WOOD PRODUCTS MARKET STATEMENT WITH FORECASTS

(Market Statement 2022; Slovenia)

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1. General economic trends

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We are currently living in a time of great uncertainty which is mostly related to the situation on energy markets, which will only aggravate as the war in Ukraine rages on, contributing to the deterioration of the economic outlook in our most important trade partners. The autumn forecast, issued by the Institute of Macroeconomic Analysis and Development of the Republic of Slovenia, predicts that GDP will grow by 5.0% this year, slowing to 1.4% next year (mainly due to aggravated conditions in the first half of the year) and growing again to 2.6% in 2024 in the absence of shocks. Economic activity in the eurozone has started to cool in the third quarter, while the forecasts of international institutions for next year are already being revised downwards since spring. The difficulty of access to energy-generating products and the reduction of their use which, as a consequence, causes uncertainty, the influence of high inflation to the purchase power of households and high costs of the business operations of companies, disruptions in the supply chain, and tightening financial conditions due to the normalisation of the monetary policy will further inhibit growth. Nevertheless, certain factors will mitigate these negative effects, particularly the resistance of the labour market, the planned moderation of inflation, support provided from the Recovery and Resilience Facility, as well as excess savings which remain high.

After last year's rebound, we are expecting a stronger moderation of growth in trade in goods and manufacturing activities due to the aggravation of the energy crisis, while the trade in services will, on average, achieve a similar degree of annual growth as last year. Year-on-year growth of trade in goods and manufacturing activities has moderated in the first half of this year, while growth of trade in services has accelerated (particularly in terms of travel arrangements and transport services) and is said to exceed the level before the pandemics when it comes to year-to-year data. The moderation of growth in the export part of the economy is connected to uncertainties in the international environment due to the war in Ukraine, the acceleration of the energy crisis, and the continued disruptions of supply chains. With the expected moderation of economic activity in our main trade partners, the added value of manufacturing activities will also decrease towards the end of the year, which is also indicated by an increase in the amount of companies where, according to business surveys, the number of new orders is lower than usual. Limitations due to disruptions in supply chains will remain high in certain branches as the year progresses. In the last quarter, we are expecting that high prices of energy-generating products (particularly gas) and efforts to reduce the consumption of gas (a 15% reduction of the use of gas within the economic sector is recommended) will have a negative influence on the production volume, particularly in energy intensive sectors or in those sectors where the share of gas in total energy use is higher. These sectors include the food industry, paper industry, rubber industry, metal industry, and pharmaceutical industry, the production of non-metallic mineral products, and the production of other machines and devices. These sectors (where the share of gas in their total energy use exceeds 30%) have created around 66% of added value in manufacturing activities in 2021. This year, the growth of import will be higher than the growth of export, which is related to an increase in domestic consumption. The growth of goods exports and added value in manufacturing activities will be further moderated next year. In the first half of 2023, the added value of manufacturing activities and goods exports will remain influenced by the reduced use of gas and high prices; in the absence of any shocks in the international environment and trade partners, recovery will follow.

After last year's rapid recovery, the employment rate further increased in the first half of 2022, while the unemployment rate declined. The employment rate increased significantly last year with the recovery of economic activities. Its growth continued in the first half of 2022, with the catering and construction industry, as well as manufacturing activities, recording the highest rates. Despite that, these sectors are faced with labour shortage in view of job openings in these sectors. As a consequence, employing foreign workers contributes to the increase of the employment rate over the last period. The increase of the employment rate and the decline of the unemployment rate will continue until the end of this year; in the next two years, a significantly less intensive employment trends are expected due to the moderation of the economic activity and lack of suitable workforce.

In order to mitigate the rising prices in the energy sector, Slovenia has adopted general measures in order to suppress the increase in energy prices and target measures to assist the economy, farmers, and vulnerable households. Since the beginning of this year, Slovenia has adopted numerous support measures amounting to a total of around 1% of the GDP in 2022, of which approximately one half are general and the other half are targeted. The prevailing general measures are the measures intended to suppress the increase in energy prices (reduction of excise duties, VAT and other duties for energy-generating products), while the prevailing targeted measures consist of measures intended to assist the economy, energy-intensive companies and the farming sector, as well as provide energy additives for the most vulnerable groups of population. The scope of measures adopted for 2023 is currently smaller than the scope of measures adopted for 2022 (approximately 0.4% of the GDP) and is mainly related to general measures, while the government also proposed a guarantee law in order to ensure liquidity for electricity undertakings. Considering the fact that the situation on energy markets will also remain intensified in the year to come, we estimate that the aid amount for 2023 will be larger than the currently adopted amount.

2. Policy measures

In 2021 and partially also in 2022, the forestry and wood processing industry were marked by the SARS-CoV-2 pandemic. At the end of 2020, the Act Determining Intervention Measures to Assist in Mitigating the Consequences of the Second Wave of COVID-19 Epidemic entered into force (Official Gazette of the Republic of Slovenia No 203/20), which has represented the 7th relief package to assist in mitigating the consequences of the epidemic. The actions set out in the aforementioned act applied throughout 2021. First among of the measures, intended also for forest owners, provided a reduction of the tax base from the potential market incomes for the cultivation on lands in the amount of 50% of the cadastral income, as it is determined on 30 June 2020 or 30 June 2021 following the rules on the determination of cadastral income. The Act also foresaw an option to appoint a provisional operator of the agricultural holding or forest. If the farmer, members of the farm household or employees at the farm, which are registered in the farm register, or the forest owner were unable to perform sanitary felling in the forest due to the COVID-19 disease and if it was not possible to ensure forest management in any other way, it was possible to appoint a provisional forest operator. The provisions of the Act Determining Intervention Measures no longer apply in 2022.

A new amendment of the Rural Development Programme 2014-2020 has been confirmed at the beginning of 2022. This year, two invitations to tender have been published for the submeasure 8.4 - the 6th invitation to tender for the activity works for remedying damage and restoration of forests pursuant to the RDP 2014-2020 and the 3rd invitation to tender for the operation of arrangement of forest tracks, needed for the execution of forest rehabilitation pursuant to the RDP 2014-2020. In August 2022, the Ministry of Agriculture, Forestry and Food (the MKGP) prepared a modified proposal of the Strategic plan for the Common Agricultural Policy 2023-2027 for Slovenia (version dated 25. 8. 2022). The document has been updated according to discussions to date with the European Commission and other partners, and in accordance with the comments received in the framework of a public consultation in the process of a comprehensive environmental impact assessment. The MKGP is expecting a final confirmation of the Strategic plan until the end of this year. The following interventions (actions) have been planned for the sector of forestry and primary (small-scale) processing of wood:

- investments in the arrangement of forest infrastructure;
- investments in the purchase of new machinery and equipment for forest work;
- investments in primary processing of wood and digitalisation (the subject matter of this support are investments in the activity of primary processing of round wood which is limited to small-scale processing of wood);
- investments in the establishment and development of forest nurseries;
- investment in the rehabilitation and reconstruction of forests after natural disasters and adverse weather conditions.

In 2022, MKGP has prepared a new Operative programme for the implementation of the national forest programme 2022-2026 (the 2022-2026 OPNGP). The 2022-2026 OPNGP takes into consideration the system of goals and the direction of the adopted National forest programme (NFP), policies from other sectors influencing forests and forestry, and international commitments. On an overarching operational level and based on the scheme of priorities, actions and other tasks, the OPNGP connects, in a transparent manner, the contents of applicable sectoral operative documents and programmes, and provides necessary upgrades. In combination with the content, such a method allows the forest policy holders to direct sustainable forest and game management pursuant to the provision of all functions of forests and while taking into consideration the interests of the owners and the society as a whole within the Forest Dialogue. In doing so, rational and efficient use of available organisational, personnel-related and financial possibilities may be provided. The key basis for the preparation of the programme are goals and directions of the NFP, the findings set out in the Report on the execution of the National forest programme 2015-2019 (the 2015-2019 PNGP), the area plans for forest and game management for 2021-2030 (in preparation) and the preliminary execution analysis of the OPNGP 2017-2021 which was prepared in the framework of the establishment of the new document.
The 2022-2026 OPNGP defines the priorities in the field of forests, forestry and game management which is related to suitable goals, actions and other tasks. The 2022-2026 OPNGP and the documents that have already been adopted and that are already being executed are connected through common denominators in order not to duplicate said actions. The 2022-2026 OPNGP has five priorities:

- providing carbon sinks in forests and the adaptation of forests to climate change, especially in order to maintain their resistance, stability, vitality, and health;
- maintaining and reinforcing the biodiversity of forests on the level of the landscape, ecosystem, species and genetics, as well as monitoring their resistance, stability, vitality, and health;
- optimising the guidance of forest and game management from the legal, organisational, and financial point of view in order to maintain the multifunctional role of forests and reinforce the development of the countryside and circular bioeconomy;
- promoting the harmonisation and communication between all stakeholders related to forests, forestry, and game management, as well as developing education, research and knowledge transfer and reinforcing international cooperation;
- guaranteeing sustainable game management.

This year, the Slovenia Forest Service (hereinafter referred to as the SFS) which is executing the tasks of the public forestry service in Slovenia has prepared new ten-year forest management plans for forest management areas (the 2021-2030 GGN GGO). The 2021-2030 GGN GGOs are strategic forest management plans which define general strategic directions and represent an important tool in the execution of strategic directions at country level which are set out in the National forest programme. These plans are prepared for all forests, regardless of who owns them. They represent the strategic level of planning and present a basis for concrete directions and actions at a lower spatial level based on strategic directions at country level. In that way, concreteness of basic forest management principles (sustainability and multi-purposeness) and the main principles such as an ecosystemic approach and built-in protection of nature and maintenance of biodiversity for forest management is guaranteed. The key part of this plan are the goals for forest management, main strategies, directions according to individual forest management areas, and a framework estimate of actions at a strategic level. Among other things, they also set out the framework for potential felling that will be realised in Slovenia by 2030. Potential felling in forests amounts to over 6 million m^3/year of various forest wood assortments.

Smart Buildings and Home including Wood Chain (SRIP PSiDL) is taking part in the revision of Slovenia's Smart Specialisation Strategy (S4), as part of Slovenia's preparatory efforts for the new European cohesion policy in the programming period 2021-2027. At the same time, SRIP PSiDL has revised its own action plan for the period 2020-2023 in the year 2020 and at the beginning of 2021. The revised action plan for 2020-2023 is based on the experience gained in SRIP's three years of operation and represents an evolution of the SRIP PSiDL operation as it was initially devised in SRIP's basic action plan for the period 2017-2019. The need to revise the plan arose as a consequence of increasing digitalisation and the intertwining of solutions for smart and sustainable buildings and their integration into the smart communities of the future, against the increasingly diverse demands and needs of users. The revised Action Plan SRIP PSiDL for the period 2020-2023 was confirmed by the Government Office for Development and European Cohesion Policy and the key ministries.

On 24 June 2021, the Government of the Republic of Slovenia adopted the Slovenian industrial strategy 2021-2030, in which strategic baselines and orientations for further development of the wood processing industry are laid down, among other things. Ministry of Economic Development and Technology (MGRT) is also responsible for the area of wood industry, pursuant to the State Administration Act (ZDU-1). To rationalise the strategy, the Ministry of Economic Development and Technology has started the procedure for the selection of contractors to prepare an „implementation plan of measures for the development of wood processing industry until 2030". The aim of the document is to establish orientations for further development of Slovenian industry in the period 2021-2030 with a vision that the Slovenian industry become green, creative, and smart. An important goal, tied to the acquisition and use of wood, is to increase domestic processing and achieve 30% share of wood in all new public buildings, to develop new ways of use of wood, to increase the number of employees in industries, linked to wood (an increase of employees in services, linked to these industries, is also included, such as repair, assembly etc., which is not included in the general analysis), and to increase its sales realisation. The goal is for Slovenia to achieve the productivity of the portion amounting to EUR 66,000, which is measured through added value per employee, by 2030.

In May 2022, the Government of the Republic of Slovenia has adopted the Implementation documents for actions related to the development of the wood-processing industry by 2030, which has been prepared on the basis of outlines and goals set out in the 2021-2030 Slovenian Industrial Strategy, the examination of past and planned actions of ministries of the Government of the Republic of Slovenia, the situational analysis, and several consultations with stakeholders. The actions are divided according to content sets which are important for the development of the wood-processing industry by 2030, as indicated by the starting points for the preparation of the implementation document or the implementation plan.

Above all, the situational analysis has shown that, after the improvement of the business environment (also for the improvement of the competitiveness of wood and wood composite products), the most necessary investments are the investments in the most state-of-the-art primary wood processing practices, mainly wood that is currently not being used in Slovenia on an industrial scale, and investments in the processing of wood for furniture and other end products. In parallel, industrial stakeholders are accentuating the need to provide suitable quantities of raw materials that will be processed by workers and business managers into innovative products with the highest possible added value using better education, experiences, and skills. The connectivity and the constructive dialogue between the industry and the R&D, educational and creative sector, policymakers and other stakeholders in the national and international environment have been recognised by stakeholders as an urgent condition in order to improve the knowledge of market conditions and identify suitable market approaches (whereby the accent is on products for the creation of living environments and interior working environments) which will made it possible to create said added value. The actions are divided into the following action categories:

1. Actions creating a suitable business environment for wood processing companies;
2. Actions supporting investments in the increase of wood processing capacities;
3. Actions supporting the provision of sufficient amounts of forest wood assortments for wood processing companies;
4. Actions introducing new business models and digitalisation for the improvement of business excellency of wood processing companies;
5. Actions supporting the provision of suitable personnel for the development of wood processing companies;
6. Actions promoting research, development and investments in the field of woodworking, and developing a support environment, including the connection with relevant stakeholders;

7. Actions promoting the use of wood in the private and public sector and increasing the promotion of wood.

On March 2021, the Government of the Republic of Slovenia adopted the long-term strategy for the energy renovation of buildings until 2050 (DSEPS 2050), which defines the approaches and policies to the decarbonisation of the national building stock until 2050 as well as defines the measures, which support the headline targets in buildings, written in the Comprehensive National Climate and Energy Plan (NEPN). These two headline targets are, as follows: (1) minimization of GHG emissions in buildings by at least 70% by 2030 compared to 2005 and (2) renewable energy sources (RES) are to represent at least 2/3 of use of energy in buildings by 2030 (share of RES use in the final use of energy products without electricity and district heat). As such the strategy defines and builds upon existing and new measures, which will enable that these goals be achieved. One of the important goals of the long-term strategy for the energy renovation of buildings until 2050 (DSEPS 2050) is that by 2050 as much as 74% of one-dwelling buildings and 91% of multi-dwelling buildings are energy renovated. This will enable the final use of energy decrease by 45% and the CO_2 emissions decrease by almost 75% compared to 2005.

In June 2021, Ordinance on the Climate Change Funding Programme for the period 2021-2023 entered into force, after being proposed by Ministry of the Environment and Spatial Planning. The Ordinance has been changed in 2022 and includes the following purposes and actions in the field of forestry and woodworking:

- Continuation of co-financing of citizen investments through the Eco Fund public call for the replacement of old wood burning appliances with new burning appliances run on wood biomass or with heat pumps;
- Continuation of measures supporting the economy - measures „Subsidies for domestic or foreign initial investments in activities, important for the transition into low-carbon, circular and climate-resilient economy“; „Support for the transition into circular, low-carbon and climate-resilient economy“ as well as a new measure „Coverage of indirect costs due to the costs of GHG emissions“;
- Measures to mitigate climate change and adapt to it in forestry;
- Continuation of measure „Sustainable construction with wood“, which will also include the promotion of planning and construction of new dwellings, thereby achieving broader goals of sustainable development;
- Adapting to climate change - performing measures of preserving biodiversity and co-financing programmes of remedying damage due to natural disasters;
- Climate change research, development and innovations.

In July 2021 the National Assembly of the Republic of Slovenia adopted the Act on the Promotion of the Use of Renewable Energy Sources (ZSROVE) (Official Gazette of the Republic of Slovenia No 121/2021), which regulates the implementation of policies at national and regional levels in the area of the use of renewable energy sources, sets forth a binding target for the share of energy from renewable energy sources in the gross final consumption in Republic of Slovenia as well as the measures for achieving this goal and how to finance them, regulates the guarantees of electricity origin, self-supply with electric energy from renewable sources, the use of energy from renewable sources and excess heat in the heating and cooling sector and in the transport sector, and the information and training of installers. If one or more of the national reference values for achieving the share of energy from renewable sources are not achieved, as it is set forth with the action strategy paper NEPN, or if Slovenia fails to maintain, from 1 January 2021, the initial share of 25%, the Government may decide that a financial contribution into the Union renewable energy financing mechanism is to be performed, which was established by Article 33 of Regulation (EU) 2018/1999 and the Commission Implementing Regulation (EU) 2020/1294 of 15 September 2020 on the Union renewable energy financing mechanism (Official Journal of the European Union, L 303, 17 September 2020).

In July 2021, the Resolution on the Slovenian climate long-term strategy 2050 (ReDPS50) was adopted, which follows the commitments under the Paris Agreement and is prepared according to the Framework of Slovenian climate long-term strategy. Climate strategy is based upon the principles of minimization of GHG emissions, efficient use of energy and minimisation of energy consumption, climate justice, just transition and scientific findings. The main vision of the strategy is that by 2050 Slovenia will be a climate-neutral and climate-resilient society based on a sustainable development. It will be efficient in the management of energy in natural resources, while at the same time maintaining a high level of competitiveness of a low-carbon circular economy.

In July 2021, the Government of the Republic of Slovenia adopted the Decree amending the Decree on green public procurement. This amendment extended the scope of subjects to procurement for which environmental factors must necessarily be taken into consideration. In the field of the use of wood and wooden products, this scope is, in addition to the construction of business buildings and the purchase of furniture, also extended to public procurement of builders' carpentry and joinery, as well as road traffic noise reducing barriers. The applicable Decree on green public procurement now includes mandatory consideration of environmental factors in public procurements for:

- designing and constructing business and administration buildings - the share of wood or wood-based products in buildings must consist of no less than 30% of the volume of incorporated materials;
- furniture - the share of wood or wood-based panels in furniture must consist of no less than 70% of the volume of the materials used for the furniture;
- builders' carpentry and joinery - the share of wood and/or wood-based products in builders' carpentry and joinery must consist of no less than 80% of the volume of incorporated materials (excluding glass and hardware for buildings);
- road traffic noise reducing barriers - the share of wood and/or wood-based products in road traffic noise reducing barriers must consist of no less than 55% of the volume of the materials used for road traffic noise reducing barriers.

To help repair the economic and social damage brought by the coronavirus pandemic, kick-start European recovery, and protect and create jobs, the European Commission proposed a major recovery plan for Europe based on harnessing the full potential of the EU budget. In the framework of this mechanism, the Government of the Republic of Slovenia has adopted a Recovery and Resilience Plan in 2021. The Recovery and Resilience Plan is the basis for the use of assets of the Recovery and Resilience Facility, which is financially speaking the largest part of the European NextGenerationEU Recovery and Resilience Package. Together with plans prepared by other Member States, the Slovenian Recovery and Resilience Plan will contribute to the promotion of economic, social and territorial connection of the European Union. The framework of the Recovery and Resilience Plan also includes two forestry projects, i.e. (1) digitalisation in forestry, and (2) seeds, nurseries, and forest protection, which was confirmed by the European Commission in July of this year. The combined funding for these two areas is around EUR 18 million. Both projects are currently underway.

Based on the Recovery and Resilience Plan, the MGRT published 2 invitations to tender in March 2022 in order to promote a larger scale of manufacture of wood in order to guarantee a quicker transition to a climate-neutral society amounting to EUR 28 million. The subject of the invitation to tender is the co-financing of investments which will guarantee the capacities necessary to manufacture or process wood, or sustainable construction in a materially efficient, environmentally friendly manner, pursuant to the principles of circular economy and with the best possible technology. The invitation to tender can be attended by micro, small and medium enterprises with registered activities C16 and C31.

Due to an extreme increase in the prices of energy-generating products in the second half of 2022, the Act Determining Measures to Mitigate the Consequences of Energy Commodity Price Rise in Business and Agriculture (the ZNUDDVE) was adopted in August 2022. Among other new developments, the

VAT rate of firewood with commodity code 4401 was reduced from 22% to 9.5%. The reduced VAT rate shall apply from 1 September 2022 to 31 May 2023.

4. Market factors

Data sources: IMAD, SURS, SFS and SFI

The latest data from the Statistical Office of the Republic of Slovenia (hereinafter referred to as SURS) show that economic activity increased by 8.2% last year. Year-on-year GDP growth therefore amounted to 8.9% in the first half of the year. In the second half of the year, economic activity will moderate significantly. With the aggravation of the energy crisis and the related moderation of economic activity in the main trade partners, the activity of the export part of the economy will also moderate towards the end of the year. As far as manufacturing activities are concerned, the high prices of energy-generating products and the efforts to reduce the use of gas will negatively influence the production volume in energy-intense sectors. Consumer price inflation has been on the rise since last July and amounted to 8.2% on average in the first eight months of this year compared to the same period of last year, further rising up to 11% in August. The most important contributing factor were prices of energy-generating products which were mainly higher due to stressed geopolitical conditions but also increased due to an increase in demand accompanied by favourable economic trends. The growth in prices of food and energy-generating products which caused supply chain issues, the reinforced demand for services, and lack of workforce and related pressure on wage growth also influenced a growth in prices of non-energy industrial goods and services which, on average, have increased by 6.5% or 4.5% on average during the first eight months compared to the same period of last year. Prices of products of Slovenian manufacturers and import prices have begun dropping in the anticipation of a moderation in economic activity and with a relatively high last year's basis; the prices still remain high but if the trends continue, slightly lower pressures on the increase in retail prices may be expected. In addition to the actions adopted in order to mitigate high energy-generating products, a high last year's basis towards the end of the year and the anticipated decrease in household consumption, this will also influence a slowdown in the growth in consumer price inflation. The decrease in household consumption will mainly affect the gradual slowdown of the prices of non-energy industrial goods which will remain high this year, in spite of that.

2020 saw the beginning of the reconstruction process of regional forest management plans and hunting management plans for 2021-2030 which represent the strategic basis for forest management in the next 10 years. These plans are an important instrument of forest policy and of ensuring hunting management goals, and significantly contribute to the development of other areas, such as preserving of natural and cultural heritage, protection of water sources and rural development. In the first phase, the SFS organised participatory workshops on this topic, the purpose of which was to address goals and strategies for forest management in the specific forest management area and to manage the population of game in the hunting management area. In 2022, public consultations on regional forest management plans and hunting management plans took place, allowing the stakeholders to voice their comments which will be discussed in autumn and a final version of each individual plan will be prepared. The priority of the SFS, the forest industry, owners of the forests and forestry work operators is to restore forests that have been damaged due to natural disasters. In 2021, salvage logging has decreased significantly compared to the years before (26% of all cutting in this year).

In 2021, the import of oak logs from USA into EU has stopped due to the oak disease, called „oak wilt", caused by the *Bretziella fagacearum* quarantine pest. In the EU, the logs of white oak (*Quercus alba*) and red oak (*Quercus rubra*) are used primarily in the veneer industry and, in a lesser manner, in the manufacturing of wine barrels. The prohibition of trade with this type of goods has affected primarily some of the veneer manufacturers from Austria, Germany, Portugal, and Spain. The prohibition measure also affects the Slovenian primary wood processing industry, but in a minimal extent, as there are very few processors of logs of red and white oak in Slovenia.

On 1 January of this year, Russia introduced extremely high duties for the export of unprocessed or roughly processed fresh round timber of coniferous trees and valuable types of deciduous trees from the country, which in turn stopped the export of this wood in the EU. Europe is not one of the biggest importers of round timber from Russia; according to Eurostat, EU imported 4.7 million m^3 of round timber from Russia in 2021, of which 79% birch wood. The main EU importers of round timber from Russia are Finland, Germany and the Baltic countries. The prohibition of exporting round timber from Russia and the already applicable prohibition of exporting round timber and wood-based products from Belarus, Ukraine and Turkey will also have an influence on the round timber market in Europe; demand for round timber in the European market will keep on growing, thus also increasing the pressure on the increase in the prices of these assortments, as well as sawn timber.

The Russian invasion of Ukraine will have an important influence on the European wood market. According to Wood Resources International (WRI), the import of sawn timber of coniferous trees from Russia and Belarus in the EU amounted for approximately 10% of the entire EU consumption in 2021. An important disruption in the supply of sawn timber of deciduous trees in the EU is also expected, as well as a disruption in the supply of pallets and wood for packaging, since Ukraine was an important exporter for the western EU countries until recently. Russia and Ukraine do not trade in round timber in Slovenia: in 2020 and 2021, the exported and imported quantities were minimal, and the same applies for sawn timber and timber composite boards. However, Russia and Ukraine are important import markets for wood pellets for Slovenia. In 2020, we imported more than 58,000 tonnes of pellets from Ukraine, which represents 23% of total pellet imports of that year in Slovenia. This information puts Ukraine second on the list of countries importing pellets in Slovenia, right after Romania. In 2021, Ukraine was the main importer of wood pellets for Slovenia (41,000 tonnes of pellets or 25% of total imports were imported from Ukraine). In 2020, we imported 11,000 tonnes of wood pellets from Russia, which represents 4% of the total import of pellets in Slovenia; last year, we imported 6,400 tonnes or 4% of the total import of pellets. Wood pellets are not being exported from Slovenia to these two countries.

The Slovenian market of wood pellets and round timber of inferior quality is strongly affected by the prohibition of the import of round timber and pellets from Serbia and Bosnia and Herzegovina, particularly with the latter traditionally being an important provider of firewood and pellets in Slovenia. The prohibition of the import of round timber entered into force on 27 May 2022 in Serbia, while the prohibition of the import of round timber and wood pellets in Bosnia and Herzegovina entered into force on 15 June 2022. In 2021, the import of firewood from Bosnia and Herzegovina amounted for 55% of the total import of this wood in Slovenia. Bosnia and Herzegovina is also an important importer of wood pellets in Slovenia; last year, we imported 10% of the total amount of imported wood pellets from this country.

In the wood processing industry (NACE C16), in the current year 2022, the production index has increased by 0.5% in the first seven months compared to the same period in the previous year. Also, in the industry of paper and paper articles (NACE 17), a negative trend can be detected this year, with the production index 96.7 in the first seven months compared to the same period in the previous year. The greatest growth among all the activities in question can be seen in the activity of furniture production (NACE 31), with the production index 5.2% in the months from January to July 2022 compared to the same period in the previous year. Compared to last year, the indexes of the C16, C17 and C31 industrial manufacturing activity were significantly lower in the first half of this year. Sales revenues in NACE 16 increased by 30.6% in the first seven months compared to the same period in the previous; furthermore, they increased by 22.3% on the domestic market and by 35.3% in export. This year sales revenues have also increased in NACE 17 and NACE 31; for a total of 38.1% for the former and 8.7% for the latter.

For an efficient transition to a carbon-free society and in order to achieve the goal on climate neutrality of EU countries by 2050, Slovenia also allocated some assets to the economy in the field of forestry and woodworking. Among the most important ones are the Climate Change Fund financed by the Ministry of the Environment and Spatial Planning, the invitation to tender in order to promote more wood processing which was published by the Ministry for Technology and Economic Development, and the financial support provided to companies for strategic sustainable and circular transformation by the Public Agency of the Republic of Slovenia for the Promotion of Entrepreneurship, Internationalisation, Foreign Investments and Technology (SPIRIT Slovenia).

5. Developments in the wood products market

Data sources: SURS, IMAD, CCIS: Wood Processing and Furniture Association, CCIS: Paper and Paper Converting Industry, SFI; recalculations, analysis and interpretation of SFI

a) Roundwood

2021

In 2021, the production volume of forest wood assortments (hereinafter referred to as round timber) amounted to 3.8 million of net cubic metres, i.e. 5% less than in 2020, which is also the lowest result in these past eight years. The main reason for cuts in production of round timber in this past year compared to 2020 and, above all, to 2014-2019 is mainly a lower volume of sanitation felling due to natural disasters and bark beetles in forests (e.g. -41% compared to 2020 and -71% compared to the average volume in 2014-2019). The production of the assortment of deciduous trees increased by 2% in the last year compared to 2020, amounting to 1.9 million m^3. The production of the assortment of coniferous trees is continuing to decline (-10% compared to 2020) and also amounted to 1.9 million m^3 in this past year. The biggest share in the structure of production of round timber from coniferous trees was held by the category of sawlogs and veneer logs with 79% and the biggest share in the structure of production of forest wood assortments from deciduous trees was held by fuel wood and firewood (52%).

Acquisition amounts of round timber from private forests have decreased in industrial coniferous round timber by 1% compared to 2020, on the other hand, acquisitions of industrial non-coniferous round timber have increased by 8%. Acquisition of firewood (coniferous and non-coniferous) decreased by 13% compared to the year before. The value of acquisition amounts of industrial coniferous round timber from private forests increased by 43%, whereas it increased by 13% for deciduous trees. Purchase prices of round timber from private forests have mainly been reflecting the consequences of the lack of coniferous logs in the Slovenian market and abroad in 2021, which brought about a massive increase in prices of these assortments. According to SURS, the average annual purchase prices of coniferous logs in the 2012-2020 period have fluctuated between EUR 57.41/m^3 without VAT (in 2020) and EUR 73.25/m^3 (in 2013). 2021 saw a massive increase in the price of these assortments: their average annual purchase price amounted to EUR 83.28/m^3 without VAT. These are record figures, since last-year's annual purchase price of coniferous logs is higher than the highest price recorded in 2013 by 19% (i.e. EUR 14/m^3 without VAT). The prices of coniferous logs have been increasing in these past years, with the most substantial rise noticeable in oak logs, the prices of which have been increasing since 2012. According to SURS, the average total price of all round timber in 2021 has increased by 16% compared to 2020. In 2021, the prices for all groups of round timber, with the exception of industrial deciduous timber of inferior quality and deciduous wood fuel, have reached record values. Round timber export continues to decrease and amounted to 1.35 million m^3 in 2021 (-14% compared to 2020). A similar export of round timber was last recorded in 2012. Round timber import into Slovenia has been rising since 2016 and amounted to record 0.89 million m^3 in 2021, which is 4% more compared to 2020. As a consequence, trade surplus of round timber has decreased to 0.46 million m^3, which is the lowest score in the past 15 years. Until 2020, the traditionally highest trade surplus has been recorded in the group of sawlogs and veneer logs of coniferous trees (in 2011-2019, it amounted to an average of 0.98 million m^3); in 2020, the trade surplus decreased to 157,000 m^3, while trade gap was recorded in 2021 for the first time in the last 20 years (-972 m^3). In 2021, trade surplus only increased in the group of round industrial timber of deciduous trees, amounting to 0.46 million m^3 (+10% compared to 2020). Last year saw the first trade gap in the group of pulpwood (round and split) of coniferous trees after 2006, meaning that import surpassed export and that consumption surpassed production.

2022

This year, the volume of production of round timber is expected to be slightly higher compared to the volume in the previous year, mainly due to a higher volume of sanitary felling. In July and August, the number of trees attacked by bark beetles has increased significantly. According to the SFS, 11% more woody mass was felled in the period from 1 January 2022 to 31 August 2022 compared to the same period last year. Felling of coniferous trees is predominant with 53%, but in the past two years this share has been decreasing compared to the same period in the years before. In August, over 260,000 m^3 of trees damaged by bark beetles have been marked, indicating a strong outbreak of bark beetles. These quantities are mainly not included in total felling since felling sites are currently still being recovered.

Just like in Europe, prices of logs of coniferous trees have still been increasing this year in Slovenia. The average purchase price of these assortments from private forests in the first half of the year has amounted to EUR 102/m^3 on a vehicle road, and has amounted to EUR 71/m^3 in the same period last year. The price in this round timber group was the highest in May, exceeding EUR 108/m^3 without VAT, which is a record. In terms of spruce logs, the prices were the highest in the B (+44%), C (+47%) and D1 (+41%) quality classes in May 2022, compared to May 2021. Just like logs of coniferous trees, prices of oak logs have also considerably increased; the highest average monthly purchase price on a vehicle road from private forests has already exceeded EUR 245/m^3 without VAT. The prices of other assortments are also higher than last year; due to the energy crisis, prices of timber of inferior quality have also been increasing, while supply of this timber is also becoming increasingly difficult. In August, the purchase price of beech firewood in private forests amounted to EUR 65/m^3 without VAT, which is 30% more than in August 2021. The same applies for beech pulpwood and panels which have increased by 25% in August of this year compared to August 2021, amounting to EUR 60/m^3 without VAT (for private forests). The prices of spruce pulpwood and panels have also reached record levels; in August, the purchase price for these assortments from private forests amounted to EUR 40/m^3 without VAT (+43% compared to August 2021).

According to data provided by SURS about the purchase quantities of round timber from private forests, the purchase has decreased by 7% in the first seven months of this year, compared to the same period of last year. The purchase decreased the most in the group of deciduous pulpwood and panels (-35%) and firewood (-18%). The increase was the most considerable in the group of oak logs (+39%) and beech logs (18%). The purchase of coniferous logs in the first seven months of this year remained the same as in the same period of last year. Only around a half of the quantity of round timber entering the market in one year is considered in the research on the purchased quantity prepared by SURS.

Despite the fact that there are not many manufacturers of round industrial oak timber, the supply of companies with this raw material is limited; according to informations provided by the companies, the main reason is the strong increase in export to foreign countries. According to SURS, the export of round industrial oak timber is increasing; in 2021, it increased by 23% compared to 2020, and in 2022, it will further increase for around 80% compared to last year. The prevailing market where this wood is being exported is China which, in 2021, amounted to 43% of total export, followed by Italy (30%). According to estimates, the export of oak to China will further increase this year, compared to 2021: it is estimated to amount to around 90.000 m^3 (for comparison: the export amounted to 15,000 m^3 in 2019). Oak logs are mainly being exported to China. For 2022, a total export of around 1.5 million m^3 of round timber is anticipated, while the expected import amounts to around 0.9 million m^3. It is estimated that the export of coniferous logs will continue to decrease this year and will amount to less than 300,000 m^3. Export of round industrial deciduous timber will continue to increase, amounting to around 800,000 m^3. The import of coniferous logs will amount to a similar quantity as in 2021 (around 300,000 m^3); similar amounts are expected for other round timber groups.

b) Wood biomass for energy

In the structure of the use of energy-generating products in households, wood fuel represents the highest share - over 35%. Households use approximately 1.5 million tonnes of wood fuel on average, predominantly logs, followed by pellets, chips and finally briquettes. In these past years, the number of households using wood fuel has been increasing due to the transition to heating with electricity and natural gas. The situation is changing in 2022 due to an increase in prices of all energy-generating products.

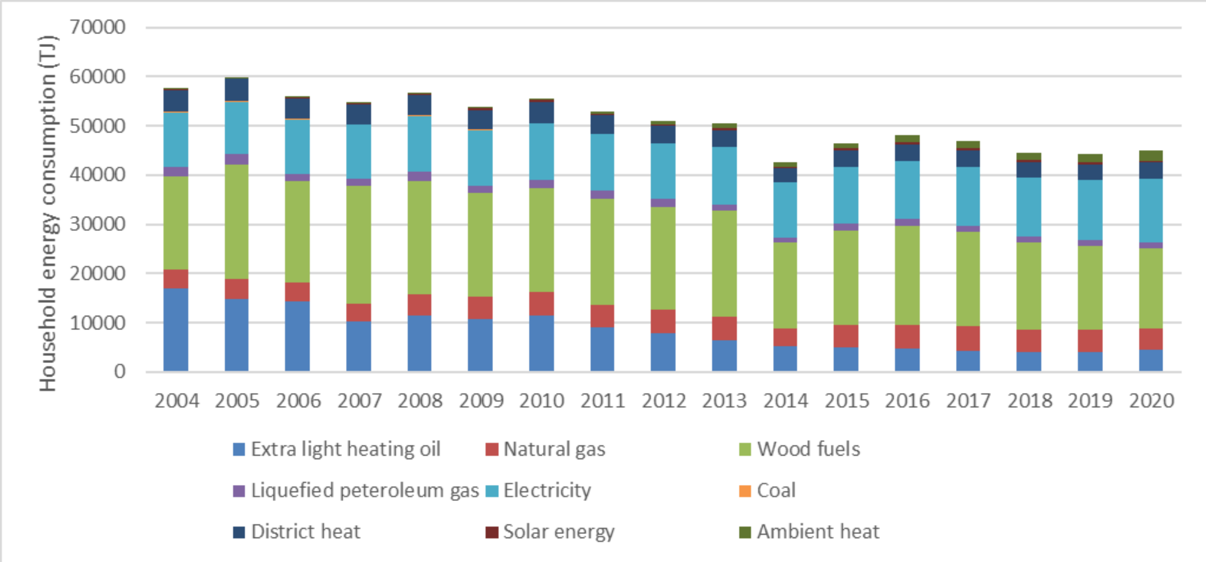

Image 1: Use of different energy-generating products in households (Source: SURS, 2021)

Firewood for household use must be air-dry to ensure to optimal combustion and reduce dust particle emissions. On the Slovenian market, the biggest demand is for beech firewood with humidity levels of approx. 20% (air dry firewood) and lengths between 25 and 33 cm. The price of such firewood amounted to 215 EUR/t at the end of the heating season 2021/2022, which is 10% more compared to the beginning of the heating season. The Slovenian Forestry Institute (hereinafter referred to as the SFI) monitors wood fuel prices and regularly publishes them at http://wcm.gozdis.si/cene-lesnih-goriv.

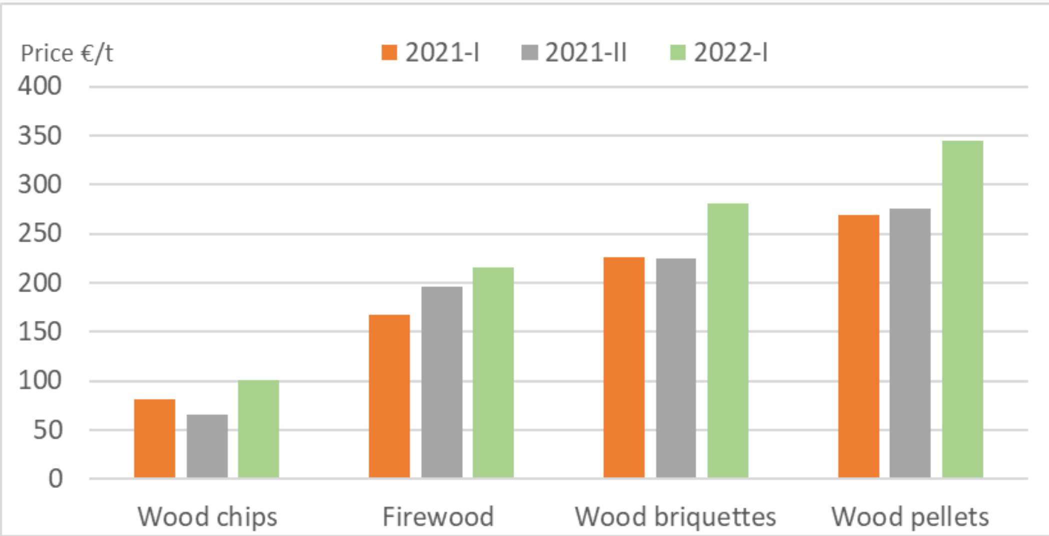

Image 2: Wood fuel prices (in EUR/t with VAT) in 2021-2022 at the beginning and end of the heating season (source: Slovenian Forestry Institute)

Wood fuels are and will remain an important energy product, mainly in rural areas, and are also environmentally friendly compared to fossil fuels. If wood fuel prices are compared to heating oil prices, it can be determined that wood chips, the cheapest among energy wood products, are 78% cheaper than heating oil, firewood is 60% cheaper than heating oil and pellets as the most expensive form of wood biomass are 46% cheaper than heating oil. Due to an increase in prices in the second half of 2022, the situation is changing; however, wood fuel still remains the cheapest source.

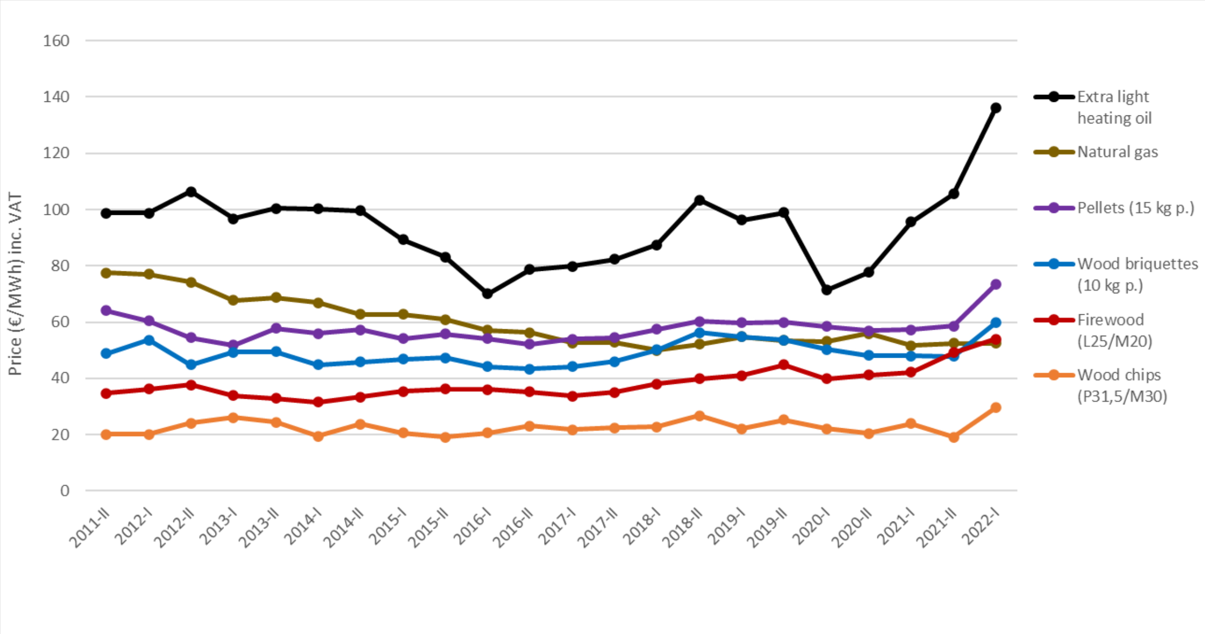

Image 3: Comparison of wood fuel and fuel oil prices in 2011-2022 at the beginning and end of the heating season (source: Slovenian Forestry Institute)

In May 2022 the price of extra-light heating oil was around 136 EUR/MWh (VAT included). The price of pellets, packed in 15 kg bags, cost 344 EUR/t or 73 EUR/MWh (VAT included) on average after the end of the heating season 2021/2022. In 2020 the difference between the prices of pellets and heating oil was the smallest recorded since the beginning of price collection in 2011, due to the drop in heating oil prices. In 2021 and in the second half of 2022, the price of heating oil has once again risen significantly - in May, the price was 42% higher compared to the same period in the previous year. Due to unforeseen circumstances on the market of all energy-generating products, the price evolution dynamics in the first half of the year is extremely high, which is why it is currently hard to predict what will happen in the second half of the year and in the next heating season. However, prices of wood fuel have started to increase in June 2022, while a lack of pellets and logs was occasionally observed on the market due to a high demand in spring and summer. According to the latest information, the prices of pellets in August have increased by nearly 70 % (compared to May 2022), while the prices of logs have increased by 30%. Prices of wood chips have remained more stable.

In the last decade, Slovenia was a net exporter of pellets, with the exception of 2017 and 2021 when export surpassed import. According to SURS, we exported 165,594 tonnes of wood pellets in 2021, i.e. 36% less than in 2020 and the least amount after 2015. The main countries from which Slovenia was importing wood pellets last year were Ukraine (25% of the total pellet import), Romania (21%) and Austria (19%). Compared to 2020, the import of pellets from Slovakia (representing 9% of the total import in 2021) increased the most compared to 2020, while import from Romania decreased by 62%. The main consumers of wood pellets are households, followed by larger public buildings and other users. According to the data on the production of pellets in Slovenia, collected by SFI, the production of pellets in Slovenia has been rising for the past 10 years. There are currently 23 registered producers in Slovenia. They are predominantly smaller producers, who annually produce up to 10,000 tons of pellets. Domestic production of pellets amounted to 149,000 tonnes in 2021, which is 0.7% more compared to 2020.

In the export amounts, the pellets of Slovenian producers are included as well as pellets, which were previously imported into Slovenia (a so-called re-export). Due to vibrant trade with pellets, the indicator of foreign trade deficit or surplus, which is calculated as a balance (import - export), is useful on the national level. Unlike in the previous years (with the exception of 2017) a foreign trade surplus was recorded on the wood pellet market in 2021, which shows that the consumption of pellets was greater than production. According to SURS, the trade surplus from last year amounted to 38,000 tonnes.

According to SURS, the export of wood pellets in 2021 amounted to 203,591 tonnes, which is 3% more than in 2020 and 20% more than the average of 2015-2019. Italy remains the main export market of wood pellets for Slovenia (84% of total exported volumes from Slovenia), followed by Austria with 10% and with 5% of volumes exported to the neighbouring Croatia. Compared to 2020, the import of pellets in Austria increased by 21%, the import of pellets in Italy increased by 5%, and the import of pellets in Croatia decreased by 35%.

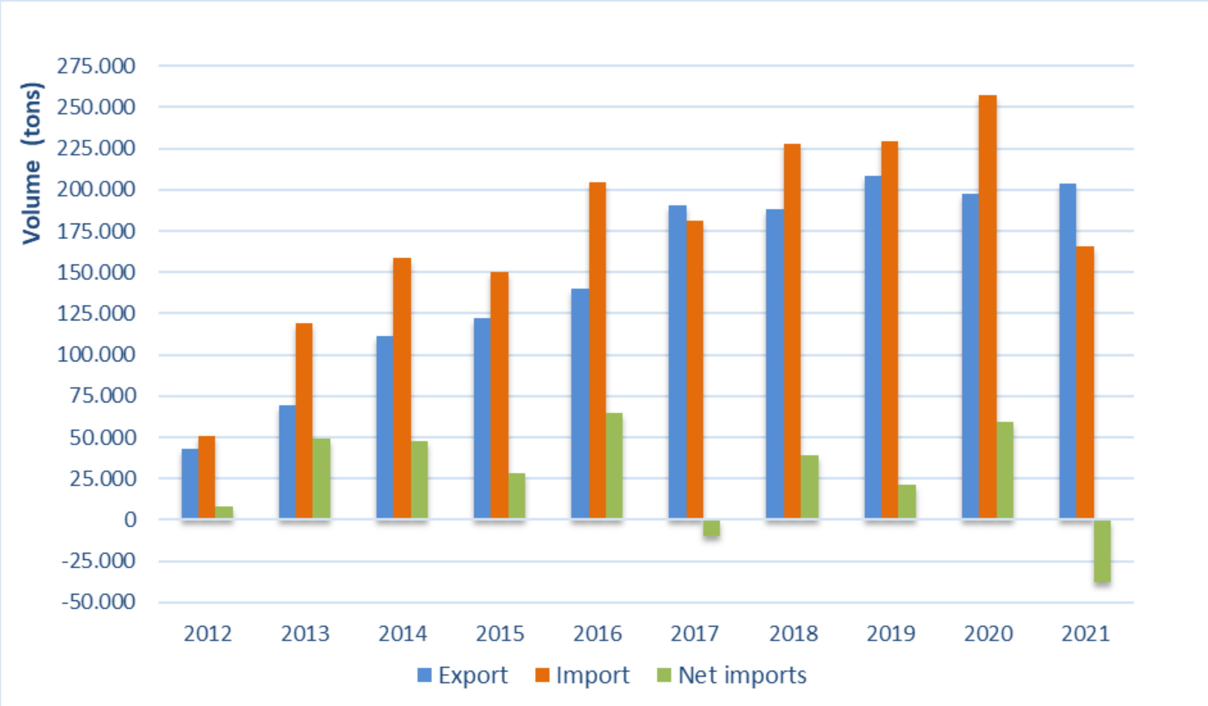

Image 4: Foreign trade of pellets in 2012–2021 (data source: Statistical Office of the Republic of Slovenia, recalculations of SFI)

Wood chips are mainly used for energy purposes. The largest consumer of wood chips is Termoelektrarna toplarna Ljubljane, consuming over 120,000 tonnes per year. The consumption of wood chips in the production of wood products (fibre boards, pulp, chemicals) in 2021 represented less than 15% of the total consumption of wood chips in Slovenia. According to data for foreign trade, Slovenia exported 501,116 tonnes of wood chips to foreign markets in 2021, of which one half (50%) went to the Austrian market and 30% went to the Italian market. The import of wood chips in 2021 has increased compared to 2020 (+52%), amounting to 119,318 tonnes. The greater part of the volumes (72%) was imported from the neighbouring Croatia, while 23% were imported from Austria.

c) Certified wood products

Now, 260,747 ha of forests are certified by the FSC system, which is the same amount as during the same period of last year. This surface represents 22% of the complete forest area in Slovenia and these are predominantly national forests (share of 91%). The company SiDG d.o.o., which manages national forests, holds seven group FSC certificates, along with the certification of national forests. In September 2022, seven larger private forest holdings, with a total of 24,347 hectares, were certified in a group scheme FSC FM/CoC of SiDG.

The area according to the system PEFC for certified forests is increasing slightly and now encompasses 293,995 ha. The majority (79%) of this surface is represented by national forests managed by Slovenski državni gozdovi d.o.o., while 20% of the surface is privately owned and 1% is represented by municipal forests. An increasing number of forest owners, who manage their own forest, are involved in the regional certification scheme PEFC; there were more than 1277 of such owners last year.

Companies use the FSC and PEFC certificates for tracking wood origin predominantly as a marketing mechanism for export markets and compliance with green public procurement policies. The number of companies with the FSC certificate for tracking certified wood (CoC) is currently 274 (+4% from September 2021), and the number of companies with the PEFC certificate for tracking certified wood (CoC) is 91, which is 14% more compared to the same period last year.

d) Value-added wood products

The Slovenian furniture industry produced net sales revenues in the amount of EUR 435 million in 2021, which is 23% more compared to 2020 and represents 1.2% of net sales revenues in relation to the whole processing industry in the country. The share in the total net sales revenues structure in foreign markets for the furniture industry NACE C31 amounted to 43.5% last year. Foreign market sales recorded an increase of 30.2% last year compared to 2020. In 2021 the added value per employee in manufacturing C31 has increased by 4.1% compared to 2020 and amounted to EUR 34,959.

The furniture industry production index (the entire furniture industry in NACE C31), which also includes the production of wooden furniture, increased by 5.2% in the first seven months of this year compared to the same period in the previous year. The net sales revenues within the comparative periods increased by 8.7%, with 6.7% on the domestic and 11.3% on foreign markets compared to the same period in the previous year.

e) Sawn softwood

In 2021, the manufacturing of round coniferous timber has increased by 3% compared to 2020, amounting to over 1.5 million m^3, despite a significant lack of coniferous logs from domestic forests. Sawn softwood production amounted to 904,000 m^3 in last year, which is 3% more compared to 2020. In 2021, the import of sawn softwood decreased by 14% compared to 2020 and is still decreasing. Export increased by 1% compared to 2020.

In 2022, due to the estimated increased consumption of coniferous logs, we are expecting an increased production of sawn softwood by around 11% compared to 2021. According to forecasts, the import of sawn softwood will decrease while the export will increase. However, current estimations of the state of the wood processing industry in the country (and globally) are extremely uncertain.

In 2022, the average sales prices of sawn softwood have increased compared to 2021, according to SFI. The most pronounced price increase occurred in May 2022 when prices of all monitored products of sawn softwood for construction purposes, non-construction edged timber and non-construction non-edged sawn timber have increased. In May and August 2022, the median value of spruce construction wood amounted to EUR 300/m^3 without VAT, which represents a 36% increase compared to May 2021 and a 15% increase compared to August 2021.

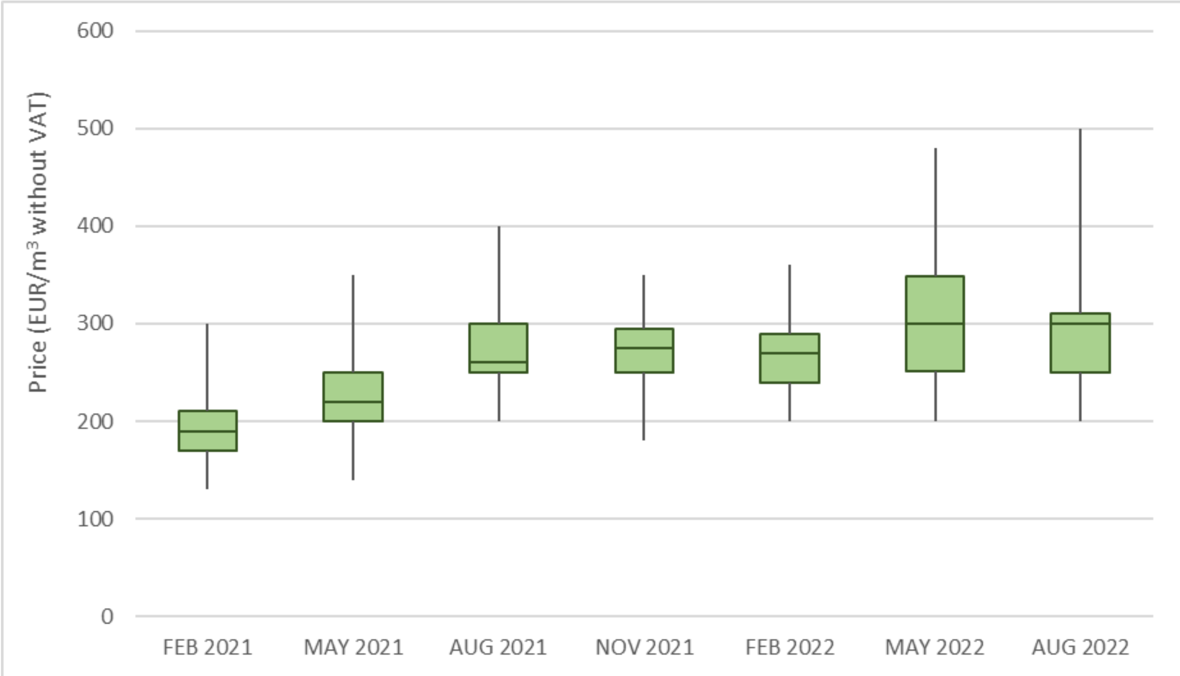

Image 5: Minimal, maximal, and median values of collected purchase prices for **spruce construction wood** for 2021 and for the current year 2022. The **construction timber** category consists of the following products: **construction timber C24/S10**, non-dried; **construction timber C24/S10**, dried; **planks** of 18-24 mm mm, non-dried; planks of 28-40 mm mm, non-dried; **boards** of 40-50 mm, non-dried; boards of over 50 mm, non-dried; **beams** of 60x80 mm (up to 5 m), non-dried; beams of 100x200 mm (up to 5 m), non-dried; beams of 140x140 mm (up to 5 m), non-dried; beams of 140x140 mm (over 6 m), non-dried; **slats** of 50/30 - 50/50 mm (3-5 m in length) marked CE, dried; slats of 50/30 - 50/50 mm (3-5 m in length) not marked CE, dried; slats 50/30 - 50/50 mm (3-5 m in length) not marked CE, non-dried. Purchase prices are shown in EUR/m^3 not including VAT and transport.

This year, the prices of sawmill residues of coniferous trees have also increased; the highest price of selvedges or wood splinters was recorded in May and amounted to EUR 27.5/prm, which represents a 129% increase compared to May 2021. This year, the highest price of sawdust was recorded in February and amounted to EUR 22.5/t (+88% compared to February 2021).

New investments in technological modernisation and the increase of capacity of existing Slovenian sawmills, which process coniferous wood, as well as investments into new sawmills are foreseen in the coming years. One of the strategic areas of operation of Slovenski državni gozdovi d.o.o. (SiDG d.o.o.) in the next ten years is also the establishment of centres for collection and modern primary processing of wood.

f) Sawn hardwood

Sawn hardwood production amounted to 140,000 m^3 in 2021, which is the highest amount after 2007. In Slovenia, there are currently less than 20 companies which yearly process 5,000 m^3 of logs or more; this year, a research was conducted among these companies by the SFI. Among other findings, the research found that manufacturing of standard chipped timber (i.e. planks, boards) is prevailing, with the products mainly being sold to the foreign market.

In 2021, the use of sawn hardwood remained the same as in 2020, amounting to 121,000 m^3. Both the import and export of sawn hardwood increased in 2021 compared to the year before; import decreased by 1% and export by 16%.

In 2022, the sawmills processing oak logs have detected some issues related to a limited supply in raw materials, particularly due to a strong increase in export to other countries. According to SURS, the export of oak logs is on the rise and is particularly expected to soar this year. Oak logs are mainly being exported to China.

This year, the estimated lower consumption of sawlogs and veneer logs of deciduous trees is expected to cause a drop in the production of sawlogs by 10% compared to 2021. Due to an increase in export (approximately +44% compared to 2021), the use of deciduous trees sawlogs will also decrease.

The quantities and values recorded in the production, the import and export of sawn wood from tropical tree species are negligible. A similarly low level of sawn wood from tropical trees foreign trade is foreseen for this year.

g) Wood-based panels (including veneer)

Production of all types of wood-based panels (including veneer) was just under 261,000 m^3 in 2021, 63% of which was coniferous. Production therefore increased by 12% compared to 2020 when one of the manufacturers of timber composite boards has stopped its production process for a certain period of time due to the COVID-19 epidemic. In 2021, consumption of wood panels increased again (+13% compared to 2020), indicating a take-off of Slovenian construction. For 2022, we are estimating an approximately 3% decrease in the production volume compared to 2022, particularly due to the planned reduced production volume of panels. It is also estimated that the consumption of wood-based panels and veneer will decrease slightly.

In 2021, 189,000 m^3 of particle boards (including OBS boards) were used in the manufacture of furniture and in construction, which amounts to a 7% increase compared to the previous year. All particle boards are being imported since 2015 when the last particle board factory declared bankruptcy. For 2022, we are predicting a similar consumption of particle boards than in 2021.

The consumption of fibreboards in Slovenia has been fluctuating through the ages and is one of the lowest consumptions compared to other types of wood-based panels. The consumption of these panels was particularly extremely low in 2019-2021, oscillating between 23,000 and 26,000 m^3. In 2021, the consumption of fibreboards increased by 15% compared to 2020. There is one company engaged in the production of MDF and HDF fibreboards in Slovenia.

Plywood panel production is dominated by tri-layer shuttering composite conifer panels, of which the greater part of production is exported. In 2021, the production of panels increased by 7% compared to 2020, reaching similar levels than in 2019. The consumption of panels is currently on the rise in Slovenia: in 2021, it amounted to 79,000 m^3 (+28% compared to 2020 in +24% compared to the average amount of the 2015-2019 period).

Domestic production of veneer has been increasing in these past years, amounting to slightly less than 23,000 m^3 in 2021 (+17% compared to 2020). For 2022 a few percentage points higher volume of production is forecast. The quantities recorded in the production, the import and export of veneer from tropical tree species are negligible. The best part of sliced veneer manufacture is performed as a service for customers within the EU.

h) Pulp and paper

The production volume of mechanical pulp decreased in 2021 from 91,000 tonnes (in 2020) to 86,000 tonnes. In 2021, a company with a long-standing tradition operating in the field of manufacturing newspaper paper, coated graphic paper, and wrapping and packaging paper has temporarily stopped its production process due to financial issues; the company is also faced with temporary stoppages this year. In 2021, the import of mechanical pulp represented 4% of the total import of all types of wood pulp, while the export represented 64%. Mechanical pulp export volumes are negligible as the production in Slovenia is entirely integrated.

According to the Chamber of Commerce and Industry of Slovenia, the Slovenian production of paper in 2021 amounted to a total of 635,000 tonnes, i.e. 10% less than in 2020. The highest decrease (-70%) can be noted when it comes to newspaper paper, since one of the paper mills has been inactive for 5 months. Furthermore, the Chamber of Commerce and Industry of Slovenia also recorded some changes in the structure of the manufactured paper; at the end of 2021, 67% of Slovenian paper was intended for the packaging segment (59% in 2020), while the manufacture of tissue (sanitary) paper also increased, representing 11% of the total paper manufactured in 2021. Graphic papers already represent less than one quarter of the entire production. Since the paper-making industry is an energy intensive industry, certain paper mills have temporarily stopped their production processes this year according to the Chamber of Commerce and Industry of Slovenia, due to a drastic increase in prices of electricity. Because of that, the Chamber of Commerce and Industry of Slovenia is estimating that the production of paper and cardboard will decrease this year compared to the year before, and will amount to approximately 605,000 tonnes.

In the first seven months of 2022, the C 17 industry recorded a 3.3% decrease in the industrial production index compared to the same period in the previous year. Sales revenues in the industry, however, increased by 38.1% in the first seven months of this year.

i) Innovative wood products

The holder of the project for designing and constructing the Slovenian pavilion during the Expo Dubai 2020 World's Fair was RIKO, d.o.o. The pavilion is characterised by: (1) the optimal combination of steel and massive wooden cross-laminated (X-lam) CLT walls and panels; (2) a unique and complex parasol roof construction; (3) designed and CNC-processed wooden elements for the roof construction which have been prepared in Slovenia to be constructed in Dubai; (4) the entire weight of the wooden construction of the pavilion is less than 250 tonnes (less than 400 tonnes together with the steel construction).

Image 6: The Slovenian EXPO 2020 pavilion in Dubai (photo: RIKO, d.o.o.)

This year, awards and prizes for the 2022 Wooden Masterpiece Award were also awarded during the third consecutive edition of the Days of Slovenian Woodworking, the central national professional event of the Slovenian woodworking industry. The awards were won by authors of products which are mainly created out of local wood, create new niche markets and also have a lot of potential to succeed abroad. Seven awards and three equivalent prizes were awarded for products which contribute to the foundations

of future reflections on the woodworking economy of the environment. The list of the award winners is available at:
https://www.spiritslovenia.si/sporocilo/646

Image 7: "OLYMPUS" (designed by: Katjuša Kranjc, Rok Kuhar), one of the recipients of the 2022 Wooden Masterpiece Award

Image 8: "NATURA ULTIMO" WOODEN WINDOW (designed by: Liza Križnar, M Sora), one of the recipients of the 2022 Wooden Masterpiece Award

j) Residential construction and construction

The decreasing trend in the construction of dwellings came to an end in 2015 and has steadily risen from 2016 onwards. In 2021, 11,841 dwellings were under construction in Slovenia, of which 4,032 were completed by the end of the year, which is 14% more than in 2020. In 2021 most of the dwellings were completed in the Osrednjeslovenska statistical region (20% of all), followed by the Podravska statistical region (19% of all). On the other hand, the fewest dwellings were completed in the Zasavska region (2%). In the first eight months of this year, 3,927 building permits were issued for new buildings and the change of use of buildings, which is 12% less compared to the same period in 2021. Compared to the same period in 2021, 1% less building permits were issued for apartment buildings, and 20% less building permits were issued for non-apartment buildings.

Company activity within the Manufacture of other builders' carpentry and joinery (NACE: C16.230), which consists of the manufacture of prefabricated wooden buildings, builder's joinery (windows, doors, stairs…) and glued laminated roof trusses and roofing, was again successful last year, with a reported highest net profit in the industry C16 Manufacture of wood and of products of wood. According to CCIS, this segment had a EUR 33 million net profit last year, which is 46% more than net profit in 2020 and no less than 66% more than the average of the 2017-2020 period. The growth of sales revenues created by companies in this industry on foreign markets decreased by 0.4% compared to 2020, but net sales revenues in foreign markets increased by 21.2%.

Even though the export of wooden windows has been decreasing in the last years, Slovenia remains a traditional net exporter of wooden windows and doors. The increasing trend in the import of wooden doors is continuing in 2021 (+36% compared to 2020); the same applies for wooden windows (+10% compared to 2020). The export of wooden doors decreased by 2% last year compared to the year before, while the export of wooden windows increased by 11%, thus remaining at a similar level than in 2017 and 2018. When it comes to data related to foreign trade, we unfortunately cannot provide the data on the so-called "re-export", i.e. the quantities that we import and immediately export.

6. Tables

a) Economic indicators

	2021	Autumn forecast (September 2022) 2022	2023	2024
GDP				
GDP, real growth in %	8.2	**5.0**	**1.4**	**2.6**
GDP, nominal growth in %	11.0	**10.9**	**7.0**	**5.4**
GDP in EUR billion, current prices	52.2	**57.9**	**62.0**	**65.3**
Exports of goods and services, real growth in %	14.5	**5.0**	**2.5**	**4.7**
Imports of goods and services, real growth in %	17.6	**6.5**	**2.2**	**3.8**
External balance of goods and services (contribution to growth in p.p.)	*-0.8*	***-0.8***	***0.3***	***1.0***
Private consumption, real growth in %	9.5	**5.4**	**0.3**	**1.9**
Government consumption, real growth in %	5.8	**1.4**	**1.7**	**1.9**
Gross fixed capital formation, real growth in %	13.7	**6.5**	**2.5**	**2.0**
Change in inventories and valuables (contribution to growth in p.p.)	0.4	**1.4**	**0.1**	**0.0**
EMPLOYMENT AND PRODUCTIVITY				
Employment according to the SNA, growth in %	1.3	**3.0**	**0.8**	**0.7**
Number of registered unemployed, annual average, in '000	74.3	**57.1**	**54.4**	**52.8**
Registered unemployment rate in %	7.6	**5.8**	**5.5**	**5.3**
ILO unemployment rate in %	4.7	**4.2**	**4.1**	**3.9**
Gross wage per employee, nominal growth in %	6.1	**2.2**	**6.0**	**4.5**
Gross wage per employee, real growth in %	4.1	**-6.2**	**0.0**	**1.5**
- private sector	4.1	**-3.1**	**-0.8**	**2.1**
- public sector	4.5	**-10.6**	**1.5**	**0.5**
Labour productivity (GDP per employee), real growth in %	6.8	**1.9**	**0.7**	**2.0**
BALANCE OF PAYMENTS STATISTICS				
Current account BALANCE in EUR billion	2.0	**-0.3**	**-0.3**	**0.1**
- as a % of GDP	3.8	**-0.5**	**-0.5**	**0.1**
PRICES AND EFFECTIVE EXCHANGE RATE				
Inflation (Dec/Dec), in %	4.9	**9.8**	**3.9**	**2.2**
Inflation (annual average), in %	1.9	**8.9**	**6.0**	**2.9**
Real effective exchange rate deflated by unit labour costs	-1.8	**-3.0**	**1.4**	**0.6**
ASSUMPTIONS				
Foreign demand (imports of trading partners), real growth in %	11.7	**4.3**	**2.0**	**3.4**
GDP in the euro area, real growth in %	5.3	**3.1**	**0.4**	**1.8**
Brent Crude oil price in USD/barrel	70.7	**103.1**	**89.5**	**83.9**
Non-energy commodity prices in USD, growth	34.4	**7.0**	**-4.0**	**-3.5**
USD/EUR exchange rate	1.184	**1.058**	**1.022**	**1.022**

Source: IMAD (Institute of Macroeconomic Analysis and Development of the Republic of Slovenia), Autumn Forecast of Economic Trends, September 2022. Year 2021 SURS, BoS, ECB, EIA, 2022-2024 IMAD forecasts.

b) Production and foreign trade

Product	Unit	Historical data		Estimate	Forecast
		2020	2021	2022	2023
Sawlogs and veneer logs, coniferous					
Production	1000 m^3	1,624	1,510	1,680	1,600
Imports	1000 m^3	367	287	320	300
Exports	1000 m^3	523	286	260	280
Apparent consumption	1000 m^3	1,467	1,511	1,740	1,620
Sawlogs and veneer logs, non-coniferous					
Production	1000 m^3	348	467	530	530
Imports	1000 m^3	32	43	42	40
Exports	1000 m^3	145	248	330	310
Apparent consumption	1000 m^3	235	263	242	260
of which, tropical logs					
Imports	1000 m^3	1	1	1	1
Exports	1000 m^3	0	0	0	0
Net Trade	1000 m^3	0	1	1	1
Pulpwood (round and split), coniferous					
Production	1000 m^3	346	262	285	275
Imports	1000 m^3	230	264	270	270
Exports	1000 m^3	298	239	230	230
Apparent consumption	1000 m^3	278	288	325	315
Pulpwood (round and split), non-coniferous					
Production	1000 m^3	450	386	540	550
Imports	1000 m^3	88	117	114	110
Exports	1000 m^3	392	372	500	500
Apparent consumption	1000 m^3	146	131	154	160
Wood chips, particles and residues					
Domestic supply	1000 m^3	1,230	1,360	1,450	1,500
Imports	1000 m^3	176	272	290	300
Exports	1000 m^3	847	922	1,200	930
Apparent consumption	1000 m^3	559	710	540	870
Other industrial roundwood, coniferous					
Production	1000 m^3	15	18	13	13
Other industrial roundwood, non-coniferous					
Production	1000 m^3	35	30	30	27
Wood fuel, coniferous					
Production	1000 m^3	121	106	150	160
Wood fuel, non-coniferous					
Production	1000 m^3	952	937	1,050	1,100

Product	Unit	Historical data		Estimate	Forecast
		2020	2021	2022	2023
Sawnwood, coniferous					
Production	1000 m^3	877	904	1,000	970
Imports	1000 m^3	657	563	500	500
Exports	1000 m^3	830	840	900	920
Apparent consumption	1000 m^3	704	627	600	550
Sawnwood, non-coniferous					
Production	1000 m^3	125	140	125	130
Imports	1000 m^3	98	99	100	100
Exports	1000 m^3	102	118	170	150
Apparent consumption	1000 m^3	121	121	55	80
of which, tropical sawnwood					
Production	1000 m^3	0	0	0	0
Imports	1000 m^3	2	3	3	3
Exports	1000 m^3	0	0	0	0
Apparent consumption	1000 m^3	2	2	3	3
Veneer sheets					
Production	1000 m^3	19	23	24	21
Imports	1000 m^3	12	14	14	14
Exports	1000 m^3	22	29	34	30
Apparent consumption	1000 m^3	10	8	4	5
of which, tropical veneer sheets					
Production	1000 m^3	1	1	1	1
Imports	1000 m^3	0	0	0	0
Exports	1000 m^3	1	1	1	1
Apparent consumption	1000 m^3	0	1	0	0
Plywood					
Production	1000 m^3	95	102	96	98
Imports	1000 m^3	45	57	50	50
Exports	1000 m^3	78	80	80	80
Apparent consumption	1000 m^3	61	79	66	68
of which, tropical plywood					
Production	1000 m^3	0	0	0	0
Imports	1000 m^3	16	20	20	20
Exports	1000 m^3	0	0	1	0
Apparent consumption	1000 m^3	16	20	19	20

Product	Unit	Historical data		Estimate	Forecast
		2020	2021	2022	2023
Particle board (including OSB)					
Production	1000 m^3	0	0	0	0
Imports	1000 m^3	182	197	200	190
Exports	1000 m^3	5	9	10	9
Apparent consumption	1000 m^3	177	189	190	181
of which, OSB					
Production	1000 m^3	0	0	0	0
Imports	1000 m^3	35	36	37	36
Exports	1000 m^3	1	2	2	2
Apparent consumption	1000 m^3	34	33	35	34
Fibreboard					
Production	1000 m^3	118	136	135	135
Imports	1000 m^3	49	57	55	55
Exports	1000 m^3	144	167	160	160
Apparent consumption	1000 m^3	23	26	30	30
Hardboard					
Production	1000 m^3	0	0	0	0
Imports	1000 m^3	9	8	6	6
Exports	1000 m^3	8	7	6	6
Apparent consumption	1000 m^3	1	1	0	0
MDF (Medium density)					
Production	1000 m^3	118	136	135	135
Imports	1000 m^3	32	39	43	43
Exports	1000 m^3	132	155	149	149
Apparent consumption	1000 m^3	17	20	29	29
Other fibreboard					
Production	1000 m^3	0	0	0	0
Imports	1000 m^3	8	10	6	6
Exports	1000 m^3	3	5	5	5
Apparent consumption	1000 m^3	5	5	1	1

Product	Unit	Historical data		Estimate	Forecast
		2020	2021	2022	2023
Wood pulp					
Production	1000 m.t.	91	86	82	82
Imports	1000 m.t.	289	250	230	230
Exports	1000 m.t.	13	5	3	3
Apparent consumption	1000 m.t.	367	331	309	309
Paper & paperboard					
Production	1000 m.t.	706	635	605	590
Imports	1000 m.t.	757	435	420	420
Exports	1000 m.t.	630	579	590	570
Apparent consumption	1000 m.t.	832	491	435	440
Wood pellets					
Production	1000 m.t.	148	149	162	170
Imports	1000 m.t.	257	166	120	150
Exports	1000 m.t.	198	204	170	170
Apparent consumption	1000 m.t.	207	111	112	150