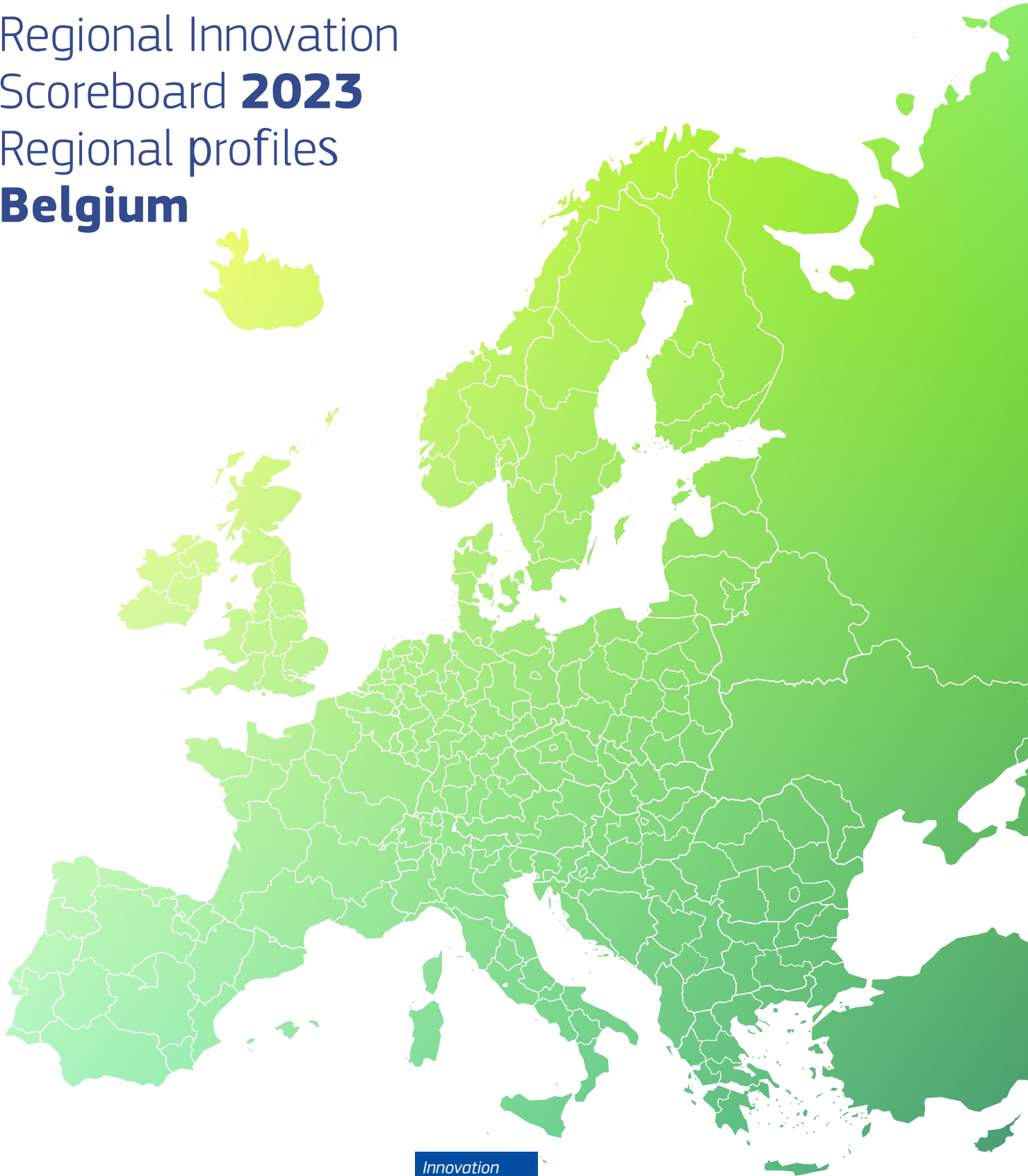




European
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Regional Innovation Scoreboard **2023** Regional profiles **Belgium**



Innovation

Regional Innovation Scoreboard 2023 – Regional profiles Belgium

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Regional Innovation Scoreboard 2023

Regional profiles Belgium

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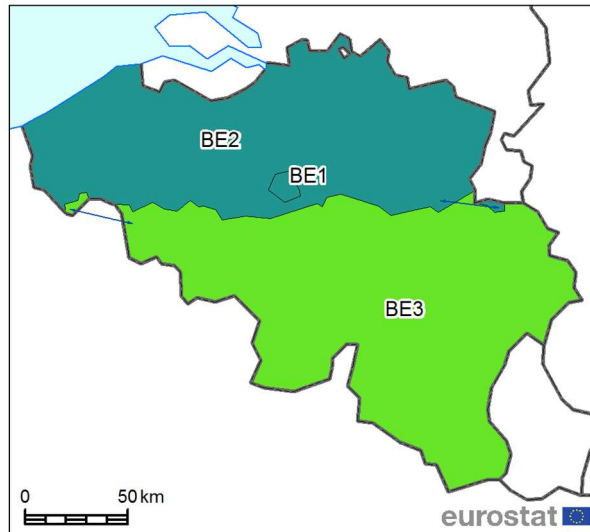
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BELGIUM



Map administrative boundaries: ©EuroGeographics ©UN-FAO ©Turkstat

NUTS	Region	RII	Rank	Group	Change
BE	Belgium	125.8	--	Innovation Leader	14.1
BE1	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	129.3	28	Innovation Leader -	14.2
BE2	Vlaams Gewest	130.3	23	Innovation Leader -	13.3
BE3	Région wallonne	113.5	60	Strong Innovator	13.9

Belgium is an Innovation Leader and includes three regions.

Both *Région de Bruxelles-Capitale* (BE1), or Brussels-Capital Region, and *Vlaams Gewest* (BE2), or the Flemish Region, are an Innovation Leader -. *Région wallonne* (BE3), or the Walloon Region, is a Strong Innovator.

For all three regions, performance has increased over time and also faster than that of the EU (8.5), with relatively small differences in performance change between the regions.

Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest (BE1)

	Data	Normalised score	Relative to	
			BE	EU
Tertiary education	56.7	0.869	117	165
Lifelong learning	14.6	0.515	148	139
International scientific co-publications	5548	1.000	185	326
Most-cited scientific publications	1130.1	0.644	94	118
Above average digital skills	26.4	0.469	100	100
R&D expenditures public sector	0.76	0.560	94	98
R&D expenditures business sector	1.48	0.668	77	99
Non-R&D innovation expenditures	±	0.209	45	52
Innovation expenditures per person employed	±	1.000	100	166
Employed ICT specialists	7.9	0.977	145	185
Product innovators	±	0.658	89	118
Business process innovators	±	0.854	85	132
Innovative SMEs collaborating	±	1.000	105	205
Public-private co-publications	869.2	0.982	157	251
PCT patent applications	1.68	0.444	76	72
Trademark applications	8.19	0.555	120	111
Design applications	1.98	0.410	86	71
Employment knowledge-intensive activities	19.3	0.716	122	126
Employment innovative enterprises	±	0.750	89	131
Sales of innovative products	±	0.383	64	80
Air emissions by fine particulates	9.8	0.669	97	112
Average normalised score	--	0.683	--	--
Country EIS-RIS correction factor	--	1.037	--	--
Regional Innovation Index (RII) 2023	--	0.708	--	--
Performance 2023 relative to EU in 2023	--	--	102.8	129.3
Performance 2023 relative to EU in 2016	--	--	--	140.2
Regional Innovation Index (RII) 2016	--	0.636	--	--
Performance 2016 relative to EU in 2016	--	--	103.0	126.0
Performance change over time	--	--	-0.2	14.2

± Scores are not shown as these would allow recalculating confidential regional CIS data.

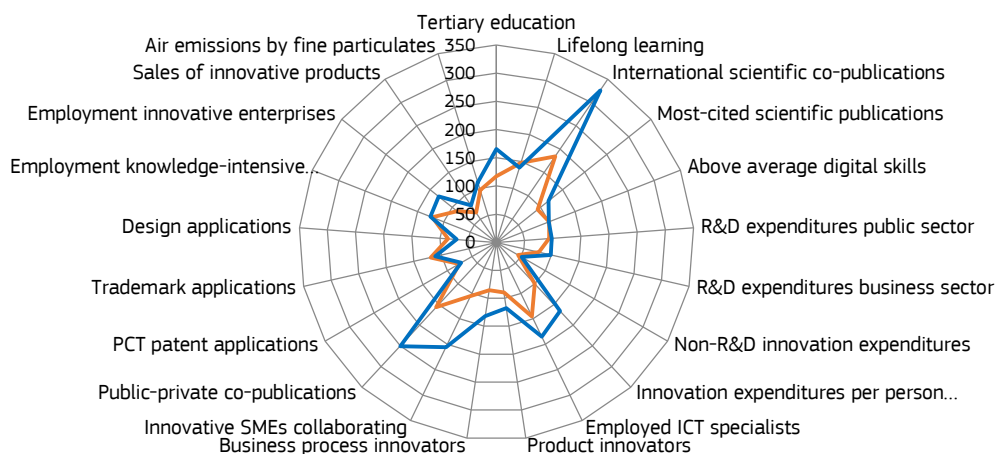
Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest (BE1) is an Innovation Leader -. Innovation performance has increased over time (14.2%).

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Belgium and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Belgium (102.8) and the EU (129.3) in 2023, the RII in 2023 relative to the EU in 2016 (140.2), and the RII in 2016 relative to both Belgium (103) and the EU in 2016 (126). The last row shows performance change between 2016 and 2023 compared to Belgium (-0.2%) and to the EU (14.2%).

The radar graph shows relative strengths compared to Belgium (orange line) and the EU (blue line), showing relative strengths (e.g. International scientific co-publications) and weaknesses (e.g. Non-R&D innovation expenditures).

The table below shows data highlighting possible structural differences, e.g. Population density (above EU average) and Employment in Manufacturing (below EU average).

	BE1	BE	EU
Share of employment in:			
Agriculture & Mining (A-B)	n/a	1.0	4.4
Manufacturing (C)	4.7	12.0	16.4
Utilities & Construction (D-F)	7.1	8.1	8.3
Services (G-N)	73.3	69.4	63.7
Public administration (O-U)	14.9	9.4	7.2
Average number of employed persons per enterprise	n/a	4.6	5.1
GDP per capita (PPS)	66,200	39,000	32,400
GDP per capita growth (PPS)	2.2	3.0	2.5
Population density	7,570	377	106
Urbanisation	100.0	86.9	75.8
Population size (000s)	1,230	11,550	447,210



— Relative to country
— Relative to EU

Vlaams Gewest (BE2)

	Data	Normalised score	Relative to	
			BE	EU
Tertiary education	53.5	0.798	108	152
Lifelong learning	10.8	0.371	107	100
International scientific co-publications	2528	0.611	113	199
Most-cited scientific publications	1281.7	0.745	108	136
Above average digital skills	26.7	0.477	102	101
R&D expenditures public sector	0.94	0.635	106	112
R&D expenditures business sector	2.40	0.850	98	126
Non-R&D innovation expenditures	±	0.519	111	128
Innovation expenditures per person employed	±	1.000	100	166
Employed ICT specialists	5.6	0.675	100	128
Product innovators	±	0.764	104	137
Business process innovators	±	1.000	100	155
Innovative SMEs collaborating	±	0.932	98	191
Public-private co-publications	414.9	0.679	108	173
PCT patent applications	3.40	0.631	108	102
Trademark applications	6.78	0.459	99	92
Design applications	3.33	0.531	112	92
Employment knowledge-intensive activities	16.8	0.597	102	105
Employment innovative enterprises	±	0.889	105	155
Sales of innovative products	±	0.636	106	132
Air emissions by fine particulates	10.2	0.651	94	109
Average normalised score	--	0.688	--	--
Country EIS-RIS correction factor	--	1.037	--	--
Regional Innovation Index (RII) 2023	--	0.714	--	--
Performance 2023 relative to EU in 2023	--	--	103.6	130.3
Performance 2023 relative to EU in 2016	--	--	--	141.3
Regional Innovation Index (RII) 2016	--	0.646	--	--
Performance 2016 relative to EU in 2016	--	--	104.6	128.0
Performance change over time	--	--	-1.0	13.3

± Scores are not shown as these would allow recalculating confidential regional CIS data.

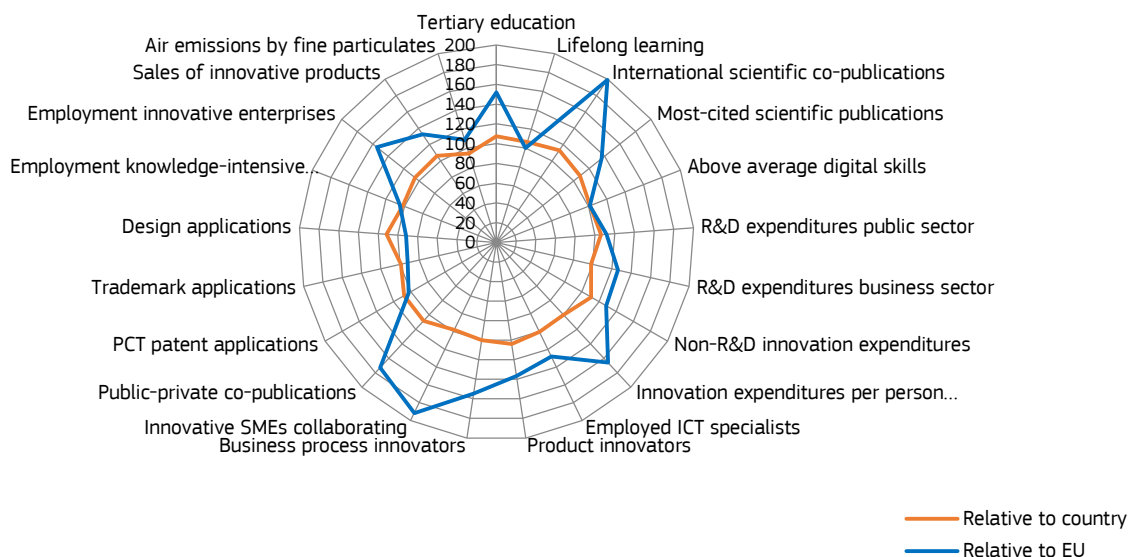
Vlaams Gewest (BE2) is an Innovation Leader -. Innovation performance has increased over time (13.3%).

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Belgium and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Belgium (103.6) and the EU (130.3) in 2023, the RII in 2023 relative to the EU in 2016 (141.3), and the RII in 2016 relative to both Belgium (104.6) and the EU in 2016 (128). The last row shows performance change between 2016 and 2023 compared to Belgium (-1%) and to the EU (13.3%).

The radar graph shows relative strengths compared to Belgium (orange line) and the EU (blue line), showing relative strengths (e.g. International scientific co-publications) and weaknesses (e.g. Design applications).

The table below shows data highlighting possible structural differences, e.g. Population density (above EU average) and Employment in Agriculture & Mining (below EU average).

	BE2	BE	EU
Share of employment in:			
Agriculture & Mining (A-B)	1.0	1.0	4.4
Manufacturing (C)	13.9	12.0	16.4
Utilities & Construction (D-F)	8.1	8.1	8.3
Services (G-N)	69.9	69.4	63.7
Public administration (O-U)	7.1	9.4	7.2
Average number of employed persons per enterprise	n/a	4.6	5.1
GDP per capita (PPS)	39,800	39,000	32,400
GDP per capita growth (PPS)	3.0	3.0	2.5
Population density	490	377	106
Urbanisation	90.4	86.9	75.8
Population size (000s)	6,660	11,550	447,210



Région wallonne (BE3)

	Data	Normalised score	Relative to	
			BE	EU
Tertiary education	43.4	0.574	78	109
Lifelong learning	7.5	0.246	71	66
International scientific co-publications	1290	0.311	57	101
Most-cited scientific publications	999.4	0.558	81	102
Above average digital skills	25.6	0.451	96	96
R&D expenditures public sector	0.52	0.444	74	78
R&D expenditures business sector	2.82	0.922	107	137
Non-R&D innovation expenditures	±	0.478	102	118
Innovation expenditures per person employed	±	1.000	100	166
Employed ICT specialists	4.8	0.562	83	107
Product innovators	±	0.675	92	121
Business process innovators	±	0.839	84	130
Innovative SMEs collaborating	±	0.960	101	197
Public-private co-publications	216.4	0.490	78	125
PCT patent applications	2.71	0.564	96	91
Trademark applications	5.99	0.405	87	81
Design applications	1.53	0.360	76	62
Employment knowledge-intensive activities	15.3	0.526	90	93
Employment innovative enterprises	±	0.732	87	128
Sales of innovative products	±	0.726	121	151
Air emissions by fine particulates	7.8	0.768	111	128
Average normalised score	--	0.599	--	--
Country EIS-RIS correction factor	--	1.037	--	--
Regional Innovation Index (RII) 2023	--	0.622	--	--
Performance 2023 relative to EU in 2023	--	--	90.3	113.5
Performance 2023 relative to EU in 2016	--	--	--	123.1
Regional Innovation Index (RII) 2016	--	0.551	--	--
Performance 2016 relative to EU in 2016	--	--	89.3	109.2
Performance change over time	--	--	1.0	13.9

± Scores are not shown as these would allow recalculating confidential regional CIS data.

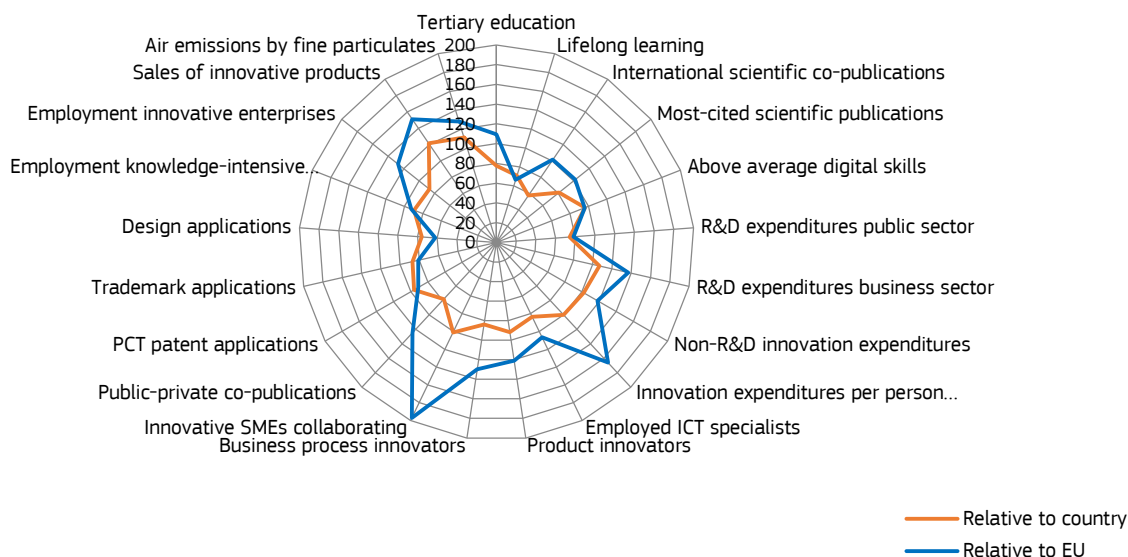
Région wallonne (BE3) is a Strong Innovator. Innovation performance has increased over time (13.9%).

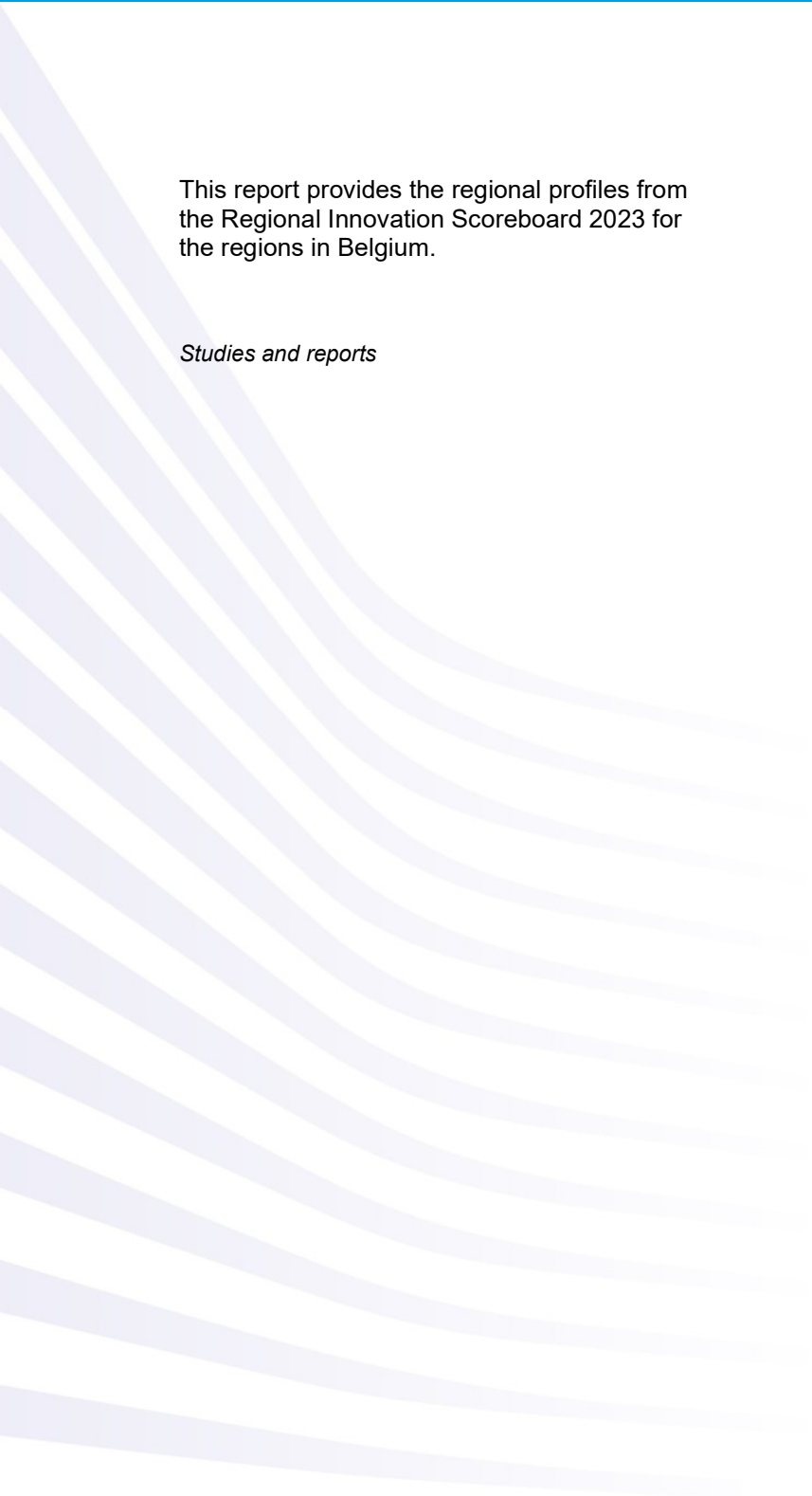

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Belgium and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Belgium (90.3) and the EU (113.5) in 2023, the RII in 2023 relative to the EU in 2016 (123.1), and the RII in 2016 relative to both Belgium (89.3) and the EU in 2016 (109.2). The last row shows performance change between 2016 and 2023 compared to Belgium (1%) and to the EU (13.9%).

The radar graph shows relative strengths compared to Belgium (orange line) and the EU (blue line), showing relative strengths (e.g. Innovative SMEs collaborating) and weaknesses (e.g. Design applications).

The table below shows data highlighting possible structural differences, e.g. Employment in Public administration (above EU average) and GDP per capita (below EU average).

	BE3	BE	EU
Share of employment in:			
Agriculture & Mining (A-B)	1.3	1.0	4.4
Manufacturing (C)	10.6	12.0	16.4
Utilities & Construction (D-F)	8.4	8.1	8.3
Services (G-N)	67.1	69.4	63.7
Public administration (O-U)	12.5	9.4	7.2
Average number of employed persons per enterprise	n/a	4.6	5.1
GDP per capita (PPS)	28,300	39,000	32,400
GDP per capita growth (PPS)	3.3	3.0	2.5
Population density	217	377	106
Urbanisation	76.2	86.9	75.8
Population size (000s)	3,660	11,550	447,210





This report provides the regional profiles from the Regional Innovation Scoreboard 2023 for the regions in Belgium.

Studies and reports