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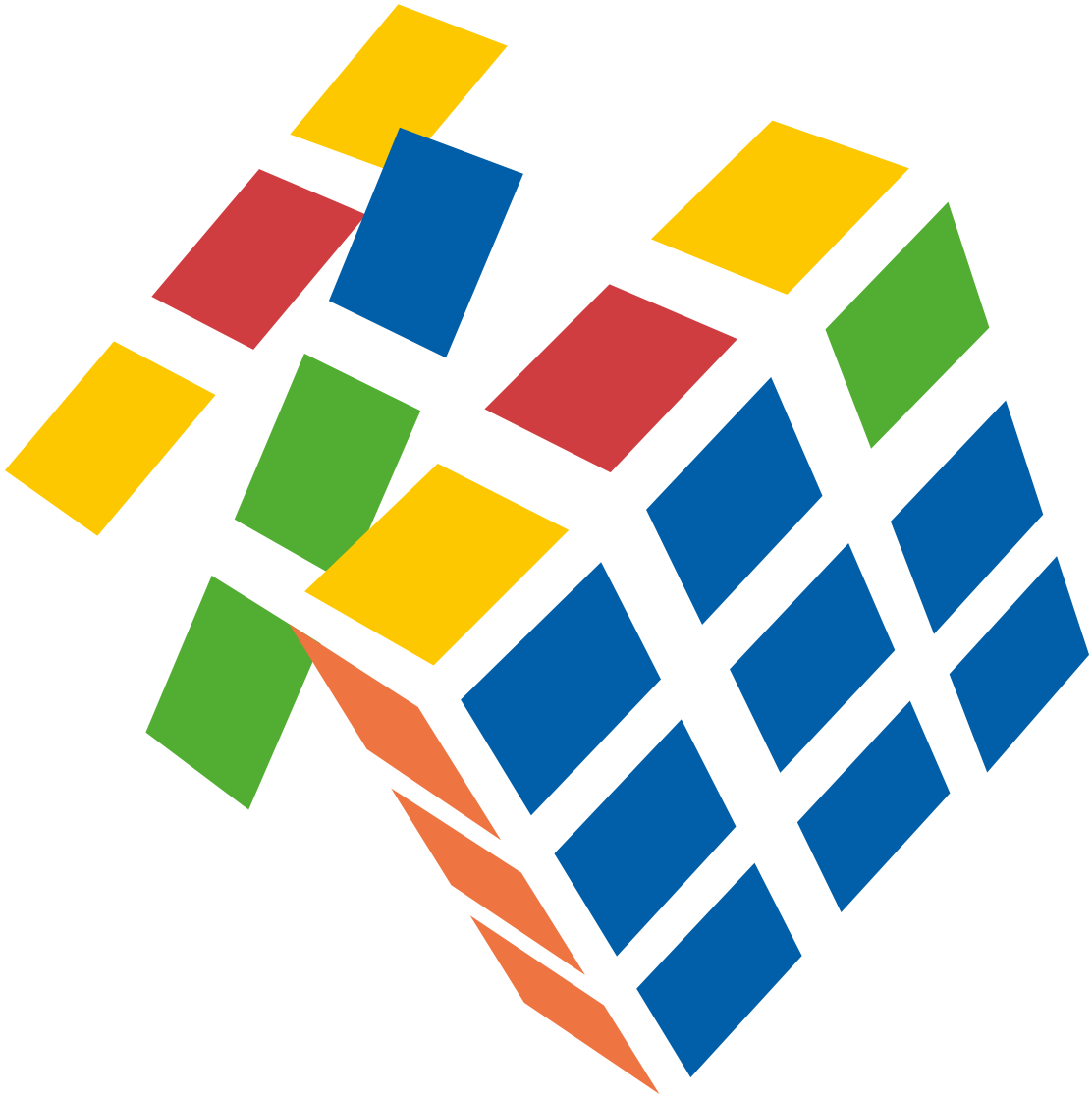


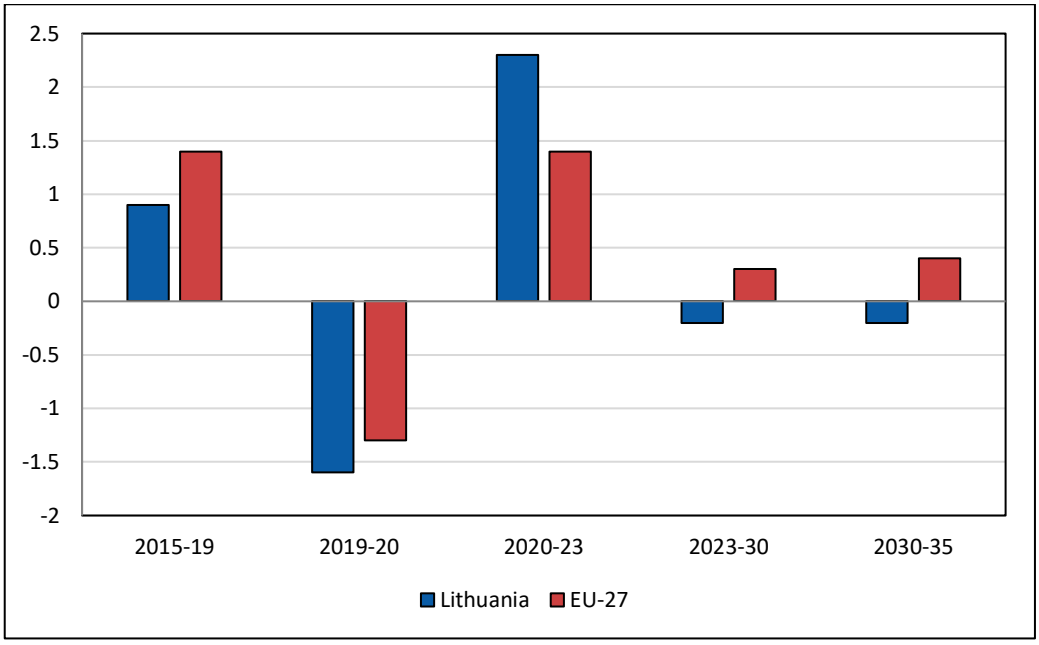
2025 skills forecast

Lithuania

1. Employment outlook

Employment in Lithuania is forecast to shrink over the forecast period. Figure **1** shows that employment in Lithuania grew more slowly than the EU-27 average over 2015-19 and fell slightly more sharply in 2020 as the Covid-19 pandemic hit. However, employment in Lithuania is estimated to have bounced back more strongly than the EU-27 as a whole over 2020-23. Even so, across the forecast period, employment in Lithuania is forecast to shrink by around 0.2% pa compared with growth of around 0.3-0.4% pa for the EU-27 as a whole.

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



Source: Cedefop (2025 Skills Forecast).

2. Labour force overview

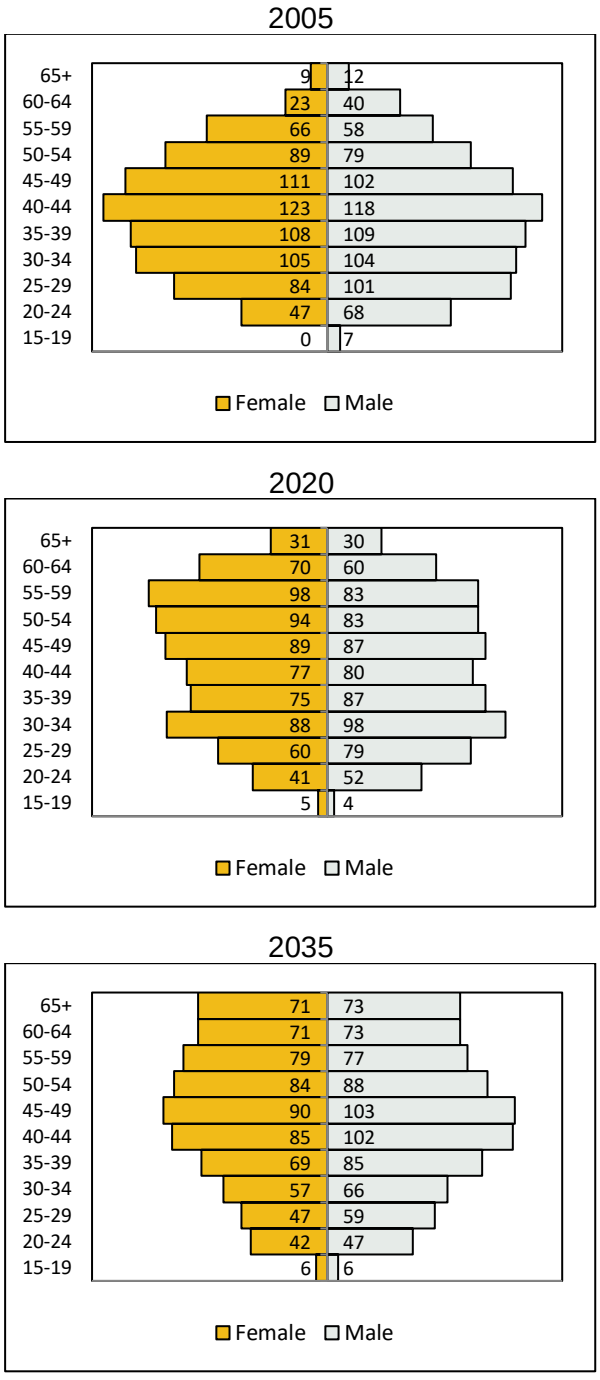
Figure **2** shows Lithuania's labour force by age group in 2005, 2020 and 2035. Changes in the labour force in Lithuania over the forecast period will continue to be driven by the ageing population and increasing participation rates in most age groups. The total labour force in Lithuania is projected to grow by only 0.4% over 2020-35, but this compares with a fall of more than 6% over the previous 15 years. It also compares with a forecast increase in the EU-27 labour force of just under 10% over 2020-35. The total participation rate in Lithuania is forecast to increase by 2 pp over 2020-35, slower than the increase of 4 pp forecast for the total rate for the EU-27. The total population in Lithuania is forecast to fall by around 3% over 2020-35, compared with a fall of 15% over 2005-20.

The population in Lithuania in all age groups between 20 and 64, except for those aged 40-49, is projected to decline quite strongly during 2020-35, while the population aged 65 and over is forecast to grow quite strongly (20%), reflecting trends in the relevant younger cohorts in preceding periods. The population aged 25-34 is projected to fall particularly strongly over this period, by around 34%.

The participation rates of all age groups in Lithuania except those aged 30-34 are forecast to increase over 2020-35, with the strongest increases projected for those aged 25-29 (12 pp) and 60 and over (11 pp).

The pattern of increases in female participation rates by age group in Lithuania compared to males is mixed, with increases in participation rates being greater for females for some age groups and vice versa for other age groups. Overall, the total female participation rate is projected to increase by 2 pp and the male rate to increase by 3 pp, over 2020-35.

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

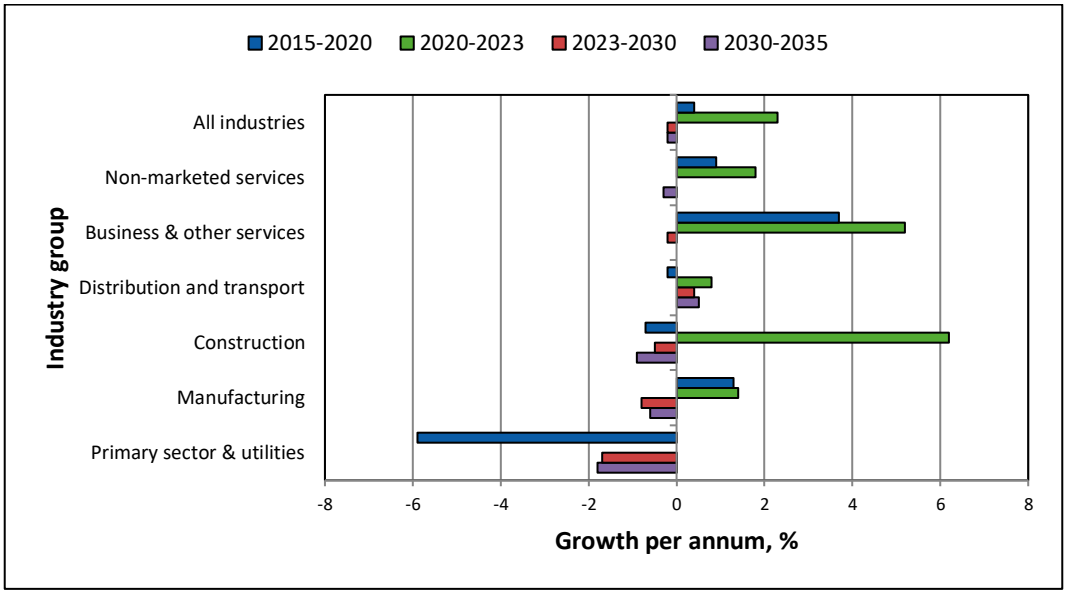


Source: Cedefop (2025 Skills Forecast).

3. Sectoral employment trends

Figure **3** shows the annual average employment growth by broad sector in Lithuania between 2015 and 2035. Employment in Lithuania is forecast to decline in all broad sectors except *distribution & transport* services over 2023-35, with *primary sector & utilities* expected to see the strongest falls, followed by *manufacturing* and *construction.* Even *business & other services*, which is forecast to see strong growth across most of the EU-27, is forecast to see a slight decline in employment over this period.

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 employment growth is more mixed. Within *business & other services*, the sub-sectors of *real estate activities*, *research & development*, *telecommunications*, *computer programming and information services* and *financial & insurance activities* are forecast to see positive employment growth over 2023-30. However, the remaining sub-sectors in this broad sector are expected to see declining employment. Within *distribution & transport*, employment in the relatively large (accounting for 2.4% of employment in Lithuania in 2020) sub-sector of *accommodation & catering* is forecast to grow by around 1% pa over 2023-30, and in *wholesale & retail trade* (16% of employment) is forecast to grow by 0.7% pa. Within *manufacturing*, sub-sectors such as *other chemicals*, *pharmaceuticals*, *electrical equipment*, *other machinery & equipment*, *motor*

vehicles and *other transport equipment* are forecast to see fairly strong positive growth in employment over 2023-30. Within *primary sector & utilities*, employment in *electricity* and *mining & quarrying* is forecast to grow over 2023-30, but employment in *agriculture* (5.7% of employment) is forecast to continue to decline strongly over the same period. Within *non-marketed services*, employment in *health* (7.1% of employment) is forecast to decline over 2023-30, despite increased demand due to the ageing population, and in *education* (9.8% of employment) is forecast to grow only slightly over the same period and then to decline over 2030-35.

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 that are required to be filled due to lost/newly created jobs and those that need replacement workers.

Lithuania's labour market is poised for considerable transformation between 2020 and 2035. While most broad occupational categories are expected to experience a decrease in job numbers, substantial job openings will persist, primarily due to replacement demand.

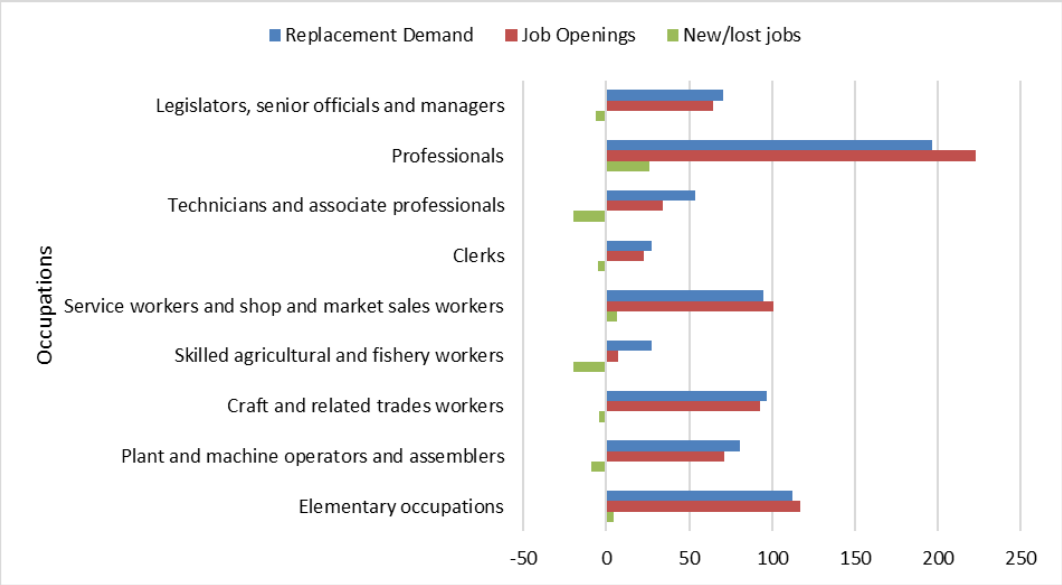
Among the various occupational groups, *professionals* as well as *technicians and associate professionals* are forecasted to generate the largest number of job openings over the forecast period. Specifically, *professionals* are anticipated to contribute 30.4% of total job openings, reflecting their significant presence in the job market and the robust demand for these roles. Meanwhile, *technicians and associate professionals* are expected to account for 4.6% of job openings. This highlights these positions' crucial role in addressing labour market needs.

Delving deeper into specific occupations, *business and administration associate professionals* are projected to represent 8.2% of the total job openings.

This substantial share indicates a strong demand in this sector, driven by both new job creation and replacement needs. Similarly, *health professionals* are expected to account for 7.7% of job openings, underscoring their critical role in the healthcare system and the ongoing demand for their expertise. *Personal care workers* are anticipated to make up 7.4% of job openings, reflecting their essential function in the support and care sectors.

Despite these projections, certain occupations are anticipated to face a reduction in job numbers. For example, *technicians and associate professionals* are expected to experience a net job loss of 19 600 positions. This decline is attributed to a decrease in overall job numbers, even though there remains a significant replacement demand for these roles

Figure 4**.** **Total job openings, 2022-35**



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).

The field of *information and communications technology professionals* is forecast to experience substantial growth. The expansion of this occupation group is driven by technological advancements and increasing digitalisation, which has led to a significant rise in demand for ICT professionals. From 2022 to 2035, the number of ICT professionals is forecast to grow by nearly 48%, translating into a notable increase in their share within the workforce. This rise is partly due to the occupation effect, reflecting a strong alignment with sector-specific growth trends. The industry mix effect is also significant. As a result, ICT professionals are seeing enhanced job opportunities and increased specialisation within the field.

Similarly, the occupation of *business and administration professionals* is experiencing growth. The occupation's expansion, driven by broader economic activities and organisational changes, has resulted in a notable increase in employment within this group. The occupation effect here is positive, indicating a strong contribution to the overall growth of this profession. This is further supported by an industry mix effect, highlighting the growing importance of business and administration roles in the evolving economic landscape. This trend highlights a shift towards more specialised managerial and administrative functions as businesses adapt to changing market conditions.

On the other hand, some sectors are forecast to experience a decline, such as those related to *metal, machinery, and related trades*. The reduction in the number of workers in these trades reflects increased automation and technological advancements within these sectors. The industry mix effect, in this case, is negative, which is compounded by a broader decline in demand for these specialised roles. This decline suggests a shift away from traditional manufacturing roles towards more technology-driven occupations.

6. Demand for and supply of skills

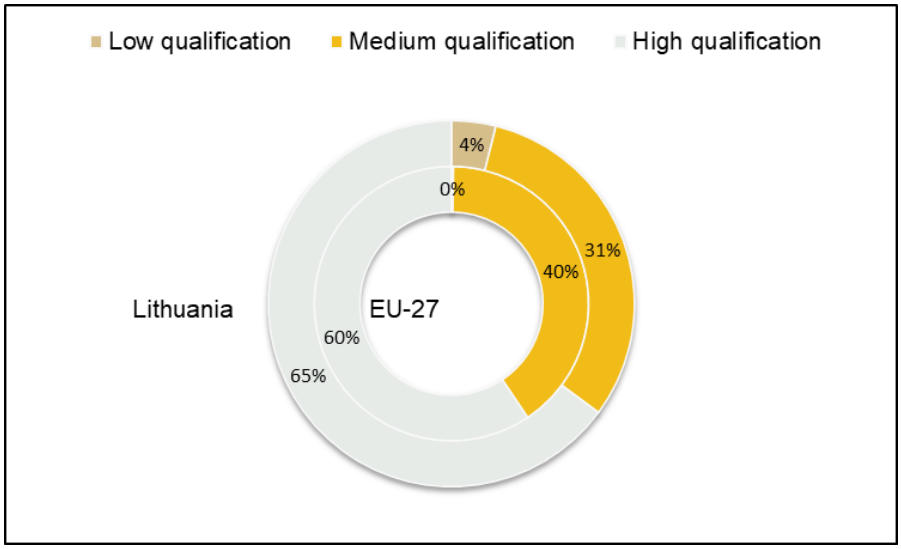
Within the Cedefop skills forecast, skills are proxied by the highest level of qualification held by individuals in the labour force and employment. Three levels are distinguished: high, medium, and low, corresponding to the official ISCED classification. The occupational group also indicates the skill 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.

The majority (65%) of job openings expected to be created in Lithuania between now and 2035 are expected to require high-level qualifications, about 5 pp more than the EU-27 average (see Figure 5). Less than one-third (31%) of total job openings will require medium-level qualifications (9 pp lower than the EU-27 average), while job openings for low-skilled workers, at the aggregate level, are expected to account for 4%, compared with be no openings for this level in the EU-27 as a whole.

Figure 6 shows the development of qualification shares of the labour force in Lithuania and the EU-27. Lithuania is rapidly increasing its share of higher qualified in the labour market.

The proportion of individuals with high-level qualifications is expected to rise to 54% by 2035, reflecting a trend towards higher educational attainment. Highly qualified labour supply will remain the largest qualification category in the country. This increase is noteworthy in contrast to the more stable share of medium-qualified workers, projected to remain at 42% in 2035. This stable share indicates that the medium-level qualifications group in Lithuania does not surpass the EU-27 average. Meanwhile, the proportion of workers with low qualifications is expected to hold steady at 4%, suggesting no change in this category. This contrasts with the EU-27 level of low-qualifications which shows a declining trend to 10% by 2035.

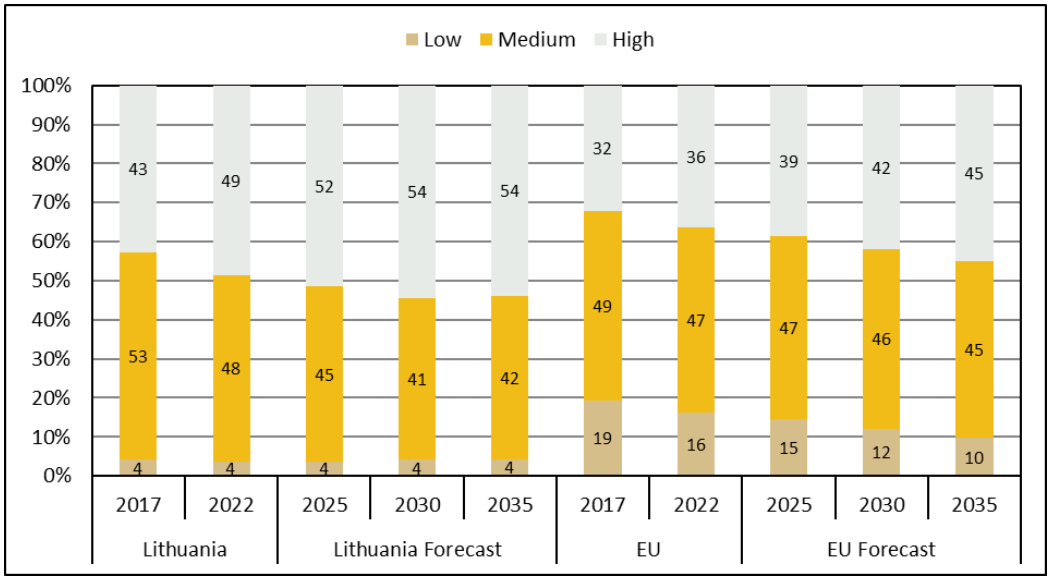
Figure 5. **Shares of total job openings by level of qualification, 2022-35**



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).

In terms of supply and demand for different qualification levels, Lithuania faces a complex scenario. By 2035, the supply of both low- and medium-skilled workers is projected to fall short of meeting demand. Specifically, the labour supply for low-skilled workers is expected to remain static at 4%, while the number of medium-skilled workers is anticipated to decrease slightly to 42%. In contrast, the supply of high-skilled workers is projected to align closely with demand, maintaining a balance due to its increase to 54%.

These trends highlight a critical challenge for Lithuania's labour market. The anticipated shortfall in low- and medium-skilled workers may impact various sectors dependent on these qualifications. Conversely, the equilibrium in the supply of high-skilled workers suggests that the demand for these roles will be met effectively, at least at the aggregate level. Overall, Lithuania's qualification distribution trends reveal a gradual shift towards higher-level qualifications while grappling with potential imbalances in the supply of lower and medium-skilled workers.

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.

Lithuania is expected to experience some degree of labour market tightness over the forecast period, varying across different occupational groups. The labour shortage index (as illustrated in **Error! Reference source not found.**), which measures the difficulty of hiring across various occupations, reveals that certain sectors will face more pronounced challenges than others.

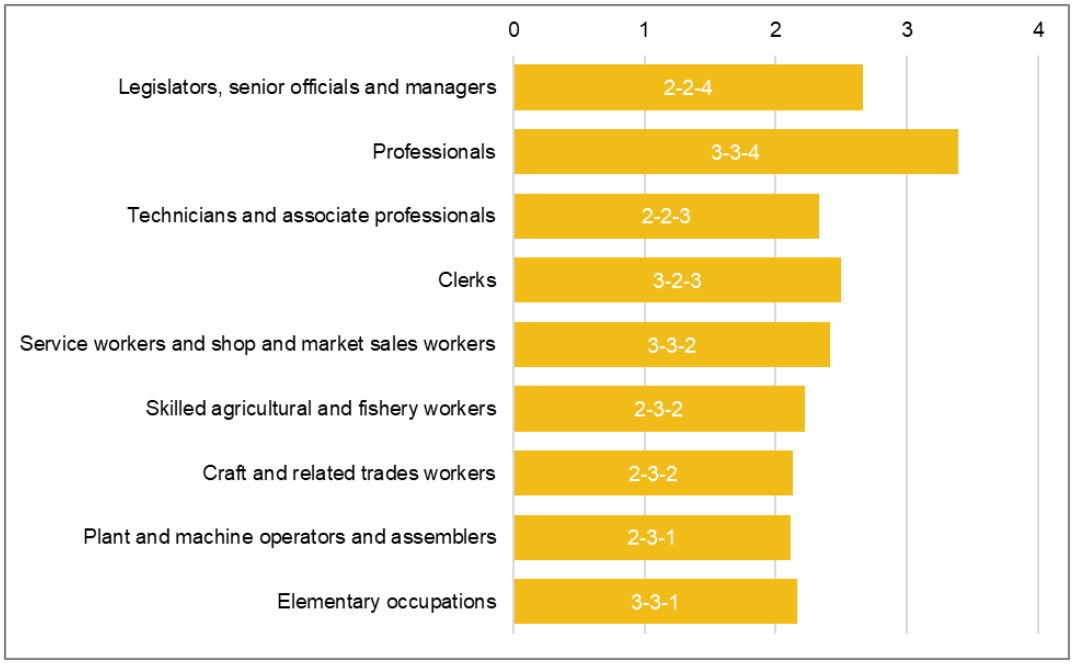
At the two-digit ISCO level, the highest labour shortage index is observed among high-skilled non-manual occupations, particularly. This is largely due to the significant growth in employment requirements within these roles combined with high replacement demand and supply/demand imbalances. Specifically, within the high-skilled non-manual occupations, the shortage is most acute among *legal, social, and cultural professionals (4-4-4)*, as well as *business and administration professionals* (3-2-4). These groups have both substantial employment growth and high replacement demand, contributing to their elevated labour shortage indices.

Among skilled manual occupations, the most notable shortages are anticipated among *assemblers* (4-4-2). This category stands out due to its high employment growth and substantial replacement demand. Similarly, in the skilled non-manual occupations, *personal service workers* are expected to experience the highest shortage (4-3-1). This is driven by their high economic growth coupled with substantial replacement demand.

In contrast, some groups within the labour market are expected to face less severe shortages. For instance, within the skilled manual occupations, *food processing, wood working, garment and other craft-related trades (2-2-1)*, as well as *electrical and electronic trades workers (1-2-1)*, are projected to see relatively lower levels of labour market tightness. These roles exhibit lower replacement demand and less pronounced imbalances compared to the sectors experiencing higher shortage indices.

Overall, while Lithuania will face some hiring difficulties, particularly in high-skilled non-manual and skilled manual occupations, the overall labour market tightness is expected to persist throughout the forecast period. This reflects both the high growth in certain occupational groups and the significant replacement demands they face.

Figure 7. **Labour shortage index**



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

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