would have experience in providing training in formal and non-formal training programs (universities), professional consultancy, experience in providing innovation advisory and innovation support services to entities seeking to digitize processes (public or non-profit); experience in the development and implementation of digital technologies (private sector) these requirements will ensure that the selected administrator would be able to ensure the collaboration between different quadruple helices.

ACTION 1 - Use regional innovation strategies to integrate manufacturing industry into digital and green value chains: Creation of Industry 4.0 Lab.

#### Actions

#### Description

This action is based on advocacy and promotion of the agenda for SME digitalisation and green transformation and special assistance with investment in their innovation function. LIC and the other regional stakeholders will seek to influence the future RRP Programme to ensure there is significant policy and resources towards the SME digitalisation and innovation function.

LIC recognises the key role RRP can play in enabling resilience in the region by facilitating digitalisation, green transformation and integration into international value chains. Also, the huge attention should be paid to the available skills and experience in the existing SMEs, startups and academia.

The main aim of this action is to have roadmap and guidelines for the specific supports for the Digital and green transformation of SMEs included in the next RRP Programme from 2021-2026. Specific measures will relate to Digitalisation Tools; Green Transformation tools; Integration into international value chains; Industry 4.0 and Disruptive Technology innovation inputs for manufacturing SME's.

The overarching objective withing the project is to allow Lithuanian accompanies, in particular SMEs, to take steps forward digitalization, sustainable development and integration into new global value chains through and easily accessible approach. Specifically, we want to achieve this on the basis of a SME journey. That SMEs would get accessible advice and guidance in regard to their needs and main challenges. The full roadmap of SME journey through transformation could contain of these areas of assistance:





- 1. Acceleration of the investment of companies in Lithuania especially SMEs of all productive sectors, promoting the efficient use of aid for the development and implementation of new technologies in traditional production systems.
- 2. Help to increase the number of employees who possess the necessary skills to be able to develop their skills in the productive environment demanded by advanced manufacturing.
- 3. Create an environment in which companies know the potential in the implementation of advanced manufacturing technologies in their production, management and manufacturing systems
- 4. Create tailor-made advice and guidance (and testing) regarding low-threshold digitalization, green transformation including data-driven technologies, guiding companies how they may use government data to develop new products or value proposition.

Taking into consideration the inspiration of the GPs presented by Oldham municipality, MTU, Emilia-Romagna and Biz-Up, Lithuanian innovation centre was highly involved in the development of a new measure which will aim to encourage Lithuanian industrial enterprises to implement digital technologies in the field of circular economy.

The measure would focus specifically on the maintenance and development of the digital circular economy ecosystem, to be implemented by 2-3 European Digital Innovation Centers selected through a call for proposals. During the project, two activities are planned to promote industrial transformation through the development of the circular economy:

- 1. Development and demonstration of virtual production lines delivering digital solutions for the circular economy;
- 2. Provision of innovation consulting services on the implementation of new technologies based on R&D results, pilot, transforming industrial enterprises and promoting the circular economy in Lithuanian industrial enterprises. This measure would cover the whole aforementioned roadmap of SME journey to digital and green transformation.

#### Stakeholders Involved

Ministry of Economy and Innovation - responsible for approving the technical specification of the new instruments in the RRP.

Lithuanian Innovation Centre - responsible for proposing the roadmap of SME journey to digital and green transformation approach for the new measure.

Science, technology and Innovation agency (will be replaced by the Innovation Agency) — this agency will be responsible for the financing of new instrument and will monitor the implementation.

Government strategic analysis center – where the active participants on the development and consultations for the new instrument, provided analytical data and information on the digitalisation level and needs of companies.





	Public Policy and Management Institute (PPMI) - where the active participants on the development and consultations for the new instrument, provided analytical data and information on the importance of digital and green transformation for the faster integration into international value chains. Their observations will be used to develop complementary measure to the Industry 4.0 LAB.
Timeframe	The development of technical specification for this new measure has already started, and it is planned that this call will be launched on the Q4 2022. Also, the monitoring indicators will be identified which will be used to measure the impact of the new instrument and set the milestones connected to the goals of this instrument. We will use these monitoring indicators to evaluate the impact of our action.
	The call will be followed by the 3-4 months to evaluate the submitted applications and select the administrators of Industry 4.0 LAB.
Costs	Around 3.4 mln. EUR for 3 years period. (to be clarified after the technical specification will be prepared)
Funding Sources	Resilience and Recovery plan for 2021-2026





### **ENDORSEMENT OF THE ACTION PLAN**

Lithuanian Innovation Centre hereby agree to support and promote the implementation (and where appropriate implement) the actions detailed above.

The undersigned confirm that they have the required authority of their organisations to do so and that the required authorisation process in each organisation has been duly carried out.

Name and Job Title:

Direktorius

Mantas Vilys

Signature:

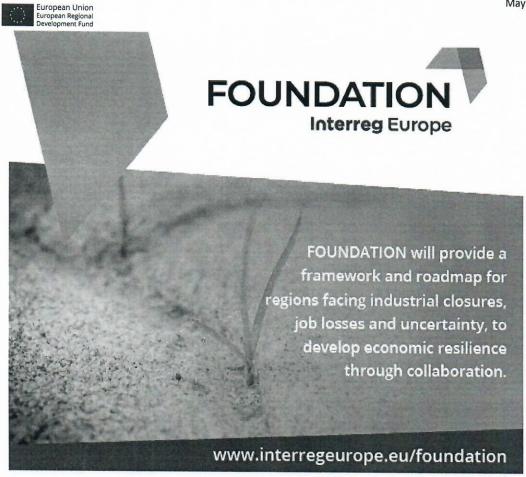
Date:

2022 -06- 14

Stamp of the Organisation:



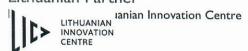




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