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ERA Country Report 2024
Norway

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Report

Research and Innovation

ERA Country Report 2024: Norway

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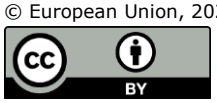

EUROPEAN COMMISSION

ERA Country Report 2024

Norway

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Key takeaways

- Norway has committed to all ERA Actions, covering all four Priority Areas. The country is classified as a 'Strong Innovator' in the 2024 European Innovation Scoreboard, performing above the EU average in open science and research collaboration but lagging in industrial R&D investment and patent activity.

- ERA objectives are integrated into Norway's research and innovation strategies through the National Action Plan for ERA (2022-2024). This plan ensures policy coordination across ministries and alignment with European R&I priorities.

- Norway's participation in Horizon Europe Missions and Partnerships has strengthened national policies on energy transition, industrial decarbonisation, and workforce transformation. Active involvement in the European Open Science Cloud (EOSC) and research assessment reform aligns national policies with ERA's open science and research evaluation goals.

- Challenges remain in increasing industry engagement in public R&D and sustaining R&D investment growth. While Norway actively participates in European monitoring frameworks, further alignment between EU-wide assessments and national data collection may enhance evidence-based policymaking.

1. National context

Norway participates fully in the EU's Single Market on the basis of the European Economic Area (EEA) Agreement and is among the EU's closest associated countries and a significant contributor to the European Research Area (ERA) objectives, despite its small population size of 5.49 million in 2023. Norway's GDP per capita stands well above the EU average, reflecting its strong economic position. Norway's GDP per capita is significantly higher than the EU average, while its R&D intensity stands at 1.67 percent of GDP – below the EU average of 2.27 percent – which still represents substantial investment in absolute terms. Norway is classified as a *Strong Innovator* in the 2024 European Innovation Scoreboard[1]. Additionally, Norway has a relatively high share of researchers, and the country exceeds the EU average in terms of female representation among researchers, with women comprising approximately 38.73 percent of the research workforce.

Table 1 Structural Key Indicators

Indicator	EU27	Norway		
	2023	2023	Average 2018-2020	Average 2021-2023
GDP in current prices, euro per capita	35 790.00	103 540.00	68 646.67	80 743.33
Gross Domestic Expenditure on R&D (GERD) as a share of GDP	2.27	1.56	2.14	1.67
Size of the population (million)	448.80	5.49	5.33	5.44
Researchers (in FTE) per million inhabitants	4 681.34	7 394.47	6 662.40	7 339.12

Source: Annex 1

Norway's R&I policy is based on a sector-based model, where each ministry oversees and funds research within its domain, while the Ministry of Education and Research coordinates overall research policy, including ERA participation. The Research Council of Norway (RCN) plays a key role in implementing national strategies through funding programs and ensuring alignment with European initiatives.[2]

2. Status of the Implementation of the ERA Policy Agenda

Chapter 2 briefly summarises **new developments in Norway since the publication of the ERA Country Report 2023**, based on the commitments to ERA Actions. The findings are based on qualitative desk research and interviews. Norway has committed to all operational ERA Actions, covering all Priority Areas (see Table 2). Norway's engagement with the ERA is structured within the framework of the EEA Agreement[3], ensuring participation in the EU's Framework Program (Horizon Europe) and ERA initiatives. As part of its commitment to ERA, Norway developed a **National Action Plan for ERA (2022-2024)** to guide the implementation of its 17 ERA actions, aligning them with national research and innovation (R&I) priorities. The plan, coordinated by the Ministry of Education and Research, was developed in collaboration with key stakeholders, including relevant sector ministries, the RCN and Universities

[1] See https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis-2024#/eis/countries/NO?country_scope=all
[2] Interview with Norwegian Ministry of Education and Research 2024-12-16
[3] Association of Norway to the EU's research and innovation framework programmes takes place through an amendment to Protocol 31 of the EEA agreement. Available at: https://www.efta.int/sites/default/files/documents/legal-texts/eea/the-eea-agreement/Protocols%20to%20the%20Agreement/protocol31.pdf

Norway[4], and aims to reinforce existing national priorities as expressed in the long-term plan for research and higher education 2023-2032[5].

In **February 2024**, **the action plan was revised** to expand Norway's engagement, incorporating one additional ERA action and two sub-actions joined in 2023. These include ERA Action 17, which focuses on strengthening the strategic capacity of public research-performing organisations, as well as new commitments under ERA Action 11 (the future of work) and ERA Action 14 (European Science Cities Initiative).[6]

Table 2 Commitment to ERA Actions

1: Deepening a truly functioning internal market for knowledge								
1. Enable Open Science, including through EOSC	2. Propose an EU copyright and data legislative framework for research	3. Reform the Assessment System for research, researchers and institutions	4. Promote attractive research careers, talent circulation and mobility	5. Promote gender equality and foster inclusiveness	6. Protect academic freedom in Europe	7. Upgrade EU guidance for a better knowledge valorisation	8. Strengthen research infrastructures	9. Promote international cooperation
2: Taking up together the challenges posed by the twin green and digital transition, and increasing society's participation in the ERA					**3: Amplifying access R&I excellence across the Union**		**4: Advancing concerted research and innovation investments and reforms**	
10. Make EU R&I missions and partnerships key contributors to the ERA	11. An ERA for green transformation	12. Accelerate the green & digital transition of Europe's key industrial ecosystems	13. Empower Higher Education Institutions	14. Bring Science closer to citizens	16. Improve EU-wide access to excellence	17. Enhance public research institutions' strategic capacity	19. Establish an ERA monitoring system	

Source: European Commission (Note: Actions 15, 18 and 20 were not implemented)

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

ERA Action 1) Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Open Science Cloud (EOSC)

Norway is supporting the transition to open science through national initiatives aligned with the European Open Science Cloud (EOSC). The RCN has established a National EOSC Forum[7], bringing together Norwegian members of the EOSC Association and other key stakeholders. This forum facilitates knowledge-sharing, coordinates national participation, and ensures Norwegian interests are represented in EOSC developments. To further strengthen Norway's engagement, an open call for support has been launched to assist Norwegian institutions in securing membership in the EOSC Association[8].

Additionally, Norway continues to invest in research infrastructure, with 28 projects receiving approximately EUR 110 million in 2024[9]. These projects include funding for data management and storage infrastructures, all of which must comply with the RCN's policy for open access to research data[10].

[4] https://www.regjeringen.no/no/aktuelt/norsk-handlingsplan-for-det-europeiske-forskningsomradet-era-2022-24/id2989531/
[5] Meld. St. 5 ENG (2022–2023)
[6] https://www.regjeringen.no/no/aktuelt/norsk-handlingsplan-for-det-europeiske-forskningsomradet-era-2022-24/id2989531/
[7] https://www.forskningsradet.no/en/research-policy-strategy/open-science/eosc/
[8] https://www.forskningsradet.no/en/call-for-proposals/2023/support-for-membership-of-the-european-open-science-cloud-association/
[9] https://www.forskningsradet.no/en/call-for-proposals/2023/research-infrastructure/
[10] https://www.forskningsradet.no/contentassets/e4cd6d2c23cf49d4989bb10c5eea087a/the-research-council-of-norways-policy-for-open-access-to-research-data.pdf

Looking ahead, a National Strategy for Scholarly Publishing post-2024 aims to guide future efforts to enhance open access and knowledge sharing across the research ecosystem[11].

ERA Action 2) Propose an EU copyright and data legislative and regulatory framework fit for research

Norway participates in workshops and information meetings organised under ERA Action 2. These engagements facilitate knowledge exchange and keep national actors informed about ongoing developments in EU copyright and data regulations relevant to research.[12]

In addition, Norway monitors key studies published under ERA Action 2, including the **May 2024 study, "Improving Access to and Reuse of Research Results, Publications, and Data for Scientific Purposes."** to align national policies with European initiatives aimed at enhancing access to and the reuse of research outputs[13].

ERA Action 3) Advance towards the reform of the Assessment System for research, researchers and institutions to improve their quality, performance and impact

In Norway, **Universities Norway (UHR)** is making efforts to implement reforms in research assessment by coordinating the **CoARA** (Coalition for Advancing Research Assessment) processes[14]. A key part of this work is the **Norwegian National Chapter[15]**, which has held three digital meetings and one physical meeting in 2024. The meetings focus on several topics:

- Institutional updates on the implementation of the NOR-CAM framework, with most UHR member institutions either having adopted or in the process of approving their own versions.
- Engagement in CoARA, including participation in four different working groups such as the working group on Reforming Academic Career Assessment (ACA) and contributions to action plans.
- Sharing best practices and addressing challenges related to research assessment reforms.
- Discussing relevant government and EU initiatives that impact research assessment, ensuring alignment with broader European developments.

ERA Action 4) Promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and intersectoral mobility across the ERA

Norway has established a national working group in line with the national action plan 2022-2024 for ERA Action 4, led by the RCN, with representatives from key organisations. The group aims to coordinate on implementation of the European Framework for Research Careers and to foster dialogue across policy levels to strengthen the link between policy and the knowledge sector.

The **Universities and University Colleges Act** was renewed in August 2024, to improve working conditions, career pathways, and mobility for researchers, while promoting long-term employment, fair recruitment, training, and diversity.

Norway hosted a **Conference on Holistic Career Policies** on 21 October 2024, to align European and national career policies and address challenges and synergies between ERA Actions 3, 4 and 5. An HR

[11] https://www.openscience.no/media/3775/download?inline?inline; Interview with Norwegian Ministry of Education and Research 2024-12-16.

[12] Main Norwegian activities in the context of ERA Action 2 on “Copyright and data legislative and regulatory framework fit for research” (unpublished ERA Action update, 15 November 2024).

[13] European Commission: Directorate-General for Research and Innovation, Improving access to and reuse of research results, publications and data for scientific purposes – Study to evaluate the effects of the EU copyright framework on research and the effects of potential interventions and to identify and present relevant provisions for research in EU data and digital legislation, with a focus on rights and obligations, 2024, https://data.europa.eu/doi/10.2777/633395

[14] https://coara.eu/

[15] https://coara.eu/working-groups/national-chapters/coara-national-chapter-norway/

Excellence Award Forum was launched in early 2025 to support Human Resources Excellence in Research (HRS4R).

In autumn 2024, Norway introduced the **Framework for Career Guidance for Early-Stage Researchers** (ESR)[16], to support institutions offering guidance for PhD candidates and postdocs. A seminar on this framework took place on 2 December 2024.

Statistics Norway developed a **Career Monitor** to track research career progression from doctoral studies to retirement, providing data on employment trends, mobility, and diversity to inform policy decisions.[17]

ERA Action 5) Promote gender equality and foster inclusiveness, taking note of the Ljubljana declaration

Norway supports ERA Priority 5 through the **Committee for Gender Balance and Diversity in Research** (KIF)[18] as well as through the work led by RCN. The following initiatives were carried out in 2024:

- KIF participated in the ERA Forum's Sub-Group on Inclusive Gender Equality, aligning with European frameworks.
- At the GENDERACTIONplus[19] Conference in Brussels (February 2024), KIF presented policy recommendations, emphasising intersectionality and inclusion in Higher Education and Research & Innovation.
- KIF contributed to GENDERACTIONplus Work Packages, particularly on Inclusive Research Careers (WP 2.2) and Monitoring & Evaluation of Gender Equality Actions (WP 6).

The KIF Committee supported inclusive Gender Equality Plans (GEPs) through several initiatives:

- Presentations at the National Network Conference for Equality (June 2024) and the Holistic Career Policies Conference (October 2024).
- National Conference on Inclusive Equality (October 2024) co-hosted with the Research Council of Norway.
- Workshops and discussions on GEP requirements, mainstreaming gender equality into national policies, and promoting national studies and local mapping on gender-based violence (GBV).

The Research Council of Norway's Role:

- Since 2022, the RCN has made GEPs mandatory for funding eligibility.
- The BALANSE+[20] programme allocated funding in the 2023/2024 call for 19 small-scale projects and a knowledge centre at NIFU.
- In fall 2024, the RCN and KIF Committee organised a national conference on best practices for inclusive gender equality policies.[21]

[16] https://hkdir.no/karriereveiledning-og-utdanningsvalg/rammeverk-for-karriereveiledning-for-forskere-i-tidlig-karrierefase

[17] Main Norwegian activities in the context of ERA Action 4 on "Promote attractive research careers, talent circulation and mobility" (unpublished ERA Action update, 14 November 2024).

[18] https://kifinfo.no/en/content/committee-gender-balance-and-diversity-research-kif-0#:~:text=What%20is%20the%20KIF%20Committee%3F&text=The%20KIF%20Committee%20was%20launched,for%20Gender%20Balance%20in%20Research.

[19] https://genderaction.eu/

[20] https://www.forskningsradet.no/finansiering/hva/balanse/

[21] Main Norwegian activities in the context of ERA Action 5 on "Promote gender equality and foster inclusiveness" (unpublished ERA Action update, 15 November 2024).

ERA Action 6) Deepening the ERA through protecting academic freedom in Europe

Academic freedom and trust in science are priorities in the Norwegian government's Long-term Plan for Research and Higher Education (2023-2032)[22], following the work of a dedicated committee. However, this strand of the ERA Action has not yet been implemented in a manner that enables specific Norwegian participation or contributions. The guidelines and tools for responsible international cooperation, first published in 2023, were updated in 2024[23].

ERA Action 7) Upgrade EU guidance for better knowledge valorisation

In 2024, the RCN engaged in events like Arendalsuka[24] to facilitate discussions on translating research into practice, participating in 20 events with the key message "Make use of knowledge".

RCN highlighted the importance of increasing knowledge valorisation for social and economic value through events and publications[25]. RCN supports knowledge valorisation through schemes like Innovation Projects for the Industrial Sector, the Industrial PhD programme, and projects in the public sector. It also funds research on R&I policies contributing to societal development[26].

In 2024, RCN supported the commercialisation of research, including a 100 million NOK initiative[27]. A new call for the Technology Transfer Office (TTO) function (2025-2026) was launched[28], leveraging insights from the Mutual Learning Exercise (MLE) on Knowledge Valorisation.

RCN collaborated with the Foundation for Polish Science (FNP) on a project exploring barriers to research valorisation in Poland, with a final report expected soon.

Finally, a relevant document for implementing ERA Action 7 was the White Paper on Entrepreneurs and Start-Ups, published in November, which focuses on enhancing the entrepreneurial ecosystem[29]. RCN also supported initiatives promoting open access to research data and publications.

ERA Action 8) Strengthen sustainability, accessibility and resilience of research infrastructures in the ERA

Norway is involved in the **European Strategy Forum on Research Infrastructures** (ESFRI) and participates in related initiatives. RCN's Infrastructure funding scheme, which has calls every other year, supports all Norwegian nodes in the ESFRI infrastructures. To date, over NOK 2 billion (approximately EUR 172.2 million) has been allocated for the participation of Norwegian institutions in these infrastructures. Norway is a member of 18 ESFRI research infrastructures, with the Research Council representing the country in their governing bodies.

In 2024, a total of 28 projects received funding from the Research Infrastructure of National Importance scheme[30], amounting to approximately EUR 110 million. This includes funding support for ESFRI infrastructures. Additionally, a report was published detailing the demand for high-performance computing and artificial intelligence, as well as Norway's

[22] https://www.regjeringen.no/contentassets/9531df97616e4d8eabd7a820ba5380a9/en-gb/pdfs/stm202220230005000engpdfs.pdf
[23] https://hkdir.no/retningslinjer-og-verktoy-for-ansvarlig-internasjonalt-kunnskapssamarbeid
[24] https://www.forskningsradet.no/nyheter/2024/mot-oss-under-arendalsuka-2024/
[25] https://www.forskningsradet.no/forskningspolitikk-strategi/ltp/vi-mener/hva-norge-ikke-vet-at-norge-vet/
[26] https://www.forskningsradet.no/en/call-for-proposals/2024/funding-for-research-on-research-and-innovation-policy/
[27] https://www.forskningsradet.no/nyheter/2024/100-millioner-kroner-til-kommersialisering-av-forskning/
[28] https://www.forskningsradet.no/utlysninger/2024/tidligfase-teknologioverforing/
[29] https://www.regjeringen.no/no/aktuelt/stortingsmelding-for-grundere/id3072460/
[30] https://www.forskningsradet.no/en/call-for-proposals/2023/research-infrastructure/

participation in the EuroHPC initiative[31]. Finally, the Norwegian Roadmap for Research Infrastructure 2023[32] remains relevant in 2024, guiding investments and strategic development of research infrastructure.

ERA Action 9) Promote a positive environment and level playing field for international cooperation based on reciprocity

Norway's recent national developments related to research security and international dialogue in FP10 include:

- The Norwegian Ministry of Education and Research has continued its efforts to improve knowledge and understanding of China's R&I policy. This has been done both nationally and through the EU Knowledge and Cooperation Network (EUKNOC). A report on Sino-Norwegian cooperation in science was commissioned by the Ministry[33]. The Ministry also organises roundtable meetings focused on cooperation with China, bringing together officials, academia, and business representatives to discuss experiences and address dilemmas, including research security concerns.
- Due to technological and security policy developments, there is a need to better align the Norwegian research system to handle a broader range of knowledge types, including open, sensitive, and classified information. To address this, the Ministry of Defence and the Ministry of Education and Research have tasked the Research Council of Norway, the Norwegian Defence Research Establishment, and the Norwegian National Security Authority with proposing solutions, which led to a final report published in December 2023[34].
- Furthermore, the Ministry has asked the same institutions to create a systematic knowledge base to assess sensitive technologies, ensuring Norway's research landscape can address both security and innovation challenges[35].
- Norway has continued its effort to promote research security and responsible international cooperation. The White Paper on the Norwegian research system (March 2025) outlines the Government's policy and measures, balancing concerns related to keeping international cooperation as open as possible and upholding academic values while at the same time safeguarding national and research security. The White Paper underlines that Norway shall contribute to and follow up in line with the EU's efforts on promoting research security.

[31] https://www.forskningsradet.no/nyheter/2024/kraftig-okning-i-behovet-for-tungregnekraft/
[32] https://www.forskningsradet.no/en/financing/what/infrastructure/veikart-for-forskningsinfrastruktur/
[33] https://nifu.brage.unit.no/nifu-xmlui/bitstream/handle/11250/3135459/NIFU-insight2024-9.pdf
[34] https://www.regjeringen.no/contentassets/2cb3961679964e34bc9c9c3f3d73565d/supplerende-tildelings-brev-2023-2294672.pdf
[35] https://www.forskningsradet.no/nyheter/2024/oppdrag-vurdering-sensitive-teknologiar/

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

ERA Action 10) Make EU R&I missions (10.1) and partnerships (10.2) key contributors to the ERA

In 2024, Norway's engagement in European partnerships includes participation by the Ministry of Education and Research in the Partnerships Knowledge Hub (PKH) and relevant comitology procedures as well as in multiple transnational calls, national information meetings – such as the CETP 2024 Knowledge Sharing Workshops on CO_2 Management in Oslo (September 2024) – and a joint Nordic webinar on the Innovative Health Initiative (IHI) Partnership by the RCN. Norway participates in all five EU missions. A national steering structure has been established for the follow up of the missions, involving relevant ministries. The RCN has an advisory and mobilizing role in all EU missions and the missions are linked to the RCN's other programmes. The agency Innovation Norway is involved in four of the missions. Two national missions have been launched and are seen in conjunction with the participation in the EU missions.

ERA Action 11) An ERA for green transformation

Norway is engaged as Associated Country in the **EU's Strategic Energy Technologies Plan (SET Plan),** participating in 9 of the 14 IWGs and co-chairing the Implementation Working Group on CCS-CCU. Norway also participates in the temporary working group on hydrogen[36]. Norwegian research environments and industry are involved in contingent ETIPs and EERA Joint Programmes. The SET Plan aligns with Norway's national energy strategy, **Energi21**[37], which focuses on climate-friendly energy technologies and supports national and international climate goals. Energi21 emphasises harmonising Norway's energy system development with European efforts to ensure a unified approach to sustainable energy. In addition, Norway has participated in **ERA4FutureWork**[38] since April 2023, a collaborative effort to discuss best practices and research priorities related to the future of work. Norway has contributed to a report on the future of work, which identifies key research areas and existing efforts. The RCN, in close dialogue with the Ministry of Labour and Social Inclusion, the Ministry of Trade, Industry and Fisheries and the Ministry of Education and Research will develop a plan to integrate the findings from this report into the Norwegian context.[39]

ERA Action 12) Accelerate the green/digital transition of Europe's key industrial ecosystems

The Ministry of Trade, Fisheries and Industry launched an updated roadmap for the Green Industrial Initiative in March 2024. The RCN, Innovation Norway and SIVA are working together with other relevant actors to strengthen the country's innovation ecosystem. This includes developing and supporting technology infrastructure such as incubators, business gardens, and catapult centres, which are crucial for fostering innovation and industrial scaling. Furthermore, Norway is advancing efforts in establishing innovation enterprises and centres, as well as promoting industrial real estate projects to contribute to sustainable and efficient industrial ecosystems.

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[36] https://energy.ec.europa.eu/topics/research-and-technology/strategic-energy-technology-plan_en
[37] https://www.energi21.no/en/
[38] https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/future-work_en
[39] Main Norwegian activities in the context of ERA Action 11 on "An ERA for green transformation" (unpublished ERA Action update, 15 November 2024).

ERA Action 13) Empower Higher Education Institutions to develop in line with the ERA, and in synergy with the European Education Area

No specific national activities have been directly implemented for this action. Norway already has a well-established scheme of Norwegian Centres of Excellence, which fosters research and development within its universities and research institutions. In addition, Norway has similar schemes focused on innovation, environmentally friendly energy, and education, which are aligned with broader European objectives. These existing initiatives contribute to the development and strengthening of Norwegian HEIs in line with the ERA and the European Education Area.

ERA Action 14) Bring Science closer to citizens

Citizen engagement and citizen science is included in main Norwegian policy documents, such as the Long-term plan for research and higher education 2023-2032 and the new White paper on the research system; Secure knowledge in an insecure world[40]. The Ministry of Education and Research has commissioned guidelines for researchers who would like to involve citizens in research, and that also includes advice for policymakers[41]. The RCN established a website for a national network for citizen science. This platform aims to provide a comprehensive resource for citizens, researchers, and organisations interested in engaging with science and features information, such as national guidelines for citizen research, which were introduced in 2023. It also highlights Norwegian citizen science projects and also provides links to international websites on citizen science, such as the EU's Citizen Science Platform[42], connecting Norway's efforts with broader European initiatives.

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

ERA Action 16) Improve EU-wide access to excellence

Norway participates in **ERA Action 16 as an observer**, monitoring initiatives aimed at improving access to research excellence across Europe[43]. However, Norway contributes to capacity building and research collaboration in widening countries through the **EEA and Norway Grants**. On 12 September Norway, Iceland, Liechtenstein and the EU signed an agreement on a new funding period for the EEA and Norway Grants. **2021–2028**. Under this agreement, Iceland, Liechtenstein, and Norway will provide **EUR 3.2 billion** to **15 EU Member States** to enhance economic and social cohesion, with research and innovation remaining a key priority area. The new funding cycle builds on the **2014 to 2021 period**, focusing on **three priority areas**: **the European green transition, democracy and human rights, and social inclusion and resilience**. These grants contribute to bridging participation gaps in the EUs Framework Programme and ERA, strengthening research capacity, and fostering collaboration between Norwegian institutions and researchers in widening countries. These efforts aim to further integrate researchers from widening countries into **European research**

[40] Meld. St. 14 (2024-2025) - regjeringen.no https://www.regjeringen.no/no/dokumenter/meld.-st.-14-20242025/id3092418

[41] https://www.regjeringen.no/no/dokumenter/veileder-og-rad-om-innbyggerinvolvering-i-forskning/id3016041

[42] https://eu-citizen.science/

[43] https://www.regjeringen.no/contentassets/7903662193364452b11aaf27fcc96d88/no/pdfs/nasjonal-handlingsplan-for-europeiske-forskingsomr.pdf

networks, ensuring long-term collaboration and participation in EU-level R&I initiatives[44].

ERA Action 17) Enhance the strategic capacity of Europe's public research-performing organisations

The national network for research administrators, **NARMA**[45], under the auspices of Universities Norway (UHR), has directed efforts in 2024 towards upskilling, recognition, networking, and capacity building within the research management community and trained 70 participants in a three-level competence programme for research administrators. NARMA's 2024 Annual Conference featured a dedicated session on ERA 17, discussing its status, results, and developments related to the RM Roadmap and CARDEA[46], attracting over 100 participants.[47]

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

ERA Action 19) Establish an efficient and effective ERA monitoring mechanism

The Ministry of Education and Research, in collaboration with Statistics Norway (SSB), NIFU, and the RCN, remains responsible for tracking national progress in ERA implementation. In 2024, efforts focused on strengthening data collection and improving alignment with EU-level indicators. The annual Indicator Report (Indikatorrapporten) continues to serve as a key tool for evaluating Norway's R&I system, with updated assessments on R&D expenditure, researcher mobility, private-sector innovation, and international collaboration. [48]

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 Norway's performance in achieving the ERA objectives as defined in the Pact for R&I during the period 2022-2024.

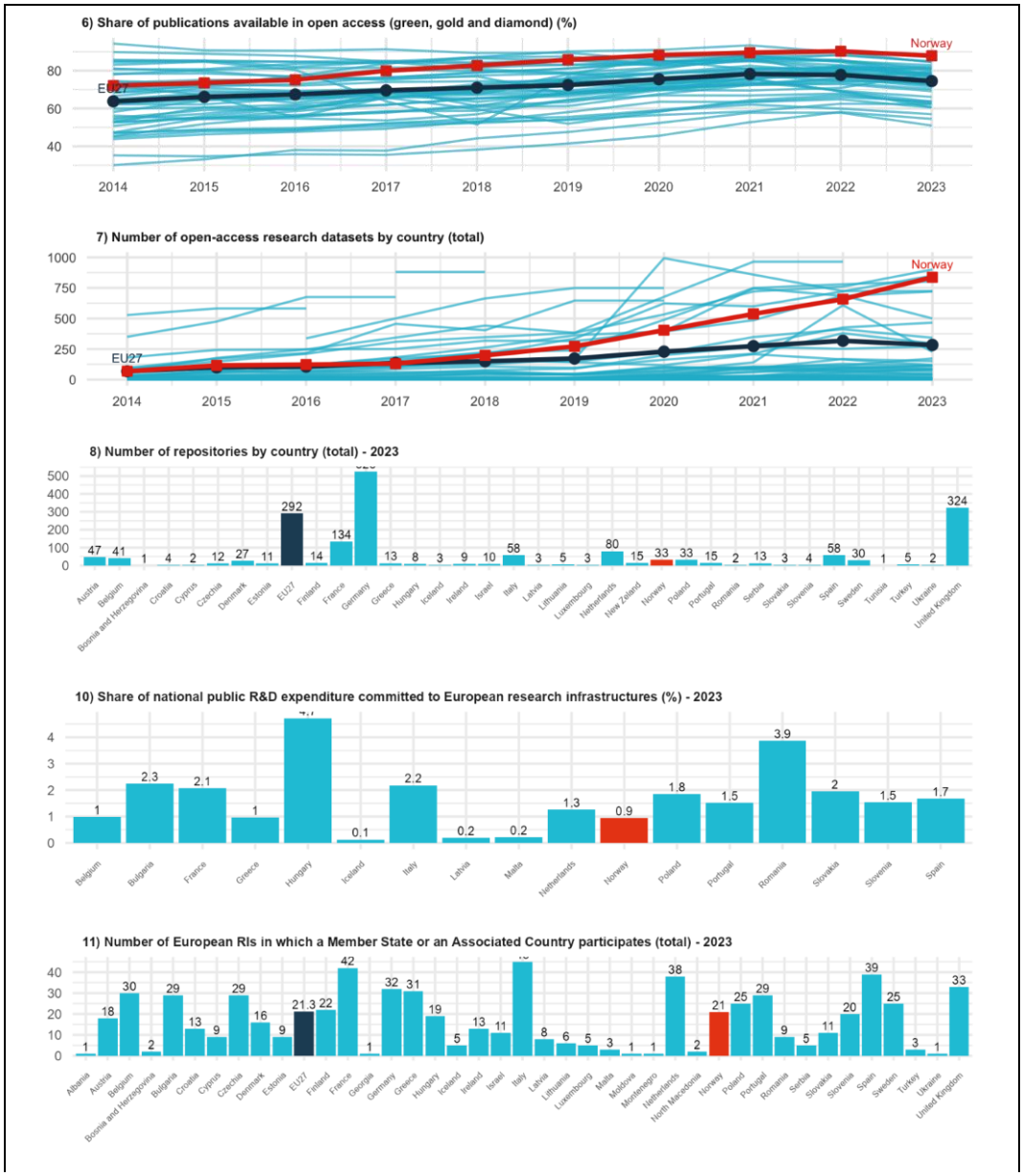
Norway has been particularly active in open science (specifically Actions 1 and 2), research infrastructures (Actions 8, 17), and European partnerships. This is visible from the strong and consistent performance of almost all indicators, and particularly those for ERA Priority 1.

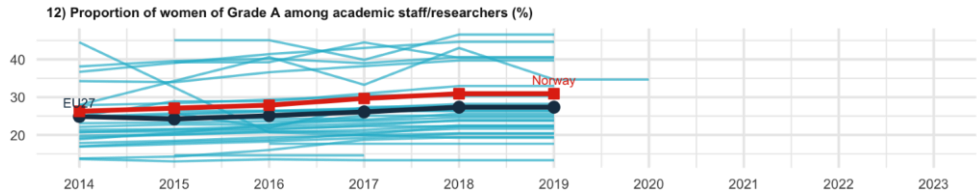
Norway performs strongly in **ERA Priority 1**, often aligning with or slightly surpassing the EU average. The country stands out in open-access research, with a high share of open-access publications and a sharp increase in open-access datasets since 2019. Participation in European research infrastructures is mid-range, while the number of European RI memberships is relatively high, despite Norway's relatively small size. Gender balance in academia is a mixed picture: women are well-represented among senior researchers and doctoral graduates, but mixed-gender research teams are less common. Norway also excels in public-

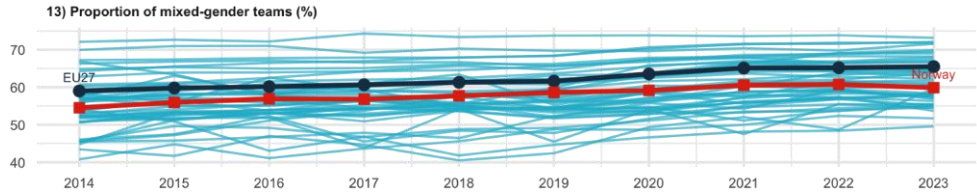
[44] https://eeagrants.org/news/iceland-liechtenstein-and-norway-and-european-union-have-now-signed-agreement-new-funding
https://statusreport2023.eeagrants.org/assets/downloads/EEA-and-Norway-Grants_Status-Report-2023_Summary.pdf
[45] https://narma.no/
[46] https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/rm-comp-new-key-tool-strengthen-research-management-europe-2025-01-27_en
[47] Main Norwegian activities in the context of ERA Action 17 on "Enhance public research institutions' strategic capacity" (unpublished ERA Action update, 15 November 2024).
[48] https://www.forskningsradet.no/indikatorrapporten/indikatorrapporten-dokument

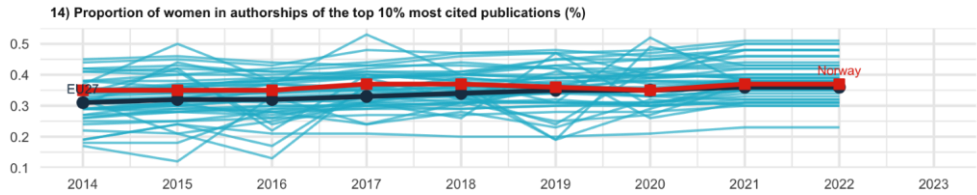
private collaboration, with a high share of co-publications and strong business-sector research employment. However, patent activity is an area of relative weakness, with lower PCT patent applications and patents from universities and public research organisations. International collaboration is a strong point, with high levels of co-publications and patents with foreign co-inventors.

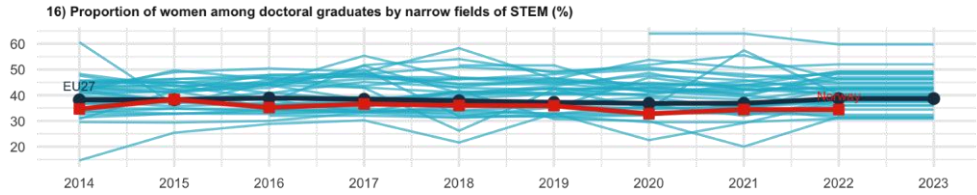
Figure 3-1 Indicators for ERA Priority 1

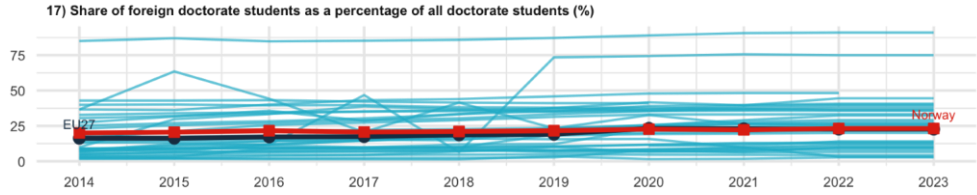


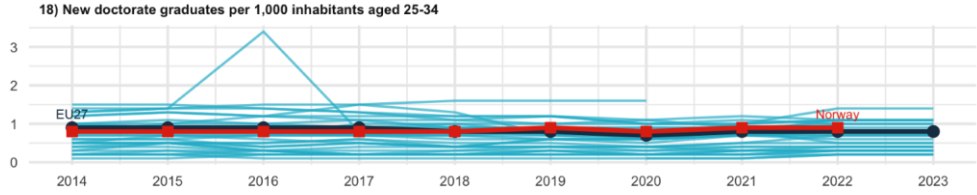

12) Proportion of women of Grade A among academic staff/researchers (%)
40
30
20
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

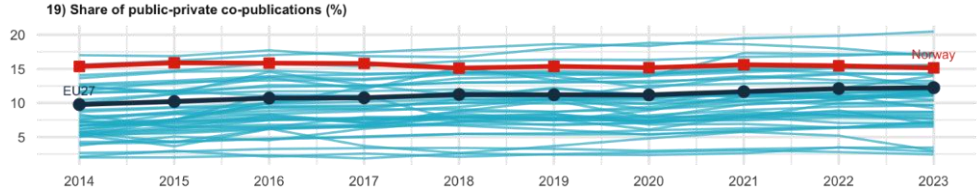

13) Proportion of mixed-gender teams (%)
70
60
50
40
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

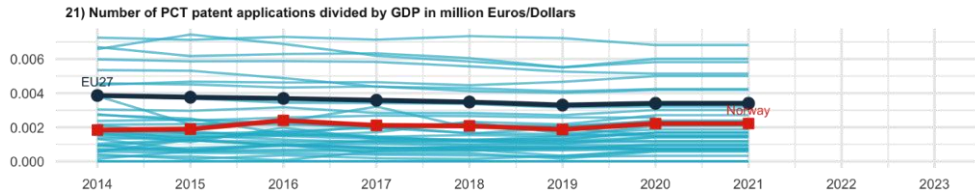

14) Proportion of women in authorships of the top 10% most cited publications (%)
0.5
0.4
0.3
0.2
0.1
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

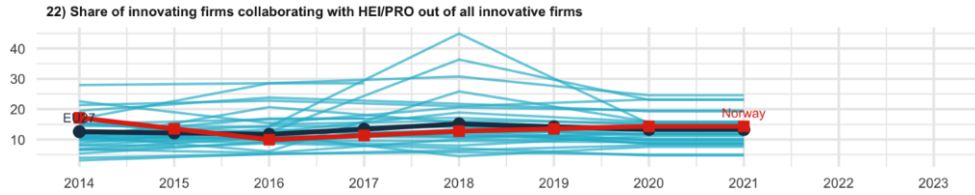

16) Proportion of women among doctoral graduates by narrow fields of STEM (%)
60
50
40
30
20
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

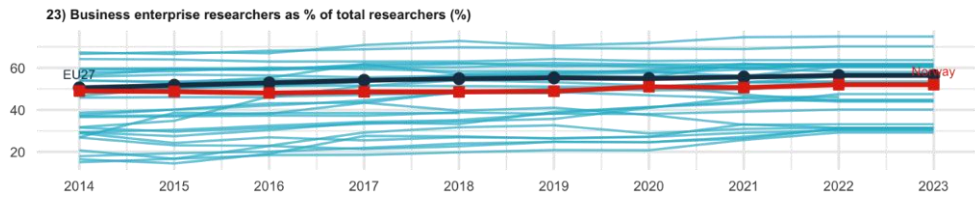

17) Share of foreign doctorate students as a percentage of all doctorate students (%)
75
50
25
0
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

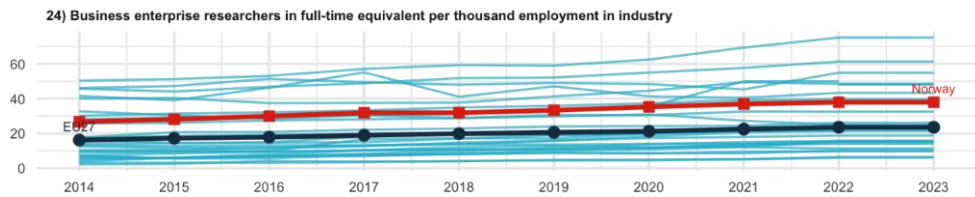

18) New doctorate graduates per 1,000 inhabitants aged 25-34
3
2
1
0
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

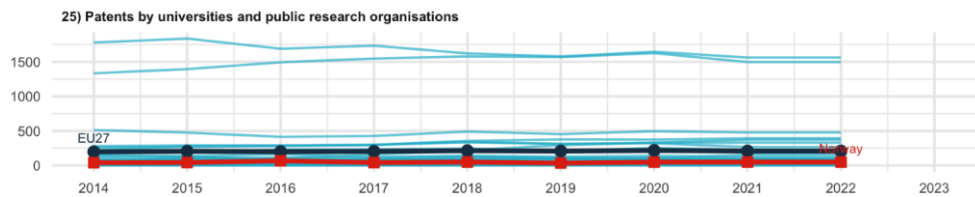

19) Share of public-private co-publications (%)
20
15
10
5
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

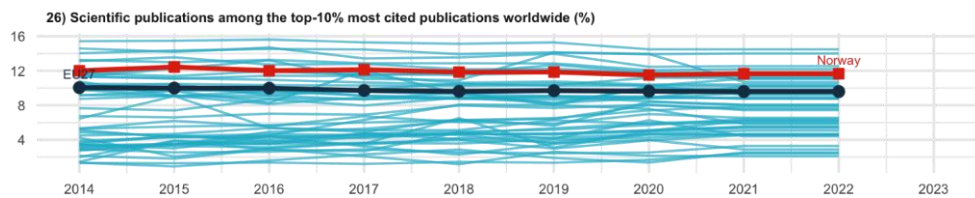

21) Number of PCT patent applications divided by GDP in million Euros/Dollars
0.006
0.004
0.002
0.000
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

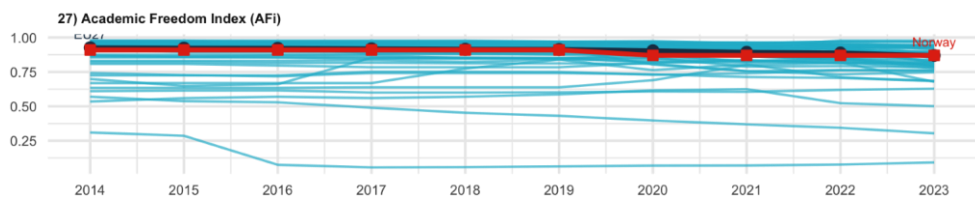

22) Share of innovating firms collaborating with HEI/PRO out of all innovative firms
40
30
20
10
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


23) Business enterprise researchers as % of total researchers (%)
60
40
20
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


24) Business enterprise researchers in full-time equivalent per thousand employment in industry
60
40
20
0
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


25) Patents by universities and public research organisations
1500
1000
500
0
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


26) Scientific publications among the top-10% most cited publications worldwide (%)
16
12
8
4
EU27
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


27) Academic Freedom Index (AFi)
1.00
0.75
0.50
0.25
Norway
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

Source: Annex 1

Norway's performance in **ERA Priority 2** aligns closely with the EU average, with a few notable differences. Norway's R&I investments in transnational cooperation, the share of government R&D funding dedicated to environmental research, and the percentage of patents on environmental technology all match the EU benchmark, indicating a consistent commitment to research collaboration and sustainability efforts. Similarly, the share of innovative firms cooperating with higher education institutions and research organisations, as well as public trust in science, remains in line with the EU average, reflecting a stable and well-integrated innovation ecosystem. Norway slightly exceeds the EU in terms of direct and indirect government support for R&D as a percentage of GDP, demonstrating a stronger governmental commitment to fostering R&I.

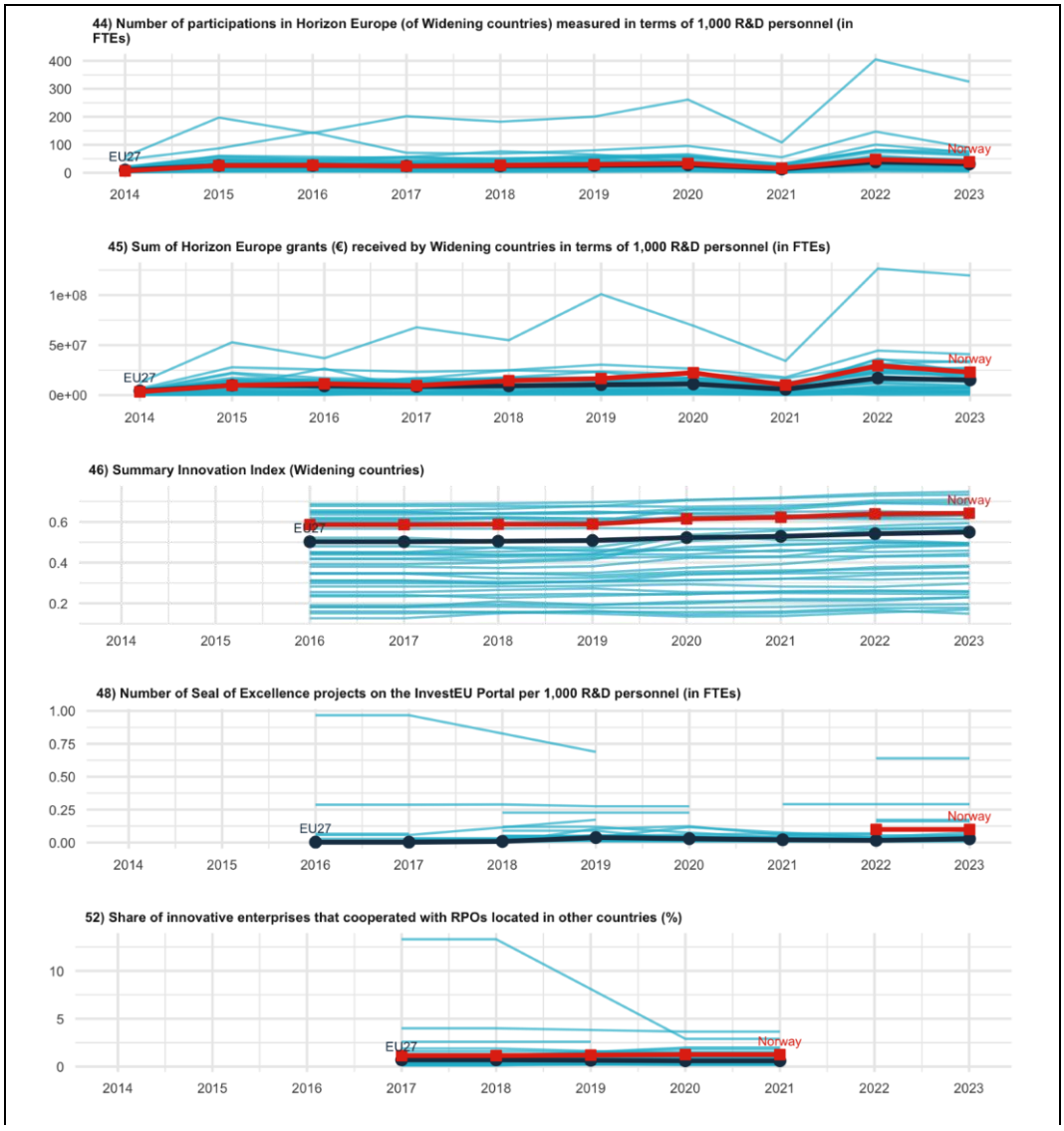
Figure 3-2 Indicators for ERA Priority 2

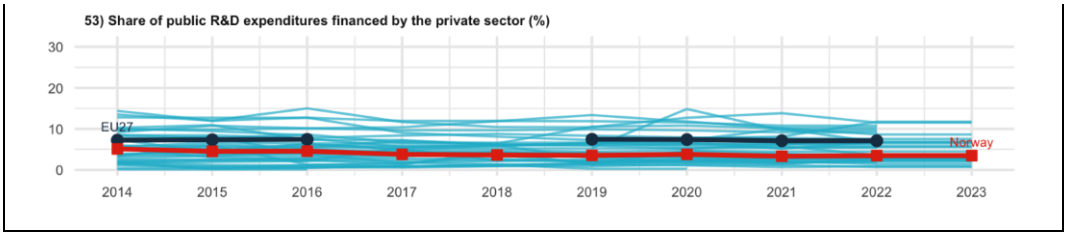
Source: Annex 1

For **ERA Priority 3** Norway performs on par with or slightly above the EU average across most indicators, indicating a strong and well-integrated research and innovation ecosystem. Its participation in Horizon Europe, both in terms of project involvement and grants received by R&D personnel, is close with the EU average, indicating active engagement in European

research initiatives. Norway's Summary Innovation Index is higher than the EU average. However, the number of Seal of Excellence projects in the InvestEU portfolio R&D personnel is slightly below average, which may indicate room for improvement in securing high-quality project recognition. Norway's share of innovative enterprises cooperating with foreign research-performing organisations is comparable to the EU average, highlighting stable international collaboration. Meanwhile, the share of public R&D expenditure financed by the private sector is lower, pointing to a relatively weaker role of industry in funding public research.

Figure 3-3 Indicators for ERA Priority 3

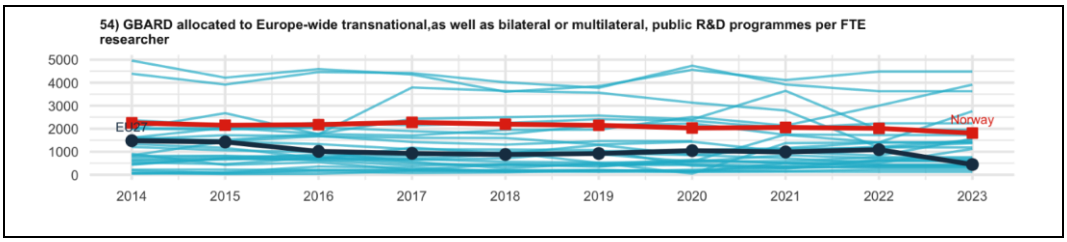




Source: Annex 1

In relation to **ERA Priority 4**, for Norway the trend remains relatively stable over the years, showing a consistent level of funding allocated to international and European R&D cooperation. Compared to the EU average, Norway appears to be on a similar trajectory or slightly above. However, several other European countries exhibit higher fluctuations, with some significantly higher investment levels. This suggests that while Norway maintains steady involvement in European and international R&D cooperation, it remains in line with the broader EU trend.

Figure 3-4 Indicators for ERA Priority 4



Source: Annex 1

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

This chapter presents a qualitative assessment of the ERA Action commitments of Norway and their effects on the national R&I system, including the quantitative performance in the ERA Dashboard.

The National Action Plan for ERA (2022-2024) shows that Norway actively aligns its national research strategies with ERA objectives. The plan clearly outlines the relevance of the actions for the national R&I system as well as highlights synergies, specifies responsibilities and steps for implementation. The policy coordination across ministries and agencies ensures that ERA participation is not only complementary to national policies but also shapes them, which is seen through the emphasis on ERA in national strategy documents such as the long-term strategy for research and higher education.[49]

Under **ERA Priority 1,** Norway has strongly aligned its national efforts with ERA Actions 1, 2, and 3. The RCN plays a key role in coordinating the national EOSC Forum, ensuring

[49] Interview with Norwegian Ministry of Education and Research 2024-12-16; https://www.regjeringen.no/contentassets/9531df97616e4d8eabd7a820ba5380a9/no/pdfs/stm202220230005000dddpdfs.pdf

Norwegian institutions are integrated into the EOSC. The national policy for Open Science[50] follows the ERA principles, particularly regarding data management and open access. As shown by the Dashboard indicators 6 and 7, Norway has a leading role in open access, following continuous growth since 2014. Similarly, Norway's engagement in CoARA has supported the implementation of new research evaluation practices that move towards qualitative and responsible metrics, aligning closely with the objectives of ERA Action 3[51].

In **ERA Priority 2,** Norway contributes to ERA Actions 10, 11, and 12 through structured participation in Horizon Europe Missions and Partnerships. Norway actively engages in all five European Missions, including climate adaptation, smart cities, and clean oceans, integrating these objectives into national strategies through inter-ministerial coordination. The RCN and Innovation Norway map national programmes with thematic links to EU missions. In ERA Action 11, Norway plays a key role in the SET Plan. Norwegian institutions, including NTNU, SINTEF, and NORCE, participate in the European Energy Research Alliance (EERA), which coordinates research on clean energy solutions. Through ERA4FutureWork (ERA Action 11.3), Norway supports research on workforce transformation, with the Ministry of Labour and Social Inclusion integrating findings into the Norwegian context. In ERA Action 12, Norway contributes to industrial decarbonisation and circular economy strategies, complementing national efforts such as the Green Industrial Transition Roadmap and Technology Infrastructure Mapping.

Within **ERA Priority 3,** Norway contributes to the objectives of ERA Actions 16 and 17, by facilitating capacity building and research collaboration through the EEA and Norway Grants. The latest 2024 funding cycle, amounting to EUR 3.2 billion, focuses on integrating widening countries into European research networks. In parallel, the NARMA competence programme has significantly contributed to the professionalisation of research management and administration, supporting the objectives of ERA Action 17.

ERA Priority 4: Norway aligns with ERA Priority 4 by integrating European monitoring the Ministry of Education and Research, supported by the RCN and the Directorate for Higher Education and Skills. The Ministry ensures national participation in the ERA Policy Platform, ERA Dashboard, and ERA Scoreboard, allowing for comparative analysis and tracking of ERA implementation.

5. Conclusions

In conclusion, Norway's active engagement with the ERA Actions has significantly contributed to the country's progress in meeting ERA objectives for the 2022-2024 period. Norway has demonstrated strong performance across multiple ERA priorities, notably in open science, research infrastructures, and international cooperation, aligning closely with or exceeding the EU average in several key areas. Notable strengths include a high share of open-access research outputs, substantial participation in European research infrastructures, and robust public-private collaboration in research.

Despite these achievements, there are areas where Norway could further enhance its impact, such as increasing patent activity and fostering greater industry investment in public research. The country's commitment to environmental research and transnational collaboration aligns well with EU objectives, although recent trends in R&D investment growth suggest

[50] https://www.forskningsradet.no/en/research-policy-strategy/open-science/policy ; https://www.forskningsradet.no/en/research-policy-strategy/strategies-plans
[51] https://zenodo.org/records/10785275

room for improvement in sustaining momentum. Overall, while Norway has made substantial strides toward achieving ERA objectives, continued efforts in fostering innovation, strengthening the role of industry, and improving specific areas like patenting and high-quality project recognition will further solidify its position within the European research landscape.

In recent years Norway's national R&I strategies and policies have become more aligned with the ERA. The National Action Plan for ERA (2022-2024) has played a central role in integrating ERA objectives into national research priorities, ensuring coordination across ministries and agencies. Through structured involvement in ERA Actions, Norway has strengthened its approach to open science, digital and green transitions, and research assessment reforms, aligning national strategies with European developments. The country's participation in Horizon Europe Missions and Partnerships has reinforced synergies between national and EU-level initiatives, particularly in areas such as energy transition, industrial decarbonisation, and labour market transformation.

6. References

European Commission. (2024). *European Innovation Scoreboard 2024*. Retrieved from https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis-2024#/eis?country_scope=all

European Free Trade Association. (2025). *Association of Norway to the EU's research and innovation framework programmes through an amendment to Protocol 31 of the EEA agreement*. Retrieved from https://www.efta.int/sites/default/files/documents/legal-texts/eea/the-eea-agreement/Protocols%20to%20the%20Agreement/protocol31.pdf

Norwegian Government. (2023). *Norsk handlingsplan for det europeiske forskningsområdet (ERA) 2022–24*. Retrieved from https://www.regjeringen.no/no/aktuelt/norsk-handlingsplan-for-det-europeiske-forskningsomradet-era-2022-24/id2989531/

The Research Council of Norway. *Open Science: European Open Science Cloud (EOSC)*. Retrieved from https://www.forskningsradet.no/en/research-policy-strategy/open-science/eosc/

The Research Council of Norway. (2023). *Support for membership of the European Open Science Cloud Association*. Retrieved from https://www.forskningsradet.no/en/call-for-proposals/2023/support-for-membership-of-the-european-open-science-cloud-association/

The Research Council of Norway. (2023). *Research Infrastructure Call for Proposals 2023*. Retrieved from https://www.forskningsradet.no/en/call-for-proposals/2023/research-infrastructure/

The Research Council of Norway. (2017). *The Research Council of Norway's Policy for Open Access to Research Data*. Retrieved from https://www.forskningsradet.no/contentassets/e4cd6d2c23cf49d4989bb10c5eea087a/the-research-council-of-norways-policy-for-open-access-to-research-data.pdf

Open Science. (2023). *Open Science Norway*. Retrieved from https://www.open-science.no/media/3775/download?inline?inline

European Commission: Directorate-General for Research and Innovation. (2024). *Improving access to and reuse of research results, publications and data for scientific purposes – Study to evaluate the effects of the EU copyright framework on research and the effects of potential interventions and to identify and present relevant provisions for research in EU data and digital legislation, with a focus on rights and obligations*. Publications Office of the European Union. Retrieved from https://data.europa.eu/doi/10.2777/633395

Coalition for Advancing Research Assessment (CoARA). (2022). *CoARA website*. Retrieved from https://coara.eu/

Coalition for Advancing Research Assessment (CoARA). (2022). *CoARA National Chapter Norway*. Retrieved from https://coara.eu/working-groups/national-chapters/coara-national-chapter-norway/

Norwegian Directorate for Higher Education and Skills. *Rammeverk for karriereveiledning for forskere i tidlig karrierefase* [Framework for Career Guidance for Researchers in the Early Career Phase]. Retrieved from https://hkdir.no/karriereveiledning-og-utdanningsvalg/rammeverk-for-karriereveiledning-for-forskere-i-tidlig-karrierefase

The Committee for Gender Balance and Diversity in Research (KIF). (2021). *What is the KIF Committee?*. Retrieved from https://kifinfo.no/en/content/committee-gender-balance-and-diversity-research-kif-0#:~:text=What%20is%20the%20KIF%20Committee%3F&text=The%20KIF%20Committee%20was%20launched,for%20Gender%20Balance%20in%20Research

GenderAction. (2022). *GenderAction website*. Retrieved from https://genderaction.eu/

The Research Council of Norway. *BALANSE – Gender balance in senior research positions and research management*. Retrieved from https://www.forskningsradet.no/finansiering/hva/balanse/

Norwegian Government. (2022). *Long-term plan for research and higher education 2023–2032*. Retrieved from https://www.regjeringen.no/contentassets/9531df97616e4d8eabd7a820ba5380a9/en-gb/pdfs/stm202220230005000engpdfs.pdf

Norwegian Directorate for Higher Education and Skills. *Retningslinjer og verktøy for ansvarlig internasjonalt kunnskapssamarbeid* [Guidelines and Tools for Responsible International Knowledge Collaboration]. Retrieved from https://hkdir.no/retningslinjer-og-verktoy-for-ansvarlig-internasjonalt-kunnskapssamarbeid

The Research Council of Norway. (2024). *Møt oss under Arendalsuka 2024* [Meet Us at Arendalsuka 2024]. Retrieved from https://www.forskningsradet.no/nyheter/2024/mot-oss-under-arendalsuka-2024/

The Research Council of Norway. (2024). *Hva Norge ikke vet at Norge vet* [What Norway Doesn't Know That Norway Knows]. Retrieved from https://www.forskningsradet.no/forskningspolitikk-strategi/ltp/vi-mener/hva-norge-ikke-vet-at-norge-vet/

The Research Council of Norway. (2024). *Funding for research on research and innovation policy*. Retrieved from https://www.forskningsradet.no/en/call-for-proposals/2024/funding-for-research-on-research-and-innovation-policy/

The Research Council of Norway. (2024). *100 millioner kroner til kommersialisering av forskning* [100 Million NOK for Research Commercialization]. Retrieved from https://www.forskningsradet.no/nyheter/2024/100-millioner-kroner-til-kommersialisering-av-forskning/

The Research Council of Norway. (2024). *Tidligfase teknologioverføring* [Early-Stage Technology Transfer]. Retrieved from https://www.forskningsradet.no/utlysninger/2024/tidligfase-teknologioverforing/

Norwegian Government. (2024). *Stortingsmelding for gründere* [White Paper for Entrepreneurs]. Retrieved from https://www.regjeringen.no/no/aktuelt/stortingsmelding-for-grundere/id3072460/

The Research Council of Norway. (2024). *Kraftig økning i behovet for tungregnekraft* [Significant Increase in Demand for High-Performance Computing]. Retrieved from https://www.forskningsradet.no/nyheter/2024/kraftig-okning-i-behovet-for-tungregnekraft/

The Research Council of Norway. (2023). *Veikart for forskningsinfrastruktur* [Roadmap for Research Infrastructure]. Retrieved from https://www.forskningsradet.no/en/financing/what/infrastructure/veikart-for-forskningsinfrastruktur/

Norwegian Institute for Studies in Innovation, Research, and Education. (2024). *NIFU Insight 2024/9*. https://nifu.brage.unit.no/nifu-xmlui/bitstream/handle/11250/3135459/NIFU-insight2024-9.pdf?sequence=4&isAllowed=y

Ministry of Education and Research. (2023). *Supplementary allocation letter 2023*. https://www.regjeringen.no/contentassets/2cb3961679964e34bc9c9c3f3d73565d/supplerende-tildelingsbrev-2023-2294672.pdf

The Research Council of Norway. (2024, February 8). *Mission: Assessment of sensitive technologies*. https://www.forskningsradet.no/nyheter/2024/oppdrag-vurdering-sensitive-teknologiar/

European Commission. (*2007*). *Strategic Energy Technology Plan*. https://energy.ec.europa.eu/topics/research-and-technology/strategic-energy-technology-plan_en

Energi21. (2008). *About Energi21*. https://www.energi21.no/en/

European Commission. (2022). *The future of work: Research and innovation*. https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/future-work_en

Ministry of Education and Research. (2022). *Nasjonal handlingsplan for europeiske forskningsområder* [National action plan for European research areas]. https://www.regjeringen.no/contentassets/7903662193364452b11aaf27fcc96d88/no/pdfs/nasjonal-handlingsplan-for-europeiske-forskingsomr.pdf

EEA and Norway Grants. (2023). *Iceland, Liechtenstein, and Norway, and European Union have now signed agreement on new funding*. https://eeagrants.org/news/iceland-liechtenstein-and-norway-and-european-union-have-now-signed-agreement-new-funding

EEA and Norway Grants. (2023). *EEA and Norway Grants status report 2023 summary*. https://statusreport2023.eeagrants.org/assets/downloads/EEA-and-Norway-Grants_Status-Report-2023_Summary.pdf

European Commission. (2025). *RM COMP: A new key tool to strengthen research management in Europe*. https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/rm-comp-new-key-tool-strengthen-research-management-europe-2025-01-27_en

Research Council of Norway. (2021). *Indikatorrapporten dokument*. https://www.forskningsradet.no/indikatorrapporten/indikatorrapporten-dokument/

Ministry of Education and Research. (2023). *St. meld. 5 (2022–2023)*. https://www.regjeringen.no/contentassets/9531df97616e4d8eabd7a820ba5380a9/no/pdfs/stm202220230005000dddpdfs.pdf

Research Council of Norway. (2019). *Open science policy*. https://www.forskningsradet.no/en/research-policy-strategy/open-science/policy/

Research Council of Norway. (2019). *Strategies and plans*. https://www.forskningsradet.no/en/research-policy-strategy/strategies-plans/

Zenodo. (2024). *Presentation of the Norwegian National Chapter at the CoARA National Chapters Exchange Forum 2024*. https://zenodo.org/records/10785275

Annex 1 – 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 https://european-research-area.ec.europa.eu/era-monitoring-reports. 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
/	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 suggested 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 different governance levels (local or regional, national, 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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