

# ERA Country Report 2024 Iceland



Independent Expert Report

### **ERA Country Report 2024: Iceland**

European Commission
Directorate-General for Research and Innovation
Directorate A — ERA & Innovation
Unit A2 — ERA, Spreading Excellence and Research Careers

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## ERA Country Report 2024 Iceland

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as part of the project 'Implementation of the ERA Monitoring Mechanism' for the European Commission, Directorate-General for Research and Innovation (RTD/2023/OP/0017)

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### **Key takeaways**

- Research and innovation policy in Iceland is largely inspired by trends in the EU and the ERA Policy Agenda in particular.
- Although Iceland has not formally endorsed any actions under the ERA Policy Agenda, the country is active under all priorities and most of the actions under the current ERA Policy Agenda.
- Performance in the available ERA Dashboard Indicators shows that Iceland is performing well in terms of gender equality and inclusiveness, knowledge valorisation, international cooperation and academic freedom, bringing science closer to citizens, and access to research and innovation excellence.
- On the other hand, Iceland ranks comparatively low in terms of open science and research infrastructures.

### 1. National context

Iceland is among the smallest Associated Countries with a population of 390,000 people in 2023. The country is categorised as a *Strong Innovator* in the latest 2024 European Innovation Scoreboard with performance at 100.5 percent of the EU average. While the Icelandic index has been steadily growing since 2019, Iceland's performance has been increasing at a slower rate than the EU27 average since 2017. In terms of gross domestic expenditure on research and development (GERD), Iceland performed above the EU average in 2023. Iceland also has more researchers (in full-time equivalent, FTE) per million inhabitants compared to the EU27 average.

**Table 1 Structural Key Indicators** 

	EU27	Iceland		
Indicator	2023	2023	Average 2018-2020	Average 2021-2023
GDP per capita, in current prices	35 790.00	73 930.00	63 983.33	62 506.67
Gross Domestic Expenditure on R&D (GERD) as a share of GDP	2.27	2.60	2.28	2.66
Size of the population (million)	448.80	0.39	0.36	0.38
Researchers (in FTE) per million in- habitants	4 681.34	6940.42	1	1

Source: Annex 1

The Ministry of Culture, Innovation and Higher Education (MCIHE), up until the beginning of 2025 known as the Ministry of Higher Education, Science, and Innovation, holds the overall responsibility for research and innovation (R&I) in Iceland.<sup>3</sup> The Science and Innovation Council provides high-level independent policy advice to the government on science, technology and innovation (STI) matters, whereas the Ministerial Committee on Science and Innovation coordinates the government's policy in the field of STI.

The **Icelandic Centre for Research (Rannís)**<sup>4</sup>, is the main national agency funding and promoting scientific research in Iceland. Rannís manages the three main research funds: the Icelandic Research Fund, the Technology Development Fund and the Infrastructure Fund. The agency also administers a Tax Credit Scheme for innovative companies. In 2024, a new R&I policy has been produced. However, due to the parliamentary election in November 2024, the policy was not published before the end of the year.

### 2. Status of the Implementation of the ERA Policy Agenda

Iceland is an Associated Country and participates in ERA as a full and equal partner as part of the EEA/EFTA Agreement. However, the country has not formally committed to the ERA Policy Agenda 2022-2024, in part due to a reorganisation of the ministerial portfolios in 2022. This reorganisation resulted in the establishment of the new MCIHE. According to a representative MCIHE, Iceland intends to commit to the next policy agenda. This chapter therefore

<sup>&</sup>lt;sup>1</sup> See <a href="https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis-2024#/eis/countries/IS">https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis-2024#/eis/countries/IS</a>

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> The name of the ministry changed from the Ministry of Higher Education, Science, and Innovation to the Ministry of Culture, Innovation and Higher Education in the beginning of 2025.

<sup>&</sup>lt;sup>4</sup> Rannís: <a href="https://en.rannis.is/">https://en.rannis.is/</a>

presents developments and achievements since the publication of the ERA Country Report 2023 that are relevant to the various ERA priorities and actions, in which Iceland is particularly active. The findings are based on qualitative desk research and interviews with representatives of MCIHE.

### ERA Priority 1: Deepening a truly functioning internal market for knowledge

Iceland continues to place high priority on open science and open access (**ERA Action 1**). The country's focus is on working towards a culture that embraces open data by strengthening support mechanisms and establishing research infrastructures that assist researchers in meeting open access requirements. Although Iceland do not yet have a policy on open science, work is underway to formulate and implement a policy on open and responsible science with the aim of strengthening the quality of scientific work, recognition and equality among scientists, as well as increasing the societal benefits of research.<sup>5</sup> Three of the seven universities in Iceland have policies on Open access, although none of them is mandatory.<sup>6</sup> In addition, MCIHE has a representative on the EOSC Steering Board, which it took over from Rannís in October 2024.

In November 2024, Statistics Iceland, in collaboration with the European Digital Innovation Hub in Iceland (EDIH-IS), universities, and MCIHE, among others, organised a conference on the development of the Icelandic data ecosystem to improve access to data and its utilisation.<sup>7</sup>

Related to **ERA Action 3**, in September 2023, a new performance-based funding model for universities was introduced in Iceland.<sup>8</sup> In the research component of the funding model, seven new variables have been introduced, six of which focus on publication statistics. Additionally, special funding is awarded for securing foreign grants and producing doctoral graduates. These updates mark the first inclusion of research activity metrics in the funding formula.<sup>9</sup> According to a representative of MCIHE, the new performance-based funding model has been positively received by the universities, and the ministry is already noticing some positive changes. In addition, two Icelandic institutions, Rannís and the University of Iceland, have become members of the Coalition for Advancing Research Assessment (CoARA).<sup>10</sup>

Attracting and retaining world-class scientific talent is one of the key objectives of the Icelandic Government's Policy on Science and Innovation (**ERA Action 4**). By offering scientists competitive terms of employment through systematically promoting the quality of life in Iceland, subsidising experts' expenses for moving to the country, and strengthening international education, Iceland aims to attract international experts. The R&I policy also emphasises the need for measures to attract and support the work of young scientists and talented individuals. In August 2023, Iceland implemented amendments to the Foreign Nationals Act that introduce new benefits for residence permit holders. The changes benefit individuals who

<sup>&</sup>lt;sup>5</sup> Icelandic Government (2024), Stefnumótun málefnasviða 2025–2029, available: <a href="https://www.stjornarradid.is/library/03-Verkefni/Efnahagsmal-og-opinber-fjarmal/FjarmalaaAetlun-2024/Stefnum%c3%b3tun%20m%c3%a1lefnasvi%c3%b0a%202025-2029.pdf">https://www.stjornarradid.is/library/03-Verkefni/Efnahagsmal-og-opinber-fjarmal/FjarmalaaAetlun-2024/Stefnum%c3%b3tun%20m%c3%a1lefnasvi%c3%b0a%202025-2029.pdf</a> [accessed 16-01-2025]

<sup>&</sup>lt;sup>6</sup> Opinn Aðgangur/Open Access, OA Policies in Iceland: <a href="https://openaccess.is/oa-policies-in-iceland/">https://openaccess.is/oa-policies-in-iceland/</a>

<sup>&</sup>lt;sup>7</sup> European Digital Innovation Hub EDIH Iceland, Ráðstefna um íslenska gagnavistkerfið: https://www.edih.is/radstefna-um-islenska-gagnavistkerfid [accessed 16-01-2025]

<sup>&</sup>lt;sup>8</sup> Government of Iceland, 18. september 2023, Ministry of Higher Education, Industry and Innovation, Performance-based funding for universities: <a href="https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2023/09/18/Arangurstengd-fjarmognun-haskola/">https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2023/09/18/Arangurstengd-fjarmognun-haskola/</a> [accessed 16-01-2025]

<sup>&</sup>lt;sup>9</sup> Ministry of Higher Education, Science and Innovation, Performance-based University Funding Exposition, December 2024

<sup>&</sup>lt;sup>10</sup> CoARA, List of the Coalition members: <a href="https://coara.eu/coalition/membership/">https://coara.eu/coalition/membership/</a> [accessed 16-01-2025]

apply for, or hold, residence permits based on employment under the following categories (i) Expert Knowledge; (ii) Specialised Staff with a Collaboration or Service Contract; and (iii) Labour Shortage. In addition, the implemented changes benefit dependents of primary applicants and international students in Iceland.<sup>11</sup>

In relation to **ERA Action 5** on gender equality, Iceland is considered one of the most gender-equal countries in the world, ranking number one in the World Economic Forum's gender gap index for 14 consecutive years. Despite this, the Icelandic government's Financial Plan for 2025-2029<sup>13</sup> identifies gender disparities in R&I. Efforts are directed at increasing women's participation in competitive public funds and fostering opportunities for underrepresented groups, improving women's advancement in academic hierarchies. Other initiatives include targeted support for women in entrepreneurship and innovation, and programmes to encourage women's participation in Science, Technology, Engineering, and Mathematics (STEM). Other measures such as simplifying research grant systems and integrating gender perspectives into decision-making aim to create a more inclusive and equitable research system.

The national technology transfer office (TTO) Auðna supports the Icelandic science community in bringing innovative ideas to full market realisation, and to enable knowledge valorisation (**ERA Action 7**). It gives advice on intellectual property protection, analyses market- and patent landscapes and connects inventions and innovative research projects with investors and the industry. Auðna regularly organises courses for the science community where experts present and share their experience and knowledge regarding value creation, intellectual property rights, funding channels and contracts. Is

National work on **ERA Action 8** on research infrastructure follows the 2021 adoption the first Icelandic Roadmap for Research Infrastructures<sup>16</sup>. Work is ongoing to update the roadmap. The Science and Innovation Council is also placing emphasis on ensuring that the updated roadmap align with ongoing efforts related to the European Strategy Forum on Research Infrastructures (ESFRI) and the next ESFRI Roadmap

## ERA Priority 2: Taking up together the green transition and digital transformation and other challenges with impact on society and increasing society's participation in the ERA

Relevant for **ERA Action 10** on EU R&I missions and partnerships, Iceland participates in the Chips Joint Undertaking (Chips JU) as well as the Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans).<sup>17</sup> In addition, Rannís is a member of the Clean Energy Transition Partnership (CETP).<sup>18</sup>

Concerning, ERA Action 11, Iceland aims to achieve carbon neutrality before 2040 and to cut greenhouse gas emissions by 40 percent by 2030 under the Paris Agreement.19 A Climate

6

<sup>&</sup>lt;sup>11</sup> EY, Iceland introduces new benefits for residence permit holders: <a href="https://www.ey.com/en\_gl/technical/tax-alerts/iceland-introduces-new-benefits-for-residence-permit-holders">https://www.ey.com/en\_gl/technical/tax-alerts/iceland-introduces-new-benefits-for-residence-permit-holders</a>

<sup>&</sup>lt;sup>12</sup> World Economic Forum, Equity, Diversity and Inclusion, Gender parity: Here's what leading countries are getting right, Jun 21, 2023; https://www.weforum.org/stories/2023/06/global-gender-gap-parity/

getting right, Jun 21, 2023: https://www.weforum.org/stories/2023/06/global-gender-gap-parity/

13 Icelandic Government (2024), Fjármálaáætlun 2025–2029, available: https://www.stjornarradid.is/library/03-Verkefni/Efnahagsmal-og-opinber-fjarmal/FjarmalaaAetlun-2024/Fjarmalaaaetlun\_2025-2029.pdf

<sup>&</sup>lt;sup>14</sup> OECD STIP COMPASS, Iceland, Technology Transfer Office: <a href="https://stip.oecd.org/stip/interactive-dash-boards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F26059">https://stip.oecd.org/stip/interactive-dash-boards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F26059</a> [accessed 16-01-2025]

<sup>&</sup>lt;sup>15</sup> TTO Iceland, Masterclass, <a href="https://www.audna.is/en/masterclass">https://www.audna.is/en/masterclass</a> [accessed 16-01-2025]

<sup>&</sup>lt;sup>16</sup> Ministry of Education, Science and Culture (2021). Icelandic Roadmap for Research Infrastructures 2021. Reykjavik: Prime Minister's Office

<sup>&</sup>lt;sup>17</sup> ÉRA LEARN, Organisations: <a href="https://www.era-learn.eu/network-information/organisations/iceland-country">https://www.era-learn.eu/network-information/organisations/iceland-country</a> [accessed 16-01-2025]

<sup>&</sup>lt;sup>18</sup> CETPartnership members: <a href="https://cetpartnership.eu/members">https://cetpartnership.eu/members</a> [accessed 16-01-2025]

<sup>&</sup>lt;sup>19</sup> Government of Iceland (2020). A Sustainable Energy Future – An Energy Policy to the year 2050

Action Plan, published in 2018 and updated in 2020 and 2024, containing 150 actions, is Iceland's main policy instrument to reach these goals. The Climate and Energy Fund, managed by the National Energy Authority (Orkustofnun), provides grants for energy transition projects aimed reducing the use of fossil fuels and instead utilising renewable and environmentally friendly energy, using proven technology. Complementarily, the Climate Fund provides grants to support research and development regarding the adaptation and implementation of new climate-friendly solutions. In March 2024, a bill proposing an amendment to the Energy Fund Act No. 76/2020 and the Climate Change Act No. 70/2012 was introduced to parliament and is currently under review. The bill proposes to simplify and expand funding in the field of environment, energy and climate issues with the aim of reducing greenhouse gas emissions. In addition, as mentioned above, Rannís is a member of CETP. 24

Concerning **ERA Action 12** on the twin transition, in Iceland, tax incentives have become the primary instrument of government to boost business R&I, allowing companies that engage in R&I projects to deduct part of the related costs from their payable income tax.<sup>25</sup> The law on R&I tax credits was amended in 2020 as a part of the Icelandic government measures to counteract the economic impact of COVID-19. The tax credit percentage was raised and the ceiling on total annual qualifying R&I costs was increased for qualifying projects.<sup>26</sup>In 2024, the regulations regarding the tax credits were clarified further and monitoring strengthened.

In 2022, Eyvör, the Icelandic National Coordination Centre (NCC-IS) for Cybersecurity was established. In October 2023 it was awarded a two-year co-funding via the Digital Europe Programme. Eyvör NCC-IS is a collaborative platform for education, training and research in the field of cybersecurity in Iceland. The purpose of Eyvör is to systematically support Icelandic stakeholders from the business sector, the research community and the public sector in strengthening research and increasing skills, knowledge and development in the field of cybersecurity, as well as to ensure strong European cooperation in the field of cybersecurity. Eyvör was established based on EU Regulation 2021/887<sup>27</sup> and will work in close collaboration with the European Cybersecurity Competence Centre (ECCC).<sup>28</sup>

In April 2023, the European Digital Innovation Hub in Iceland (EDIH-IS) was formally established. The focus of EDIH-IS is on building capacity and skills to support the digital transformation in key sectors and SMEs.<sup>29</sup>

The government also supports IceTec, which is a private company that offers technical expertise and facilities for deep tech entrepreneurs with the goal to bridge the gap between industry and academic research in the fields of materials science, civil engineering,

<sup>&</sup>lt;sup>20</sup> Government of Iceland, New Climate Action Plan - More detailed mapping of actions and benefits than beforer: <a href="https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2024/06/14/Ny-adgerdaaaetlun-i-lofts-lagsmalum-ltarlegri-kortlagning-adgerda-og-avinnings-en-adur-/[accessed 03-04-2025]">https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2024/06/14/Ny-adgerdaaaetlun-i-lofts-lagsmalum-ltarlegri-kortlagning-adgerda-og-avinnings-en-adur-/[accessed 03-04-2025]</a>

<sup>&</sup>lt;sup>21</sup> Ísland.is, Climate and energy fund: https://island.is/en/p/energy-fund/objectives-and-roles

<sup>&</sup>lt;sup>22</sup> Rannís, Loftslagssjóður: <a href="https://www.rannis.is/sjodir/rannsoknir/loftslagssjodur/">https://www.rannis.is/sjodir/rannsoknir/loftslagssjodur/</a>

<sup>&</sup>lt;sup>23</sup> Ísland.is, Samráðsgátt, Frumvarp um Loftslags- og orkusjóð: https://island.is/samradsgatt/mal/3708

<sup>&</sup>lt;sup>24</sup> CETPartnership members: https://cetpartnership.eu/members [accessed 16-01-2025]

<sup>&</sup>lt;sup>25</sup> OECD (2023). Evaluating the effects of the R&D tax credit in Iceland

<sup>&</sup>lt;sup>26</sup> Deloitte (2020). Survey of Global Investment and Innovation Incentives, Iceland.

<sup>&</sup>lt;sup>27</sup> Regulation (EU) 2021/887 of the European Parliament and of the Council of 20 May 2021 establishing the European Cybersecurity Industrial, Technology and Research Competence Centre and the Network of National Coordination Centres

<sup>&</sup>lt;sup>28</sup> Government of Iceland, A collaborative platform for education, training and research in the field of cybersecurity in Iceland, Eyvör – National Coordination Center Iceland (NCC-IS): <a href="https://www.stjornarradid.is/ver-kefni/fjarskipti/netoryggi/ncc-is/#:~:text=NCC-neti%C3%B0%20er%20samstarfsvett-vangur%20fr%C3%A6%C3%B0slu%2C%20menntunar%20og%20ranns%C3%B3kna%20%C3%A1,%C3%">https://www.stjornarradid.is/ver-kefni/fjarskipti/netoryggi/ncc-is/#:~:text=NCC-neti%C3%B0%20er%20samstarfsvett-vangur%20fr%C3%A6%C3%B0slu%2C%20menntunar%20og%20ranns%C3%B3kna%20%C3%A1,%C3%</a>

A1samt%20%C3%BEv%C3%AD%20a%C3%B0%20veita%20uppl%C3%BDsingar%20um%20starfsemi%20ECCC [accessed 16-01-2025]

<sup>&</sup>lt;sup>29</sup> European Digital Innovation Hub EDIH Iceland, Miðstöð stafrænnar nýsköpunar: https://www.edih.is/

biotechnology and energy. There is also a specific focus on green technology. IceTec provides industry with the technology infrastructures needed to test, validate and scale up innovations.

In November 2024, MCIHE released its draft Artificial Intelligence Action Plan for 2024–2026. The action plan is based on the government's policy on artificial intelligence from 2021. The Action Plan is structured around five pillars, including actions to support innovation and the digital transformation of the business sector, with an emphasis on building knowledge, digital skills and technology transfer.30

ERA Action 13 continues being addressed through international partnerships. As mentioned in the 2023 Country Report, the University of Iceland participates in the Aurora University Partnership, funded through the European Universities Initiative, which aims to harness academic excellence to influence societal change through research and educational activities.<sup>31</sup>

Finally, Iceland is implementing activities closely linked to ERA Action 14. Increasing "the general public's engagement and participation in science and innovation" is one of the key objectives in Iceland's new R&I Policy. It recognises that public support for prioritising government spending on research is dependent on a widespread comprehension of the mechanisms of science and innovation and their significance in building a thriving society. Complementarily, the third component of the new performance-based funding model for universities considers the societal role of universities. Funding in this component covers a wide range of contributions which address multiple objectives to ensure that universities are better placed to fulfil their societal role.32

### ERA Priority 3: Enhancing access to research and innovation excellence across the Union and enhancing interconnections between innovation ecosystems across the Union

There are no new developments to report since the publication of the 2023 ERA Country Report regarding developments and achievements relevant to ERA Priority 3 and related actions.

### ERA Priority 4: Advancing concerted research and innovation investments and reforms

There are no new developments to report since the publication of the 2023 ERA Country Report regarding developments and achievements relevant to ERA Priority 4 and related actions.

<sup>30</sup> Ísland.is, Samráðsgátt, Aðgerðaáætlun um gervigreind 2024-2026: https://island.is/samradsgatt/mal/3862

<sup>&</sup>lt;sup>31</sup> Aurora, We are Aurora, Matching academic excellence with societal relevance: https://aurora-universi-

ties.eu/about/ [accessed 16-01-2025]

32 Ministry of Higher Education, Science and Innovation (2024). Performance-based University Funding Expo-

### 3. Contribution of ERA Actions to national performance in reaching ERA objectives

This chapter provides a qualitative assessment of how the joint ERA Actions contributed to Iceland's performance in achieving the ERA objectives as defined in the Pact for R&I during the period 2022-2024.

**ERA Priority 1** is addressed through a range of measures related to **ERA Actions 1, 3, 4, 5, 7, 8 and 9** which aim to create structural reforms and other interventions. On the topic of **Open Science**, ERA Dashboard Indicator 6 shows that Iceland is performing on par with the EU27 average in terms of the share of publications available in open access. When it comes to the number of open-access research datasets and the number of repositories, ERA Dashboard Indicators 7 and 8 show that Iceland ranks below the EU27 average. Despite a positive development in the last five years, the number of open-access research datasets is not developing on par with the EU27 average, meaning that Iceland is falling further behind. However, when interpreting ERA Dashboard Indicator 7 and 8, the small size of the country should be considered.

As shown by ERA Dashboard Indicator 10, Iceland committed 0.1 percent of its national public R&D expenditure to European **research infrastructures** in 2023. Related ERA Dashboard Indicators 11, 12, 13, 14 and 16 illustrate that Iceland is participating in five European research infrastructures, which is below the EU27 average but above or on par with other small countries such as Malta and Luxembourg.

When it comes to **gender equality and inclusiveness** in research and innovation, that Iceland is performing above or on par with the EU27 average related ERA Dashboard Indicators 12-14 and 16. The proportion of mixed-gender teams as well as the proportion of women in authorships of the top 10 percent most cited publications has increased since 2014.

In terms of attractive research careers and international mobility, Iceland has a higher share of foreign doctorate students compared to the EU27 average (ERA Dashboard Indicator 17). When it comes to new doctorate graduates per 1,000 inhabitants aged 25-34, however, Iceland is performing below the EU27 average (ERA Dashboard Indicator 18).

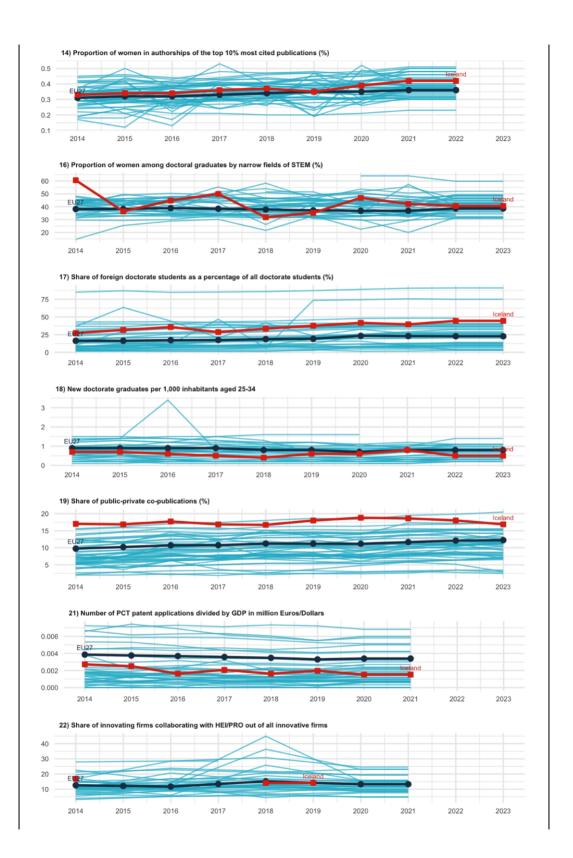
In the area of **knowledge valorisation**, Iceland has one of the highest shares of public-private co-publications, ranking well above the EU27 average, as shown by ERA Dashboard Indicator 19. However, developments have fluctuated over the past ten years and the EU27 average has been catching up to Iceland's performance. As for PCT patent applications (divided by GDP) and patents by universities and public research organisations, Iceland is ranking lower that the EU27 average, as illustrated by ERA Dashboard Indicators 21 and 25. Furthermore, the number of PCT patent applications has decreased. However, in terms of business enterprise researchers in full-time equivalent per thousand employments in industry, Iceland is ranking higher than the EU27 average, as depicted in ERA Dashboard Indicator 24.

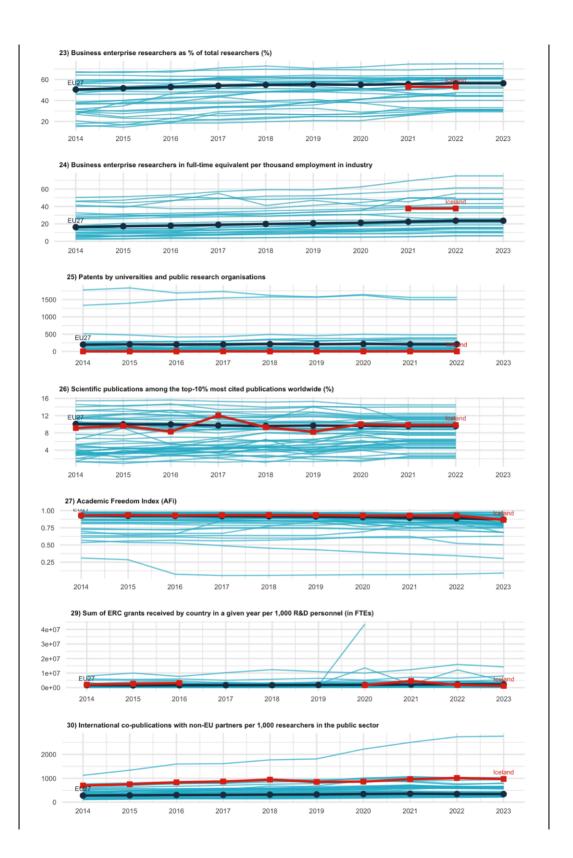
As for **internation cooperation**, Iceland is performing well in terms of international co-publications with non-EU partners and developments show a positive trend compared to the EU27 average, as illustrated by ERA Dashboard Indicator 30. Iceland also ranks higher than the EU27 average in terms of the share of patents with foreign co-inventors, as shown in ERA Dashboard Indicator 31. As for the sum of ERC grants received per 1,000 R&D personnel (in FTEs), Iceland is performing on par with the EU27 average (ERA Dashboard Indicator 29).

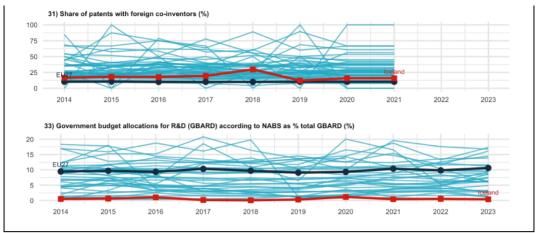
In other ERA Priority 1 areas, ERA Dashboard Indicator 27 shows that Iceland has a high degree of **academic freedom**, although the country's position has decreased slightly in 2023. In terms of Government budget allocations for R&D (GBARD), Iceland ranks among the lowest countries in Europe and well below the EU27 average.

Figure 3-1 Indicators for ERA Priority 1





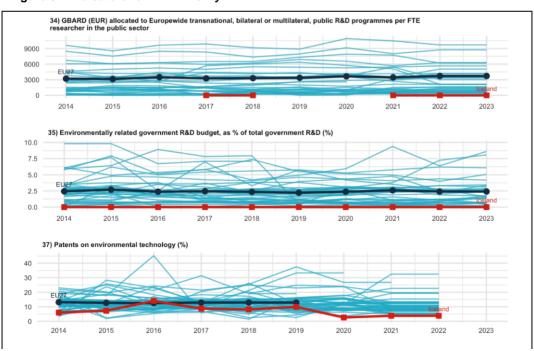


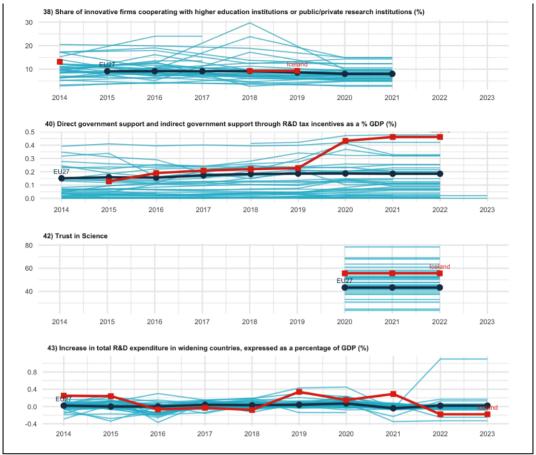


Source: See Annex 1

**ERA Priority 2** is addressed through measures related to **ERA Actions 10-14**. Regarding **green energy transformation**, Iceland ranks low in terms of its environmentally related government R&D budget as a share of total government R&D, as illustrated by ERA Dashboard Indicator 35. Furthermore, the share of patents on environmental technology has decreased since 2016 (ERA Dashboard Indicator 37). Between 2019 and 2020, government support through R&D tax incentives as a percent of GDP increased significantly in Iceland and the country now ranks among the highest in Europe, well above the EU27 average, (ERA Dashboard Indicator 40). **Bringing science closer to citizens** is a key priority for Iceland, and the country also ranks high in terms of trust in science, well above the EU27 average (ERA Dashboard Indicator 42).

Figure 3-2 Indicators for ERA Priority 2

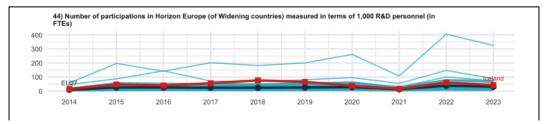


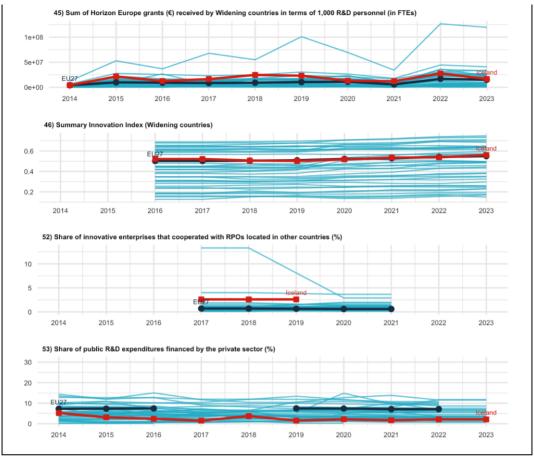


Source: See Annex 1

In relation to **ERA Priority 3**, Iceland ranked high in terms of the share of innovative enterprises that cooperated with research performing organisations (RPOs) located in other countries between the years 2017 and 2019 (the only years for which data is available), as evidenced by ERA Dashboard Indicator 52. Iceland also ranks high in the summary innovation index, and on par with the EU27 average, as shown by indicator 46. However, the share of public R&D expenditure financed by the private sector is comparatively low, as illustrated by ERA Dashboard Indicator 53. When it comes to **improving EU-wide access to excellence**, Iceland ranks higher or on par with the EU27 average (ERA Dashboard Indicators 44 and 45).







Source: See Annex 1

In relation to ERA Priority 4, there are no data for Iceland regarding the related indicator.

### 4. Effects of ERA Action implementation on the national R&I system

This chapter presents a qualitative assessment of the implementation of actions related to the ERA Policy Agenda 2022-2024 on the national R&I system.

**ERA Priority 1:** Iceland's measures related to **ERA Actions 1, 8 and 9** corresponds to the key objectives in the new research and innovation policy of ensuring robust scientific work by strengthening universities and research institutions, supporting national and international collaboration, and promoting open research, technology, and data infrastructure. Measures corresponding to **ERA Action 9** has long been a priority for Iceland, and the Dashboard shows a positive trend in these areas, in particular ERA Dashboard Indicator 30 and 31. **ERA Action 4** corresponds to the policy objective of attracting and retaining world-class scientific talent in the new research and innovation policy, which is pursued by several measures

**ERA Priority 2:** Iceland aims to achieve carbon neutrality before 2040 and to cut greenhouse gas emissions by 40 percent by 2030 under the Paris Agreement.<sup>33</sup> Corresponding to **ERA Actions 11 and 12**, Iceland's Climate Action Plan<sup>34</sup> includes actions aiming to reduce emissions, including the Climate fund and the issuing of green bonds. In addition, the objectives of **ERA Action 14** are reflected to the policy measures to increase "the general public's engagement and participation in science and innovation" in the new science and innovation policy, and ERA Dashboard Indicator 42 shows a positive trend in this area.

### 5. Conclusions

Research and innovation policy in Iceland is largely inspired by trends in the EU and the ERA Policy Agenda in particular, as evidenced by the review of developments and achievements relevant to the various ERA priorities and actions presented in chapter 2.

The report shows that although Iceland has not formally endorsed any ERA Actions under the 2022-2024 ERA Policy Agenda, the country is actively working on initiatives closely related and sometimes directly linked to ERA Priority 1 and ERA Priority 2.

The analysis of relevant ERA Dashboard Indicators underline that the country overall performs on par with the EU27 average.

<sup>33</sup> Government of Iceland (2020). A Sustainable Energy Future – An Energy Policy to the year 2050

<sup>&</sup>lt;sup>34</sup> Government of Iceland, Climate Change: <a href="https://www.government.is/topics/environment-climate-and-na-ture-protection/climate-change/">https://www.government.is/topics/environment-climate-and-na-ture-protection/climate-change/</a> [accessed 16-01-2025]

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### Annex 1 – Full List of ERA Dashboard Indicators

The indicators used in the report are taken from the ERA Dashboard 2024. The full ERA Dashboard Report and the supporting Data Replication Package can be downloaded at <a href="https://european-research-area.ec.europa.eu/era-monitoring-reports">https://european-research-area.ec.europa.eu/era-monitoring-reports</a>. However, *GDP* (in million €), Size of the population (million), and Share of female researchers, all sectors of performance (%) were added to provide additional context and directly retrieved from the Eurostat website.

Additionally, EU and country averages are for 2023, except *Share of female researchers, all sectors of performance* (%) (2021).

**Table 1 Structural Key Indicators:** 

Indicator number	Indicator	Source
/	GDP in euro per capita, current prices	Eurostat https://doi.org/10.2908/TEC00001
1	Gross Domestic Expenditure on R&D (GERD) as a share of GDP	Eurostat
2	Government Budget Allocations for R&D (GBARD) as share of GDP	Eurostat
4	Business Enterprise Expenditure on R&D (BERD) as a share of GDP	Eurostat
5.2	Expenditure on R&D procurement as a percentage of GDP	EC/European Innovation Procurement Observatory
/	Size of the population (million)	Eurostat, https://doi.org/10.2908/TPS00001
3	Researchers (in FTE) per million inhabitants	Eurostat
1	Share of female researchers, all sectors of performance (%)	Eurostat, https://doi.org/10.2908/TSC00005

Figure 3.1 Indicators for ERA Priority 1

Indicator number	Indicator	Source
6	Share of publications available in open access (green, gold, and diamond)	OpenAIRE
7	Number of open-access research datasets by country	OpenAIRE
8	Number of repositories by country	EOSC - Re3data
9	Country investments in EOSC and Open Science (in ranges of investment)	EOSC Observatory
10	Share of national public R&D expenditure committed to European research infrastructures	ESFRI
11	Number of European RIs in which a Member State or an Associated Country participates	ESFRI
12	Proportion of women of Grade A among academic staff/researchers	Women in Science - She Figures
13	(Corrected) Proportion of mixed-gender teams	EC_Scopus
14	(Corrected) Proportion of women in authorships of the top 10% most cited publications	EC_Scopus
15	Women in Digital index (0-100)	EC-Women in Digital Scoreboard

16	Proportion of women among doctoral graduates by narrow fields of STEM	Eurostat
17	Share of foreign doctorate students as a percentage of all doctorate students	Eurostat
18	New doctorate graduates per 1,000 inhabitants aged 25-34	Eurostat
19	Share of public-private co-publications	EC_Scopus
20	(Cumulative number of) Best practice examples and methodologies for knowledge valorisation	Knowledge Valorisation Platform
21	Number of PCT patent applications divided by GDP in million Euros/Dollars	OECD, Eurostat & World Bank
22	Share of innovating firms collaborating with HEI/PRO out of all innovative firms	Eurostat CIS (own calculations)
23	Business enterprise researchers as % of total researchers	OECD
24	Business enterprise researchers in full-time equivalent per thousand employment in industry	OECD
25	Patents by universities and public research organisations	EPO PATSTAT - Fraunhofer ISI calculations
26	% of scientific publications among the top-10% most cited publications worldwide	EC_Scopus
27	Academic Freedom Index (AFi)	V-Dem Varieties of Democracy
28	Average ranking score of top 10 universities by country and year	QS World University Ranking
29	Sum of ERC grants received by country in a given year per 1,000 R&D personnel (in FTEs)	EC-ERC
30	International co-publications with non-EU partners per 1,000 researchers in the public sector	EC_ScienceMetrix and Eurostat/OECD
31	Share of patents with foreign co-inventors	OECD
32	European and international co-patenting in EPO applications at national and EU level	Eurostat
33	Government budget allocations for R&D (GBARD) according to NABS as % total GBARD	Eurostat

Figure 3.2 Indicators for ERA Priority 2

Indicator number	Indicator	Source	
34	Note: The ERA Dashboard Indicator 34 was removed from the Dashboard in January 2025. As a consequence, the indicator has also been omitted from the Country Report, while, however, keeping the original numbering of the indicators.		
35	Environmentally related government R&D budget, as % of total government R&D	Eurostat	
36	National public and private investments as sug- gested in the SET Plan progress report 2021 (EUR million)	SETIS R&I data	
37	% Patents on environmental technology	OECD	
38	Share of innovative firms cooperating with higher education institutions or public/private research institutions	Eurostat CIS	
39	Enterprises that purchased or licensed-in patents or other IPRs from public research organisations, universities or higher education institutions	Eurostat CIS	

40	Direct government support and indirect government support through R&D tax incentives as a % GDP	OECD
41	Green bond issuance as a percentage of total bond issuance	Eurostat - EEA
42	Trust in Science	Eurobarometer 95.2
43	Increase in total R&D expenditure in widening countries, expressed as a percentage of GDP	Eurostat, OECD, UNESCO

Figure 3.3 Indicators for ERA Priority 3

Indicator number	Indicator	Source
44	Number of participations in Horizon Europe (of Widening countries) measured in terms of 1,000 R&D personnel (in FTEs)	Cordis - Eurostat
45	Sum of Horizon Europe grants (€) received by Widening countries in terms of 1,000 R&D personnel (in FTEs)	Cordis - Eurostat
46	Summary Innovation Index (Widening countries)	EC_EIS
47	Share of enterprises using public funds from dif- ferent governance levels (local or regional, na- tional, and EU) for R&I activities	Eurostat CIS
48	Number of Seal of Excellence projects on the InvestEU Portal per 1,000 R&D personnel (in FTEs)	EC - Invest EU
49	Number of collaboration networks of RPOs in Widening countries with other EU countries	Cordis - Horizon Dashboard
50	Average number of partners from non-widening countries per institution from a Widening country participating in the Horizon programme each year	Cordis - Eurostat
51	Share of patents registered by a Widening country together with partners from other EU countries	OECD
52	Share of innovative enterprises that cooperated with RPOs located in other countries	Eurostat CIS
53	Share of public R&D expenditures financed by the private sector	Eurostat

Figure 3.4 Indicators for ERA Priority 4

Indicator number	Indicator	Source
54	GBARD allocated to Europe-wide transnational, as well as bilateral or multilateral, public R&D programmes per FTE researcher	Eurostat

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