



European
Commission

European Innovation Scoreboard **2023** Country profile **Latvia**



Innovation

European Innovation Scoreboard 2023 – Country profile Latvia

European Commission

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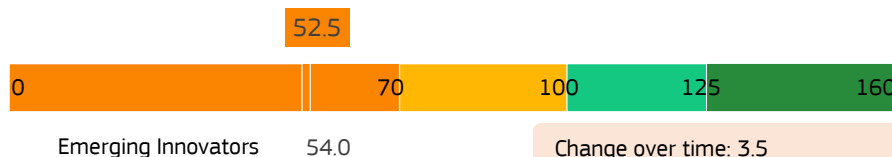
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The European Innovation Scoreboard report and annexes, and the indicators database are available at:

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



Latvia

	Performance relative to EU in 2023	Performance change 2016- 2023	Performance change 2022- 2023
SUMMARY INNOVATION INDEX	52.5	3.5	0.6
Human resources	75.4	-6.0	-1.1
Doctorate graduates	25.8	-22.9	-11.4
Population with tertiary education	122.5	2.4	2.4
Lifelong learning	78.4	12.1	12.1
Attractive research systems	53.7	27.4	10.1
International scientific co-publications	58.7	49.9	-4.1
Most cited publications	46.0	13.2	17.2
Foreign doctorate students	63.0	38.9	7.1
Digitalisation	71.2	-4.6	0.4
Broadband penetration	58.9	-9.1	0.9
People with above basic overall digital skills	88.1	0.0	0.0
Finance and support	37.9	-13.9	3.3
R&D expenditures in the public sector	54.7	3.2	-1.6
Venture capital expenditures	46.5	-55.7	8.7
Government support for business R&D	6.8	6.6	4.2
Firm investments	24.5	-9.4	-5.6
R&D expenditure in the business sector	12.5	-0.8	1.5
Non-R&D Innovation expenditures	57.3	-26.6	-16.0
Innovation expenditures per employee	9.2	-2.2	-3.3
Use of information technologies	75.4	19.3	5.6
Enterprises providing ICT training	58.0	17.8	-10.2
Employed ICT specialists	93.3	20.7	20.7
Innovators	39.3	30.0	-8.7
Product innovators (SMEs)	41.3	33.8	-16.2
Business process innovators (SMEs)	37.5	26.0	-0.7
Linkages	74.4	38.6	11.6
Innovative SMEs collaborating with others	45.8	41.6	-1.7
Public-private co-publications	98.9	71.5	-7.1
Job-to-job mobility of HRST	87.5	20.6	32.4
Intellectual assets	63.8	0.3	-3.0
PCT patent applications	41.8	-8.8	-3.2
Trademark applications	106.0	32.7	4.6
Design applications	49.8	-13.7	-8.6
Employment impacts	48.9	10.8	-4.7
Employment in knowledge-intensive activities	69.9	0.0	0.0
Employment in innovative enterprises	31.7	21.0	-9.2
Sales impacts	52.3	4.7	-3.8
Medium and high-tech goods exports	33.8	-7.1	-3.5
Knowledge-intensive services exports	83.8	15.7	7.0
Sales of innovative products	45.5	9.2	-17.6
Environmental sustainability	41.9	-11.8	7.6
Resource productivity	58.1	13.1	10.8
Air emissions by fine particulate matter	27.5	6.1	0.9
Environment-related technologies	46.5	-49.4	13.5

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).

LATVIA is an **Emerging Innovator** with performance at 52.5% of the EU average. Performance is below the average of the Emerging Innovators. Performance is increasing at a rate lower than that of the EU (8.5%-points). The country's performance gap to the EU is becoming larger.

Relative strengths

Population with tertiary education
Trademark applications
Public-private co-publications
Employed ICT specialists
People with above basic overall digital skills

Relative weaknesses

Government support for business R&D
Innovation expenditures per employee
R&D expenditure in the business sector
Doctorate graduates
Air emissions by fine particulate matter

Strong increases since 2016

Public-private co-publications
International scientific co-publications
Innovative SMEs collaborating with others

Strong decreases since 2016

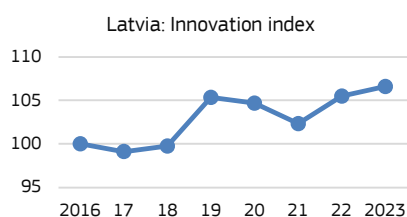
Venture capital expenditures
Environment-related technologies
Non-R&D Innovation expenditures

Strong increases since 2022

Job-to-job mobility of HRST
Employed ICT specialists
Most cited publications

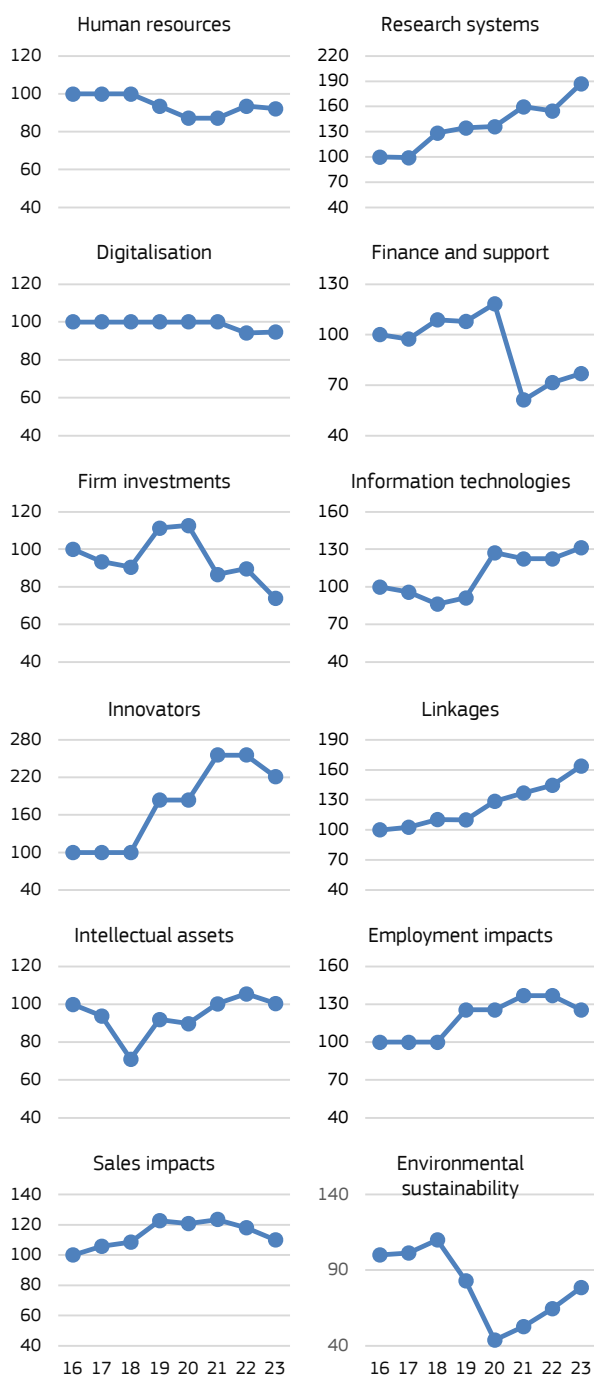
Strong decreases since 2022

Sales of innovative products
Product innovators
Non-R&D Innovation expenditures



The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance, after an initial increase, dropped in 2021 and then increased, leading to a 7% 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 and Linkages. Performance declined for Human resources, Digitalisation, Finance and support, Firm investments and Environmental sustainability.





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

Structural differences with the EU are shown below:

- Latvia has lower per capita income and a slower growing economy. Business services takes up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- Enterprise births, Entrepreneurial Activity, and FDI net inflows add positively to the innovation climate, Top R&D spenders, and Buyer sophistication add negatively.
- Latvia has higher shares of Non-innovators with potential to innovate 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.
- Latvia lags behind in climate change indicators, with below-average recycling rates, limited greenhouse gas reductions, and weak environmental innovation scores.

	LV	EU
Performance and structure of the economy		
GDP per capita (PPS)	23,700	32,600
Average annual GDP growth (%)	3.4	4.4
Employment share Manufacturing (NACE C) (%)	12.7	16.4
of which High and Medium high-tech (%)	15.3	38.0
Employment share Services (NACE G-N) (%)	41.4	41.1
of which Knowledge-intensive services (%)	29.5	35.8
Turnover share SMEs (%)	53.6	34.1
Turnover share large enterprises (%)	23.7	49.6
Foreign-controlled enterprises – share of value added (%)	14.6	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	1.8	1.0
Total Entrepreneurial Activity (TEA) (%)	15.4	6.8
FDI net inflows (% GDP)	5.1	2.1
Top R&D spending enterprises per 10 mln. population	0.0	20.3
Buyer sophistication (1 to 7 best)	3.1	3.7
Innovation profiles		
In-house product innovators with market novelties	10.9	12.2
In-house product innovators without market novelties	2.7	12.8
In-house business process innovators	12.6	16.5
Innovators that do not develop innovations themselves	3.6	6.5
Innovation active non-innovators	2.2	4.1
Non-innovators with potential to innovate	24.7	17.2
Non-innovators without disposition to innovate	43.3	30.7
Governance and policy framework		
Corruption Perceptions Index (0 to 100 best)	58.3	64.0
Basic school entrepreneurial education and training	4.3	3.3
Govt. procurement of advanced tech. products	2.9	3.5
Rule of law (-2.5 to 2.5 best)	1.0	1.0
Climate change indicators		
Circular material use rate	5.2	11.8
Greenhouse gas emissions intensity of energy consumption	82.9	82.8
Eco-Innovation Index	86.7	100.0
Demography		
Population size	1.9	447.1
Average annual population growth (%)	-0.8	-0.1
Population density	30.4	108.8



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

Studies and reports