

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.

	IS	EU
Performance and structure of the economy		
GDP per capita (PPS)	40,100	30,800
Average annual GDP growth (%)	-3.8	-2.5
Employment share Manufacturing (NACE C) (%)	7.7	16.5
of which High and Medium high-tech (%)	31.0	37.9
Employment share Services (NACE G-N) (%)	38.5	41.2
of which Knowledge-intensive services (%)	38.7	35.1
Turnover share SMEs (%)	n/a	36.5
Turnover share large enterprises (%)	n/a	45.7
Foreign-controlled enterprises – share of value added (%)	n/a	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	1.0	1.0
Total Entrepreneurial Activity (TEA) (%)	n/a	6.7
FDI net inflows (% GDP)	-19.9	2.0
Top R&D spending enterprises per 10 million population	9.3	16.2
Buyer sophistication (1 to 7 best)	4.1	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)	79.0	76.5
Basic school entrepreneurial education and training	n/a	2.0
Govt. procurement of advanced tech. products	3.6	3.5
Rule of law (-2.5 to 2.5 best)	1.7	1.1
Climate change indicators		
Circular material use rate	n/a	11.7
Greenhouse gas emissions intensity of energy consumption	47.3	86.6
Demography		
Population size	0.4	446.7
Average annual population growth (%)	2.2	0.1
Population density	3.5	108.8

Iceland's strengths are in *Linkages, Attractive research systems* and *Finance and support.* The top-3 indicators include International scientific co-publications, Public-private co-publications, and Lifelong learning. In the most recent years innovation performance is declining, which is mostly due to reduced performance for Doctorate graduates, Business

R&D expenditures, Product and Business process innovators, Job-to-job mobility of HRST, Design applications, and Employment in knowledgeintensive activities.

Iceland is showing a above average performance on Greenhouse gas emissions.

Human resources   132.6   139.1   140.5     Doctorate graduates   48.1   54.0   42.6     Population with tertiary education   157.7   140.5   203.3     Lifelong learning   215.2   282.2   236.7     Attractive research systems   157.6   166.5   177.4     International scientific co-publications   101.6   107.6   99.8     Foreign doctorate students   179.4   148.9   213.0     Digitalisation   148.6   173.1   205.5     Broadband penetration   114.2   114.0   173.2     People with above basic overall digital skills   200.0   244.4   148.7     Finance and support   156.7   113.4   188.7     R&D expenditures in the public sector   150.9   101.8   145.6     Venture capital expenditures   67.9   77.2   77.2     R&D expenditure in the business sector   77.3   70.9   85.8     Non-R&D Innovation expenditures   67.9   77.2   77.2     Innovation expenditures in terpubl		Relative to Relative to EU		
SUMMARY INNOVATION INDEX   109.9   115.8   123.7     Human resources   132.6   139.1   140.5     Doctorate graduates   48.1   540   42.6     Population with tertiary education   157.7   140.5   203.3     Lifelong learning   215.2   282.2   236.7     Attractive research systems   157.6   166.5   177.4     International scientific co-publications   211.4   277.2   277.2     Most cited publications   101.6   107.6   99.8     Foreign doctorate students   179.4   148.8   213.0     Digitalisation   148.6   173.1   205.5     Broadband penetration   114.2   114.0   173.2     People with above basic overall digital skills   200.0   244.4   244.4     Finance and support   156.7   113.4   186.7     R&D expenditures in the public sector   150.9   101.8   145.6     Government support for business sector   77.3   70.9   85.8     Non-R&D Innovation expenditures	Iceland	EU 2021 in	2014 in	
Human resources   132.6   139.1   140.5     Doctorate graduates   48.1   54.0   42.6     Population with tertiary education   157.7   140.5   203.3     Lifelong learning   215.2   282.2   236.7     Attractive research systems   157.6   166.5   177.4     Most cited publications   101.6   107.6   99.8     Foreign doctorate students   179.4   148.9   213.0     Digitalisation   144.6   173.1   205.5     Broadband penetration   114.2   114.0   173.2     People with above basic overall digital skills   200.0   244.4   244.4     Finance and support   150.9   101.8   145.6     Venture capital expenditures   N/A   N/A   N/A     R&D expenditures in the public sector   150.9   101.8   145.6     Venture capital expenditures per employee   47.7   62.9   62.9     Non-R&D Innovation expenditures   67.9   77.2   77.2     Innovation expenditures per employee   <		2021	2014	2021
Doctorate graduates   48.1   54.0   42.6     Population with tertiary education   157.7   140.5   203.3     Lifelong learning   215.2   282.2   236.7     Attractive research systems   157.6   166.5   177.4     International scientific co-publications   101.6   107.6   99.8     Foreign doctorate students   179.4   148.9   213.0     Digitalisation   148.6   173.1   205.5     Broadband penetration   114.2   114.0   173.2     People with above basic overall digital skills   200.0   244.4   244.4     Finance and support   156.7   113.4   186.7     R&D expenditures in the public sector   159.9   101.8   145.6     Venture capital expenditures   N/A   N/A   N/A     R&D expenditure in the business sector   77.3   70.9   85.8     Non-R&D Innovation expenditures per employee   47.7   62.9   62.9     Use of information technologies   147.8   133.3   186.7     Employed	SUMMARY INNOVATION INDEX	109.9	115.8	123.7
Population with tertiary education   157.7   140.5   203.3     Lifelong learning   215.2   282.2   236.7     Attractive research systems   157.6   166.5   177.4     International scientific co-publications   211.4   277.2   277.2     Most cited publications   101.6   107.6   99.8     Foreign doctorate students   179.4   148.9   213.0     Digitalisation   144.8   173.1   205.5     Broadband penetration   114.2   114.0   173.2     People with above basic overall digital skills   200.0   244.4   244.4     Finance and support   158.7   113.4   186.7     R&D expenditures in the public sector   150.9   101.8   145.6     Overnment support for business R&D   158.2   93.0   183.0     Firm investments   61.3   69.8   74.0     R&D expenditure in the business sector   77.3   70.9   85.8     Non-R&D Innovation expenditures   67.9   172.2   170.7     Enterprises providi	Human resources	132.6	139.1	140.5
Lifelong learning215.2282.2236.7Attractive research systems157.6166.5177.4International scientific co-publications211.4277.2277.2Most cited publications101.6107.699.8Foreign doctorate students179.4148.9213.0Digitalisation148.6173.1205.5Broadband penetration114.2114.0173.2People with above basic overall digital skills200.0244.4Finance and support156.7113.4186.7R&D expenditures in the public sector150.9101.8145.6Venture capital expendituresN/AN/AN/AGovernment support for business R&D158.293.0183.0Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.31095152.4Innovators197.3251.6266.0Innovators (SMEs)107.6136.6143.1Linkages197.3329.1329.1Job-to-job mobility of HRST144.6189.720.7Intellectual assets64.282.155.6PCT patent applications5130035Employment in knowledge-intensive activities119.5157.3130.7 <t< td=""><td>Doctorate graduates</td><td>48.1</td><td>54.0</td><td>42.6</td></t<>	Doctorate graduates	48.1	54.0	42.6
Attractive research systems157.6166.5177.4International scientific co-publications211.4277.2277.2Most cited publications101.6107.699.8Foreign doctorate students179.4148.9213.0Digitalisation144.6173.1205.5Broadband penetration114.2114.0173.2People with above basic overall digital skills200.0244.4Finance and support156.7113.4186.7R&D expenditures in the public sector150.9101.8145.6Venture capital expendituresN/AN/AN/AGovernment support for business R&D158.293.0183.0Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Innovators191.5256.1280.7134.1Innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0135.6Public-private co-publications191.5256.1280.7Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications101.781.296.1Innovative SMEs68.9135.872.3Design applications <td< td=""><td>Population with tertiary education</td><td>157.7</td><td>140.5</td><td>203.3</td></td<>	Population with tertiary education	157.7	140.5	203.3
International scientific co-publications211.4277.2277.2Most cited publications101.6107.699.8Foreign doctorate students179.4148.9213.0Digitalisation148.6173.1205.5Broadband penetration114.2114.0173.2People with above basic overall digital skills200.0244.4244.4Finance and support156.7113.4186.7R&D expenditures in the public sector150.9101.8145.6Venture capital expendituresN/AN/AN/AGovernment support for business R&D158.293.0183.0Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Innovators (SMEs)101.6136.6143.1Innovators (SMEs)107.6136.6143.1Undative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.532.9132.91Job-to-job mobility of HRST144.6189.720.7Intalectual assets64.282.155.6PCT patent applications5130.03.5 <trr<tr>Employment in knowledge-intens</trr<tr>	Lifelong learning	215.2	282.2	236.7
Most cited publications101.6107.699.8Foreign doctorate students179.4148.9213.0Digitalisation148.6173.1205.5Broadband penetration114.2114.0173.2People with above basic overall digital skills200.0244.4244.4Finance and support156.7113.4186.7R&D expenditures in the public sector150.9101.8145.6Venture capital expendituresN/AN/AN/AGovernment support for business R&D158.293.0183.0Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Innovators (SMEs)101.7159.0139.1Product innovators (SMEs)107.6136.6143.1Linkages197.3256.1280.7Public-private co-publications293.532.9132.91Job-to-job mobility of HRST144.6189.720.7Intalectual assets64.282.155.6PCT patent applications5130.03.5Employment in knowledge-intensive activities119.5157.3130.7Employment in knowledge-intensive activities	Attractive research systems	157.6	166.5	177.4
Foreign doctorate students 179.4 148.9 213.0   Digitalisation 148.6 173.1 205.5   Broadband penetration 114.2 114.0 173.2   People with above basic overall digital skills 2000 244.4 244.4   Finance and support 156.7 113.4 186.7   R&D expenditures in the public sector 150.9 101.8 145.6   Venture capital expenditures N/A N/A N/A   Government support for business R&D 158.2 93.0 183.0   Firm investments 61.3 69.8 74.00   R&D expenditure in the business sector 77.3 77.2 77.2   Innovation expenditures 67.9 77.2 77.2   Innovation expenditures 147.8 122.2 170.7   Enterprises providing ICT training 186.7 133.3 186.7   Innovators (SMEs) 95.4 184.3 134.6   Business process innovators (SMEs) 107.6 136.6 143.1   Linkages 197.3 256.1 280.7   Public-private co-publications <td< td=""><td>International scientific co-publications</td><td>211.4</td><td>277.2</td><td>277.2</td></td<>	International scientific co-publications	211.4	277.2	277.2
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People with above basic overall digital skills   200.0   244.4   244.4     Finance and support   156.7   113.4   186.7     R&D expenditures in the public sector   150.9   101.8   145.6     Venture capital expenditures   N/A   N/A   N/A     Government support for business R&D   158.2   93.0   183.0     Firm investments   61.3   69.8   74.0     R&D expenditure in the business sector   77.3   70.9   85.8     Non-R&D Innovation expenditures   67.9   77.2   77.2     Innovation expenditures per employee   47.7   62.9   62.9     Use of information technologies   147.8   122.2   170.7     Employed ICT specialists   114.3   109.5   152.4     Innovators   190.7   159.0   139.1     Product innovators (SMEs)   107.6   136.6   143.1     Linkages   197.3   255.1   280.7     Public-private co-publications   293.5   329.1   329.1     Job-to-job mobility of HRST	Digitalisation	148.6	173.1	205.5
Finance and support156.7113.4186.7R&D expenditures in the public sector150.9101.8145.6Venture capital expendituresN/AN/AN/AGovernment support for business R&D158.293.0183.0Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.3109.5152.4Innovators195.4184.3134.6Business process innovators (SMEs)95.4184.3134.6Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications51.130.035.5Employment in novative enterprises134.4145.3129.8Employment in novative enterprises134.4145.3129.8Sales inpacts60.00.00.00.0Knowledge-intensive services exports68.489.072.5Sales of innovative products40.635.335.3Employment in inn	Broadband penetration	114.2	114.0	173.2
R&D expenditures in the public sector 150.9 101.8 145.6   Venture capital expenditures N/A N/A N/A   Government support for business R&D 158.2 93.0 183.0   Firm investments 61.3 69.8 74.0   R&D expenditure in the business sector 77.3 70.9 85.8   Non-R&D Innovation expenditures 67.9 77.2 77.2   Innovation expenditures per employee 47.7 62.9 62.9   Use of information technologies 147.8 122.2 170.7   Enterprises providing ICT training 186.7 133.3 186.7   Employed ICT specialists 114.3 109.5 152.4   Innovators 191.7 159.0 139.1   Product innovators (SMEs) 95.4 184.3 134.6   Business process innovators (SMEs) 107.6 136.6 143.1   Linkages 197.3 251.6 266.0   Innovative SMEs collaborating with others 191.5 256.1 280.7   Public-private co-publications 191.5 130.2 96.1   Trademark	People with above basic overall digital skills	200.0	244.4	244.4
Venture capital expendituresN/AN/AGovernment support for business R&D158.293.0183.0Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.3109.5152.4Innovators101.7159.0139.1Product innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications51.130.03.5Employment in knowledge-intensive activities119.5157.3130.7Employment in innovative enterprises134.4145.3129.8Sales infpacts68.489.072.5Sales infpacts68.489.072.5Sales of innovative products68.489.072.5Sales of innovative products68.489.072.5	Finance and support	156.7	113.4	186.7
Government support for business R&D158.293.0183.0Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.3109.5152.4Innovators101.7159.0139.1Product innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications51.130.03.5Employment in knowledge-intensive activities119.5157.3130.7Employment in knowledge-intensive activities119.5157.3130.7Employment in knowledge-intensive activities10.440.334.7Medium and high tech goods exports68.4890.072.5Sales of innovative products40.635.335.3Env	R&D expenditures in the public sector	150.9	101.8	145.6
Firm investments61.369.874.0R&D expenditure in the business sector77.370.985.8Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.3109.5152.4Innovators195.4184.3134.6Business process innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications51.130.03.5Employment in knowledge-intensive activities119.5157.3130.7Employment in innovative enterprises134.4145.3129.8Sales impacts0.00.00.00.0Knowledge-intensive services exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Air emissions by fine particulate matter59.855.563.6	Venture capital expenditures	N/A	N/A	N/A
R&D expenditure in the business sector 77.3 70.9 85.8   Non-R&D Innovation expenditures 67.9 77.2 77.2   Innovation expenditures per employee 47.7 62.9 62.9   Use of information technologies 147.8 122.2 170.7   Enterprises providing ICT training 186.7 133.3 186.7   Employed ICT specialists 114.3 109.5 152.4   Innovators 101.7 159.0 139.1   Product innovators (SMEs) 95.4 184.3 134.6   Business process innovators (SMEs) 107.6 136.6 143.1   Linkages 197.3 251.6 266.0   Innovative SMEs collaborating with others 191.5 256.1 280.7   Public-private co-publications 293.5 329.1 329.1   Job-to-job mobility of HRST 144.6 189.7 207.7   Intellectual assets 64.2 82.1 55.6   PCT patent applications 51.1 30.0 3.5   Employment in knowledge-intensive activities 119.5 157.3 130.7   Employmen	Government support for business R&D	158.2	93.0	183.0
Non-R&D Innovation expenditures67.977.277.2Innovation expenditures per employee47.762.962.9Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.3109.5152.4Innovators101.7159.0139.1Product innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications51.730.03.5Employment in knowledge-intensive activities119.5157.3130.7Employment in innovative enterprises134.4145.3129.8Sales impacts0.00.00.00.0Knowledge-intensive services exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Air emissions by fine particulate matter59.855.563.6	Firm investments	61.3	69.8	74.0
Innovation expenditures per employee 47.7 62.9 62.9   Use of information technologies 147.8 122.2 170.7   Enterprises providing ICT training 186.7 133.3 186.7   Employed ICT specialists 114.3 109.5 152.4   Innovators 101.7 159.0 139.1   Product innovators (SMEs) 95.4 184.3 134.6   Business process innovators (SMEs) 107.6 136.6 143.1   Linkages 197.3 251.6 266.0   Innovative SMEs collaborating with others 191.5 256.1 280.7   Public-private co-publications 293.5 329.1 329.1   Job-to-job mobility of HRST 144.6 189.7 207.7   Intellectual assets 64.2 82.1 55.6   PCT patent applications 110.7 81.2 96.1   Trademark applications 5.1 30.0 3.5   Employment in knowledge-intensive activities 119.5 157.3 130.7   Employment in innovative enterprises 134.4 145.3 129.8   Sales impacts <td>R&amp;D expenditure in the business sector</td> <td>77.3</td> <td>70.9</td> <td>85.8</td>	R&D expenditure in the business sector	77.3	70.9	85.8
Use of information technologies147.8122.2170.7Enterprises providing ICT training186.7133.3186.7Employed ICT specialists114.3109.5152.4Innovators101.7159.0139.1Product innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications5.130.03.5Employment in knowledge-intensive activities113.5157.3130.7Employment in innovative enterprises134.4145.3129.8Sales impacts0.00.00.00.0Knowledge-intensive services exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Air emissions by fine particulate matter59.855.563.6	Non-R&D Innovation expenditures	67.9	77.2	77.2
Enterprises providing ICT training 186.7 133.3 186.7   Employed ICT specialists 114.3 109.5 152.4   Innovators 101.7 159.0 139.1   Product innovators (SMEs) 95.4 184.3 134.6   Business process innovators (SMEs) 100.6 136.6 143.1   Linkages 197.3 251.6 266.0   Innovative SMEs collaborating with others 191.5 256.1 280.7   Public-private co-publications 293.5 329.1 329.1   Job-to-job mobility of HRST 144.6 189.7 207.7   Intellectual assets 64.2 82.1 55.6   PCT patent applications 110.7 81.2 96.1   Trademark applications 5.1 30.0 3.5   Employment in knowledge-intensive activities 119.5 157.3 130.7   Employment in innovative enterprises 134.4 145.3 129.8   Sales impacts 34.0 40.3 34.7   Medium and high tech goods exports 0.0 0.0 0.0   Knowledge-intensive services exports	Innovation expenditures per employee	47.7	62.9	62.9
Employed ICT specialists   114.3   109.5   152.4     Innovators   101.7   159.0   139.1     Product innovators (SMEs)   95.4   184.3   134.6     Business process innovators (SMEs)   107.6   136.6   143.1     Linkages   197.3   251.6   266.0     Innovative SMEs collaborating with others   191.5   256.1   280.7     Public-private co-publications   293.5   329.1   329.1     Job-to-job mobility of HRST   144.6   189.7   207.7     Intellectual assets   64.2   82.1   55.6     PCT patent applications   110.7   81.2   96.1     Trademark applications   51.1   30.0   3.5     Employment in knowledge-intensive activities   119.5   157.3   130.7     Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6	Use of information technologies	147.8	122.2	170.7
Innovators101.7159.0139.1Product innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications5.130.03.5Employment inpacts127.8150.3130.1Employment in innovative enterprises134.4145.3129.8Sales impacts34.040.334.7Medium and high tech goods exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Air emissions by fine particulate matter59.855.563.6	Enterprises providing ICT training	186.7	133.3	186.7
Product innovators (SMEs)95.4184.3134.6Business process innovators (SMEs)107.6136.6143.1Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications5.130.03.5Employment innovative enterprises134.4145.3129.8Sales impacts127.8150.3130.7Employment in innovative enterprises134.4445.3129.8Sales impacts0.00.00.0Knowledge-intensive services exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Air emissions by fine particulate matter59.855.563.6	Employed ICT specialists	114.3	109.5	152.4
Business process innovators (SMEs)   107.6   136.6   143.1     Linkages   197.3   251.6   266.0     Innovative SMEs collaborating with others   191.5   256.1   280.7     Public-private co-publications   293.5   329.1   329.1     Job-to-job mobility of HRST   144.6   189.7   207.7     Intellectual assets   64.2   82.1   55.6     PCT patent applications   110.7   81.2   96.1     Trademark applications   68.9   135.8   72.3     Design applications   5.1   30.0   3.5     Employment in knowledge-intensive activities   119.5   157.3   130.7     Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability	Innovators	101.7	159.0	139.1
Linkages197.3251.6266.0Innovative SMEs collaborating with others191.5256.1280.7Public-private co-publications293.5329.1329.1Job-to-job mobility of HRST144.6189.7207.7Intellectual assets64.282.155.6PCT patent applications110.781.296.1Trademark applications5.130.03.5Design applications5.130.03.5Employment impacts119.5157.3130.7Employment in innovative enterprises134.4145.3129.8Sales impacts34.040.334.7Medium and high tech goods exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Resource productivity74.1108.0109.7Air emissions by fine particulate matter59.855.563.6	Product innovators (SMEs)	95.4	184.3	134.6
Innovative SMEs collaborating with others   191.5   256.1   280.7     Public-private co-publications   293.5   329.1   329.1     Job-to-job mobility of HRST   144.6   189.7   207.7     Intellectual assets   64.2   82.1   55.6     PCT patent applications   110.7   81.2   96.1     Trademark applications   68.9   135.8   72.3     Design applications   5.1   30.0   3.5     Employment impacts   127.8   150.3   130.1     Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7	Business process innovators (SMEs)	107.6	136.6	143.1
Public-private co-publications 293.5 329.1 329.1   Job-to-job mobility of HRST 144.6 189.7 207.7   Intellectual assets 64.2 82.1 55.6   PCT patent applications 110.7 81.2 96.1   Trademark applications 68.9 135.8 72.3   Design applications 5.1 30.0 3.5   Employment impacts 119.5 157.3 130.7   Employment in innovative enterprises 134.4 145.3 129.8   Sales impacts 34.0 40.3 34.7   Medium and high tech goods exports 0.0 0.0 0.0   Knowledge-intensive services exports 68.4 89.0 72.5   Sales of innovative products 40.6 35.3 35.3   Environmental sustainability 68.2 58.3 71.0   Resource productivity 74.1 108.0 109.7   Air emissions by fine particulate matter 59.8 55.5 63.6	Linkages	197.3	251.6	266.0
Job-to-job mobility of HRST 144.6 189.7 207.7   Intellectual assets 64.2 82.1 55.6   PCT patent applications 110.7 81.2 96.1   Trademark applications 68.9 135.8 72.3   Design applications 5.1 30.0 3.5   Employment impacts 127.8 150.3 130.1   Employment in innovative enterprises 134.4 145.3 129.8   Sales impacts 34.0 40.3 34.7   Medium and high tech goods exports 0.0 0.0 0.0   Knowledge-intensive services exports 68.4 89.0 72.5   Sales of innovative products 40.6 35.3 35.3   Environmental sustainability 68.2 58.3 71.0   Resource productivity 74.1 108.0 109.7   Air emissions by fine particulate matter 59.8 55.5 63.6	Innovative SMEs collaborating with others	191.5	256.1	280.7
Intellectual assets   64.2   82.1   55.6     PCT patent applications   110.7   81.2   96.1     Trademark applications   68.9   135.8   72.3     Design applications   5.1   30.0   3.5     Employment impacts   127.8   150.3   130.1     Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7	Public-private co-publications	293.5	329.1	329.1
PCT patent applications 110.7 81.2 96.1   Trademark applications 68.9 135.8 72.3   Design applications 5.1 30.0 3.5   Employment impacts 127.8 150.3 130.1   Employment in innovative enterprises 134.4 145.3 129.8   Sales impacts 34.0 40.3 34.7   Medium and high tech goods exports 0.0 0.0 0.0   Knowledge-intensive services exports 68.4 89.0 72.5   Sales of innovative products 40.6 35.3 35.3   Environmental sustainability 68.2 58.3 71.0   Resource productivity 74.1 108.0 109.7   Air emissions by fine particulate matter 59.8 55.5 63.6	Job-to-job mobility of HRST	144.6	189.7	207.7
Trademark applications 68.9 135.8 72.3   Design applications 5.1 30.0 3.5   Employment impacts 127.8 150.3 130.1   Employment in innovative enterprises 119.5 157.3 130.7   Employment in innovative enterprises 134.4 145.3 129.8   Sales impacts 34.0 40.3 34.7   Medium and high tech goods exports 0.0 0.0 0.0   Knowledge-intensive services exports 68.4 89.0 72.5   Sales of innovative products 40.6 35.3 35.3   Environmental sustainability 68.2 58.3 71.0   Resource productivity 74.1 108.0 109.7   Air emissions by fine particulate matter 59.8 55.5 63.6	Intellectual assets	64.2	82.1	55.6
Design applications   5.1   30.0   3.5     Employment impacts   127.8   150.3   130.1     Employment in knowledge-intensive activities   119.5   157.3   130.7     Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7     Air emissions by fine particulate matter   59.8   55.5   63.6	PCT patent applications	110.7	81.2	96.1
Employment impacts   127.8   150.3   130.1     Employment in knowledge-intensive activities   119.5   157.3   130.7     Employment in knowledge-intensive activities   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7     Air emissions by fine particulate matter   59.8   55.5   63.6	Trademark applications	68.9	135.8	72.3
Employment in knowledge-intensive activities   119.5   157.3   130.7     Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7     Air emissions by fine particulate matter   59.8   55.5   63.6	Design applications	5.1	30.0	3.5
Employment in innovative enterprises   134.4   145.3   129.8     Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7     Air emissions by fine particulate matter   59.8   55.5   63.6	Employment impacts	127.8	150.3	130.1
Sales impacts   34.0   40.3   34.7     Medium and high tech goods exports   0.0   0.0   0.0     Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7     Air emissions by fine particulate matter   59.8   55.5   63.6	Employment in knowledge-intensive activities	119.5	157.3	130.7
Medium and high tech goods exports0.00.00.0Knowledge-intensive services exports68.489.072.5Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Resource productivity74.1108.0109.7Air emissions by fine particulate matter59.855.563.6	Employment in innovative enterprises	134.4	145.3	129.8
Knowledge-intensive services exports   68.4   89.0   72.5     Sales of innovative products   40.6   35.3   35.3     Environmental sustainability   68.2   58.3   71.0     Resource productivity   74.1   108.0   109.7     Air emissions by fine particulate matter   59.8   55.5   63.6	Sales impacts	34.0	40.3	34.7
Sales of innovative products40.635.335.3Environmental sustainability68.258.371.0Resource productivity74.1108.0109.7Air emissions by fine particulate matter59.855.563.6	Medium and high tech goods exports	0.0	0.0	0.0
Environmental sustainability68.258.371.0Resource productivity74.1108.0109.7Air emissions by fine particulate matter59.855.563.6	Knowledge-intensive services exports	68.4		72.5
Resource productivity74.1108.0109.7Air emissions by fine particulate matter59.855.563.6	Sales of innovative products	40.6	35.3	35.3
Air emissions by fine particulate matter 59.8 55.5 63.6	Environmental sustainability	68.2	58.3	71.0
	Resource productivity	74.1	108.0	109.7
Environment-related technologies 76.7 32.4 57.6	Air emissions by fine particulate matter	59.8	55.5	63.6
	Environment-related technologies	76.7	32.4	57.6

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.