



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.

	PL	EU
Performance and structure of the economy		
GDP per capita (PPS)	22,000	30,800
Average annual GDP growth (%)	1.0	-2.5
Employment share Manufacturing (NACE C) (%)	20.6	16.5
of which High and Medium high-tech (%)	27.9	37.9
Employment share Services (NACE G-N) (%)	35.2	41.2
of which Knowledge-intensive services (%)	31.1	35.1
Turnover share SMEs (%)	33.8	36.5
Turnover share large enterprises (%)	44.2	45.7
Foreign-controlled enterprises – share of value added (%)	14.5	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	1.8	1.0
Total Entrepreneurial Activity (TEA) (%)	6.5	6.7
FDI net inflows (% GDP)	2.5	2.0
Top R&D spending enterprises per 10 million population	0.9	16.2
Buyer sophistication (1 to 7 best)	3.4	3.7
Innovation profiles		
In-house product innovators with market novelties	5.2	10.7
In-house product innovators without market novelties	6.6	12.3
In-house business process innovators	6.7	11.0
Innovators that do not develop innovations themselves	3.4	11.6
Innovation active non-innovators	1.7	3.3
Non-innovators with potential to innovate	15.0	19.9
Non-innovators without disposition to innovate	61.3	31.3
Governance and policy framework		
Ease of starting a business (0 to 100 best)	77.1	76.5
Basic school entrepreneurial education and training	1.7	2.0
Govt. procurement of advanced tech. products	3.0	3.5
Rule of law (-2.5 to 2.5 best)	0.5	1.1
Climate change indicators		
Circular material use rate	9.8	11.7
Greenhouse gas emissions intensity of energy consumption	90.0	86.6
Eco-Innovation Index	59.0	100.0
Demography		
Population size	38.0	446.7
Average annual population growth (%)	0.0	0.1
Population density	123.6	108.8

Poland's strengths are in *Digitalisation*, *Intellectual assets* and *Use of information technologies*. The top-3 indicators include Design applications, Population with tertiary education, and Environment-related technologies.

The performance increase in the last two years is mostly due to strong improvements in Product and Business process innovators, Broadband penetration, Employment in innovative enterprises, and Public R&D expenditures.

Poland has an above average share of Non-innovators without disposition to innovate and is showing below average scores on the Climate change related indicators.

Poland	Relative to EU 2021 in 2021	Relative to EU 2014 in 2014	Relative to EU 2021 in 2021
SUMMARY INNOVATION INDEX	58.5	51.3	65.9
Human resources	63.9	68.2	67.7
Doctorate graduates	22.1	19.6	19.6
Population with tertiary education	126.3	155.4	162.8
Lifelong learning	39.4	53.3	43.3
Attractive research systems	39.4	25.6	44.3
International scientific co-publications	53.2	39.5	69.7
Most cited publications	44.3	22.8	43.6
Foreign doctorate students	11.3	13.8	13.5
Digitalisation	83.1	60.9	114.9
Broadband penetration	102.2	83.7	154.9
People with above basic overall digital skills	54.5	33.3	66.7
Finance and support	56.0	49.2	66.7
R&D expenditures in the public sector	56.4	64.9	54.4
Venture capital expenditures	36.8	58.0	61.9
Government support for business R&D	75.1	21.6	86.9
Firm investments	60.1	64.6	72.7
R&D expenditure in the business sector	55.3	22.0	61.4
Non-R&D Innovation expenditures	77.4	126.5	87.9
Innovation expenditures per employee	36.5	57.4	48.2
Use of information technologies	78.5	48.9	90.7
Enterprises providing ICT training	86.7	33.3	86.7
Employed ICT specialists	71.4	66.7	95.2
Innovators	15.1	5.6	20.7
Product innovators (SMEs)	21.3	2.9	30.0
Business process innovators (SMEs)	9.4	8.0	12.6
Linkages	68.8	72.8	92.7
Innovative SMEs collaborating with others	27.9	35.0	40.8
Public-private co-publications	63.4	41.9	71.1
Job-to-job mobility of HRST	101.8	123.1	146.2
Intellectual assets	84.4	63.9	73.2
PCT patent applications	15.1	13.3	13.1
Trademark applications	88.7	74.4	93.1
Design applications	155.5	98.4	106.6
Employment impacts	31.3	26.1	31.9
Employment in knowledge-intensive activities	59.8	53.3	65.3
Employment in innovative enterprises	8.6	6.8	8.3
Sales impacts	63.6	60.0	64.8
Medium and high tech goods exports	80.7	86.5	88.5
Knowledge-intensive services exports	53.9	45.8	57.0
Sales of innovative products	49.2	41.9	42.8
Environmental sustainability	62.2	49.3	64.8
Resource productivity	43.3	18.1	64.1
Air emissions by fine particulate matter	50.8	40.5	54.0
Environment-related technologies	105.1	79.2	79.0

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.