



# European Innovation Scoreboard 2023 - Country profile Norway

European Commission

Directorate-General for Research and Innovation

 ${\sf Directorate}\;{\sf G-Common\;Policy\;Centre}$ 

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Manuscript completed in June 2023.

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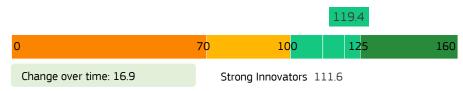
# The report was prepared by

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as part of the European Innovation Scoreboard project for the European Commission, Directorate-General for Research and Innovation under Framework Contract N° 2018/RTD/A2/OP/PP-07001-2018 Lot 2 (EDAR)

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





Performance Performance Performance

Nemvey		Performance	
Norway		change 2016-	
	in 2023	2023	2023
SUMMARY INNOVATION INDEX	119.4	16.9	-0.7
Human resources	159.7	-4.3	0.7
Doctorate graduates	114.8	-22.9	-11.4
Population with tertiary education	178.6	3.6	3.6
Lifelong learning	190.2	17.6	17.6
Attractive research systems	162.4	27.2	0.6
International scientific co-publications	272.6	147.4	11.1
Most cited publications	112.0	-14.7	-6.6
Foreign doctorate students	129.8	11.1	7.3
Digitalisation	139.4	13.2	8.1
Broadband penetration	115.8	26.0	15.9
People with above basic overall digital skills	171.8	0.0	0.0
Finance and support	129.0	55.9	-2.7
R&D expenditures in the public sector	121.9	17.7	-21.0
Venture capital expenditures	134.9	93.2	13.3
Government support for business R&D	129.6	69.0	5.4
Firm investments	78.6	4.5	-2.6
R&D expenditure in the business sector	68.8	9.2	-13.8
Non-R&D Innovation expenditures	89.4	2.2	7.4
Innovation expenditures per employee	79.4	2.0	-0.5
Use of information technologies	142.9	-15.9	-1.5
Enterprises providing ICT training	168.4	-21.7	7.6
Employed ICT specialists	116.7	-10.3	-10.3
Innovators	155.6	73.7	-1.7
Product innovators (SMEs)	176.8	67.5	-2.7
Business process innovators (SMEs)	136.9	80.4	-0.5
Linkages	244.7	68.2	-6.2
Innovative SMEs collaborating with others	243.7	91.0	0.0
Public-private co-publications	468.0	144.7	0.0
Job-to-job mobility of HRST	150.0	11.8	-14.7
Intellectual assets	57.4	3.9	-3.1
PCT patent applications	92.0	-2.0	-4.1
Trademark applications	53.1	17.6	-1.5
Design applications	12.1	0.7	-3.1
Employment impacts	133.5	20.5	1.6
Employment in knowledge-intensive activities	120.5	0.0	0.0
Employment in innovative enterprises	144.2	39.9	3.1
Sales impacts	55.3	0.5	-3.9
Medium and high-tech goods exports	0.0	-5.0	0.0
Knowledge-intensive services exports	141.8	8.5	2.3
Sales of innovative products	42.8	-1.2	-17.7
Environmental sustainability	82.8	1.4	4.1
Resource productivity	70.2	-1.6	0.0
Air emissions by fine particulate matter	76.0	10.1	-1.1
Environment-related technologies	105.3	-6.7	13.1
The second solumn shows performance relativ	_	•	

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).

**NORWAY** is a **Strong Innovator** with performance at 119.4% of the EU average. Performance is well above the average of the Strong Innovators. Performance is increasing at a rate higher than that of the EU (8.5%-points). The country's performance lead over the EU is becoming larger.

# **Relative strengths**

Public-private co-publications International scientific co-publications Innovative SMEs collaborating with others Lifelong learning Population with tertiary education

### **Relative weaknesses**

Medium and high-tech goods exports
Design applications
Sales of innovative products
Trademark applications
R&D expenditure in the business sector

# Strong increases since 2016

International scientific co-publications Public-private co-publications Venture capital expenditures

# Strong decreases since 2016

Doctorate graduates Enterprises providing ICT training Most cited publications

# Strong increases since 2022

Lifelong learning Broadband penetration Venture capital expenditures

# Strong decreases since 2022

R&D expenditures in the public sector Sales of innovative products Job-to-job mobility of HRST



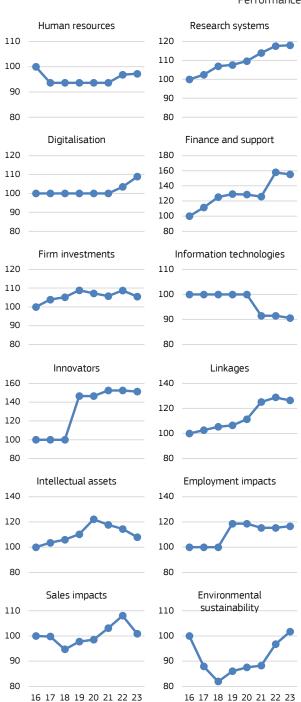
The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance increased moderately between 2016 and 2018 and then strongly in 2019. From 2020 onwards performance increased at more moderate rates, but declined in 2023, leading to an overall improvement of 15% between 2016 and 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 Finance and support and Innovators. Performance declined for Human resources and Information technologies.

### Structural differences with the EU are shown below:

- Norway has higher per capita income, but a slower growing economy. Business services takes up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- Buyer sophistication adds positively to the innovation climate, Enterprise births, Entrepreneurial Activity, FDI net inflows, and Top R&D spenders add negatively.
- Information on Innovation profiles is not available.
- Entrepreneurial training and government procurement are above the EU average as drivers of research and innovation.
- Climate change related indicators show that Norway has a below average reduction in greenhouse gas emissions.

below average reduction in greenhouse gas emi		
	NO	EU
Performance and structure of the economy	40 500	72.600
GDP per capita (PPS)	48,500	
Average annual GDP growth (%)	2.8	4.4
Employment share Manufacturing (NACE C) (%)	12.6	
of which High and Medium high-tech (%)	47.3	38.0
Employment share Services (NACE G-N) (%)	44.8	
of which Knowledge-intensive services (%)	47.8	
Turnover share SMEs (%)	42.4	
Turnover share large enterprises (%)	37.5	49.6
Foreign-controlled enterprises – share of value added (%)	12.2	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.2	1.0
Total Entrepreneurial Activity (TEA) (%)	6.4	6.8
FDI net inflows (% GDP)	1.9	2.1
Top R&D spending enterprises per 10 mln. population	18.6	20.3
Buyer sophistication (1 to 7 best)	4.4	3.7
Innovation profiles		
In-house product innovators with market novelties	n/a	12.2
In-house product innovators without market novelties	n/a	12.8
In-house business process innovators	n/a	16.5
Innovators that do not develop innovations themselves	n/a	6.5
Innovation active non-innovators	n/a	4.1
Non-innovators with potential to innovate	n/a	17.2
Non-innovators without disposition to innovate	n/a	30.7
Governance and policy framework		
Corruption Perceptions Index (0 to 100 best)	84.3	64.0
Basic school entrepreneurial education and training	5.4	3.3
Govt. procurement of advanced tech. products	4.1	3.5
Rule of law (-2.5 to 2.5 best)	2.0	
Climate change indicators		
Circular material use rate	n/a	11.8
Greenhouse gas emissions intensity of energy consumption	88.2	82.8
Eco-Innovation Index	n/a	100.0
Demography		
Population size	5.4	447.1
Average annual population growth (%)	0.5	-0.1
Population density	17.2	108.8
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Performance is measured relative to that of the country in 2016 (=100).

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

Studies and reports