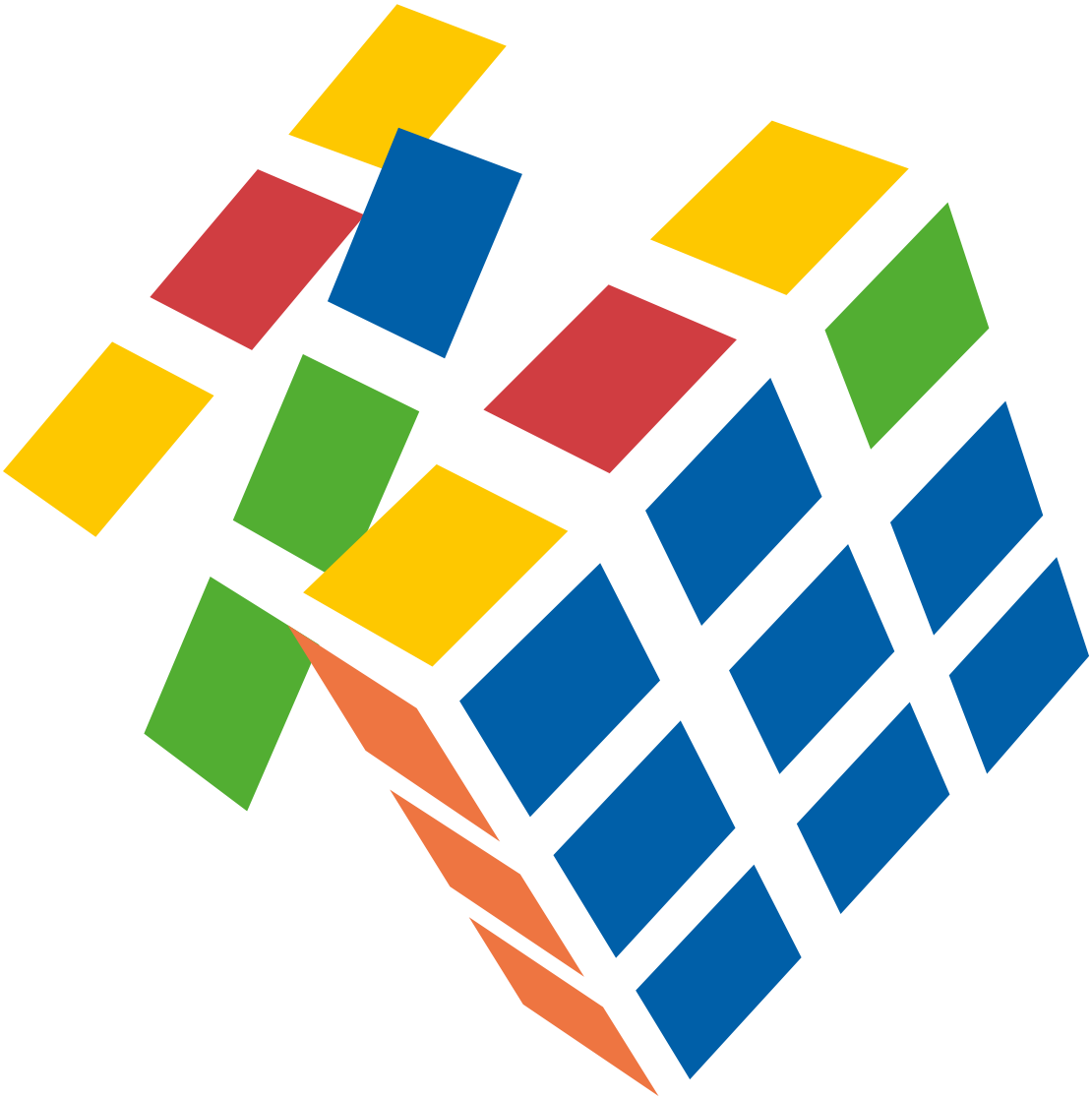
European Centre for the Development of Vocational Training

EN

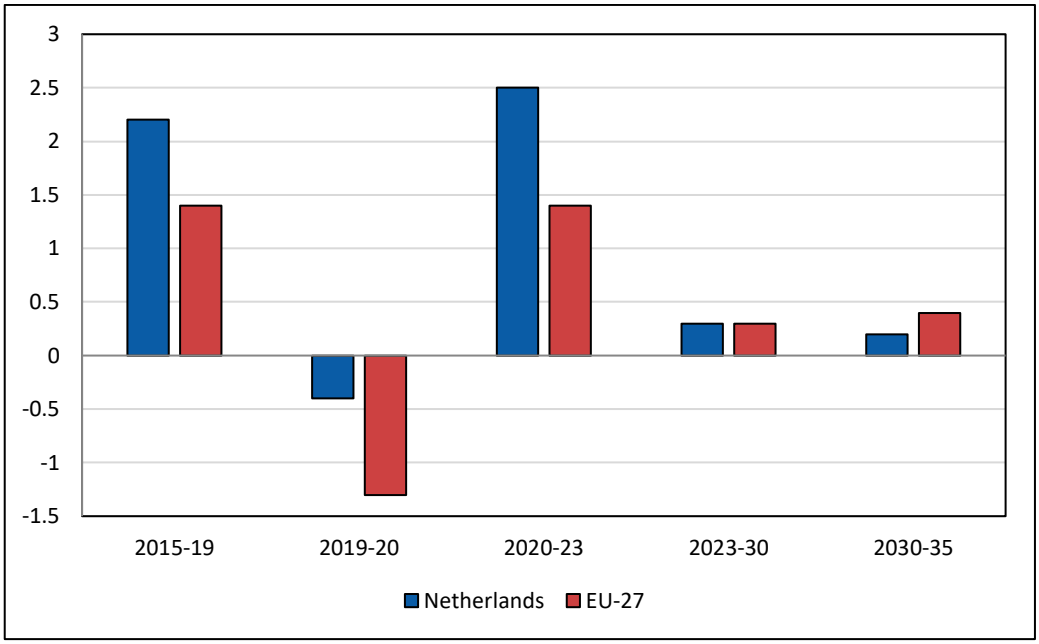


2025 skills forecast
Netherlands

1. Employment outlook

Employment in the Netherlands is forecast to grow slightly slower than the EU-27 average in the long run. Figure **1** shows that employment in the Netherlands grew quite a bit faster than the EU-27 average over 2015-19 and fell less sharply in 2020 as the Covid-19 pandemic hit. Employment in the Netherlands is also estimated to have bounced back faster than the EU-27 over 2020-23. Across the forecast period, employment in the Netherlands is forecast to grow at the same rate as the EU-27 average over 2023-30, and slightly slower than the EU-27 average rate over 2030-35.

Figure 1. **Annual percentage employment growth in the Netherlands and the EU-27, 2015-35**



Source: Cedefop (2025 Skills Forecast).

2. Labour force overview

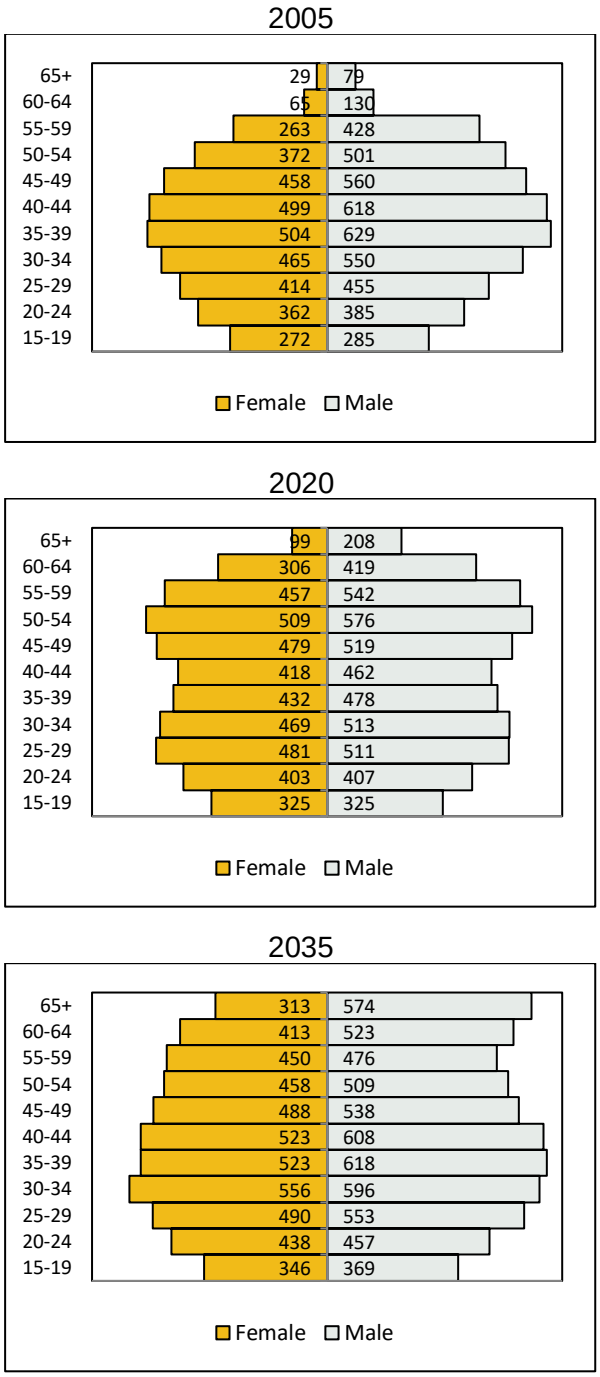
Figure **2** shows the Dutch labour force by age group in 2005, 2020 and 2035. Changes in the labour force in the Netherlands over the forecast period will continue to be driven by the ageing population and increasing participation rates in most age groups. The total labour force in the Netherlands is projected to increase by 16% over 2020-35, slightly faster than the growth seen over the previous 15 years. This compares with an expected increase in the labour force of just under 10% over 2020-35 for the EU-27. The total participation rate in the Netherlands is forecast to increase by 5 pp over 2020-35, compared with an increase of 4 pp for the EU-27. The total population is forecast to grow by 7% over 2020-35, compared with a growth of 10% over 2005-20.

The population aged 15-29 and 45-59 in the Netherlands is forecast to decline during 2020-35, while the population aged 65 and over, in particular, is forecast to grow strongly, reflecting trends in the relevant younger cohorts in preceding periods.

The participation rates of all age groups in the Netherlands are forecast to increase over 2020-35, with the strongest increases projected for the 15-19 (15 pp), 20-24 (12 pp), 60-64 (17 pp) and 55-59 and 65+ (11 pp) age groups.

The differences between male and female participation rates in the Netherlands are not generally as great as the EU-27 average, and, also unlike the EU-27 average, female participation rates in the Netherlands are not generally forecast to increase more than male rates. Overall, the total participation rate for females is projected to increase by 4 pp, while that for males is projected to increase by 7 pp, over 2020-35.

Figure 2. **Distribution of the labour force (thousands), 2005-35**

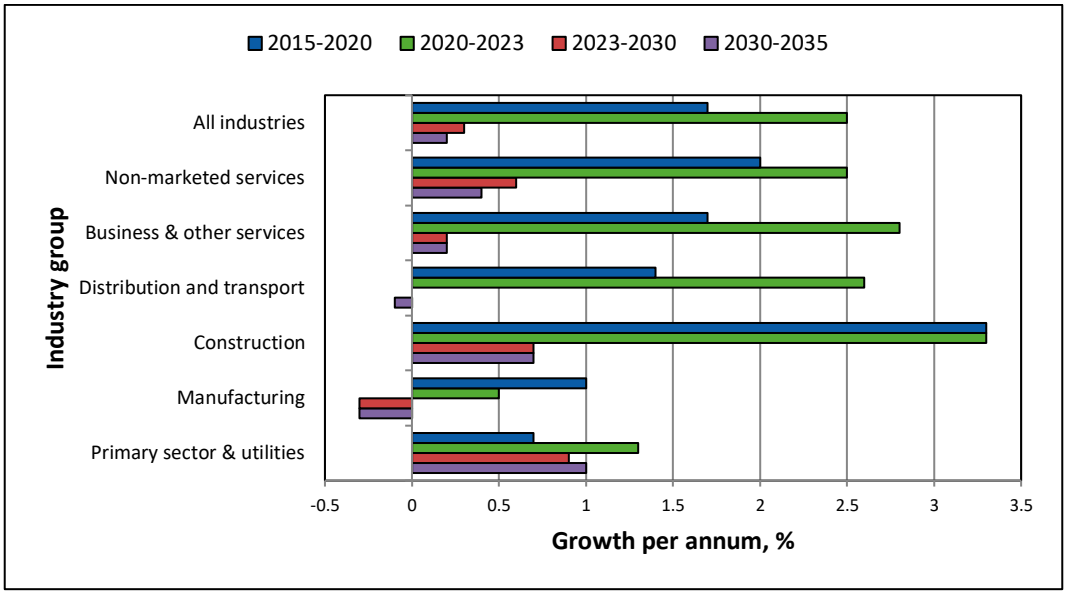


Source: Cedefop (2025 Skills Forecast).

3. Sectoral employment trends

Figure **3** shows annual average employment growth by broad sector in the Netherlands between 2015 and 2035. All broad sectors except *manufacturing* and *distribution & transport* are forecast to see positive employment growth over this period. employment growth is forecast to be strongest in *primary sector & utilities* (around 1% pa), followed by *construction* (0.7% pa) and *non-marketed services* (0.4-0.6% pa).

Figure 3. **Employment growth by broad sector of economic activity, 2015-35**



Source: Cedefop (2025 Skills Forecast).

In terms of sub-sectors (i.e. below the level of the six broad sectors discussed above), the pattern of growth is much more mixed. Within the rather small sector of *primary sector & utilities*, employment growth in *electricity* is forecast to be strong, but in the largest of these sub-sectors, *agriculture*, there is forecast to be no growth in employment. Within *distribution & transport*, employment in the relatively large (4.5% of employment in 2020) *accommodation & catering sub-sector* is forecast to grow quite strongly. However, employment in the much larger (16% of employment) *wholesale & retail trade* sub-sector is forecast to shrink very slightly over the same period. In *non-marketed services*, the largest sub-sector, *health* (accounting for 16% of total employment), is forecast to see growth of around 1% pa, reflecting increased demand due to the ageing population, while both *education* and *public administration & defence* are forecast to see negative or no growth due to demographic developments. Within *business & other services*,

employment growth in some sub-sectors, such as *computer programming* & information services, *market research & other professional services*, *telecommunications* and *research & development* is forecast to be quite strong over the forecast period. However, employment in the large sub-sector (12% of total employment) of *administration & support services* is forecast to fall quite strongly over the same period. The sub-sectors within *manufacturing* tend to be relatively small. *Other transport equipment, motor vehicles, electrical equipment* and *wood, paper, printing & publishing* are all forecast to see relatively strong employment growth over 2023-35. On the other hand, the relatively large (1.5% of total employment) *food, drink & tobacco* sub-sector is forecast to see a strong decline in employment over the same period.

Cedefop skills forecasts estimate the total job openings by occupational group as the sum of net employment change and replacement needs. Net employment change refers to new jobs created or lost due to the expansion or contraction of employment in that sector or occupation. Replacement needs arise as the workforce leaves the occupation due to retirement or career changes. Replacement needs, generally, provide more job opportunities than new jobs, meaning that significant job opportunities arise even in occupations declining in size (i.e. agricultural workers are a typical example, as ageing workers employed in the sector will need to be replaced).

4. Job openings by occupational group

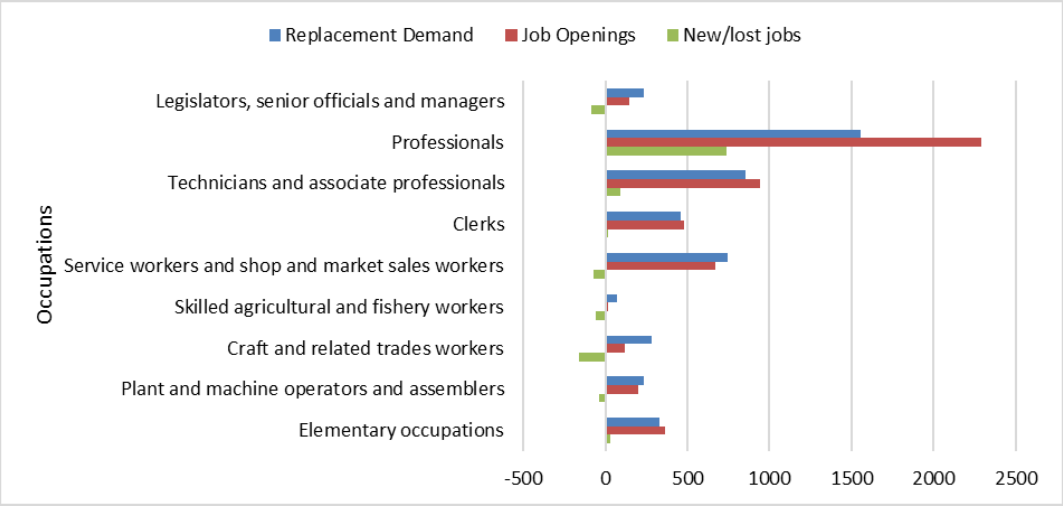
Figure 4 shows the total job openings by broad occupational group over 2022-35. The number of job openings indicates the number of jobs required to be filled due to lost/newly created jobs and those that need replacement workers.

Job openings in the *professionals group* are expected to account for 44% of the economy's total job openings. This results from strong employment growth in the underlying occupations, which contribute about one-third of the group's job openings, along with replacement demand, which contributes 68% of the total job openings.

There are also expected to be many job openings for *technicians and associate professionals*, driven largely by replacement demand (91%), as the total number of jobs is expected to increase only slightly. *service workers and shop and market sales workers* are expected to see substantial job openings due entirely to replacement demand.

Even among *clerks* and *elementary occupations*, 9% and 7% of all job openings in the Netherlands are expected, largely from replacement needs.

Figure 4. **Total job openings, 2015-35**



Source: Cedefop (2025 Skills Forecast).

5. Drivers of occupational change

Within the Cedefop skills forecast, future employment growth (or decline) of occupations is further broken down by separating national economic components from regional industrial and economic effects, helping to interpret what is driving the change. From this perspective, employment growth can be explained by three possible drivers: (a) overall economic trends (i.e., growth or decline), (b) shifts of employment between sectors, and (c) changes in the occupational structure within sectors (i.e., factors making some occupations more important than others).

Increasing specialisation and automatisation in many sectors influence the occupational composition of employment in the Netherlands. This is reflected in stronger occupation-specific effects, leading to increasing shares of *business and administration professionals* and *science and engineering professionals* in the economy. These changes reflect changes in job organisation in many sectors and, in many cases, an increasing specialisation.

This effect also influences the ICT-related occupations that benefit from strongly positive occupation effects as they gain importance in many sectors. *information and communications technology professionals* and *information and communications technicians* strongly benefit from this. These two occupation

groups also benefit from sector specific effects as they are often employed in sectors that are expected to grow.

Health professionals, associate health professionals, and personal care workers are expected to benefit from the increase in the underlying health sector. However, not all of the increases in employment translate into higher employment in these important health occupations, benefitting health professionals more than associate professionals. An increasing specialisation will also lead to a larger share of other occupations in that sector.

Therefore, the overall effect of occupational change depends on several factors that need to be considered together. Increasing automatization and moving towards a more service-oriented economy, including within manufacturing, will lead to a greater use of higher-level occupations. At the other end of the spectrum, lower-level occupations supporting production and the service sector seem to be increasing at the cost of intermediate occupations.

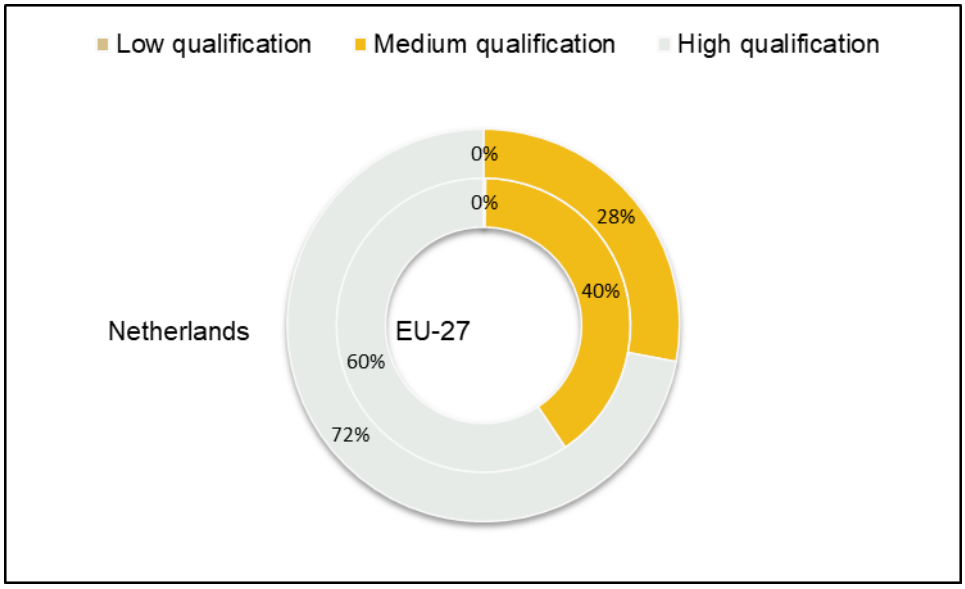
6. Demand for and supply of skills

Within the Cedefop skills forecast, skills are proxied by the highest level of qualification held by individuals in the labour force and employment. Three levels are distinguished: high, medium, and low, corresponding to the official ISCED classification. The occupational group also indicates the skill level required, as some occupations (e.g. professionals) typically require high-level skills, while others (e.g. elementary) typically require only basic ones. Therefore, occupational groups are also linked to a skill level.

Well over two-thirds (72%) of the total job openings expected to be created in the Netherlands between 2022 and 2035 will require higher qualifications, about 12 pp more than the EU-27 average (see Figure 5).

Less than one-third (28%) of the total job openings will require medium-level qualifications, and one in ten will require low-level qualifications.

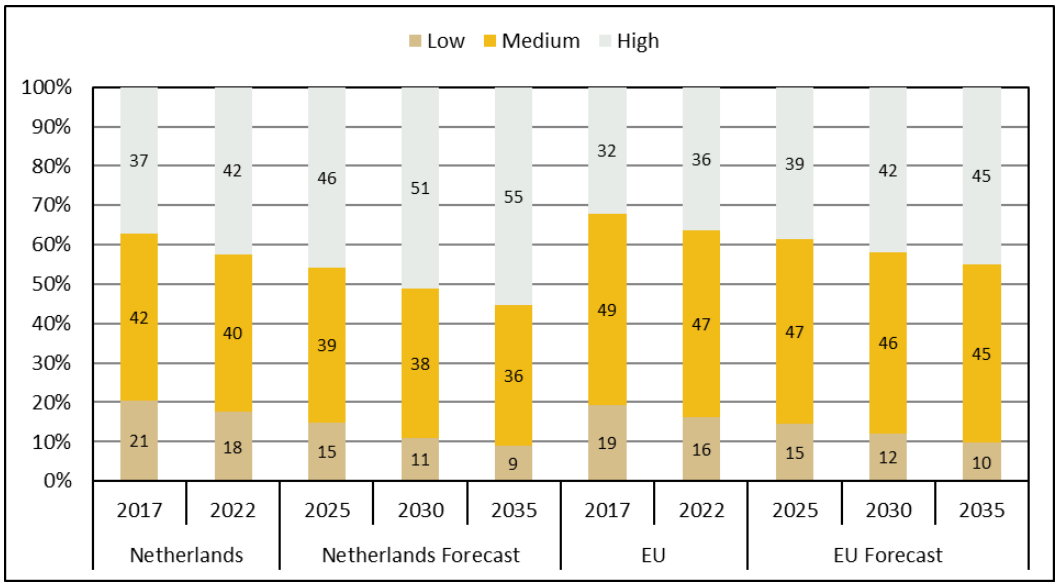
Figure 5. **Shares of total job openings by level of qualification, 2022-35**



Source: Cedefop (2025 Skills Forecast).

Future labour supply trends depend on the size of the working-age population (defined as those aged 15 or older), labour market participation rates, and the extent to which people acquire formal qualifications.

Figure 6**.** **Labour force by qualification level**



Source: Cedefop (2025 Skills Forecast).

The Netherlands is expected to continue its shift towards higher education over 2022-35, as seen in Figure 6. The share of people with high-level qualifications in the Netherlands is expected to increase from 42% to 55% by 2035. The medium-qualified labour force share is expected to drop from 40% to 36% by 2035. Those with low levels of qualification are expected to decline substantially, from 18% to 9% by 2035. In the Netherlands, the proportion of the labour force with medium-level qualifications remains well below the EU-27 average.

In the Netherlands, the supply of low- and medium-skill workers is expected to be below what is required by demand by 2035, while the supply of high-skill workers is expected to broadly meet the demand for those qualifications.

The **labour shortage index** is a method to summarise three elements of potential labour shortage: (1) employment growth, (2) replacement demand, and (3) Supply/Demand imbalance (IFIOD). The outcomes at the occupation level are grouped into four quartiles: those with a low indication of shortage get the value 1, and those with the highest indication of shortage will get the value 4. The total outcome of the individual elements is a simple average of the elements. In Figure 6, the length of the bar gives the overall outcome, where higher levels indicate more shortage. The outcomes of the three elements are also given to quickly evaluate the influence of employment growth - replacement demand, and - supply-demand imbalances.

The Netherlands faces labour market tightness, which hinders economic development. Some of these restraints are considered in generating the sectoral employment forecast. Some labour market tightness is expected to remain throughout the forecast period. Hiring difficulties arise mainly among low- and medium-qualified workers.

The labour shortage index is calculated at the ISCO 2-digit level and then aggregated to the ISCO 1-digit level.

The highest value of the labour shortage index can be found among *Plant and machine operators and assemblers* (3-3-4), *professionals* (4-4-1), and *also elementary occupations* (3-3-4). This is driven for *professionals* by the growth of the underlying occupations and their high replacement needs. At the same time, the imbalances are low given that the highly qualified cater to this group's occupation requirements. The other two occupation groups show similar outcomes: reasonably strong employment needs, strong replacement demand, and high supply/demand imbalances driven by intermediate and lower educated.

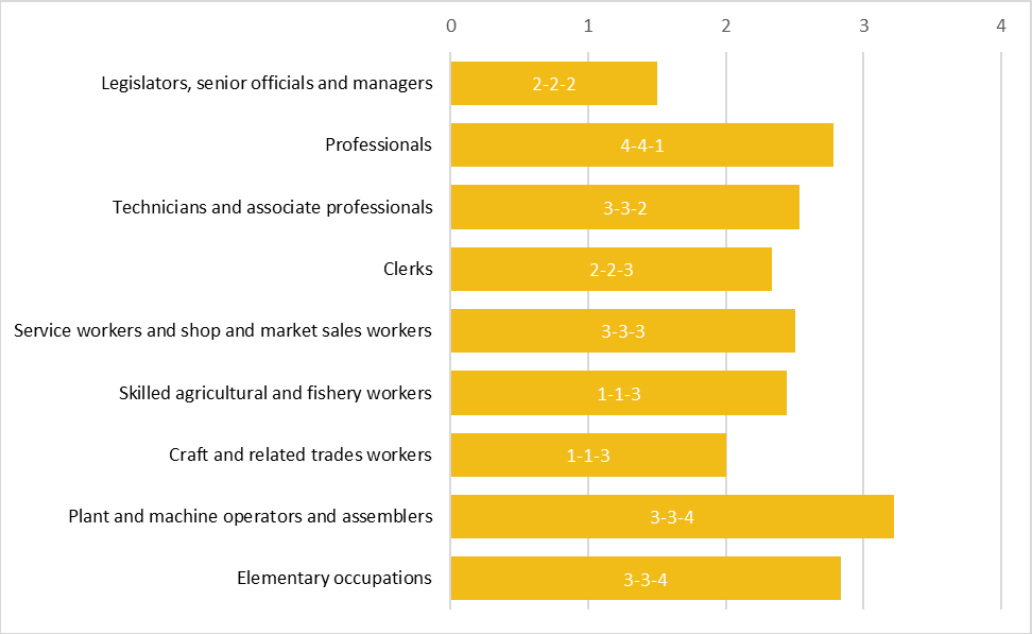
At the more detailed level, among skilled manual occupations, the highest shortages are expected among *assemblers (4-4-4),* who have among the highest employment growth replacement needs and imbalances.

Among the skilled non-manual occupations, the highest shortage is expected among *Numerical and material recording clerks* (4-4-2). This is driven by being among the highest group for employment growth and replacement demand, and some imbalances.

According to the forecast, the greatest shortages among the high-skilled workers are expected among *legal, social, and cultural professionals* (4-4-1) and *associated legal, social, and cultural professionals* (4-4-2). *Professionals* use high qualified labour which the model predicts to be without shortage. However, the forecasting model does not take into account that, especially among *professionals,* the specialisation or field of study is of utmost importance; usually, replacing one specialisation for another is not feasible or even permitted. Therefore, it is likely to underestimate the labour shortage.

While the shortage among the professionals is driven by high employment growth and replacement demand, the replacement demand is slightly lower among the associate professionals. Among the associate professionals, imbalances are higher given their employment of workers with intermediate qualification levels.

Figure 7. **Labour Shortage Index, 2022-35**



Source: Cedefop (2025 Skills Forecast).

Cedefop methodology

The Cedefop Skills Forecast offers quantitative projections of future trends in employment, by sector of economic activity and occupational group. Future trends in the level of education of the population and the labour force are also estimated. Cedefop's forecast uses harmonised international data and a common methodological approach allowing cross-country comparisons between employment trends in sectors, occupations and qualifications. The forecast and methodology is validated by a group of national experts. The forecast does not substitute national forecasts, which often use more detailed methodologies and data, while they also incorporate in-depth knowledge of a country's labour market.

The latest round of the forecast covers the period up to 2035. The forecast takes account of global economic developments up to November 2023. The European Economy is expected to grow despite monetary tightening on phasing out of fiscal support.

The key assumptions of the baseline scenario incorporate the Eurostat population forecast available in June 2023 (Europop 2023) ([1]), and the short-term macroeconomic forecast produced by DG ECFIN in November 2023 ([2]). The source of historical labour force data is the European Labour Force Survey, which in 2022 underwent important methodological changes, causing a break in the time series for several variables, including the labour force. Consequently, in many Member States, the participation rates in 2021 are noticeably above/below historical trends. Moreover, some Member States experienced significant revisions in the historical data series for sectoral employment from the National Accounts.

The Cedefop Skills forecast 2025 is consistent with the objectives set by the European Green Deal by incorporating suitable assumptions about additional investment, power sector technologies, energy balances, and carbon pricing.

Energy and commodity price forecasts from the World Bank and the IEA are used as inputs to the Cedefop Skills Forecast.

([1]) https://ec.europa.eu/eurostat/web/population-demography/population-projections/database

([2]) https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/economic-forecasts/autumn-2023-economic-forecast-modest-recovery-ahead-after-challenging-year_en

For the latest update and access to more detailed Cedefop skills forecast data please visit:
www.cedefop.europa.eu/el/events-and-projects/projects/forecasting-skill-demand-and-supply

For more details, please contact Cedefop's Skills Forecast team at:
Skills-Forecast@cedefop.europa.eu

SKILLS FORECAST
ONLINE DATA