OSKA study of forestry and timber industry

Key findings

According to the OSKA forecast, employment in the main occupations of the forestry and timber industry will increase by approximately 4%, or 1000 employees, by 2031.

• Employment growth is expected to be particularly high in the wooden house construction and wood chemistry sub-sectors.

• In addition to the need for additional manpower in the main occupations (over 1000 employees in 10 years), over 6700 employees will need to be replaced due to retirement. Replacement demand therefore accounts for approximately 85% of total new labour demand. Replacement demand in occupations requiring higher education is lower – approximately 57%.

• The forestry and timber industry sector is a major regional employer. Over 40% of the sector's main employment (approximately 13,400 employees) is in South Estonia. With less and less people living in rural areas due to continued urbanisation, regional labour availability may become a key issue for the sustainability of enterprises in the sector.

• The availability of foreign labour affects the performance of enterprises in the sector today and even more so in the future. Foreign labour is used in several low-skilled but highly staffed main occupations (unskilled workers, machine and line operators, skilled forestry workers). In 2021, the number of such workers exceeded 2000, accounting for at least 7% of the sector's workforce.

• The key factors affecting the sector's future are technological advances and innovation.

The main occupations of the forestry and timber industry employed a total of 31,500 workers in 2021, accounting for 4.5% of the total Estonian workforce. Of the subsectors, the timber and furniture industry has the largest number of employees (over 20,000). The number of employees in the paper, pulp and wood chemistry subsector is the lowest (approximately 1100), but it also has the highest potential for growth.

• The wood chemistry sector has a high potential for growth. To aid further developments, it is necessary to provide learning opportunities for specialists in the industrial bioprocess technology and engineering fields, at both higher and vocational education levels.

• To be able to meet the labour and skills demand of the manufacturing industry, it is important to prioritise engineering education and further develop holistic solutions for STEAM-education and broader vocational education. To meet labour demand, it is also necessary to make use of foreign labour, and to this end consider the specifics of the manufacturing industry in national migration policy.

• The use of various types of felling and the amount of reforestation and maintenance felling work is forecast to increase. Therefore, there is a continuing demand for harvesting operators with expertise in silvicultural skills in the future. The number of workers willing to do the heavy physical labour of lumberjacks and fellers is decreasing, especially among young people. This in turn increases the demand for workers skilled in the operation of 'mini-harvesters' and other forestry machinery (including tree shears and afforestation machines) used for cleaning.

• The replacement demand for logging truck drivers is high, as approximately 37% will retire in the next 10 years. To mitigate the emerging labour shortages, the development of a more comprehensive training programme for forestry drivers should be considered.

• There is a growing demand for further training at the vocational education level. This will mitigate labour shortages in occupations where there are no specific education curricula or where there is a shortage of graduates and applicants with pre-existing skills. There is a need for a universal, short and introductory further training course for machine and line operators, i.e. an initial training course for new employees.