

Report No 11 to the Storting (2024–2025)
Skilled workers for a new era – with higher vocational education



1 Introduction and summary

1.1 Introduction

Norway is set to undergo a green and digital transition. Having the right skills in the right place is crucial to succeed in this transition. With this white paper on higher vocational education, the Government aims to ensure that the Norwegian labour market gains access to *more* graduates and more *highly skilled* graduates. We will take on major tasks and engage in lifelong learning. The Government will continue to develop and build Norwegian society to increase value creation in all the country's regions and strengthen citizens' welfare throughout the country. The unmet need for skilled workers and other professionals is a major and growing challenge in Norway. There is a common thread running through the Government's work that involves a more practice-based school system, an adaptable private sector and a just green transition.

The White Paper on Long-term Perspectives on the Norwegian Economy clearly states that human capital – in other words, people – is our most important national asset. Both the Labour and Welfare Administration's (Nav) annual survey among employers and the Confederation of Norwegian Enterprise's (NHO) Skills Barometer survey also clearly show great demand for skilled workers.¹

Access to the right skills is essential to foster innovation and using scarce resources efficiently in different parts of the Norwegian labour market. Norway's advantages can be further enhanced, including our know-how and technology and our world-class professionals with the ability to take decisive action. This will also enable us to develop the green solutions that Norway and the world need, and to process the raw materials that exist in Norwegian nature and agriculture. We can achieve the efficiency and innovation we need to compensate for the shortage of people, for example in the health and care services. To do so, we need to invest in vocational education and in lifelong learning and qualification.

Today, 850,000 people in the Norwegian labour force have completed upper secondary education as their highest level of education, and more than 660,000 of them have completed vocational programmes. They must be given the opportunity to take further education and specialise throughout their lives. For them, higher vocational education is the main arena for access to formal further education and lifelong learning.²

Through vocational colleges, we provide the means to solve specific tasks in business and industry and in welfare services. Through universities and university colleges, we also address the complex societal challenges that can be resolved at the intersection between research and education, building up a knowledge reserve for a future we do not know. At all levels of education, we emphasise practical skills and strengthen knowledge about quality in practical subjects. Through an efficient division of labour and good cooperation, we prepare for the future. Practice-oriented and relevant

¹ Norwegian Labour and Welfare Administration (Nav), 2024a and Nordic Institute for Studies in Innovation, Research and Education (NIFU) 2025:2

² The admission requirement for higher education is normally Higher Education Entrance Qualification, cf. Section 2-1 of the Regulations concerning Admission to Higher Education.

basic and further education programmes should be available where people live and accommodate people in different life situations.

Universities, university colleges, vocational colleges and vocational education and training produce candidates in close collaboration with the labour market to meet the needs for labour and skills. Norway has a long-standing tradition of successful partnerships between public authorities, educational institutions and employers. This close partnership allows us to identify new and changing needs at an early stage. Such partnerships are needed now more than ever, for example in healthcare, energy supply and national defence.

Vocational colleges are uniquely positioned close to labour market needs, offering practical and short courses and programmes that are suitable throughout different phases of life. This means that they play a key role in solving the major tasks and challenges we face.

1.2 Challenges ahead

The 2024 White Paper on Long-term Perspectives on the Norwegian Economy highlights the competition for labour force and the need for adaptation as two of the main challenges facing Norway towards 2060.³ Norwegian employees, businesses and society at large have skills needs that must be met. Knowledge, skills and competence provide the basis for value creation and innovation, products and services that society needs, and a competitive economy. At the same time, employers in Norway and Europe are facing significant skills shortages and, notably, a shortage of the right skills.⁴

Norway is facing long-term, complex challenges such as climate and environmental changes, demographic changes and a more demanding security situation. At the same time, Norway is undergoing major changes driven by digitalisation and new technology. To meet these challenges, we need innovative thinking and skills. When the entire population is given an opportunity for lifelong learning, the competitiveness of our economy and the quality of our welfare services will be strengthened.

The Norwegian labour market needs more vocational college graduates. The Government believes that changes should be made to several aspects of higher vocational education in order to achieve this ambition. In particular, the sector's legislation, financing and management should be improved. The Government will facilitate close cooperation between vocational colleges, counties (*fylkeskommuner*) and employers to develop and offer high-quality higher vocational education programmes.

There are large unmet labour shortages in Norway. We therefore need to take a closer look at possible obstacles to a good, well-functioning higher vocational education sector, including how the counties exercise their ownership and management roles, lack of capacity for accreditation and quality assurance of vocational colleges, weaknesses in the body of knowledge, challenges in

³Report to the Storting No 31 (2023–2024) *Long-term Perspectives on the Norwegian Economy*

⁴ Draghi, 2024

recruiting teachers for vocational colleges, predictable funding and raising the profile of higher vocational education.⁵

1.3 The Government's ambitions for the vocational college sector

The Government has great ambitions for the vocational college sector. This white paper outlines several measures to strengthen vocational colleges and points to further work that needs to be followed up. Education and skills policy is a key instrument to help provide employers with more and better qualified employees by qualifying and mobilising more people outside the labour market. Better education and opportunities for skills development are also a key tool for those already in employment.

A large proportion of employees in industries and companies vulnerable to restructuring have vocational qualifications from upper secondary school. Many of them need to specialise and adapt, often while working and living at home with their families. Vocational colleges that offer flexible and easily accessible programmes can help meet important skills needs across Norway. Vocational colleges are also taking a proactive approach and are in the process of developing new programmes in several subject areas.

The Government aims to strengthen higher vocational education and offer more opportunities in all parts of the country to those who have taken or wish to take vocational or practice-oriented programmes. The Government focuses on upskilling of employees at any point in their careers by facilitating good, decentralised education programmes close to the regional and local labour markets. We want to provide skilled workers with more and better skills to ensure security and development throughout the country, ensure good public health and welfare services and promote innovative businesses. We want to give young people an opportunity to take more education and achieve their ambitions in vocational occupations.

The counties will continue to have overall responsibility for skills policy in the regions, including for higher vocational education. With the major changes taking place in the labour market, it is necessary to consider how both county and central government authorities can help ensure that vocational colleges continue to offer programmes that are relevant and meet the needs of the labour market at all times. The Government will prioritize the development of quality in higher vocational education and educational programmes to meet changing skills needs throughout the country. Vocational colleges are in a position where they can be close to local businesses, health and care services, kindergartens and so on. This interaction is valuable for the further development of educational programmes and for providing the labour market with the skills it needs.

1.3.1 The Government's focus on higher vocational education

During the Government's term in office, vocational colleges have received funding to increase the number of student places by 2,000. Of these, 100 places have been earmarked for the Industrial Trade School scheme as a result of the wage negotiations for competitive industries (*frontfag*) in

⁵ Deloitte, 2023a

2024. The new places have primarily been established for technical subjects and health and welfare subjects, which is in line with the Government's general priorities.⁶ Developments in health sciences can also be seen in the context of the Government's initiative for skilled workers with qualifications that are relevant for the health and care services.⁷

Through the grant scheme for the tripartite industry programmes (*bransjeprogram*), vocational colleges have received around NOK 165 million in funding during the period 2021–2024. In addition, the Government has given priority to strengthening the grant schemes for development funds for vocational colleges and for study centres, among other things to facilitate higher vocational education across the country.

The Government has enabled institutional accreditation for vocational colleges and the establishment of a national student ombudsman for vocational college students. From 2025, the Research Council of Norway will be issuing funding calls for research on higher vocational education and vocational education and training. NOKUT has received increased funding for its work on supervision and accreditation of higher vocational education. Two new state-owned vocational colleges have been established in recent years. The Naval Vocational College under the Ministry of Defence has accepted students since autumn 2022, and the Fire and Rescue Academy under the Ministry of Justice has accepted students since spring 2024.⁸ Funding commitments for a total of 5,133 new student accommodation units have been announced for the period 2022–2024, and for 2025, funding has been pledged for a further 3,050 units.

1.4 Body of knowledge for the White Paper

The previous white paper on higher vocational education was considered in 2017.⁹ The introduction and impact of the measures have been evaluated.¹⁰ In this White Paper on higher vocational education, the Government draws on these evaluations and on new knowledge to plan the future development of the vocational college sector. The evaluation of the Norwegian Qualifications Framework for Lifelong Learning, the Committee on Skills Needs' thematic report 1/2022 and the status reports on higher vocational education have been key sources informing work on this White Paper, in addition to sources on the skills needs of the individual sectors, which is elaborated on in Chapter 3.¹¹ Furthermore, dialogue meetings, input workshops and input meetings have been held, and many written submissions have been received. See Appendix 1. This has given the Government a good basis for assessing the development opportunities for higher vocational education.

⁶ Report to the Storting No 14 (2022–2023) *Outlook on the skills needs in Norway*

⁷ Fiscal Budget Resolution Prop. 1 S (2024–2025) Ministry of Health and Care Services

⁸ Database for Statistics on Higher Education's vocational college statistics (2024)

⁹ Report to the Storting No 9 (2016–2017)

¹⁰ Deloitte, 2023a

¹¹ NOKUT, 2023, HK-dir, 2023 and 2024I and Norwegian Committee on Skill Needs, 2022

1.5 Summary of the Government's priorities

In this white paper on higher vocational education, the Government presents its policy for the further development of the vocational college sector. The measures that are proposed can be found in chapters 4, 5, 6 and 7, while the financial and administrative consequences are described in Chapter 8. There are major skills needs in the Norwegian labour market, and some of these are particularly important. The skills needs are described in Chapter 3.

1.5.1 Development and access to meet labour market needs

Norway's society is undergoing major changes, and the Government aims for the development of higher vocational education to keep pace with changes in the labour market. Vocational colleges must be able to respond quickly to new and changing needs in the labour market through practice-oriented and flexible programmes. The counties have overall responsibility for skills policy in the regions, and the Government believes that it is crucial that they are also responsible for determining the capacity of higher vocational education. Good dialogue and collaboration with the business sector on skills needs is required. The Government will continue to increase the capacity of higher vocational education in line with the skills needs of the entire country. As stated in the White Paper Outlook on skills needs in Norway, the Government will, when allocating funds for places at vocational colleges, give priority to student places on technical and health and welfare programmes and fields that are important for the green transition.¹² No evidence has been presented to suggest that this prioritisation should be changed, and the counties' priorities have over time shown that these are key areas throughout the country. At the same time, the courses and programmes offered by vocational colleges must also cover the need for other subject areas that the counties believe are strategic to prioritise. In some regions, for example, skills for work in tourism should be prioritised, while in other places skills for aquaculture, agriculture or transport are essential.

The Government will continue to invest in higher vocational education throughout the country and will therefore be reviewing legal regulations to better enable vocational colleges to meet labour market needs. In the review, the Government will propose amendments to the Norwegian Qualifications Framework for Lifelong Learning and propose that the purpose of higher vocational education should be better reflected. The Government would like vocational colleges to have the flexibility to offer programmes of different lengths and with different learning outcomes. Where necessitated by increasing skills requirements, vocational colleges must also be able to develop programmes with more complex learning outcomes. Vocational colleges will continue to develop further education programmes for skilled workers and others who seek and need a practice-oriented education. To meet the needs of a diverse workforce and an equally diverse student body, vocational colleges must continue to organise their programmes in a flexible and accessible way.

¹² Report to the Storting No 14 (2022–2023)

1.5.2 Higher vocational education for more people

The Government's goal is for the labour market to have access to *more* graduates and more *highly skilled* graduates, partly by giving vocational colleges a larger and more central role in education and skills policy. Approximately 850,000 people aged 15–61 have completed upper secondary school as their highest level of education. This corresponds to about one-third of the labour force. With the help of higher vocational education, many of them will be able to improve their skills and learn throughout their working lives.

The Government will invest in skills also for the purpose of getting more people into employment. Adults with a low level of education more often find themselves outside the labour market. In the outlook report, the Government proposed closer cooperation between the counties and the Norwegian Labour and Welfare Administration (Nav) to enable more people to complete an education that results in a trade or journeyman's certificate.¹³ This cooperation can also be used to enable those who have completed upper secondary education to take higher vocational education that can qualify them for new jobs. Higher vocational programmes are becoming increasingly flexible which accommodates this. Higher vocational education on offer must be made more visible to those working at Nav or as career counsellors, as well as to prospective students and to employers.

The Government will consider whether the admissions regulations should be changed to make it easier to attract a more diverse group of students to higher vocational education. This includes diversity in educational backgrounds. Both vocational college students and society will benefit from students progressing efficiently through the programmes. The Government is therefore presenting measures that in various ways will help students succeed in their education. You can read more about this in Chapter 5.

1.5.3 Good practice-oriented vocational programmes across the country

Good quality education is a prerequisite for attracting students and supplying the labour market with relevant skills. The Government is intent on the opportunities that good education programmes provide in terms of creating development, innovation and efficiency in the workplace. The Government aims for a vocational college sector that covers the breadth of Norwegian working life and that develops in step with new trends and transition processes in business and industry and the welfare sector. This requires quality and room for manoeuvre.¹⁴

The Government wants to further develop the body of knowledge about higher vocational education and vocational education and training. More knowledge will contribute to quality development in the sector in addition to raising the sector's profile and enhancing people's knowledge of it. The Government will also review the regulations and strengthen the Norwegian Agency for Quality Assurance in Education's (NOKUT) capacity for supervision and accreditation of higher vocational education. In order to accommodate the growth in vocational college programmes and the desire

¹³Report to the Storting No 14 (2022–2023)

¹⁴ Vocational colleges are regulated by the Section 5 of the Vocational Education Act, Section 49 of the Vocational Education Regulations and the Chapter 4 of the Vocational Education Academic Supervision Regulations.

for good higher vocational education throughout the country, the Government will also take the initiative to further develop educational programmes specifically designed for vocational college teachers. You can read more about this in Chapter 6.

1.5.4 Strengthen the management and financing of higher vocational education

Through their responsibility for skills policy in their own region, the counties play a key role in helping to ensure that people throughout the country have access to relevant skills. The administration of the grant scheme for operating funds for vocational colleges is a strategic skills policy instrument for the counties, and the Government would therefore like the counties to continue to administer this scheme. This is related to the fact that the counties are responsible for mapping regional skills needs, communicating needs to providers, such as vocational colleges, and facilitating in-demand training and education programmes. The Government will support this role and further develop a strategic dialogue between the Ministry of Education and Research and the counties on the administration and management of higher vocational education. The Government also sees a need to clarify the division of responsibilities between the boards of vocational colleges and the counties as owners and will follow this up in order to assess whether the rules on organisation should be changed.

The Government will strengthen state funding of vocational colleges by increasing the rate for performance-based payment for completed credits. On the basis of changes in the number of credits completed in publicly funded programmes, the counties are allocated funds annually through the grant scheme for operating funds for vocational colleges.

The Government recognises a need for adjustments in the grant scheme in order to achieve a better balance between the vocational colleges' room for manoeuvre and the counties' management and allocation of operating funds. The Government will therefore adjust the grant scheme to make funding more predictable for the vocational colleges and to make it easier for the counties to administer. This means that the counties allocate the annual operating grant to the vocational colleges, including performance-based payment, as a block grant with overarching guidelines. You can read more about this in Chapter 7.

1.6 List of measures

There are huge unmet skills needs in Norway. The Government believes that vocational colleges are well suited to offer flexible and practice-oriented programmes that can help meet the needs of the Norwegian society. Through higher vocational education, the Government wants to provide the labour market with *more* graduates and more *highly skilled* graduates. The plan is to achieve this through a three-track approach, to equip vocational colleges, students and counties, respectively.

Vocational colleges shall be equipped with more knowledge about quality, better and more predictable funding and new authorisations.

The Government will therefore

1. present a proposal to amend the Tertiary Vocational Education Act to highlight vocational colleges' purpose (Chapter 4)
2. consider adapting the regulations for accreditation to ensure the quality of future higher vocational education (Chapter 6)
3. explore the concept of quality in higher vocational education (Chapter 6)
4. strengthen supervision of higher vocational education and consider introducing periodic supervision of vocational colleges' systematic quality assurance work (Chapter 6)
5. support the testing of artificial intelligence in NOKUT's supervisory work (Chapter 6)
6. contribute to more research on quality in vocational training and education (Chapter 6)
7. take the initiative to strengthen and make education programmes for teachers at vocational colleges available throughout the country (Chapter 6)
8. ensure opportunities for internationalisation (Chapter 6)
9. facilitate more robust vocational colleges through financing and regulations (Chapter 7)
10. give vocational colleges more room for manoeuvre through the allocation of operating funds as a block grant (Chapter 7)
11. increase the rate for performance-based payment for completed credits (Chapter 7)

Students shall have access to good student welfare and be equipped with more learning and career opportunities.

The Government will therefore

12. enable higher vocational education to be offered at levels 6 and 7 of the Norwegian Qualifications Framework for Lifelong Learning and introduce a two-pillar model (Chapter 4)
13. continue to develop higher vocational education in the Norwegian Armed Forces (Chapter 4)
14. review terminology for courses and programmes in higher vocational education (Chapter 4)
15. introduce skills loans through the Norwegian State Educational Loan Fund (Lånekassen) (Chapter 5)
16. introduce a debt cancellation scheme in rural areas through the Norwegian State Educational Loan Fund (Chapter 5)
17. map the need for welfare services for students in flexible education programmes (Chapter 5)
18. contribute to universal design and diversity at vocational colleges (Chapter 5)
19. raise the profile of higher vocational education by increasing knowledge about higher vocational education among counsellors and supervisors in central government agencies, counties and municipalities (Chapter 5)
20. consider legal changes to enable applicants from different backgrounds to be admitted to higher vocational education (Chapter 5)
21. provide better information about general recognition of higher vocational education from abroad (Chapter 5)
22. improve knowledge about higher vocational education as a labour market measure (Chapter 5)

23. strengthen the requirements for work on the learning environment at vocational colleges with institutionally accreditation (Chapter 6)
24. establish a national student ombudsman (Chapter 6)
25. examine and account for the consequences of using *the European Credit Transfer and Accumulation System* (ECTS) in higher vocational education (Chapter 6)

The counties shall be better equipped to manage higher vocational education through greater cooperation and room for manoeuvre.

The Government will therefore

26. support the counties role in skills policy and responsibility for higher vocational education (Chapter 4)
27. further develop a strategic dialogue between the Ministry of Education and Research and the counties on the administration and management of higher vocational education (Chapter 4)
28. increase the capacity of higher vocational education in line with the skills needs of the entire country (Chapter 4)
29. consider the regulation of organisational structures and responsibilities for vocational colleges owned by counties (Chapter 7)

2 Developments in the sector

Higher vocational education has undergone considerable development over the past ten years. The number of vocational college students has doubled since 2017 to almost 31,400 in autumn 2023,¹⁵ and the number of education programmes on offer has increased by 80 per cent.

Vocational colleges have essentially become larger as a result of both growth and mergers. From 2017 to 2023, the number of campuses has increased by 25 per cent to a total of 175, while the number of vocational colleges has been reduced from 80 to 60.¹⁶ The decrease in the number of vocational colleges is due to mergers between both public and private colleges, as well as the closure of some colleges. Collaboration with the labour market is strong, and both students and employers seem satisfied with the quality of the programmes.¹⁷

Higher vocational education has become even more focused on meeting the needs of the labour market. The number of campuses has increased, the vocational colleges collaborate with study centres, and they offer many flexible courses and programmes. This helps them reach students in all over the country.¹⁸

You can read more about vocational college students, programmes and campuses, both nationally and regionally, in *the status report on higher vocational education*.

¹⁵ By comparison, the number of students at universities and university colleges was around 276,000 in 2023 (DBH).

¹⁶ Directorate of Higher Education and Skills, 2024l

¹⁷ NIFU 2024:1, NIFU 2024:7, NIFU 2023: 3

¹⁸ Norwegian Committee on Skill Needs, 2022

Table 2.1. Key figures for higher vocational education, 2017–2023

	2017	2021	2023	Change from 2017
<i>Vocational colleges</i>				
Number of vocational colleges	80	61	60	–25%
Vocational colleges owned by counties	33	16	11	–67%
State-owned vocational colleges	3	3	4	33%
Privately owned vocational colleges	44	45	44	0%
Vocational colleges with fewer than 50 students	29	17	20	–31%
Vocational colleges with between 50 and 500 students	43	27	23	–47%
Vocational colleges with fewer than 500 students	9	16	17	89%
<i>Education programmes by subject area</i>				
Health and welfare	354	497	659	86%
Creative subjects	150	145	146	–3%
Transport and communications	44	55	46	5%
Technical subjects	300	444	517	72%
Business and administration	156	299	391	151%
Other	35	60	60	71%
Not stated		21	47	
Total	1,039	1,521	1,866	80%
<i>Vocational college students</i>				
Number of new students	8,424	18,821	17,266	105%
Number of students	15,690	28,241	31,380	100%
Women	43%	46%	47%	9%
Men	57%	54%	53%	–7%
Number of graduates	5,618	9,846	11,386	103%
<i>Vocational college students by subject area</i>				
Health and welfare	3,862	6,162	7,596	97%
Creative subjects	2,250	2,806	2,541	13%
Transport and communications	1,294	1,512	1,395	8%
Technical subjects	6,183	10,876	13,306	115%
Business and administration	1,658	5,363	5,657	241%
Other	443	692	668	51%
Not stated		830	217	
Total	15,690	28,241	31,380	100%

Table 2.1. Key figures for higher vocational education, 2017–2023

	2017	2021	2023	Change from 2017
<i>Gender distribution for the biggest subject areas</i>				
Technical subjects, women	6%	13%	14%	133%
Health and welfare, women	90%	87%	86%	–4%
Business and administration, women	70%	69%	69%	–1%
<i>Admission basis for new students, autumn term¹</i>				
Vocational qualifications	4,814		9,954	107%
Higher Education Entrance Qualification	2,260		3,638	61%
Prior learning and work experience	948		3,230	241%
Other skills basis	402		6	–99%
Higher vocational education			93	
Special admission requirements			185	
Foreign education background			160	

¹ The categories for reporting admission figures to DBH-F were changed prior to reporting in autumn 2023 to ensure consistency between the rules on admissions in the Higher Vocational Education Regulations and the reporting requirements.

Source: Norwegian Directorate for Higher Education and Skills, 2024

Today's vocational college students

Most vocational college students are over 30 years old, study part-time alongside work and have a vocational background. The picture can be nuanced in several ways, however. Looking at total study effort in terms of full-time equivalents, the breakdown is 55 per cent part-time and 45 per cent full-time students.¹⁹ In simple terms, these two groups differ in terms of their age, admission basis and subject areas.

Two-thirds of full-time students are under the age of 30. Higher Education Entrance Qualification is the most common basis for admission for this group, but some are also admitted on the basis of prior learning and work experience or vocational qualifications. Almost 70 per cent study computer/IT subjects, creative subjects or transport and communications subjects.²⁰ Many have already been in employment, but are looking to take an education as part of restructuring and career development.²¹

Two-thirds of part-time students are 30 years or older, 70 per cent are admitted on the basis of vocational qualifications, and they take different educational programmes than full-time students.

¹⁹ A student on a one-year full-time programme counts as one full-time equivalent, while a student on a 50 per cent part-time programme counts as half a full-time equivalent.

²⁰ Directorate for Higher Education and Skills, 2024l

²¹ NIFU 2023: 3

Part-time students are more likely to have a job that is directly relevant to their education while studying.²² Part-time students are the fastest growing group, and for whom we see that higher vocational education plays a particularly crucial role. The flexible forms of education enable more people to gain new and specialised skills while working or attending to other commitments. However, the situation is complex and will probably change as the needs of the labour market and the structure of vocational colleges' offerings change.

One thing both groups have in common is that they mainly take programmes of between 60 and 120 credits. In fact, 84 per cent of all students take such programmes. At the same time, there are indications that shorter programmes of less than 30 credits are on the increase, and that shorter courses and programmes accommodate people who might not otherwise have taken more education.²³

²² NIFU 2023: 3

²³ Rambøll, 2024



3 Need for higher vocational education

In the White Paper Long-term Perspectives on the Norwegian Economy and the White Paper Outlook on skills needs in Norway, the Government has presented the general challenges associated with a shortage of skilled labour in Norway.²⁴ The challenges are due to an ageing population and the labour market adapting in line with technological development, major welfare issues and the green transition. The changes are likely to alter the allocation of resources in Norwegian society, the tasks that need to be carried out and how, and the skills that we will need more of. The Government aims for a more efficient prioritisation of both human and financial resources. Higher vocational education is one of the Government's highest priorities with a view to *increasing the number of skilled* workers and employees with *updated* skills, and to help reduce the labour reserve.²⁵

3.1 The labour market lacks both labour and skills

Every year, around ten per cent of all employment relationships are replaced. Since 2017, an average of 315,000 new jobs have been created each year, while 270,000 old jobs have disappeared.²⁶ Movements in the labour market allow both employers and employees to renew skills and working methods. The workforce has largely managed to adapt to changes in the industry structure and in enterprises' need for skills, and enterprises have managed to develop their employees' skills in the

²⁴ Report to the Storting No 31 (2023–2024) and Report to the Storting No 14 (2022–2023)

²⁵ Report to the Storting No 31 (2023–2024) and Report to the Storting No 14 (2022–2023)

²⁶ SSB tabell 12317

necessary direction. Restructuring has taken place at the same time as overall employment has increased.

A great deal of work goes into identifying the labour market's skills needs and estimating where needs will arise in the future. Although there is no definitive answer, we have a broad knowledge base that shows that many sectors and industries are struggling to attract enough of the right skills, and that there is great regional variation in the challenges facing the labour market. Some of the main reasons are high employment, low unemployment, an increasing number of people with a reduced capacity for work and a low-mobility labour force. Over the past year, the labour shortage has been reduced in some manufacturing and crafts occupations, while unemployment has increased for cyclically sensitive occupations in building and construction and among engineering and IT professions.²⁷

3.1.1 Need for skilled labour

With the ageing of the population, Norway is entering a period of permanent societal change. The over-80s group will increase by more than 250,000 between 2020 and 2040.²⁸ At the same time, the growth in the available labour force will slow down before coming to a halt towards the mid-2030s.²⁹ An ageing population means a greater burden of disease. This, in turn, increases the need for personnel with broader medical and healthcare expertise. The Healthcare Personnel Commission's report shows that a shortage of personnel is the biggest challenge facing the health and care services.³⁰ There is fierce competition for labour between the specialist health service, the municipal health and care services and privately funded healthcare providers. The challenges associated with a shortage of personnel will be greatest in municipal care services. The Government agrees with the Health Personnel Commission's analysis that the labour market will be tight for all sectors going forward, and that the healthcare share of the total workforce will not be able to continue to increase significantly. New solutions will be required as a result of the demographic development.

Nav's 2024 survey among employers shows that, second only to the health and care sector, the shortage of labour is biggest in the retail sector (6,700 people) and in building and construction (5,500 people).³¹ Industries such as building and construction and hospitality are vulnerable to cyclical fluctuations, and labour shortages can therefore vary greatly from year to year. Among occupations that require vocational training, the shortage increased most among healthcare workers, heavy equipment and industrial mechanics, bus drivers, tram drivers, sheet metal workers and welders. The labour market appears to have sufficient access to other types of vocational skills. These include operator skills in various industrial disciplines, as well as skills in advertising,

²⁷ Norwegian Labour and Welfare Administration (Nav), 2024c

²⁸ SSB report 2024/21

²⁹ SSB tabell 10211, SSB tabell 14282

³⁰ Official Norwegian Reports (NOU) 2023: 4

³¹ Norwegian Labour and Welfare Administration, 2024a

marketing and graphic design, systems analysis, software and application development, operating technology and IT user support.³²

Other surveys support these findings. The Skills Barometer survey estimates that NHO's member companies were short of a total of 42,000 new employees in 2023, of whom 12,000 with a higher vocational education. Three out of four companies needed to recruit people with a craft or journeyman's certificate, and almost as many (seven out of ten) needed to recruit people with a higher vocational education. That is an increase of 17 percentage points since 2022. Most companies lack craft skills and technical expertise relevant to their industry, while the need for IT expertise is great in all industries. Craft trades are the most sought-after higher vocational skills.³³ According to the parties in the maritime industry, there will be a great need for seafarers in the coming years. In a survey on maritime career paths, 80 per cent of the companies surveyed responded that people with practical and operational maritime experience will play a major role in meeting the need for labour and skills up until 2030.³⁴ The survey also shows that 25 per cent of all maritime certificate holders are over the age of 60. Statistics Norway's projection of the labour force and employment by education shows that there will be a shortage of labour up until 2040 in several key areas of working life, including up to 100,000 skilled workers.³⁵

NIFU's 2017 employer survey shows high demand for vocational college graduates, particularly in technical subjects.³⁶ There was nonetheless only a slight increase in the number of enterprises that to a great or some degree needed to recruit workers with a higher vocational education between 2017 and 2022, from 54 to 57 per cent of those surveyed.³⁷ In the same period, the number of students and graduates increased significantly. The 2022 employer survey shows a greater unmet need for skills in the least central municipalities in the country,³⁸ and that the need for skills development is greatest among younger employees with little work experience. Around one-third of the enterprises surveyed in the least central municipalities need to recruit workers with a higher vocational education to a great or some degree. The survey also shows that two out of three enterprises have taken advantage of further education programmes at either a vocational college, university college or university, but that there are major differences between the disciplines. Demand for further and continuing education is greatest among enterprises in the fields of teacher training and educational theory and practice, and health and social care.³⁹

The Skills Needs Committee's thematic report on higher vocational education shows that 41 per cent of the enterprises surveyed by the Directorate for Higher Education and Skills (HK-dir) lacked

³² Norwegian Labour and Welfare Administration, 2024a

³³ NIFU 2024: 3

³⁴ Menon Economics, 2024

³⁵ SSB rapport 2020/41

³⁶ NIFU 2019: 3

³⁷ NIFU 2024: 1

³⁸ Municipalities in centrality categories 5 and 6 according to Statistics Norway's centralisation index.

³⁹ NIFU 2024: 1

workers with a higher vocational education.⁴⁰ The number of respondents was low in this survey, but the disciplines that stand out harmonise with the findings in NIFU and NHO's surveys, showing that both the building and construction industry and the hospitality industry lack workers with a higher vocational education. In addition, industrial establishments and companies in the transport and storage sector stated that they lacked such workers.

NIFU's graduate surveys for higher vocational education support the findings from the various surveys and document that vocational college graduates are in demand in the labour market. The graduates are either already working while studying or generally quickly find relevant work after graduation. The surveys also document that the programmes are considered highly relevant for the labour market. The most recent graduate survey shows that the proportion of vocational college graduates who landed a job in the field they trained for has increased since the previous survey.⁴¹ Just over half of the graduates are still working for the same employer as before they took the education, and three out of four have found a new job or position for the same or a new employer. In particular, graduates in technical and transport subjects achieve more independence, professional challenges and a higher salary. The outcomes for candidates in the health sciences are less pronounced, but the graduates report greater professional confidence.

⁴⁰ Norwegian Committee on Skill Needs, 2022

⁴¹ NIFU 2023: 3