

# **Country factsheet**

Lithuania



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### Introduction



This document presents an overview of the cluster policy in Lithuania. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the <a href="European Semester Country Report for Lithuania">European Semester Country Report for Lithuania</a>.

The European Semester was an instrument introduced to coordinate the EU Member States economic policies and address the economic challenges faced by the EU. Its goals are "to ensure sound public finances, to prevent excessive macroeconomic

imbalances in the EU, to support structural reforms to create more jobs and growth, and to boost investment". Thus, it focuses on the following areas: business environment; financial and fiscal stability; green economy; public administration; labour market and skills; and, social protection and cohesion.

The COVID-19 pandemic has caused an unprecedented economic shock to the European and global economy. In response, policymakers at EU and national level have acted decisively and at short notice to make available very significant financial resources, notably through the Recovery and Resilience Facility, to tackle the threat of a prolonged downturn. National recovery and resilience plans have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. In Lithuania, clusters have not acted as a partner in drafting the plan and setting the strategic priorities and were not mentioned in the National recovery and resilience plan.



01 **Industrial ecosystems** and cluster landscape Strengthening the European economy through collaboration



# 1. Industrial ecosystems and cluster landscape

## **Employment in the 14 ecosystems in the country**

As part of its Industrial Strategy (March 2020), the European Commission has selected 14 industrial ecosystems that are particularly relevant in Europe and encompass all players operating in a value chain. The following graph shows the proportion of the country's employment accounted for by each ecosystem, as well as the equivalent figure for the EU27 on average. The ecosystems are ordered, from top to bottom, according to the amount of employment in the country. When the bar for the country is higher than that of the EU27, it indicates that the country is more specialised in that ecosystem.

Retail Construction Agri-Food Mobility-Transport-Automotive Proximity, Social economy and Civil Security Energy-intensive industries Cultural and creative industries Digital Textile Aeroespace & Defense Energy-renewables Electronics 0% 4% 10% 14% 16% ■Lithuania ■EU27

Graph 1: Employment in the ecosystems

Source: Own elaboration from Eurostat and National Statistical Offices



### Regionally relevant nodes

Economic activity, and therefore employment, is not equally distributed in all regions. Specialisation can be measured through Location Quotients (LQ) that reflect the relative specialisation of an activity in a region compared to the EU average. If the LQ for a given activity-region combination is above 1.5, it is considered a specialisation node, and if the activity accounts for at least 1 % of total employment in the region, it is considered regionally relevant. The following tables shows the total number of regionally relevant specialisation nodes in each region in the country and identifies the top five most specialised of these nodes. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 19 in the country, while the second table is based on the 14 ecosystems, which total 3 in the country.

Table 1: Regionally relevant sectoral nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
LT01: Capital Region (Lithuania)	8	C31 - Manuf. of furniture	C14 - Manuf. of wearing apparel	M73 - Advertising & market research	C16 - Manuf. of wood products	H49-Land transport (inc. pipelines)
LT02: Central and Western Region (Lithuania)	11	C31 - Manuf. of furniture	A02 - Forestry & logging	C16 - Manuf. of wood products	C14 - Manuf. of wearing apparel	H49-Land transport (inc. pipelines)

Source: Own elaboration from Eurostat and National Statistical Offices

Table 2: Regionally relevant ecosystem nodes

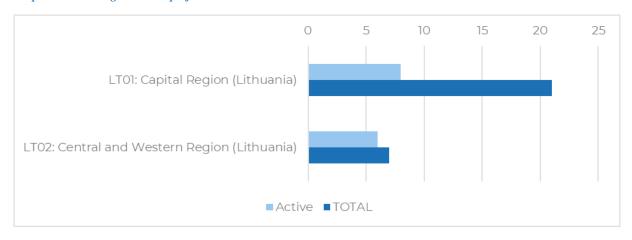
Region	Number of nodes	Node 1	Node 2
LT01: Capital Region (Lithuania)	1	Digital	-
LT02: Central and Western Region (Lithuania)	2	Textile	Agri-Food

Source: Own elaboration from Eurostat and National Statistical Offices

## **Cluster organisations in the regions**

There are 28 cluster organisations registered on the ECCP in the country, 14 of which can be considered active on the ECCP, having updated their profiles during the first half of 2021. The following graph shows the presence of cluster organisations in the different regions.

Graph 2: Cluster organisations profiled and active on the ECCP



Source: Own elaboration from Eurostat and National Statistical Offices



02

National cluster policy, programmes and initiatives





# 2. National cluster policy, programmes and initiatives

Policy type:	Broad policy
Policy name:	The Lithuanian Innovation Development Programme 2014-2020
	Science, technology and innovation policy
POLICY OBJECTIVES	Strengthening cooperation between companies or industry and RTDI actors
	Increasing competitiveness and boosting scale up of SMEs
	Supporting internationalisation activities
	Enhancing the visibility of clusters
	Fostering R&D activities, technology development and implementation
	Fostering innovation and strengthening innovation ecosystems
	Promoting entrepreneurship, start-ups and spin-offs
	Promoting social and sustainable economy and other solidarity-based initiatives
	Promoting employment and upgrading skills and competences
	Connect to global supply chains
	The Lithuanian Innovation Development Programme 2014-2020 (LIDP) is the country's current innovation strategy. The LIDP strongly emphasises the nexus between the stimulation of innovation and the development of clusters, as well as their internationalisation and integration into global value chains. The development and improvement of innovation is a main driver for Lithuanian's international competitiveness. Incentives are provided for national clusters to merge with global value chains and to develop international partnerships while enhancing their visibility. The LIDP promotes cooperation between different sectors and between enterprises and education and research institutions, encouraging transfer of knowledge and technology as well. R&D activities are encouraged with special attention on results of experimental activities (e.g. prototypes). The programme explicitly fosters the development and sustainability of existing clusters while stimulating entrepreneurship and innovation. Increased cooperation should increase employment, professional development and trainings especially for knowledge-intensive sectors. The strengthening of the network of clusters is also targeted, however with no reference to cluster organisations at all. The overall goal of enhanced competitiveness is based on high-level knowledge, high technologies, skilled human resources, smart specialisation and increased international integration.

#### **POLICY FOCUS**



#### Cross-sectoral

The Lithuanian Innovation Development Programme (LIDP) promotes innovation in all sectors and intersectoral partnerships as driver of innovation.

#### **RESPONSIBLE AUTHORITIES**



#### Both drafting and implementation

#### Oversees the implementation

The Ministry of Economy was responsible for the preparation and the coordination of the implementation of the Lithuanian Innovation Development Programme (LIDP). The implementation is supervised by the interinstitutional working group.

#### **BENEFICIARIES**



#### **SMEs**

Research organisations

Academic institutions

Start-ups

**Technology centres** 

General population

Micro, small and medium-sized enterprises and start-ups are highlighted as main drivers of innovation. They benefit from greater cooperation with the industry as well as from support regarding market entry, intellectual property, financial incentives, etc. Research institutions and technology centres will benefit from active measures from the government that support FDI to Research, Development and Innovation. National and EU financial resources are foreseen to be allocated to the creation and development of technology centres. This applies especially to technology centres and research institutions which engage in the creation of innovative products. The general population benefits from concrete measures regarding improvement of human capacity (trainings, upskilling) and increase of employment especially in knowledge-intensive sectors. The goal is to create an innovative society by developing new knowledge and to provide more effective services to families, children and socially vulnerable individuals through innovation. Besides SMEs and research centres, also business association are mentioned as important drivers of innovation, however no concrete measures for them are indicated.

#### **INSTRUMENTS**



#### **Financial**

#### Funding collaboration initiatives

Support to R&D projects, SMEs becoming cluster members, etc.

Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)

		Financing start-ups Innovation: voucher, support to hire PhDs, cooperation with R&I actors
	Technical assistance	Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence Support for soft skills development: coaching, management training, upskilling/reskilling Support for networking and partnership building (at national and/or international level) Marketing activities: advertising, communication, events, fairs, and so on
	Explanation	The measures of the Lithuanian Innovation Development Programme (LIDP) are detailed in two Action Plans covering the periods 2014-2017 and 2018-2020. Financial assistance is foreseen for innovative start-ups and SMEs which engage in R&D activities. Further funds are allocated to early stage validation of new products, certification and the improving of technological skills of employees through trainings. Assistance will be provided for register design, trademark and partnering for businesses operating in R&D in the field of smart specialisation. Measures that among others aim at export promotion are simplification of market entry and the protection of intellectual property. Furthermore, regional and international events to promote the culture of innovation and increase collaboration will be organised and financed. Clusters directly benefit from innovation consulting services, international business networking and financial support for cooperation activities, as well as from support investment in acquisition of innovative technologies and equipment. Cluster cooperation activities and international business networking will be funded. Furthermore, promotion of the benefits of clusters is foreseen in educational institutions, on media, during seminars and conferences.  Several further measures for Innovation Support are not explicitly mentioned in the LIDP, nor in the Action Plans, but they are listed on the official website of the Ministry of Economy including tax incentives, innovation vouchers, pre-commercial public procurement and consultation.
HISTORY	Period	Limited period
	Ending year (for policies with limited period)	2020
	Starting year	2014
	Explanation	The Innovation Development Programme is implemented for a limited time period until 2020.
	Overall	Not mentioned in the sources.
	Annual	Not mentioned in the sources.

BUDGET	Source of funding	There is no specific information of the budget. However, this might be connected to the different sources of funding that are foreseen. The programme will be financed through the budgets of the responsible authorities (mainly the Ministry of Economy and Innovation), but also other state (e.g. Ministry of Education) and municipal budgets (e.g. for technology centres), EU structural funds and international financial assistance.
POLICY	Availability	no policy evaluation
EVALUATION	Results	At the time being there is no policy evaluation available and neither the Innovation Development Programme, nor the Action Plans do refer to any form of evaluation of the policy.
POLICY ALIGNMENT WITH THE EU		Digitalisation
PRIORITIES		Social inclusion

03

**State of play of cluster policy** 



# 3. State of play of cluster policy

The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 2 and which are scored based on their existence:

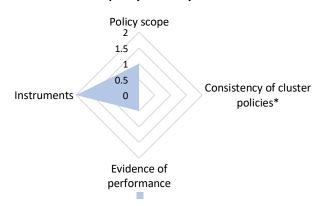
- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- Consistency of cluster policies: assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- Evidence of performance: the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020 and 2021). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Lithuania	Maximum
	Litituania	score
Policy scope	1	2
Consistency of cluster policies*	0	2
Evidence of performance	0,5	1
Instruments	2	2

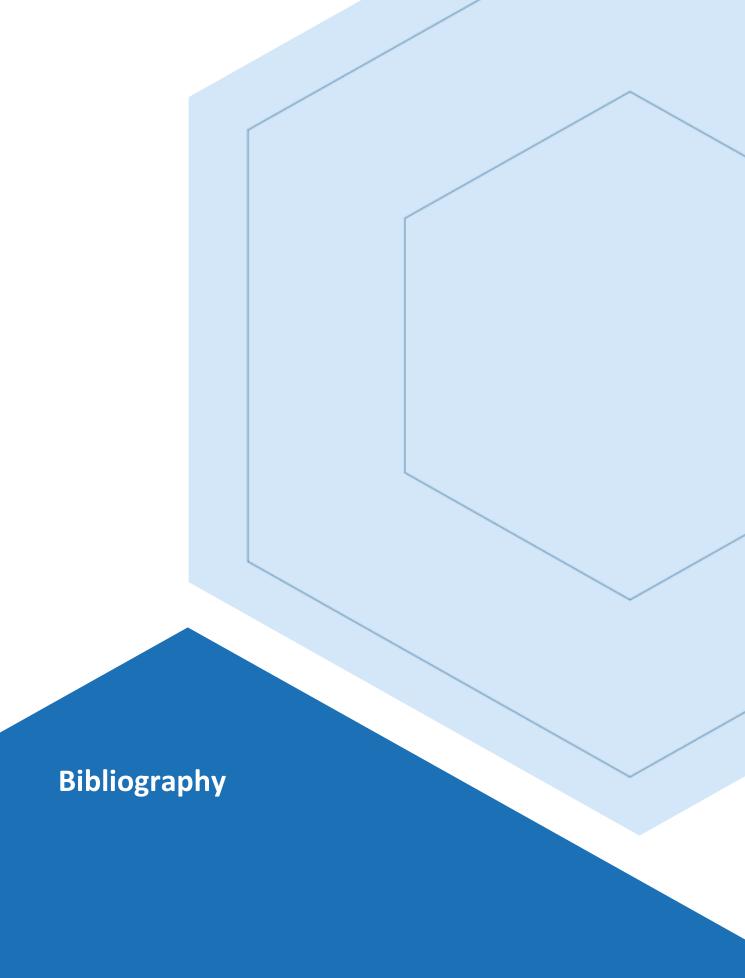
<sup>\*</sup> This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies

#### Cluster policy maturity level



State of play of cluster policy in the country		
Policy evaluation (for terminated	Availability of evaluations for terminated policies	
policies)	There is no official national evaluation of cluster relevant policies. However, a 2016 OECD Review of Innovation Policy in Lithuania refers to the "Valley Programme" which aimed in developing centres of science, studies and business. The valleys that emerged out of this programme were strongly centred around education and research	

	institutions and lacked active involvement and interest of the business sector. The report points out that at this point a final evaluation is difficult, as high-tech valleys usually take a long time to fully develop <u>An evaluation has also been conducted for the "Inno-vouchers LT" scheme in 2017</u> . An overall positive impact on SMEs engagement in R&D and on cooperation between science and business was observed. However, there was no significant impact on productivity nor on competitiveness indicators.
Policy approach in the country	Cluster approach used directly by national/regional development agencies  Specific policies to support cooperation projects  Broad-based framework policies to support cooperation effectiveness
Continuity	Despite the lack of a national cluster policy, Lithuania implemented several measures and broader programmes which directly fostered the creation of collaboration initiatives and strengthened existing clusters. European programmes and initiatives such as the smart specialisation (RIS3), whose main policy objectives are also addressed in the LIDP, and Horizon 2020 also strongly contributed to the development of cluster related policies. The Ministry of Economy and Innovation adopted the "Concept of Lithuanian Cluster Development" in 2014 (revised in 2020) which is the official concept paper for the development of clusters. The Concept promotes the benefits and targets of cluster development. The expansion of clusters may be promoted through state or municipal budgets, using EU funds or other international financial assistance measures. The document also mentions the importance of a favourable business environment for development of international world-class innovation clusters. However, it does not provide any concrete policy interventions as opposed to the LIPD which is much more precise in this regard. According to Lithuania Cluster Network Association, although the national cluster policy is currently only in the development stage, it can already be stated that it will attempt to directly reflect the concept of clusters in Lithuania and the standards set for clusters not only in Lithuania, but in the EU.
Consistency	No cluster policy available
	At the moment only broad policies and strategies provide policy interventions for the development of clusters in Lithuania.





# **Bibliography**

Antanavičius, J. et alii. 2017. Ex-post Evaluation of the Ministry of Economy Instrument Inno-Vouchers LT impact on Business R&D Expenditure. Available at: <a href="https://www.visionary.lt/wp-content/uploads/2017/03/Inocekiai-LT-vertinimo-santrauka-EN-1.pdf">www.visionary.lt/wp-content/uploads/2017/03/Inocekiai-LT-vertinimo-santrauka-EN-1.pdf</a>

Federal Ministry for Economic Affairs and Energy and Federal Ministry of Education and Research of Germany. Clusterplattform Deutschland. Available at:

www.clusterplattform.de/CLUSTER/Redaktion/DE/Standardartikel/Cluster\_Europa/litauen-lang.html

KlasterLT (2021). Naujoji klasterių plėtros koncepcija atvėrė galimybes mūsų šalyje – kuriama nauja strategija, kiekybę keičia kokybė. Available at: <a href="https://klaster.lt/naujoji-klasteriu-pletros-koncepcija-atvere-galimybes-musu-salyje-kuriama-nauja-strategija-kiekybe-keicia-kokybe/">https://klaster.lt/naujoji-klasteriu-pletros-koncepcija-atvere-galimybes-musu-salyje-kuriama-nauja-strategija-kiekybe-keicia-kokybe/</a> Ministry of Economy and Innovation of the Republic of Lithuania. The Lithuanian Innovation Development Programme 2014-2020. Available at:

http://eimin.lrv.lt/uploads/eimin/documents/files/Inovaciijos/Strategijos/Lietuvos%20inovacij%C5%B3%20pl%C4%97tros%20programa patvirtinta%202013%2012%2018 EN.pdf

Ministry of Economy and Innovation of the Republic of Lithuania. Lithuanian Innovation Development 2014-2020. Program implementation 2014-2017, Action Plan. Available at:

http://eimin.lrv.lt/uploads/eimin/documents/files/Inovaciijos/LIP%20planas%204-491.pdf

Ministry of Economy and Innovation of the Republic of Lithuania. Lithuanian Innovation Development 2014-2020. Program implementation 2018-2020, Action Plan. Available at:

https://eimin.lrv.lt/uploads/eimin/documents/files/Inovaciijos/Strategijos/2018-02-05%202018-2020%20veiksm%C5%B3%20planas.pdf

Ministry of Economy and Innovation of the Republic of Lithuania. The Concept of the Development of the Lithuanian Clusters, 2014. Available at:

http://eimin.lrv.lt/uploads/eimin/documents/files/imported/lt/inovacijos/klasteriu%20koncepcija.pdf

Ministry of Economy and Innovation of the Republic of Lithuania. Innovation Policy. Available at:

https://eimin.lrv.lt/en/sector-activities/innovation/innovation-

 $\frac{\text{policy\#:$\sim$:} \text{text=Ministry}\% 20 \text{of}\% 20 \text{Economy}\% 20 \text{and}\% 20 \text{Innovation}, \text{The}\% 20 \text{programme}\% 20 \text{has}\% 20 \text{four}\% 20 \text{objectives}\% 3A \& \text{text=To}\% 20 \text{develop}\% 20 \text{innovative}\% 20 \text{society}\% 20 \text{by}\% 20 \text{developing}\% 20 \text{new}\% 20 \text{knowledge}\% 20 \text{and}\% 20 \text{its}\% 20 \text{application}. \& \text{text=To}\% 20 \text{enhance}\% 20 \text{innovation}\% 20 \text{potential}\% 20 \text{of}\% 20 \text{business}$ 

Ministry of Economy and Innovation of the Republic of Lithuania. Areas of Activity, Innovation: Clusters. Available at: <a href="https://eimin.lrv.lt/lt/veiklos-sritys/inovaciju-veiklos-sritis/klasteriai">https://eimin.lrv.lt/lt/veiklos-sritys/inovaciju-veiklos-sritis/klasteriai</a>

Ministry of Economy and Innovation of the Republic of Lithuania. Sector Activities, Innovation: Innovation Support Measures. Available at: <a href="https://eimin.lrv.lt/en/sector-activities/innovation/innovation-support-measures">https://eimin.lrv.lt/en/sector-activities/innovation/innovation-support-measures</a>

OECD (2016). Reviews of Innovation Policy: Lithuania 2016. Available at: <a href="https://www.oecd.org/countries/lithuania/oecd-reviews-of-innovation-policy-lithuania-2016-9789264259089-en.htm">www.oecd.org/countries/lithuania/oecd-reviews-of-innovation-policy-lithuania-2016-9789264259089-en.htm</a>