Competitiveness of Estonian forest and wood cluster

EXECUTIVE SUMMARY

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Editor: Marek Tiits

Research group: Kalev Kaarna, Kristjan Kaldur, Tarmo Kalvet, Maarja Käger, Imre Mürk, Geete Paulus, Anu Oinberg, Doris Pavlov, Jüri Saarma, Dorel Tamm-Klaos, Merit Tatar, Marek Tiits, Kaido Väljaots

Customer representative: Teo Saimre, Enterprise Estonia

Executive summary

The objective of the current study on the competitiveness of the forest and wood industry of Estonia is to find out the success factors for the development of the field in order to allow for the liquidation of bottlenecks of the sector and magnify the advantages at the national level as well as to provide enterprises with high-quality information for decision-making.

This study regards the forest and wood cluster of Estonia as an integral value chain of wood processing from forestry and logging to wood processing, production of wood products, production of paper and paper products and furniture production, which consists of about 2,000 enterprises[1].

The forest and wood cluster is a very important part of the Estonian economy. Wood, paper and furniture industry together provide more than 20% of the total production and value added of manufacturing industry in Estonia. This is more than in most of the other countries in the Baltic Sea region. The forest and wood cluster is one of the main stabilisers of foreign trade in Estonia: its export amounting to 1.5 billion euros accounted for 12% of the export of goods in Estonia in 2012. The added value created by the cluster amounted to 4% of the GDP in 2011. Therefore, it is extremely important for the Estonian economy that this cluster develop and be truly competitive.

The study reveals that the export volume and added value of the cluster has almost doubled within the last decade. The global financial and economic crisis hit the cluster severely. While Estonian exports decreased for 2009 from their earlier peak of approximately 15%, exports of the forest and wood cluster declined even 30%. However, the enterprises in this cluster managed to resist the economic downturn well. The crisis led to the reorganisation of the work and the productivity of labour force was increased. For now, the sales revenue, export volume and added value of the Estonian forest and wood cluster again exceed the pre-crisis peak level. The cluster's employment figures also indicate recovery, but there is still some way to go to reach the employment numbers of the mid-2000s.

Despite the economic crisis and decline in the global demand in recent years, the Estonian forest and wood cluster has actually been able to expand its market share on the world market. For now, for example, Estonia has a larger market share in the production of wood houses on the world market than Finland and Sweden do. However, the Estonian forest and wood cluster as a whole still has, in comparison to the above Nordic countries, a much smaller number of such product groups, where it belongs among the top ten or even top three in the world according to its market share.

The competitiveness of the Estonian forest and wood cluster is still significantly weaker than that of Finland and Sweden. The investment made by the Estonian wood processing, paper and furniture industry is, per person, comparable to the investment made in Latvia and Lithuania. Yet, it is still only a half of the investments made in the Nordic countries. The investment gap in Estonia is even fourfold in comparison to the Swedish forest and wood cluster, which has attracted in absolute terms the most foreign direct investments in the world and is itself an active investor everywhere in the world.

The value added per employee is in the Estonian wood, paper and furniture industry comparable to Latvia and Lithuania, but it is approximately four times lower than the average of the Nordic countries. In 2010, the added value per employee of the Estonian paper industry amounted to 38,000 euros and in forestry to 34,000 euros. The value added per person was about 31,000 euros in the sawmill and planing mill industry. The value added per employee of the production of wood products per employee was comparable to the average of the Estonian manufacturing industry (19,000 euros per employee), while the value added per employee was only 12,000 euros in the production of wooden furniture.

[1] Cluster is, according to Michael Porter (1990), a value chain of economy: a geographic concentration of interconnected enterprises, specialised suppliers, service providers, firms in related industries, and associated institutions in a particular field that compete but also cooperate.

The relatively low labour productivity in the Estonian forest and wood cluster has in part to do with smaller investments and less efficient organisation of production, but it also refers to more serious structural problems in the development of the cluster. The main export articles in the Estonian forest and wood cluster are wooden furniture, doors and windows, wood houses and sawn wood, while paper, paper products, etc., prevail in the employment and export structure of the Finnish and Swedish forest and wood clusters. A more detailed analysis reveals that, compared to the Nordic countries, approximately 80% of the persons employed in the Estonian forest and wood cluster hold low productivity jobs.

At the beginning of the 2000s, the Estonian forest and wood cluster had, compared to the Nordic countries, a clear cost advantage both in terms of the price of raw material as well as the labour force. In the 2000s, the enterprises engaged in the collection of wood raw materials and primary reprocessing, e.g. forestry, sawmill and planing mill industry, pellet production, managed to increase prices for their products to the level of the Nordic countries. However, the producers of various end products, e.g. furniture, doors and wooden houses, have not been able to strengthen their competitive positions and increase the unit prices of their products at the same pace with the rise in the prices of production inputs.

This has resulted in a situation in the Estonian forest and wood cluster where labour productivity is relatively good at the lower end of the value chain; but at the upper end, where the design of products is more important and it is more complicated to build up an international sales network, the competitive position of enterprises remains weak and labour productivity is low. If Estonia is to catch up with Finland and Sweden, this must change.

The competitiveness of the Estonian forest and wood cluster will improve if the share of end products increases in the export structure and value added of the cluster. While planning for the further development of the various wood processing industries, one should focus on those export markets and product groups, where the increase of the market demand is relatively faster and one can take the quality and unit price of the products to those of the market leaders relatively faster. This requires from the enterprises a more thorough analysis of their capabilities, various target markets and competitors.

A substantial share of the enterprises in the Estonian forest and wood cluster are rather small, which does not allow them to achieve economies of scale or market power comparable to larger competitors. Therefore, better development of sales channels and more efficient organisation of production require more active cooperation from the enterprises, incl. cross-border mergers or take-overs.

Joint action plan of the enterprises and government for increasing the competitiveness of the cluster

Within the last decade the forest and wood cluster in Estonia has undergone very fast and successful development. The wish to compare ourselves with the forest and wood clusters in the Nordic countries, which are some of the most competitive in the world, indicates at the same time the courage to set far-reaching objectives and the will to work for the achievement thereof.

The competitiveness of industry depends on the enterprises' choice of strategy and activities in open market competition, as well as on the activities of the state in the development of a green economy, incl. the supply of labour force, several legal acts, etc. As the world economy is constantly changing, the strategy of enterprises and public policy must also be updated in a consistent process.

Therefore, we recommend that enterprises and the Ministry of Economic Affairs and Communications establish, on the basis of the recommendations outlined in this report, a common action plan that defines main activities, persons in charge, etc. This action plan should be regularly updated according to the actual achievements and emerging future needs.

First of all, we recommend focusing on the following three courses of action.

- **Updating strategies and further positioning of enterprises on the market**

  Performance of the enterprises depends foremost on the location of a particular enterprise in the value chain and on the products it offers. To increase the productivity and profitability of the Estonian forest and wood cluster, it is particularly important to update the business strategies of the enterprises. It is only then that one should focus, based on the selected strategy, on the development of products, upgrading technology, etc. The need for updating the strategy and the business model concerns first of all producers of end products (wood houses, furniture, etc.), the unit price of export of whose products is at present much lower than the unit price of products of market leaders.

- **Internationalisation of enterprises and reinforcing their presence in the Baltic Sea region**

  Upon the acquisition of wood raw materials, planning of production, marketing and sales work of products, enterprises of the Estonian forest and wood cluster should consider the entire Baltic Sea region with its approximately 100 million residents as their home market.

  The geographic location on the border of countries of higher and lower standard of living than us provides Estonia with an excellent development opportunity. Due to the fragmented ownership structure of private forests, the allowable cut of forest in Estonia probably cannot increase very fast. However, enterprises of the forest and wood cluster can increase the volume of primary reprocessing of wood raw material in countries of similar or lower cost level in the neighbourhood (e.g. in Latvia, Lithuania or north-western Russia), focussing on the production of end products in Estonia. To reinforce the market power of Estonian industry, it is expedient to extend at the same time both the technical and engineering base as well as to intensify marketing and sales activities on markets of the Nordic countries of relatively higher purchasing power.

- **Development of the Estonian state into a smart customer**

  As for the export volume, Estonia is the fifth producer of wood houses in Europe and the state consistently invests significant amounts in the construction and renovation of various buildings. However, neither the customer nor Estonian industry receives the full possible benefit from the existing competitive strength.

  If the share of environmentally friendly and energy-efficient ultra-modern wooden architecture in public procurements for construction were increased, this would make the Estonian forest and wood cluster, incl. architects, the sawmill and planing mill industry, board industry, producers of builders' joinery products and wood houses and wooden furniture, develop such new products the equivalents for which no competitor offers yet.

  Such a system of smart public procurements would provide the entire forest and wood cluster with one more development stimulus and would reinforce its competitiveness. Preferring modern wooden architecture is also useful for the state as the fuel costs of buildings will decrease, the foreign trade balance will improve and tax revenues will increase.