



European
Commission

European Innovation Scoreboard **2023** Country profile **Lithuania**



Innovation

European Innovation Scoreboard 2023 – Country profile Lithuania

European Commission

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European Innovation Scoreboard 2023 Country profile Lithuania

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The European Innovation Scoreboard report and annexes, and the indicators database are available at:

https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en



83.8



Change over time: 16.7

86.1 Moderate Innovators

Lithuania

	Performance relative to EU in 2023	Performance change 2016- 2023	Performance change 2022- 2023
SUMMARY INNOVATION INDEX	83.8	16.7	3.7
Human resources	107.2	-3.6	1.3
Doctorate graduates	55.5	-11.4	0.0
Population with tertiary education	193.6	4.2	4.2
Lifelong learning	66.7	0.0	0.0
Attractive research systems	54.2	29.1	-2.7
International scientific co-publications	70.4	53.2	-5.7
Most cited publications	55.6	20.9	7.5
Foreign doctorate students	32.1	25.6	-23.3
Digitalisation	94.4	0.9	-1.3
Broadband penetration	101.6	1.8	-2.7
People with above basic overall digital skills	84.6	0.0	0.0
Finance and support	71.2	13.1	-1.5
R&D expenditures in the public sector	68.8	-25.8	-6.5
Venture capital expenditures	111.5	62.7	-1.2
Government support for business R&D	21.6	14.2	5.0
Firm investments	86.2	13.8	17.8
R&D expenditure in the business sector	34.0	16.9	0.8
Non-R&D Innovation expenditures	170.9	4.6	30.3
Innovation expenditures per employee	67.6	19.1	23.3
Use of information technologies	69.6	18.0	8.7
Enterprises providing ICT training	46.6	15.3	-3.8
Employed ICT specialists	93.3	20.7	20.7
Innovators	113.7	53.6	4.8
Product innovators (SMEs)	115.5	59.4	0.2
Business process innovators (SMEs)	112.1	47.3	9.7
Linkages	140.2	61.3	4.9
Innovative SMEs collaborating with others	126.3	-10.1	10.7
Public-private co-publications	66.0	36.4	-8.4
Job-to-job mobility of HRST	183.3	138.2	5.9
Intellectual assets	72.1	19.8	4.1
PCT patent applications	35.2	-9.3	2.9
Trademark applications	135.7	70.9	10.3
Design applications	56.3	16.8	0.8
Employment impacts	101.3	15.8	7.5
Employment in knowledge-intensive activities	84.3	0.0	0.0
Employment in innovative enterprises	115.2	30.8	14.5
Sales impacts	54.8	16.3	5.1
Medium and high-tech goods exports	45.8	3.7	-6.9
Knowledge-intensive services exports	35.9	24.1	9.6
Sales of innovative products	87.1	26.0	18.0
Environmental sustainability	78.3	-2.1	-4.0
Resource productivity	44.8	0.9	4.5
Air emissions by fine particulate matter	107.6	14.9	-0.2
Environment-related technologies	69.4	-23.9	-14.1

The second column shows performance relative to that of the EU in 2023. Colours next to the column show matching colour codes: dark green: above 125% of the performance of the EU in 2023; light green: between 100% and 125%; light orange: between 70% and 100%; dark orange: below 70%. The next columns show performance change over time between 2016 and 2023 and between 2022 and 2023, with scores relative to those of the EU in 2016. Positive (negative) performance changes are shown in green (red).

LITHUANIA is a **Moderate Innovator** with performance at 83.8% of the EU average. Performance is below the average of the Moderate Innovators. Performance is increasing at a rate higher than that of the EU (8.5%-points). The country's performance gap to the EU is becoming smaller.

Relative strengths

Population with tertiary education
Job-to-job mobility of HRST
Non-R&D Innovation expenditures
Trademark applications
Innovative SMEs collaborating with others

Relative weaknesses

Government support for business R&D
Foreign doctorate students
R&D expenditure in the business sector
PCT patent applications
Knowledge-intensive services exports

Strong increases since 2016

Job-to-job mobility of HRST
Trademark applications
Venture capital expenditures

Strong decreases since 2016

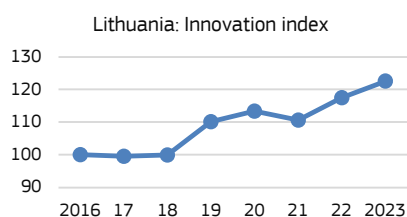
R&D expenditures in the public sector
Environment-related technologies
Doctorate graduates

Strong increases since 2022

Non-R&D Innovation expenditures
Innovation expenditures per employee
Employed ICT specialists

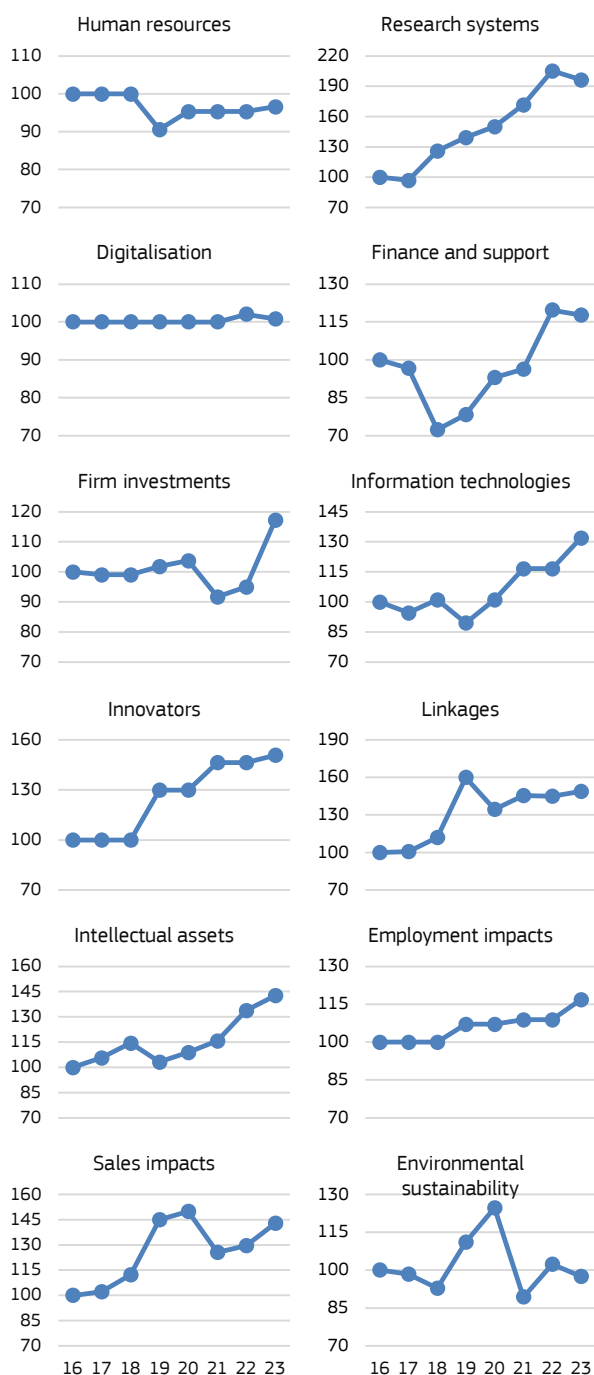
Strong decreases since 2022

Foreign doctorate students
Environment-related technologies
Public-private co-publications



The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance did not change between 2016 and 2018 and then started to increase, leading to a 23% performance increase in 2023.

The graphs below show the evolution of innovation performance in the different **innovation dimensions** against the performance of the country in 2016. Performance increased most strongly for Research systems, Innovators, Linkages, Intellectual assets and Sales impacts. Performance declined for Human resources and Environmental sustainability.





Performance is measured relative to that of the country in 2016 (=100).

Structural differences with the EU are shown below:

- Lithuania has lower per capita income and a slower growing economy. Manufacturing and business services take up the same share of the economy, as the EU, with SMEs accounting for a larger share of turnover.
- Entrepreneurial Activity, and FDI net inflows add positively to the innovation climate, Enterprise births, Top R&D spenders, and Buyer sophistication add negatively.
- Lithuania has higher shares of In-house product innovators with market novelties and Non-innovators without disposition to innovate.
- Entrepreneurial training is above the EU, while government procurement is below the EU as drivers of research and innovation.
- Lithuania's performance on climate change indicators is poor, with below-average results in recycling, greenhouse gas emission reduction, and environmental innovation.

	LT	EU
Performance and structure of the economy		
GDP per capita (PPS)	29,000	32,600
Average annual GDP growth (%)	3.2	4.4
Employment share Manufacturing (NACE C) (%)	16.1	16.4
of which High and Medium high-tech (%)	16.3	38.0
Employment share Services (NACE G-N) (%)	41.0	41.1
of which Knowledge-intensive services (%)	28.7	35.8
Turnover share SMEs (%)	47.4	34.1
Turnover share large enterprises (%)	33.8	49.6
Foreign-controlled enterprises – share of value added (%)	13.1	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	1.0	1.0
Total Entrepreneurial Activity (TEA) (%)	11.3	6.8
FDI net inflows (% GDP)	6.2	2.1
Top R&D spending enterprises per 10 mln. population	0.0	20.3
Buyer sophistication (1 to 7 best)	3.3	3.7
Innovation profiles		
In-house product innovators with market novelties	15.8	12.2
In-house product innovators without market novelties	11.1	12.8
In-house business process innovators	17.1	16.5
Innovators that do not develop innovations themselves	7.4	6.5
Innovation active non-innovators	1.6	4.1
Non-innovators with potential to innovate	12.7	17.2
Non-innovators without disposition to innovate	34.3	30.7
Governance and policy framework		
Corruption Perceptions Index (0 to 100 best)	61.0	64.0
Basic school entrepreneurial education and training	4.7	3.3
Govt. procurement of advanced tech. products	3.0	3.5
Rule of law (-2.5 to 2.5 best)	1.0	1.0
Climate change indicators		
Circular material use rate	4.0	11.8
Greenhouse gas emissions intensity of energy consumption	103.0	82.8
Eco-Innovation Index	85.4	100.0
Demography		
Population size	2.8	447.1
Average annual population growth (%)	0.2	-0.1
Population density	44.8	108.8



This report provides the Country profile from the 2023 European Innovation Scoreboard for Lithuania.

Studies and reports