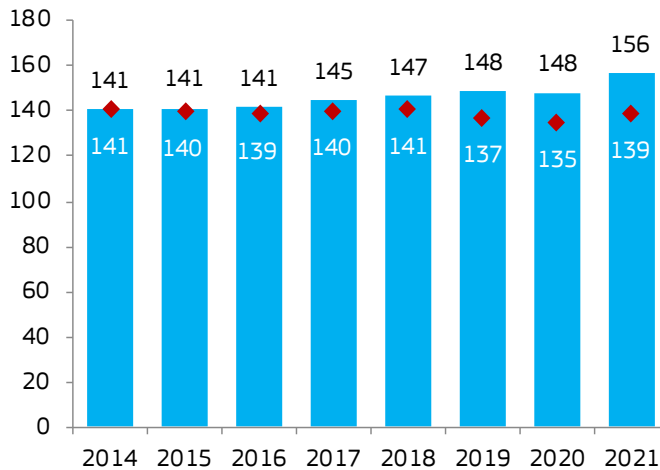




Sweden is an Innovation Leader.

Over time, performance relative to the EU has decreased.



■ 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.

	SE	EU
Performance and structure of the economy		
GDP per capita (PPS)	37,000	30,800
Average annual GDP growth (%)	-1.6	-2.5
Employment share Manufacturing (NACE C) (%)	10.0	16.5
of which High and Medium high-tech (%)	43.0	37.9
Employment share Services (NACE G-N) (%)	41.1	41.2
of which Knowledge-intensive services (%)	45.3	35.1
Turnover share SMEs (%)	36.6	36.5
Turnover share large enterprises (%)	46.5	45.7
Foreign-controlled enterprises – share of value added (%)	13.4	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.4	1.0
Total Entrepreneurial Activity (TEA) (%)	7.5	6.7
FDI net inflows (% GDP)	3.2	2.0
Top R&D spending enterprises per 10 million population	76.0	16.2
Buyer sophistication (1 to 7 best)	4.6	3.7
Innovation profiles		
In-house product innovators with market novelties	13.3	10.7
In-house product innovators without market novelties	14.0	12.3
In-house business process innovators	9.7	11.0
Innovators that do not develop innovations themselves	21.9	11.6
Innovation active non-innovators	1.7	3.3
Non-innovators with potential to innovate	3.7	19.9
Non-innovators without disposition to innovate	35.8	31.3
Governance and policy framework		
Ease of starting a business (0 to 100 best)	82.1	76.5
Basic school entrepreneurial education and training	2.5	2.0
Govt. procurement of advanced tech. products	4.0	3.5
Rule of law (-2.5 to 2.5 best)	1.9	1.1
Climate change indicators		
Circular material use rate	6.8	11.7
Greenhouse gas emissions intensity of energy consumption	71.4	86.6
Eco-Innovation Index	143.0	100.0
Demography		
Population size	10.2	446.7
Average annual population growth (%)	1.0	0.1
Population density	25.0	108.8

Sweden's strengths are in *Use of information technologies*, *Human resources* and *Attractive research systems*. The top-3 indicators include Lifelong learning, PCT patent applications, and International scientific co-publications.

The strong performance increase between 2020 and 2021 is due to improved performance for the indicators using innovation survey data and Venture capital.

Sweden has above average shares of In-house product innovators with market novelties and Innovators that do not develop innovations themselves. Sweden is showing close to average scores on the Climate change related indicators.

Sweden	Relative to EU 2021 in	Relative to EU 2014 in	
	2021	2014	2021
SUMMARY INNOVATION INDEX	139.0	140.5	156.5
Human resources	183.6	208.0	194.6
Doctorate graduates	138.9	157.4	123.0
Population with tertiary education	157.7	196.7	203.3
Lifelong learning	278.8	306.7	306.7
Attractive research systems	160.3	163.2	180.4
International scientific co-publications	172.4	180.9	226.1
Most cited publications	133.0	137.0	130.7
Foreign doctorate students	190.7	195.7	226.5
Digitalisation	147.4	146.6	203.9
Broadband penetration	133.5	148.3	202.5
People with above basic overall digital skills	168.2	144.4	205.6
Finance and support	117.7	119.9	140.2
R&D expenditures in the public sector	141.8	150.9	136.8
Venture capital expenditures	130.7	109.3	219.9
Government support for business R&D	76.8	85.2	88.8
Firm investments	130.8	156.6	158.0
R&D expenditure in the business sector	169.5	169.3	188.2
Non-R&D Innovation expenditures	66.7	103.0	75.8
Innovation expenditures per employee	141.3	186.5	186.5
Use of information technologies	185.0	213.7	213.7
Enterprises providing ICT training	180.0	180.0	180.0
Employed ICT specialists	189.3	252.4	252.4
Innovators	145.0	125.3	198.4
Product innovators (SMEs)	162.1	153.8	228.7
Business process innovators (SMEs)	129.0	100.2	171.7
Linkages	132.0	156.2	178.0
Innovative SMEs collaborating with others	127.4	151.5	186.8
Public-private co-publications	228.2	228.1	255.9
Job-to-job mobility of HRST	78.6	105.1	112.8
Intellectual assets	166.5	147.5	144.3
PCT patent applications	259.5	225.2	225.2
Trademark applications	125.7	114.6	131.9
Design applications	123.8	111.1	84.9
Employment impacts	151.0	135.9	153.8
Employment in knowledge-intensive activities	162.2	174.7	177.3
Employment in innovative enterprises	142.0	108.5	137.1
Sales impacts	111.1	88.4	113.1
Medium and high tech goods exports	97.0	96.7	106.4
Knowledge-intensive services exports	120.6	120.0	127.7
Sales of innovative products	120.4	40.0	104.7
Environmental sustainability	90.8	88.9	94.5
Resource productivity	51.5	78.0	76.2
Air emissions by fine particulate matter	105.3	102.3	111.9
Environment-related technologies	110.5	78.3	83.0

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.