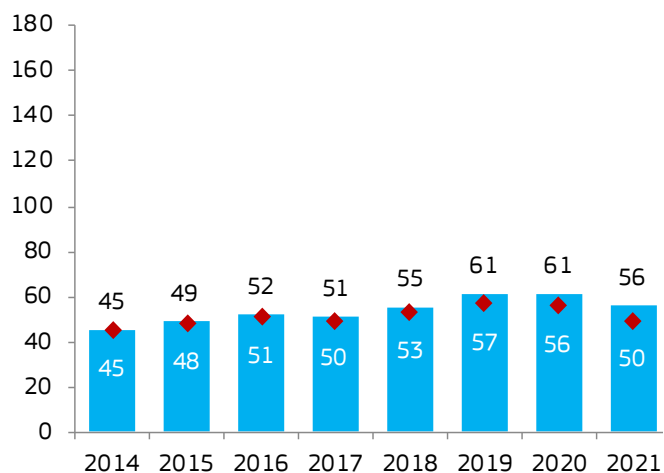




Latvia is an Emerging Innovator.

Over time, performance relative to the EU has increased strongly up until 2020 and decreased in 2021.



■ Relative to EU in base year ◆ Relative to EU in same year

Structural differences with the EU are shown in the table below including, compared to the EIS 2020, new information on different types of (innovating) enterprises (Innovation profiles) and environmental indicators.

	LV	EU
Performance and structure of the economy		
GDP per capita (PPS)	21,100	30,800
Average annual GDP growth (%)	-0.2	-2.5
Employment share Manufacturing (NACE C) (%)	12.8	16.5
of which High and Medium high-tech (%)	14.1	37.9
Employment share Services (NACE G-N) (%)	41.9	41.2
of which Knowledge-intensive services (%)	28.9	35.1
Turnover share SMEs (%)	53.8	36.5
Turnover share large enterprises (%)	22.4	45.7
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) (%)	14.8	6.7
FDI net inflows (% GDP)	2.9	2.0
Top R&D spending enterprises per 10 million population	0.0	16.2
Buyer sophistication (1 to 7 best)	3.1	3.7
Innovation profiles		
In-house product innovators with market novelties	11.4	10.7
In-house product innovators without market novelties	3.9	12.3
In-house business process innovators	6.6	11.0
Innovators that do not develop innovations themselves	8.6	11.6
Innovation active non-innovators	2.4	3.3
Non-innovators with potential to innovate	24.5	19.9
Non-innovators without disposition to innovate	42.6	31.3
Governance and policy framework		
Ease of starting a business (0 to 100 best)	80.2	76.5
Basic school entrepreneurial education and training	2.6	2.0
Govt. procurement of advanced tech. products	2.9	3.5
Rule of law (-2.5 to 2.5 best)	1.0	1.1
Climate change indicators		
Circular material use rate	5.0	11.7
Greenhouse gas emissions intensity of energy consumption	84.7	86.6
Eco-Innovation Index	86.0	100.0
Demography		
Population size	1.9	446.7
Average annual population growth (%)	-0.7	0.1
Population density	30.4	108.8

Latvia's strengths are in *Use of information technologies*, *Human resources* and *Digitalisation*. The top-3 indicators include Population with tertiary education, Trademark applications and Enterprises providing ICT training.

The relative strong decrease in innovation performance between 2020 and 2021 is the result of a sharp decline in Venture capital investments (from 0.215% to 0.019% of GDP) and Development of environment-related technologies (from 12.4 to 5.1).

Latvia has above average shares of Non-innovators with potential to innovate and Non-innovators without disposition to innovate. Latvia is showing below average scores on the Climate change related indicators.

Latvia	Relative to EU 2021 in 2021	Relative to EU 2014 in 2014	Relative to EU 2021 in 2021
SUMMARY INNOVATION INDEX	49.6	45.3	55.9
Human resources	71.7	75.0	76.0
Doctorate graduates	22.1	42.6	19.6
Population with tertiary education	128.2	128.9	165.3
Lifelong learning	65.7	70.0	72.2
Attractive research systems	53.0	14.1	59.7
International scientific co-publications	68.9	37.0	90.4
Most cited publications	40.1	6.0	39.4
Foreign doctorate students	53.2	2.2	63.2
Digitalisation	78.9	111.1	109.1
Broadband penetration	86.0	134.2	130.4
People with above basic overall digital skills	68.2	83.3	83.3
Finance and support	25.0	34.0	29.7
R&D expenditures in the public sector	52.7	57.9	50.9
Venture capital expenditures	13.5	26.8	22.7
Government support for business R&D	5.0	6.4	5.8
Firm investments	27.2	58.8	32.9
R&D expenditure in the business sector	8.5	7.9	9.4
Non-R&D Innovation expenditures	57.3	154.8	65.1
Innovation expenditures per employee	10.4	32.7	13.8
Use of information technologies	75.4	45.8	87.1
Enterprises providing ICT training	80.0	40.0	80.0
Employed ICT specialists	71.4	52.4	95.2
Innovators	41.3	28.7	56.6
Product innovators (SMEs)	42.3	13.2	59.7
Business process innovators (SMEs)	40.4	42.3	53.8
Linkages	58.3	65.4	78.6
Innovative SMEs collaborating with others	45.7	45.7	66.9
Public-private co-publications	78.9	40.2	88.4
Job-to-job mobility of HRST	55.4	100.0	79.5
Intellectual assets	67.4	35.8	58.4
PCT patent applications	26.0	13.9	22.5
Trademark applications	104.3	75.3	109.5
Design applications	58.2	18.3	39.9
Employment impacts	52.4	33.6	53.4
Employment in knowledge-intensive activities	64.6	61.3	70.7
Employment in innovative enterprises	42.6	14.0	41.2
Sales impacts	58.3	45.8	59.4
Medium and high tech goods exports	41.4	36.2	45.3
Knowledge-intensive services exports	70.7	69.0	74.8
Sales of innovative products	68.3	30.7	59.4
Environmental sustainability	22.3	19.0	23.2
Resource productivity	59.0	66.1	87.4
Air emissions by fine particulate matter	0.0	0.0	0.0
Environment-related technologies	19.6	15.5	14.8

The colours show normalised performance in 2021 relative to that of the EU in 2021: dark green: above 125%; light green: between 100% and 125%; yellow: between 70% and 100%; orange: below 70%. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.