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Timber Committee

SLOVENIA

Country Market Statement 2012

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1. General economic trends

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Gross domestic product (GDP) in Slovenia declined by 0.2% in 2011. Positive signals for economic growth came from the export-oriented sector of the economy, while domestic consumption shrank (lower investment, private and government consumption). Access to finance also deteriorated. In 2011, value added remained around the previous year's level (-0.1%). In manufacturing, value added grew by 2.9% y-o-y in real terms last year, while in the construction sector value added dropped by 20.3%. In 2011, product export growth was at 7.7%, and product import growth at 5.7%. Decline in domestic consumption recorded a 1.6% drop. In 2011, gross capital formation was down 5.6% from the previous year in real terms. Last year, investment activity further declined. Investment in construction declined by 25.2%, while investment in equipment and machinery increased somewhat by 6.4%. The decline of private consumption continued in 2011. For the first time since the beginning of the crisis, government consumption dropped by 0.9%. The decline in government consumption was a result of austerity measures. Household consumption dropped by 0.3%, as households mainly postponed purchases of durable goods. Turnover in the sale of furniture, household appliances and construction material declined by nearly a tenth. The share of durable goods in the structure of domestic consumption thus declined to 9.1%, reaching the lowest figure since 1995. In 2011, the number of employed persons was 1.7% lower than in 2010, with the largest decline recorded in manufacturing activities. The labor market expects a further decline of employment and an increase in the unemployment rate. Last year's annual consumer price growth was at 2%, similar to the previous years. Price growth was mainly underpinned by higher prices of energy and food. In view of the continuation of sluggish demand and poor prospects for economic activity we estimate that inflation will remain low this year and in the next.

In the second quarter of 2012, the GDP declined by 3.2% compared to the previous year, which is the result of lower household consumption (-0.3%), lower government consumption (-2.0%) and lower fixed capital formation (-8.9%). Export was also lower (-0,5%) y-o-y in the second quarter. The decline in domestic demand is a result of the y-o-y decline of import, which was at -5.4%. Production volume in the second quarter of 2012 remained around the previous year's level, while the decline was present mainly in the low technology industries, mainly oriented towards the domestic market. Slovenia still lags behind production results from 2008 by more than a tenth. Compared to other important trade partners in the euro area, the industries with a lower degree of technology intensity (among them the furniture industry holds a large share) are responsible for the falling behind.

2. Policy measures

Decree on Green Public Procurement (Official Gazette of the RS, No. [102/2011](#)) entered into force in December 2011. The Decree provides minimum mandatory environmental requirements and their involvement in the public procurement processes, and it also includes recommendations for achieving higher environmental standards. The purpose of this Decree is to lower the negative impact on the environment through public procurement of environmentally less burdensome goods, services and constructions, and thus lead the private sector and consumers by example.

The ECO Fund grants loans for environmental investments through public tenders within the scope of the programme for granting loans for environmental investments of natural persons, legal entities and sole traders. The granting of non-repayable financial incentives has caused a lack of interest in favorable Eco Fund loans in oceans, which is the reason we have recorded a substantial drop in environmental investments crediting in oceans. In 2011, 162 loan contracts were signed with natural persons (in 2010, 305 contracts were signed) for the implementation of different investment schemes in the area of efficient energy use and use of renewable energy sources, which also included 16 household boilers run on wood biomass fuel with a total power of 409 kW. **The Eco Fund** also carries out a programme for granting **non-returnable financial incentives to natural persons** for measures adopted in the area of efficient energy use and use of renewable energy sources. It does so on the basis of the Regulation on energy savings ensured to final customers (Official Gazette of the RS, No. [114/2009](#)), which was adopted by the Slovenian government on December 30th, 2009 and entered into force on January 1st, 2010. The Regulation introduces a collection of resources to increase the efficiency of energy use through its contribution to improving the efficiency of electricity and heat additions to the price and the price of fuels to increase energy efficiency. The beneficiaries of the incentive, who through public tenders completed their investments in a timely manner and submitted the appropriate documentation, received a total of EUR 17,318,339 in non-returnable funds in 2011, which were used to fuel 17,371 investments. It is important to bear in mind that in 2011, the Eco Fund also granted non-returnable financial incentives on the basis of public tenders from 2010, as due to extremely high number of timely received applications, these were not resolved during that year. Altogether 1443 investments in household boilers run on wood biomass fuel with the combined power of 36.2 MW were given financial support. In 2010, 407 investments in household boilers run on wood biomass fuel with the combined power of 10.4 MW were given financial support, and in 2009 there were 561 such investments with the combined power of 15 MW. Apart from the support given for the installation of boilers run on wood biomass fuel, incentives for installation of wooden outdoor builder's joinery during renovation on housing buildings are also important from the viewpoint of wood use.; in 2009, 1,415 investments with a total area of 24,613 m² were supported, in 2010, the number of supported investments amounted to 617 with a total area of 10,147 m², while in 2011, the number of supported investments amounted to 7,106 with a total area of 89,100 m². The investments which received non-returnable funds in 2011 contribute to reduced energy consumption (annually by 94.9 GWh) and thus to lower emissions of CO₂ (15.485 tons annually).

The programme of co-financing of district heating systems and the installation of boilers run on wood biomass is run within the framework of the Operational programme for environmental and transport infrastructure development for the period 2007-2013; the development priority „Sustainable Energy“ and the priority orientations of innovative measures for local energy supply. In July 2011, already the third tender for co-financing said systems run on wood biomass was opened, and it is to stay open until September 2013. In 2010 and 2011, 16 projects for district heating systems run on wood biomass were supported through this tender (12 of these were combustion engines run on wood biomass and 4 of these were existing systems without installation of combustion plants). State aid was used for the installation of 19.7 MW of combustion engines run on biomass and more than 38 km of pipelines. In 2009, 2010 and 2011, 50 individual wood biomass combustion engines were additionally co-financed. Financial incentives were used for the installation of 43 MW of combustion engines run on biomass.

The **Decree on waste** (Official Gazette of the RS, No. [103/2011](#)) has replaced the Decree on waste management (Official Gazette of the RS, No. [34/08](#)) and was adopted in December 2011. This Decree includes provisions on by-products and end of waste status, which is particularly interesting in light of wood waste. The Decree stipulates that definition of a substance or object as waste, by-product or end of waste status shall be awarded in accordance with Community legislation and within the framework of applicable guidelines, prepared on the basis of this Decree. The Decree introduces a 5-stage waste management hierarchy treated as a priority order in waste production and management. Regarding separate collection the Decree stipulates that separate collection should be established at least for paper, metal, plastic and glass waste. The Decree also includes certain environmental goals which cannot be achieved without effective separate collection:

- a) by 2020, the preparing for re-use and the recycling of at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50% by weight;
- b) by 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction, shall be increased to a minimum of 70% by weigh. In order to achieve this goal, soil and rocks (17 05 04) are not taken into account.

In June 2012, the Government of the RS adopted the **Action plan to increase competitiveness of forest-wood chain in Slovenia by the year 2020 »Les je lep«** (»Wood is beautiful«). This Action plan reclassifies the Slovenian wood processing industry as a strategically important and perspective branch of economy with sufficient amount of national raw material.

The key objectives of this Action plan are:

- the development of a wood products and services market;
- an increase in felled amounts and tending the forests in accordance with forest management plans;
- an increase in wood processing quantities on higher exacting levels with new technologies;
- new positions of employment and the growth of value added per employee in the wood processing industry.

The key factors to successful implementation of the Action plan are:

- cooperation of all participants in the forest-wood processing chain to achieve a coordinated implementation of measures directed at intensifying forest management and better use of wood;
- establishing a suitable model for state owned forests management;
- support for wood processing industry;
- implementation of the Regulation on green public procurement (Official Gazette of the RS, No. 102/11, 18/12 and 24/12);
- organized promotion of wood and wood products;
- consistent management of the Action plan and formation of an operative group which will manage the implementation of the tasks specified within the Action plan.

The measures affecting trade in wood products and the wood products market also include individual measures from the **Rural development Programme of the Republic of Slovenia 2007-2013**. In the view of promoting the use of wood, the following measures are most pertinent within the framework of Axis 1:

- 111 - Training for persons engaged in agriculture and forestry, which may influence, indirectly through education of forest owners for safe forest work, the annual felling in privately owned forests.
- 121 - Modernization of agricultural holdings, which, among other things, enables co-financing of investments in renewable sources of energy for agricultural holdings needs.
- 122 - Improving the economic value of forests, which can have a positive effect on the wood products market, as it provides for co-financing of investments in modern forestry mechanization and equipment as well as in reconstruction and construction of new forest tracks and roads.
- 123 - Adding value to agricultural and forestry products, which also foresees co-financing of investments in processing and marketing of wood.
- Within the framework of Axis 3, the following measures are the particularly pertinent:*
- 311 - Diversification into non-agricultural activities, where support is given to investments in production of energy intended for sale.
- 312 - Support for the creation and development of micro enterprises, where among other options, the co-financing for setting-up of enterprises for the production and sale of energy is foreseen.

3. Market factors

Data sources: SORS, IMAD, CCISS and SFI

Industrial undertakings in Slovenia on average increased their production by 2.5 index points in 2011. Processing industry undertakings' index points have increased by 2.6 compared to the same period in the previous year. The industrial production index of the wood processing and treatment industry grew 3.5 index points, while the manufacture of furniture dropped 8 index points (index 100 – year 2005).

Within the first six months of 2012, the industrial production value in wood processing, manufacture of furniture and paper production shows a decline in all industries in comparison to the corresponding period in 2011: in industry C 16 it declined by 4.1%, in industry C 31 by 14.6% and in paper production by 6.0%. Similar trends are visible in the volume of sales, where all three areas are in a decline: In industry C 16 the volume of sales declined by 2.7% (domestic market – 10.1%), in industry C 31 by 13.3% (domestic market – 16.9%) and in paper production by 5.8% (domestic market – 10.5%).

The performance of the wood processing industry as a whole in 2011 was also negative. In C 31 Manufacture of furniture, the decline in production continued. The largest part of the negative performance of the whole wood processing industry chiefly falls on negative performance in the manufacture of furniture industry (C 31), which amounted to 72% of the whole net loss. Negative performance was very prominent in Manufacture of veneer sheets and wood-based panels industry (C 16.210). Manufacture of other builders' carpentry and joinery (C 16.230), Sawmilling and planing of wood (C 16.100) and Manufacture of wooden containers (C 16.240) industries gained net profit.

In 2011, activity dropped in all construction segments. The decline in residential construction was due to unsold flats, while non-residential construction and civil engineering were negatively impacted by the tightening of the fiscal position and particularly by low investment activity. Compared to 2010, value added dropped by 20.3% y-o-y last year in the construction sector.

In 2011, construction put in place declined by 25.4% in comparison to 2010, while construction of buildings recorded a -39.6% drop and civil engineering activity shrank by 15.0%. Within the first six months of 2012, the value of construction put in place declined by 17.5% in comparison to the corresponding period in 2011, while construction of buildings recorded a -9.6% drop and civil engineering activity dropped by -20.4%.

The floor area of constructed buildings decreased by 6% in 2011 compared to 2010, while the floor area of non-residential buildings increased by 1%. In 2011, a fifth less building permits were issued for the given floor area in comparison to 2010 (7.2% less in regards to their number). In 2012, prospects continue to be poor as within the first six months of 2012, 29% less permits were issued in regards to floor area and 30% less in regards to their number in comparison to the corresponding period in 2011.

The continued decline in the production of this branch, which will be the largest in the domestic market, will be affected by lower domestic consumption, especially in households, and continued decline in construction.

The government supports the bringing together of industry and research organizations through Slovenian economy's developing centers.

Due to wood processing industry trends, additional research of the production chain, the production models, the use of wood products and the carbon footprint assessment of primary wood products with Slovenian origin is taking place in order to install the carbon footprint within the green public procurement policy. Research is taking place on possible contemporary technological forms of beech wood processing with an emphasis on innovative products in line with 3D composite products.

4. Developments in the wood products market

Data sources: SORS, IMAD, CCIS: Paper and Paper Converting Industry Association and Wood Processing and Furniture Association, SFI; recalculations, analysis and interpretation of SFI and Ministry for Agriculture and the Environment

a) Roundwood

The production of forest wood assortments in 2011 was officially at net 3.4 million m³, of which 1.8 million m³ accounted for conifers, which is 15% more than in 2010. The production of conifer wood assortments increased by 13% compared to 2010, and the production of deciduous wood assortments by 17%. In 2011, the scope of acquired wood assortments reached its highest point after WWII or ever since historical data has been recorded. The felling amount is estimated to further increase in 2012 and 2013 due to high buying prices of all wood assortments and the increase in wood fuel use in households.

The average price for conifer logs was EUR 91/ m³ in 2011 in both export and import, which amounts to 10% more both in export and import compared to the previous year. Buying prices in the domestic market (at forest road excluding transport costs) for conifer logs on average reached EUR 66/m³ (8% more compared to 2010), while for fuel wood they reached EUR 40/m³ (21% more compared to 2010).

In the first six months of 2012, conifer logs prices were 6% higher compared to the same period in 2011; buying prices increased in all wood for pulp, wood boards and other industrial wood categories. Conifer logs prices stayed at the same level compared to the corresponding period in 2011.

Roundwood exports in 2011 amounted to 1,135,000 m³ and increased by 34% in volume. As in the previous year, the increase was most prominent in conifer logs (+57%) and deciduous wood for pulp and wood boards (+32%). The import in 2011 increased by 46% compared to 2010 and amounted to 448,000 m³. The main export markets are Austria and Italy. Export to these two countries differs in structure, as mostly deciduous wood of lower quality is exported to Italy, while Austria imports conifer logs.

On the basis of a comparison of foreign trade data we estimate that the export of roundwood in 2012 will increase to about 1,300,000 m³, while the import will remain at about the same level as in 2011. Conifer logs, and in particular deciduous logs, wood for pulp and wood boards export is estimated to increase.

The foreign trade increase in roundwood in 2011 and according to estimates also in 2012 proves a continued decrease in log wood processing and, due to increasing felling amounts, the creation of market surpluses in all roundwood categories. The „Action plan to increase competitiveness of forest-wood chain in Slovenia by the year 2020“, adopted in 2012, defines ambitious objectives for increasing the amounts of industrial wood, processed in Slovenia, in particular log wood.

b) Wood biomass for energy

According to the Statistical Office of the Republic of Slovenia (SORS) data, the share of wood and other solid biomass on primary energy (PE) level was 19.8 PJ in 2006, which amounts to 6.5% of the total available PE, which was 307 PJ, while in 2007 this share amounted to 19.5 PJ (6.4%; total PE: 307 PJ), the share value in 2008 was 21.7 PJ (6.7%; total PE: 324 PJ), and in 2009, the share value was 20.9 PJ (7%; total PE: 292 PJ). According to latest estimates, gross domestic energy consumption on the level of primary energy supply in 2011 is at 305 PJ and is 2.4% higher compared to the previous year. Within that, renewable energy sources (together with waste) accounts for 23 PJ (this is 4% more than in 2010).

According to SORS and SFI estimates, some 180,181 tons of wood biomass were used for energy and heat production for larger energy systems in 2010; in 2009, 177,977 tons were used and in 2008, 256,051 tons were used. This significant reduction in consumption between 2008 and 2009 is the result of decreased use of wood biomass in two largest thermal power plants in Slovenia (co-incineration of coal and wood) and reduced use in industry (predominantly the wood processing industry). We estimate that the decreasing trend of wood biomass use in the wood processing industry has stopped and shall remain at a similar level in the following years.

We estimate that the use of wood biomass in households has been slightly increasing, which is evident from the larger number of households using wood for heat production. The share of households using wood fuel for heat production is on the increase – in 2005, this share amounted to 38.9%, while in 2010 it already amounted to 42.7% (SORS). Recent SORS data from 2011 shows that Slovenian households consumed some 1,314,000 tons of wood fuel in 2010 with a predominance of wood logs (1,269,000 tons), while in 2009, the consumption of

wood logs amounted to 1,230,000 tons – this shows an increase in wood fuel use by more than 6%. Households used about 1,700,000 m³ of roundwood (including bark) in 2009 and 2010 for energy purposes. Around 80% of roundwood comes from forests, while the remaining 20% consists of other types of trees or roundwood from unwooded areas.

The production of pellets and briquettes has been relatively constant since 2006. According to data from the manufacturers of pellets and briquettes, yearly production amounts to about 55,000 to 60,000 tons. A new pellet production plant with smaller capacities started operating in 2011 (6,000 tons), and two other larger pellet production plants in Šoštanj, Krško, are planned to start operating in 2013 (both with a yearly capacity of 60,000 tons). This means that the production of wood pellets in Slovenia is going to triple in the following years and shall amount to around 180,000 tons.

c) Certified wood products

All national forests (244,000 ha) in Slovenia are certified by the FSC system, while the 4 larger private forest owners with a total area of 21,000 ha are certified through a joint FSC certificate. Altogether, 22% of forests are certified.

The number of companies with the FSC certificate for tracking certified wood (CoC) which operate in all wood processing segments is still increasing. These companies cover all segments in the forest-wood production chain. The activity structure shows that the certified companies are export orientated. Companies get certified in order to maintain their export markets, uphold customer demands within the supply chain and increasingly to prove that the products were acquired legally and that they originate in sustainable forestry.

The national certification scheme PEFC for forests and the wood traceability system was confirmed by the PEFC General Assembly in 2007, however in Slovenia, no forests have been certified through this scheme as of yet. At the moment, the PEFC certificate to trace certified wood has been awarded to a relatively small number of companies (a total of 12), most of them belonging to the paper production and processing industries and the trading and brokerage areas.

Owing to the Regulation on green public procurement (2011) and requirements from the EU Timber Regulation, we estimate that the traceability of certified wood will continue to increase in the future.

Due to customer demand (predominantly those from EU countries), the largest Slovenian manufacturer of paper, Vipap Videm Krško d.d., has acquired the European Union Ecolabel („eco-label flower“) for 6 of their ecological products which comply with the criteria set out for copying and graphic paper.

d) Value-added wood products

The Slovenian furniture industry produced a total revenue of EUR 325 million from sales in 2011, which is 12% less compared to 2010. The furniture industry sector ended the fiscal year with a net loss of EUR 19.7 million. The furniture industry recorded a drop of 8.2 index point (index 100 – year 2005) and landed at 40% compared to 2005. In 2011, the share in the net

turnover structure in foreign markets for the furniture industry C31 amounted to 44.1%. The most intensive destinations for furniture exports were Germany, Italy Croatia and Austria.

In the first six months of 2012, the net turnover in furniture sales (activity C31) was 13.3% lower compared to the same period in 2011, while the value of production in the same period decreased by 14.6%.

On the other hand, the activity 16.230 Manufacture of other builders' carpentry and joinery, which consists of the manufacture of prefabricated wooden buildings, builder's joinery (windows, doors, stairs,...) and glued laminated roof trusses and roofing, has shown positive performance results. In 2011, this segment gained an 83% higher net profit compared to 2010. In the sales value structure of the sector 16.230, the manufacture of windows and doors, followed by the manufacture of prefabricated wooden buildings, contributed the largest shares – 55% and 34% respectively.

The manufacture of engineered wood products for construction in Slovenia comprises of the manufacture of glued laminated wood roof trusses (GLULAM) with a yearly production of around 10,000 m³. Glued laminated wood roof trusses are used in prefabricated wooden buildings and civil engineering (bridges, halls,...).

Despite the somewhat small share of wooden residential buildings supposedly presenting 3% according to the census (2002), construction of wooden residential buildings is continually gaining ground. In 2011, the sales of wooden houses manufactured by Slovenian manufacturers increased by 8% (in area). In the last five years, the domestic sales of wooden houses stabilized at a market share of 7% to 8%. Over 50% of wooden houses were exported, and Italy is the main export market. In value terms, Slovenian manufacturers were the largest exporters of prefabricated wooden buildings to Italy in 2011.

Due to environmental and residential advantages of wood as a construction material, the construction of wooden buildings intended for nurseries, schools and other public buildings is on the rise, which is also in compliance with green public procurement policies.

e) Sawn softwood

The scope of sawn conifer wood production remains at a low level and continues to decline. Negative developments in the construction sector, especially in the segment of residential buildings construction, remain a relevant factor in the small production volume of sawnwood. Additionally, the decreased scope of sawn conifer wood production along with bankruptcies of companies is a direct result of unfavorable structures of sawmill plants which aggravate their competitiveness in comparison to large capacity modern plants in neighboring countries. The decrease of the production of sawnwood is also reflected in the growth of conifer logs exports. The predominant part of sawn conifer wood exports comes from Austria and is exported through the Port of Koper in to Africa and the Middle East. The estimated quantity of Slovenian production sawn conifer wood exports into neighboring countries (Croatia, Italy and Austria) decreased 5% in quantity in 2011 and in 2012, we estimate there will be a new decrease in the amount of 4%.

f) Sawn hardwood (temperate and tropical)

2011 and the first six months of 2012 were characterized by bankruptcies of wood processing companies, in particular in the deciduous solid wood furniture manufacture segment. Decreased domestic and foreign market demand is recently especially prominent in the field of beech wood, which has suffered most due to the consequences of hard times in the furniture industry. The export increased by 2% in 2011 and the import by 9% in volume. We estimate that the export will decrease by 5% in 2012 and the import by 7% in volume.

Italy remains the main export market with a 80% share value of sawn deciduous tree wood export and a 90% share value in the sawn beech wood export.

The quantities and values recorded in the production and the import and export of sawn wood from tropical tree species are small. The import of sawn wood from tropical trees amounted to 2,100 m³ in 2011, while its export amounted to 900 m³.

g) Wood-based panels (including veneer)

The wood-based panels industry is predominantly export-orientated in all segments of wood-based panels. The consumption of wood-based panels dropped in 2011, which was due to a decrease in furniture production and construction activities. We estimate that the decreasing trend of consumption will continue also in 2012.

Slovenia is still one of the countries with the largest consumption of particle boards per capita within EU 27. The consumption of particle boards and in particular OSB boards is greatly dependant on the scope of building construction and consequently on the use of builder's joinery and indoor furniture. The consumption of particle boards in Slovenia mainly points at the scope of furniture manufacture. In 2011, 186,000 m³ of particle boards (including OSB boards) were used in the manufacture of furniture and construction. The consumption of particle boards has decreased by more than 30% in the last years compared to 2007, when it amounted to well over a quarter of a million square meters. We estimate that consumption of particle boards will continue to decrease in 2012, in particular due to the decreased scope of furniture manufacture.

The predominant share of particle boards used in Slovenia comes from import, which in quantity decreased by 7% in 2011 compared to the previous year. The largest import quantity of particle boards comes from Austria (45%), followed by Italy, Czech Republic and Croatia. The quantity of export dropped by 7% in 2011. In 2011, 46% of Slovenian particle boards were exported to the countries of the former Yugoslavia, while the export to Italy decreased in quantity by 72%. Since July 2012, the sole Slovenian manufacturer is in the compulsory settlement procedure due to insolvency, and this procedure foresees a termination of the manufacture of particle boards.

The consumption of fiberboards in Slovenia has been standing between 50,000 m³ and 60,000 m³ in the last years. The predominant share of fiberboards consumed in Slovenia comes from import. In 2011, fiberboard import decreased 2% in volume compared to 2010, and we estimate that it will further decrease in 2012. Slovenia's largest import quantity of fibreboards comes from Germany (34%), Italy (26%) and Austria (22%). The export of fibreboards in 2011 remained at the same level as in 2010 and we estimate it will stay at the same level also

in 2012. The export quantity is aimed at Italy (46%), Germany (12%) and the countries of former Yugoslavia (19%).

Lesonit d.o.o., a Slovenian manufacturer of dry-processed fibreboards (MDF), a part of the Fantoni Group, plays an important role in adding value to Slovenian wood, as most of the wood they use in production originates in Slovenia. Using modern technology from Siempelkamp (equipment manufacturer), Lesonit d.o.o. produces mainly incredibly market-attractive extra thin MDF boards with thicknesses from 1,5 mm to 4,5 mm boasting a wide spectrum of use (furniture industry, builder's joinery) which are mainly exported.

During 2009-2011, the manufacture of veneer decreased by a third in comparison to 2004-2006. The great part of raw material comes from import (over 90%). In terms of production, beech wood is predominant, followed by oak wood, high value deciduous tree wood and other tree species wood. In export quantity terms, the EU export markets hold the greatest share of 75%, followed by Slovenia with a 15% share, while the remainder is aimed at export outside the European Union (the countries of former Yugoslavia) and direct processing within companies. In the last years, the manufacture of peeled veneer in Slovenia, same as in Europe, is facing a decreasing trend. During 2009-2011, the manufacture decreased by a fourth in comparison to 2004-2006. The best part of raw material originates in Slovenia (over 90%) – beech wood is predominant, however other tree species (conifers, poplars) were also processed using the peeling procedure. The best part of peeled veneer manufacture (90%) was processed into products within the framework of peeled veneer manufacturers. Slovenia is a markedly net exporter of veneer, especially deciduous tree veneer. Export quantity is predominated (calculated in m³) by deciduous tree veneer (86%), followed by tropical tree species veneer (7%) and conifer tree veneer (7%). The quantity of exports in 2011 increased by 16%, while this year we estimate a decrease by 17%. Veneer export is mainly aimed at Italy, Austria and Germany, both in terms of value and quantity. Import is predominated (calculated in m³) by deciduous tree veneer (95%), followed by tropical tree species veneer (3%) and conifer tree veneer (2%). In 2011, the quantity of veneer import decreased by 6%, while this year we estimate a further decrease by 25%.

Plywood panel production is dominated by tri-layer shuttering composite conifer panels. LIP Bled, a Slovenian manufacturer of these panels, is among five of the largest manufacturers in Europe. Slovenian manufacturers also produce plywood panels from beech veneer sheets. In 2012, the largest plant for the manufacture of plywood panels in Slovenia stopped production of plywood panels from beech veneer plywood panels. The best part of plywood panels (KN 4412) is exported to the European markets (Italy, Germany, Switzerland and Austria). The quantity of exports in 2011 remained at the same level as the previous year, while this year we estimate a 21% drop in exports. In 2011, import remained at the same level as the previous year, and we estimate that 2012 will record the same export quantities.

h) Pulp and paper

Due to investments in technology, the scope of mechanical pulp production is increasing; in 2011, the production increased by 50%. The quantity of pulp imports decreased by 6% in 2011 and pulp exports were negligible.

The quantity of paper, cardboard, card paper and toilet paper production decreased by 4% in 2011 and amounted to 673,000 tons. In 2011, the whole Manufacture of paper and paper products industry (C 17) recorded a production value similar to 2010 (index 100,7), while the

sales value recorded a slight increase in 2011 (0,4%). In the first six months of 2012, the whole Manufacture of paper and paper products industry (C 17) recorded a production value drop of 6% in comparison to the corresponding period in 2011.

In 2011, the import quantity of paper, cardboard, card paper and toilet paper increased by 20%, while the exports quantity increased by 5%. We estimate that 2012 will record a similar quantity level of export and a 5% increase in export compared to 2011.

i) Forestry carbon market

Slovenia is a contracting party to the United Nations Convention on Climate Change and to the Kyoto Protocol. Within the scope of the Kyoto Protocol, Slovenia can claim a sink of 1.3 Mt CO₂ equivalents / year on account of increasing carbon stock in forests, a result of planned forest governance. The estimated CO₂ sink for the entire Land use, land-use change and forestry sector (apart from forestry, the sector also includes agricultural use, settlements, wetlands and other grounds) was -8.5 Gg CO₂ in 2010. Net CO₂ emission in the wooded land sector was -11.1 Gg CO₂. Slovenia does not implement Joint Implementation (JI) nor Clean Development Mechanism (CDM) projects.

Within the frameworks of the EU climate and energy package, Slovenia should reduce its total emissions by 6% compared to those recorded in 2005 by 2020. At the same time, Slovenia should reduce emissions from sectors not included in the emission trading system (ETS) by 21%. In sectors not included in the emission trading system (non-ETS), Slovenia can increase emissions by up to 4% according to their emissions in 2005.

j) Innovative wood products

The production of chemicals from wood has an almost 100-year-old tradition in Slovenia (processing of chestnut wood). During the last period, it has been intensively developing with the aim to research and industrially produce new products. In industry term, chemicals from wood are used in the leather trade and industry (furfural, sodium acetate trihydrate,...) and more recently, new extracts are being used in new areas of use, i.e. as additives in animal nutrition, oenology and food supplements for human use. Recent development is aimed at pharmaceutical industry products (extracts with antioxidant effects).

On the basis of research and development, a pilot production of wood liquidification and research of industrial use possibilities for this product are being carried out.

5. Tables

a) Economic indicators

| MAIN INDICATORS | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|--------|--------|--------|--------|--------|----------------------|--------|--------|
| | | | | | | Spring forecast 2012 | | |
| GDP (real growth rates, in %) | 6.9 | 3.6 | -8.0 | 1.4 | -0.2 | -0.9 | 1.2 | 2.2 |
| GDP in EUR million (current prices and current exchange rate) | 34,562 | 37,280 | 35,311 | 35,416 | 35,639 | 35,641 | 36,589 | 38,059 |
| GDP per capita, in EUR (current prices and current exchange rate) | 17,120 | 18,437 | 17,295 | 17,286 | 17,364 | 17,428 | 17,860 | 18,551 |
| GDP per capita (PPS) ¹ | 22,100 | 22,700 | 20,500 | 20,700 | | | | |
| GDP per capita (PPS EU27=100) ¹ | 88 | 91 | 87 | 85 | | | | |
| Gross national income (current prices and current fixed exchange rate) | 33,828 | 36,232 | 34,593 | 34,894 | 35,050 | 34,841 | 35,774 | 37,222 |
| Gross national disposable income (current prices and current fixed exchange rate) | 33,601 | 35,871 | 34,344 | 34,940 | 35,165 | 34,884 | 35,860 | 37,236 |
| Rate of registered unemployment | 7.7 | 6.7 | 9.1 | 10.7 | 11.8 | 12.9 | 13.5 | 13.3 |
| Standardised rate of unemployment (ILO) | 4.9 | 4.4 | 5.9 | 7.3 | 8.1 | 8.8 | 9.3 | 9.1 |
| Labour productivity (GDP per employee) | 3.4 | 1.0 | -6.3 | 4.0 | 1.6 | 1.4 | 2.4 | 2.5 |
| Inflation, ² year average | 3.6 | 5.7 | 0.9 | 1.8 | 1.8 | 2.0 | 1.8 | 1.9 |
| Inflation, ² end of the year | 5.6 | 2.1 | 1.8 | 1.9 | 2.0 | 2 | 1.9 | 2.0 |
| INTERNATIONAL TRADE – BALANCE OF PAYMENTS STATISTICS | | | | | | | | |
| Exports of goods and services ³ (real growth rates, in %) | 13.7 | 2.9 | -17.2 | 9.5 | 6.8 | 1.4 | 5.4 | 6.1 |
| Exports of goods | 13.9 | 0.5 | -18.1 | 11.0 | 7.7 | 1.3 | 5.8 | 6.5 |
| Exports of services | 13.2 | 14.3 | -13.7 | 4.1 | 3.6 | 1.7 | 3.7 | 4.3 |
| Imports of goods and services ³ (real growth rates, in %) | 16.7 | 3.7 | -19.6 | 7.2 | 4.7 | -1.6 | 4.9 | 5.5 |
| Imports of goods | 16.2 | 3.0 | -20.8 | 8.0 | 5.7 | -2.0 | 5.0 | 5.6 |
| Imports of services | 19.7 | 8.2 | -12.0 | 2.6 | -1.4 | 0.7 | 4.3 | 4.6 |
| Current account balance, in EUR million | -1646 | -2574 | -456 | -297 | -168 | 226 | 423 | 588 |
| As a per cent share relative to GDP | -4.8 | -6.9 | -1.3 | -0.8 | -0.5 | 0.6 | 1.2 | 1.5 |
| Gross external debt, in EUR million | 34,783 | 39,234 | 40,294 | 40,699 | 41,444 | 42,382 ⁵ | | |
| As a per cent share relative to GDP | 100.6 | 105.2 | 114.1 | 114.9 | 116.3 | | | |
| Ratio of USD to EUR | 1.371 | 1.471 | 1.393 | 1.327 | 1.392 | 1.320 | 1.322 | 1.322 |
| DOMESTIC DEMAND – NATIONAL ACCOUNTS STATISTICS | | | | | | | | |
| Private consumption (real growth rates, in %) | 6.1 | 3.7 | -0.1 | -0.7 | -0.3 | -1.2 | 0.2 | 1.5 |
| As a % of GDP ⁴ | 52.4 | 53.2 | 55.8 | 56.0 | 56.8 | 57.1 | 56.6 | 56.2 |
| Government consumption (real growth rates, in %) | 0.6 | 6.1 | 2.9 | 1.5 | -0.9 | -3.5 | -0.7 | 0.3 |
| As a % of GDP ⁴ | 17.3 | 18.1 | 20.3 | 20.8 | 20.6 | 19.8 | 19.3 | 19.0 |
| Gross fixed capital formation (real growth rates, in %) | 13.3 | 7.8 | -23.3 | -8.3 | -10.7 | -1.5 | 4.0 | 3.0 |
| As a % of GDP ⁴ | 27.8 | 28.8 | 23.4 | 21.6 | 19.5 | 19.4 | 20.0 | 20.3 |
| Sources of data: SORS, BS, Eurostat, calculations and forecasts by IMAD (Spring Forecast, March 2012). Notes: ¹ Measured in purchasing power standard. ² Consumer price index. ³ Balance of payments statistics (exports F.O.B., imports F.O.B.); real growth rates are adjusted for inter currency changes and changes in prices on foreign markets. ⁴ Shares GDP are calculated for GDP in current prices at fixed exchange rate (EUR=239.64). ⁵ End April 2012. | | | | | | | | |

Source: IMAD (Institute of Macroeconomic Analysis and Development of the Republic of Slovenia), Slovenian Economic Mirror No. 7-8, Vol. XVIII, 2012

b) Production and foreign trade

| Product Code | Product | Unit | Historical data | | Revised | Estimate | Forecast |
|--------------|---|---------------------|-----------------|-------|---------|----------|----------|
| | | | 2010 | 2011 | 2011 | 2012 | 2013 |
| 1.2.1.C | SAWLOGS AND VENEER LOGS, CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 1.180 | 1.297 | 1.297 | 1.328 | 1.359 |
| | Imports | 1000 m ³ | 10 # | 14 # | 16 | 6 | 6 |
| | Exports | 1000 m ³ | 257 # | 377 # | 403 | 502 | 533 |
| | Apparent consumption | 1000 m ³ | 933 | 935 | 910 | 832 | 832 |
| 1.2.1.NC | SAWLOGS AND VENEER LOGS, NON-CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 272 | 284 | 284 | 277 | 295 |
| | Imports | 1000 m ³ | 35 # | 49 # | 41 | 31 | 31 |
| | Exports | 1000 m ³ | 93 # | 117 # | 113 | 161 | 177 |
| | Apparent consumption | 1000 m ³ | 214 | 217 | 212 | 147 | 149 |
| 1.2.1.NC.T | of which, tropical logs | | | | | | |
| | Imports | 1000 m ³ | 2 # | 2 # | 1 | 1 | 1 |
| | Exports | 1000 m ³ | 0 # | 0 # | 0 | 0 | 0 |
| | Net Trade | 1000 m ³ | 2 | 2 | 1 | 1 | 1 |
| 1.2.2.C | PULPWOOD (ROUND AND SPLIT), CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 187 | 222 | 222 | 224 | 227 |
| | Imports | 1000 m ³ | 49 # | 49 # | 88 | 111 | 145 |
| | Exports | 1000 m ³ | 80 # | 68 # | 102 | 134 | 120 |
| | Apparent consumption | 1000 m ³ | 156 | 203 | 208 | 201 | 252 |
| 1.2.2.NC | PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 129 | 158 | 158 | 216 | 235 |
| | Imports | 1000 m ³ | 99 # | 97 # | 101 | 62 | 55 |
| | Exports | 1000 m ³ | 135 # | 178 # | 182 | 218 | 200 |
| | Apparent consumption | 1000 m ³ | 93 | 78 | 77 | 60 | 90 |
| 3 + 4 | WOOD RESIDUES, CHIPS AND PARTICLES | | | | | | |
| | Domestic supply | 1000 m ³ | 436 C | 457 C | 396 | 390 | 379 |
| | Imports | 1000 m ³ | 506 C | 611 C | 611 | 523 | 400 |
| | Exports | 1000 m ³ | 516 C | 656 C | 656 | 579 | 550 |
| | Apparent consumption | 1000 m ³ | 426 | 411 | 351 | 334 | 229 |
| 1.2.3.C | OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 52 | 63 | 63 | 63 | 63 |
| 1.2.3.NC | OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 21 | 27 | 27 | 26 | 28 |
| 1.1.C | WOOD FUEL, CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 136 | 177 | 177 | 184 | 192 |
| 1.1.NC | WOOD FUEL, NON-CONIFEROUS | | | | | | |
| | Removals | 1000 m ³ | 968 | 1.160 | 1.159 | 1.078 | 1.107 |

| Product Code | Product | Unit | Historical data | | Revised | Estimate | Forecast |
|--------------|---|---------------------|-----------------|-------|---------|----------|----------|
| | | | 2010 | 2011 | 2011 | 2012 | 2013 |
| 5.C | SAWNWOOD, CONIFEROUS | | | | | | |
| | Production | 1000 m ³ | 625 | 534 E | 610 | 557 | 557 |
| | Imports | 1000 m ³ | 874 | 726 | 726 | 810 | 810 |
| | Exports | 1000 m ³ | 806 | 680 | 680 | 725 | 725 |
| | Apparent consumption | 1000 m ³ | 692 | 580 | 656 | 642 | 642 |
| 5.NC | SAWNWOOD, NON-CONIFEROUS | | | | | | |
| | Production | 1000 m ³ | 135 | 108 E | 93 | 61 | 61 |
| | Imports | 1000 m ³ | 85 | 94 | 94 | 89 | 85 |
| | Exports | 1000 m ³ | 70 | 72 | 72 | 69 | 69 |
| | Apparent consumption | 1000 m ³ | 150 | 130 | 115 | 81 | 77 |
| 5.NC.T | of which, tropical sawnwood | | | | | | |
| | Production | 1000 m ³ | 0 E | 0 | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 1 | 2 | 2 | 3 | 3 |
| | Exports | 1000 m ³ | 0 | 1 | 1 | 1 | 1 |
| | Apparent consumption | 1000 m ³ | 1 | 1 | 1 | 2 | 2 |
| 6.1 | VENEER SHEETS | | | | | | |
| | Production | 1000 m ³ | 20 C | 14 C | 29 | 25 | 23 |
| | Imports | 1000 m ³ | 10 C | 9 C | 9 | 7 | 7 |
| | Exports | 1000 m ³ | 18 C | 21 C | 21 | 18 | 16 |
| | Apparent consumption | 1000 m ³ | 11 | 2 | 17 | 14 | 14 |
| 6.1.NC.T | of which, tropical veneer sheets | | | | | | |
| | Production | 1000 m ³ | 1 | 1 E | 1 | 1 | 1 |
| | Imports | 1000 m ³ | 0 | 0 | 0 | 0 | 0 |
| | Exports | 1000 m ³ | 1 | 1 | 1 | 1 | 1 |
| | Apparent consumption | 1000 m ³ | 0 | 0 | 0 | 0 | 0 |
| 6.2 | PLYWOOD | | | | | | |
| | Production | 1000 m ³ | 100 C | 87 C | 81 | 73 | 73 |
| | Imports | 1000 m ³ | 23 C | 22 C | 22 | 22 | 22 |
| | Exports | 1000 m ³ | 67 C | 63 C | 67 | 53 | 53 |
| | Apparent consumption | 1000 m ³ | 56 | 46 | 36 | 42 | 42 |
| 6.2.NC.T | of which, tropical plywood | | | | | | |
| | Production | 1000 m ³ | 0 E | 0 E | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 7 | 6 | 5 | 5 | 5 |
| | Exports | 1000 m ³ | 0 | 0 | 0 | 0 | 0 |
| | Apparent consumption | 1000 m ³ | 6 | 5 | 5 | 5 | 5 |
| 6.3 | PARTICLE BOARD (including OSB) | | | | | | |
| | Production | 1000 m ³ | 130 | 130 N | 130 | 100 | 0 |
| | Imports | 1000 m ³ | 164 | 152 | 152 | 139 | 189 |
| | Exports | 1000 m ³ | 104 | 96 | 96 | 81 | 30 |
| | Apparent consumption | 1000 m ³ | 190 | 186 | 186 | 158 | 159 |
| 6.3.1 | of which, OSB | | | | | | |
| | Production | 1000 m ³ | 0 E | 0 E | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 11 | 11 | 11 | 12 | 12 |
| | Exports | 1000 m ³ | 0 | 0 | 0 | 0 | 0 |
| | Apparent consumption | 1000 m ³ | 11 | 11 | 11 | 12 | 12 |
| 6.4 | FIBREBOARD | | | | | | |
| | Production | 1000 m ³ | 110 C | 120 C | 120 | 120 | 125 |
| | Imports | 1000 m ³ | 54 C | 53 C | 52 | 52 | 52 |
| | Exports | 1000 m ³ | 119 C | 119 C | 119 | 119 | 124 |
| | Apparent consumption | 1000 m ³ | 45 | 54 | 53 | 53 | 53 |
| 6.4.1 | Hardboard | | | | | | |
| | Production | 1000 m ³ | 0 E | 0 | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 13 | 11 | 11 | 8 | 8 |
| | Exports | 1000 m ³ | 5 | 4 | 4 | 5 | 5 |
| | Apparent consumption | 1000 m ³ | 9 | 8 | 7 | 3 | 3 |
| 6.4.2 | MDF (Medium density) | | | | | | |
| | Production | 1000 m ³ | 110 | 120 N | 120 | 120 | 125 |
| | Imports | 1000 m ³ | 37 | 37 | 37 | 39 | 39 |
| | Exports | 1000 m ³ | 114 | 115 | 115 | 114 | 119 |
| | Apparent consumption | 1000 m ³ | 33 | 42 | 42 | 45 | 45 |
| 6.4.3 | Other fibreboard | | | | | | |
| | Production | 1000 m ³ | 0 E | 0 | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 4 | 5 | 4 | 4 | 4 |
| | Exports | 1000 m ³ | 0 | 0 | 0 | 0 | 0 |
| | Apparent consumption | 1000 m ³ | 4 | 5 | 4 | 4 | 4 |
| 7 | WOOD PULP | | | | | | |
| | Production | 1000 m.t. | 43 C | 43 C | 43 | 66 | 80 |
| | Imports | 1000 m.t. | 211 C | 198 C | 198 | 204 | 204 |
| | Exports | 1000 m.t. | 0 C | 0 C | 0 | 5 | 5 |
| | Apparent consumption | 1000 m.t. | 254 | 241 | 241 | 265 | 279 |
| 10 | PAPER & PAPERBOARD | | | | | | |
| | Production | 1000 m.t. | 750 C | 788 C | 673 | 646 | 673 |
| | Imports | 1000 m.t. | 260 C | 307 C | 307 | 319 | 302 |
| | Exports | 1000 m.t. | 570 C | 535 C | 535 | 525 | 535 |
| | Apparent consumption | 1000 m.t. | 440 | 559 | 445 | 440 | 440 |