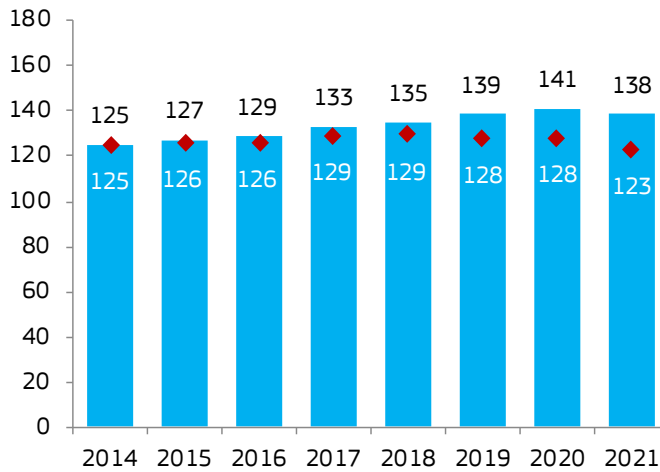




The Netherlands is a Strong Innovator.

Over time, performance relative to the EU has decreased, in particular due to a relatively strong decrease 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.

	NL	EU
Performance and structure of the economy		
GDP per capita (PPS)	39,800	30,800
Average annual GDP growth (%)	-1.7	-2.5
Employment share Manufacturing (NACE C) (%)	10.1	16.5
of which High and Medium high-tech (%)	31.1	37.9
Employment share Services (NACE G-N) (%)	46.7	41.2
of which Knowledge-intensive services (%)	40.9	35.1
Turnover share SMEs (%)	47.1	36.5
Turnover share large enterprises (%)	37.4	45.7
Foreign-controlled enterprises – share of value added (%)	14.7	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.7	1.0
Total Entrepreneurial Activity (TEA) (%)	10.9	6.7
FDI net inflows (% GDP)	-0.4	2.0
Top R&D spending enterprises per 10 million population	29.9	16.2
Buyer sophistication (1 to 7 best)	4.5	3.7
Innovation profiles		
In-house product innovators with market novelties	n/a	10.7
In-house product innovators without market novelties	n/a	12.3
In-house business process innovators	n/a	11.0
Innovators that do not develop innovations themselves	n/a	11.6
Innovation active non-innovators	n/a	3.3
Non-innovators with potential to innovate	n/a	19.9
Non-innovators without disposition to innovate	n/a	31.3
Governance and policy framework		
Ease of starting a business (0 to 100 best)	76.1	76.5
Basic school entrepreneurial education and training	3.4	2.0
Govt. procurement of advanced tech. products	4.0	3.5
Rule of law (-2.5 to 2.5 best)	1.8	1.1
Climate change indicators		
Circular material use rate	29.1	11.7
Greenhouse gas emissions intensity of energy consumption	95.4	86.6
Eco-Innovation Index	110.0	100.0
Demography		
Population size	17.3	446.7
Average annual population growth (%)	0.7	0.1
Population density	504.1	108.8

The Netherlands' strengths are in *Attractive research systems*, *Linkages* and *Use of information technologies*. The top-3 indicators include Foreign doctorate students, Public-private co-publications, and International scientific co-publications.

The performance decrease in 2021 is the result of reduced performance on Sales of innovative products, Product innovators, Employment in innovative enterprises, PCT patent applications, and Government support for business R&D.

The Netherlands is showing above average scores on the Climate change related indicators.

Netherlands	Relative to EU 2021 in	Relative to EU 2014 in	
	2021	2014	2021
SUMMARY INNOVATION INDEX	123.1	125.3	138.5
Human resources	141.2	133.4	149.7
Doctorate graduates	87.0	77.0	77.0
Population with tertiary education	162.2	169.4	209.1
Lifelong learning	187.9	188.9	206.7
Attractive research systems	176.0	184.5	198.1
International scientific co-publications	154.4	162.1	202.5
Most cited publications	158.7	168.3	156.0
Foreign doctorate students	236.5	246.8	280.9
Digitalisation	148.6	152.6	205.5
Broadband penetration	123.4	122.5	187.1
People with above basic overall digital skills	186.4	188.9	227.8
Finance and support	110.0	118.2	131.0
R&D expenditures in the public sector	94.5	115.8	91.2
Venture capital expenditures	137.5	108.6	231.2
Government support for business R&D	99.5	128.2	115.1
Firm investments	69.8	67.1	84.3
R&D expenditure in the business sector	100.0	81.1	111.0
Non-R&D Innovation expenditures	13.4	18.9	15.2
Innovation expenditures per employee	86.7	91.7	114.5
Use of information technologies	145.0	126.1	167.5
Enterprises providing ICT training	126.7	86.7	126.7
Employed ICT specialists	160.7	171.4	214.3
Innovators	94.3	124.5	129.1
Product innovators (SMEs)	90.6	160.6	127.9
Business process innovators (SMEs)	97.8	92.6	130.1
Linkages	150.5	194.6	203.0
Innovative SMEs collaborating with others	119.3	174.9	174.8
Public-private co-publications	208.2	206.2	233.5
Job-to-job mobility of HRST	139.3	200.0	200.0
Intellectual assets	135.5	110.5	117.4
PCT patent applications	161.3	150.5	140.0
Trademark applications	114.1	107.3	119.7
Design applications	139.0	78.4	95.3
Employment impacts	119.6	125.4	121.8
Employment in knowledge-intensive activities	147.6	152.0	161.3
Employment in innovative enterprises	97.2	106.5	93.8
Sales impacts	94.8	94.3	96.5
Medium and high tech goods exports	84.6	68.5	92.7
Knowledge-intensive services exports	125.9	127.2	133.3
Sales of innovative products	66.7	89.0	58.0
Environmental sustainability	124.8	124.7	129.9
Resource productivity	196.1	233.2	290.4
Air emissions by fine particulate matter	108.9	108.9	115.8
Environment-related technologies	70.2	80.7	52.7

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.