

# UNECE Timber Committee Statement on Forest Products Markets in 2011 and 2012

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## *UNECE Region forest products markets rebound after two years of falling production and consumption Forest Products contributing to the green economy*

The Committee reviewed developments in forest products markets as reported in the *Forest Products Annual Market Review, 2010-2011*, as well as experts' presentations, country market statements and forecasts.

### **I. Overview of forest products markets in 2011 and 2012**

1. A revival in demand for forest products across the UNECE region in 2010 (+5.6%)<sup>1</sup>, following two years of falling production and consumption, led to moderate optimism that the industry may have turned a corner. Despite this rebound, both production and consumption remain below the levels of 2006/2007. Consumption of the main forest products rose overall by 4.1% in North America, by 6.6% in Europe and 6.3% in the Commonwealth of Independent States (CIS). The Timber Committee forecasts an upturn in wood and paper products markets in 2011 and 2012. A longed-for revival in the fortunes of the housing and construction markets has not materialised. The North American housing market, one of the principal drivers for demand of wood products, remains weak. There was an improvement in housing starts in Canada in 2010 but starts have since fallen by 6.4% in the first half of 2011. Repairs and renovation and non-residential construction have lifted demand for sawn softwood and panels and now account for a larger share of consumption than new housing. Figures released by the US Census Bureau show that building permits issued there in the months of 2011 have generally been higher than for the equivalent months in 2010. Before a full recovery of UNECE region forest products markets can be sustained, construction spending will need to rise sharply and there needs to be a much stronger recovery in US housing starts than has been seen so far.

2. There is no consistent picture of recovery across the UNECE region. Some product sectors have seen strong improvement in consumption. For instance, the sawn softwood sector in Europe saw consumption rise by 12.5% in 2010. Demand for panels in the Russian Federation increased sharply between 2009 and 2010: plywood consumption rose by 46.5% and, for particle board, the increase was 24.6%. Competition for wood has increased across all sectors and prices have risen accordingly. The well-established price-indices for

sawlogs, for instance, show record price levels in 2010. However, prices in real terms are probably 30% lower than the peaks seen in the mid-1990s. This is a key issue for most sectors, which have had to deal with real cost increases for almost all the components of production, e.g. energy, resins and chemicals, transport, and wood. Though sale prices for their products have also risen, in most cases, these have not compensated fully for higher production costs. Clearly, this situation is not sustainable and, perhaps, the industry needs to gain insight in to the underlying reasons: prices for most of the range of products are failing even to keep up with general cost inflation, in many cases.

### **Policies affecting forest products markets**

3. International climate change policies, as well as sustainable consumption and production policies, will affect the forest sector, though it is not entirely clear what the precise impact might be. Negotiations are continuing to develop a legally-binding successor to the Kyoto Protocol, which expires in 2012. Though discussions in Cancún, Mexico concluded without agreement on this major issue, there was progress in agreeing a review process for REDD+ and LULUCF (Land-use and land-use change in forestry). Discussions will continue at COP-17, in Durban, South Africa, from 29 November to 9 December.

4. European energy policy aims to counteract increasing dependence on imported fossil fuels by reducing significantly overall demand for energy, as well as meeting a growing proportion of energy needs from renewable sources, including woody biomass from agriculture and forestry. There is evidence that competition for woody biomass may be producing higher wood raw material prices in several parts of Europe, giving rise to concern among industrial wood users about the availability and cost of future wood supplies. This topic is under examination by the European Economic and Social Committee's Consultative Commission on Industrial Change, which has expressed concern about the market effects of EU policies and has called for a detailed examination of the market dynamics of wood raw material for industrial use and for the renewable energy sector.

5. Conversely, the rise of the wood energy market has benefited forest owners, encouraging forest management by opening up market opportunities for lower quality wood and pre-commercial thinning.

<sup>1</sup> Comparisons with 2009 are drawn from the *Forest Products Annual Market Review, 2010-2011*.

Sawmills too have benefited from buoyant markets for their co-products, helping to reinforce the profitability of the sawmill sector in several countries.

6. EU criteria for biomass sustainability are currently under discussion, which is leading to uncertainty in the market.

7. Green building continues to gain momentum across the UNECE region, with growing government recognition that wood can make a major contribution in both energy efficiency and reduced carbon footprint, compared with materials such as steel and concrete. Several governments have taken the lead in introducing policies to make wood the construction material of first choice e.g. the Wood First initiative in Canada. There have been success stories throughout the region with a growing number of multi-storey buildings constructed entirely in wood, as well as individual iconic buildings and structures e.g. the Parasol in Seville, Spain. However, the absence of commonly agreed definitions or standards between green building codes continues to make it difficult to compare how timber is addressed in green building policies throughout the region: developing a common approach to standards may benefit the green building movement and thereby timber's standing as a truly green construction material.

8. Government efforts to combat illegal logging will receive a boost with the entry into force in 2013 of the EU Timber Regulation, requiring the exercise of due diligence in verifying the legality of timber being placed in the EU market for the first time. In the US, for the first time, action is being taken under the Lacey Act, against a company alleged to have imported illegally-sourced wood.

#### **Forest products-contributing to the green economy**

9. The forest sector is already a major contributor to the green economy. Sustainably-managed forests across the UNECE region provide a range of goods and services that support millions of jobs, many of which are in economically-fragile rural areas. In addition, the forests themselves are major reservoirs of stored carbon. Forests provide a key habitat for a diverse range of wildlife and plants. Through their potential for recreation, they help to promote health and they are a wonderful asset for education – 'a living classroom'. The development of an Action Plan by UNECE/FAO will help to identify new ways for the forest sector to contribute even more effectively to the green economy in member states.

10. The forest sector continues, through innovation and on-going improvement, to enhance its production processes. Reducing energy and water consumption, delivering a higher proportion of end-products, all help to lessen the sector's environmental impact. By encouraging people to choose forest products in preference to materials with higher carbon footprints,

the sector can continue to build up its contribution to the green economy. Life cycle analysis of wood products should show convincingly wood's greener credentials in comparison with alternative more carbon-intensive materials.

11. Wood's carbon neutrality as renewable energy is helping society at large to 'go green': replacing carbon-intensive fossil fuels, providing an incentive to forest owners to bring under-managed woodland into sustainable management and generating new jobs. The carbon neutrality of wood is, however, not a universally held view and reviews being undertaken by the EU and the US Environmental Protection Agency may challenge wood's status.

12. New materials, such as wood polymer composites, combine wood co-products from manufacturing and recycled plastic waste to make products that have enhanced durability and stability and extend the market for, what are still, essentially, wood products. Moves towards bio-refining in the pulp sector are opening up new possibilities and can provide a focus for integrated development with industries that can use the products from bio-refining.

13. In the longer term, on-going research into the development of cellulosic bio-based fibres and new synthetic polymers, offers exciting possibilities. If viable commercial-scale processes for this transformation of cellulose can be achieved, many new markets would open up including body-parts and components in the automotive industry, which could be made of 'wood', replacing steel and plastics.

#### **Certified forest products markets**

14. The area of forests certified for sustainable management increased between May 2010 and May 2011 by 7% to reach 375 million hectares globally, with the main increases, as in recent years, occurring in North America and the Russian Federation. The roundwood supply from certified forests totalled 447 million m<sup>3</sup> in 2010, or about 25% of the world's industrial roundwood supply, a slight decline from 2009.

15. The continued lack of certified forest area in tropical regions remains a concern, given that preventing deforestation in the tropics was among the key drivers for introducing forest certification. The tropics hold the most significant potential for future expansion of certification. Despite recent positive developments in Africa and South America, only roughly 2% of tropical forest is currently certified.

16. There is optimism that certification and the use of CoC certificates will continue to grow, though at a substantially lower rate than prior to 2008. Growth will be difficult without measures to make certification more attractive and less costly for forest owners, particularly

the large numbers of non-industrial and small private landowners. Tightening of legislation by the US and EU to ensure legality and encourage sustainability of traded wood may give a further boost to certification.

## II. Economic and construction developments

17. The global economy is showing some potential signs of recovery, though the speed of recovery is variable, with developing Asia showing the fastest growth of around 8%, followed by other developing economies in central and eastern Europe and the CIS. The advanced economies of western Europe and North America trail well behind, with an annual growth rate in the region of only 2%. Currency exchange rate fluctuations have continued to add to the general economic turmoil. GDP may grow modestly across the UNECE region in 2012, but there will be some countries of the eurozone where growth remains highly uncertain. There are still worries that some economies may experience a double-dip recession.

18. The construction and the housing markets, in particular, remain uncertain, reflecting the continuing economic uncertainty. While signs were emerging that the bottom may have been reached in terms of the dramatic fall in new housing starts witnessed since 2006, there is still no clear picture. A thin housing recovery in Europe in 2010 is not expected to continue through 2011. In fact, there are already strong indications that, in several countries, construction activity slowed down, beginning in early 2011 and is expected to continue to slow in 2012. This is unlikely to be consistent across the subregion: some countries, such as Germany and Poland are seeing a stronger revival than other countries.

19. The picture in North America is not encouraging. US housing starts have shown little promise of recovery after the dramatic fall from the peak of 2.2 million in 2005 to 554,000 in 2009, the lowest level for more than 60 years. Figures for 2011 suggest there has been a negligible lift to 590,000. For example, The National Association of Homebuilder's (NAHB) had forecast 700,000 starts for 2012, which itself had been revised downwards by 20% from an earlier forecast of 873,000. Their most recent forecast, however, has again been revised downwards to 686,000. Other forecasters see only a small chance that there will be any increases beyond 600,000 units for 2012.

## III. Market sector developments

### Wood raw materials

20. After two successive years of falling harvests, the volume of industrial roundwood harvested across the UNECE region rebounded in 2010, to an estimated 950 million m<sup>3</sup> (880 million m<sup>3</sup> in 2009), an increase of 8%. However, this is still the second lowest recorded volume since 1966. Until 2006, the harvest of industrial

roundwood in North America exceeded the combined volume harvested annually in Europe and the CIS by 80 million m<sup>3</sup>. The steep decline in harvesting in North America, which has seen a 30% drop since 2006, means that the situation is now reversed: Europe and the CIS together harvested 100 million m<sup>3</sup> more in total than North America in 2010. When wood harvested for fuel is included (200 million m<sup>3</sup>), the UNECE total rises to 1,150 million m<sup>3</sup>, which compares with total global wood removals of rather more than 3,000 million m<sup>3</sup>. The volume of roundwood (industrial and fuel) harvested in 2010 in Europe, at 480 million m<sup>3</sup>, was the highest witnessed since 2007. This can be attributed to increased sawnwood production to meet both domestic and export demand, and higher consumption of wood-fibre by pulp mills in the Europe subregion.

21. The level of wood removals is expected to increase in Europe by only 1.5% in 2011 and by less than 1% in 2012, as the initial rebound appears to stall. In the United States, it seems that any increase is likely to be negligible.

22. The imposition of Russian log export tariffs, from 1 April 2008, reduced log exports dramatically, especially to Finland, Germany, South Korea and Japan. Exports more than halved between 2006 and 2010. Exports to China did not fall quite so sharply and, in 2010, China accounted for 70% of Russian log exports. With demand for logs continuing to expand, China has looked to other sources, and North America has benefited. Log exports from the US to Asia, which had been running at about 10 million m<sup>3</sup> from 2005 to 2009, jumped suddenly in 2010 to 16 million m<sup>3</sup>. Canada too has benefited, though to a smaller extent, with log exports rising by 48% in 2010 to reach 4 million m<sup>3</sup>. Prices too have risen and there is a significant price differential now between the western seaboard of North America and the US South, where a combination of storm damage and floods has resulted in a glut of wood on the local market. Reports have been circulating that, as part of the negotiations associated with the Russian Federation's application to be admitted to the World Trade Organization (WTO), that log export taxes may be reduced.

### Wood energy

23. The global wood energy market has continued to expand, encouraged by policy commitments to reduce reliance on fossil fuels and driven by market factors, such as sharp increases in the price of other energy sources such as oil and gas. Among the policy drivers is the EU's ambitious target to lift the share of renewable energy from the present, roughly 9% of total energy needs, to 20% by 2020, accompanied by a target to reduce overall energy consumption by 20% by 2020. Currently, wood energy accounts for almost half of the renewable energy supply in the EU-27 countries, the largest single source of renewable energy at present. In future, agricultural biomass and dedicated energy

crops may be expected to make a more significant contribution to renewable energy portfolios.

24. Other wood-using industries are wary of the market impacts of a rapid and significant growth in demand for woody biomass because of associated effects on prices for solid wood and co-products from sawmilling e.g. chips and sawdust. Industry has always faced competition for wood raw material but some industry sectors take the view that incentives designed to give a boost to renewable energy based on biomass, may be distorting procurement markets and driving woody biomass prices to levels that may affect the viability of some wood product manufacturing. Wood manufacturing industries and wood energy companies are often mutually supportive and inter-dependent so that, together, they become more competitive in relation to other materials and energy sources.

25. It is not only in Europe that renewable energy is expanding. The same trend can be observed in North America. In the US, the demand for wood to meet projected energy needs is forecast to more than double between 2011 and 2014, from around 43 million m<sup>3</sup> to almost 112 million m<sup>3</sup>. While this increase seems dramatic, it represents only a fraction of the North American market. Recorded harvests for North America in 2005 and 2006 were more than 680 million m<sup>3</sup> (473 million m<sup>3</sup> in 2010).

26. Large utility companies, especially in countries such as the United Kingdom, appear to be embarking on a rapid expansion of electricity generation, based on biomass (fired alone or co-fired with coal), and are looking to North and South America and the Russian Federation for guaranteed long-term supplies of wood fuel. It is expected that there will be a huge expansion in the production of industrial-quality wood pellets to help meet the projected energy demands.

27. In the Russian Federation, new policies introduced in 2010 aim at increasing energy efficiency and reducing energy consumption, supported by public funding of \$300 billion (spread over 10 years). Pellet production in the Russian Federation in 2010 has been estimated to be around 1 million tonnes, of which 80% is exported, mainly to Europe. What is currently the world's largest pellet manufacturing plant, with a capacity of one million tonnes per annum, started production in Spring 2011 in the Leningrad region. Plans exist to construct new plants at 13 locations in northwest and central Russia, which together will have a projected capacity of 3 million tonnes.

28. Natural disasters, such as the tsunami in Japan with the subsequent catastrophe in the Fukushima nuclear plant, have caused a rethink of energy policies in several industrialized countries. Decisions to phase out nuclear power by the governments of Germany (March 2011) and Switzerland (September 2011),

present an opportunity for renewable energy, including wood energy, to meet future energy demand. The wood energy market has a vast potential for expansion.

### **Carbon markets**

29. The world carbon trade went into structural decline in 2010 as the globally-traded volume of CO<sub>2</sub>e fell to 6.9 billion tonnes with a transaction value of \$141.8 billion. The European Union Emissions Trading Scheme (EU-ETS) continued to be the largest market, accounting for 84% of global carbon trade valued at \$119.8 billion. Other sub-national compliance schemes diminished in size, and countries hesitated to roll out new national cap-and-trade schemes amidst economic uncertainty. Limited progress on a post-2012 Kyoto agreement and in the UNFCCC negotiation process, as well as the lack of operational details for REDD+, inhibited full leverage of the forestry sector on carbon markets.

30. The voluntary carbon market (VCM), the main growth segment for forest carbon projects, reached a record transaction volume of 132 million tonnes of CO<sub>2</sub>e, valued at \$424 million – still a tiny fraction of global carbon business. The first transactions on REDD+ forest conservation project credits took place in 2010. A further 13 new Clean Development Mechanism (CDM) afforestation/reforestation projects (A/R) were registered by June 2011, bringing the total to 63. The key activity was planting forest for industrial or commercial reasons. Latin America was the main incubator. Canada, Spain and some other ECE countries have partnered as “project participants” because they support the World Bank BioCarbon Fund. This indicates their interest in eventually buying the credits from those projects.

31. Forest industries in the UNECE region are investing in biomass energy and energy efficiency projects in exchange for carbon credits. Most are taking place under CDM, based around sawmill co-products and forest residue/biomass energy projects. There are four on-going wood-waste to energy and biomass utilization JI (Joint Implementation) projects on the Russian Federation's pulp and paper mills, and several biomass retrofit and cogeneration projects in Eastern Europe.

32. When the EU-ETS enters Phase 3 in 2013, the European pulp and paper industry faces competitive auctions of European Union Allowances and binding emission benchmarks against reference emission levels. This will have a direct impact on competitiveness, changing the playing field within the sector and within Europe, and additionally with global competitors. The EU decision that no free credits will be supplied for any electricity production is a major setback for combined heat and power production (CHP). The benchmarks for free allocation, although set in a balanced process, will create large cost differences between mills and countries (e.g. those still burning coal).



### Sawn softwood

33. Sawn softwood markets improved in 2010 in all the UNECE subregions, except the CIS, which remained stable. After a downturn in consumption in 2009 of 13.8%, consumption in 2010 recovered by 9.6%, comparing favourably with the TC's forecast last year of 7.5%.

34. European output in 2010 rose by over 8% to 99.3 million m<sup>3</sup> and is forecast to reach 100.1 million m<sup>3</sup> in 2011 and 102 million m<sup>3</sup> in 2012. Consumption was 87.9 million m<sup>3</sup> in 2010 (up 12%) and 88.5 million m<sup>3</sup> in 2011. Exports to the North African and the Middle East markets kept growing steadily in 2010 but were impacted by the 'Arab Spring' of 2011. Exports to the United States have dropped even further. The growing market for bio-energy at many European sawmills has been somewhat of a stabilizing factor, helping sawmills pass through the most difficult period in the market.

35. After the dramatic falls in output from North America's sawn softwood industry following the economic crisis, output in 2010 recovered slightly but it still 45% below the peak of 2005. Capacity utilization rates hit record-low levels of 50% in 2009. As forecast by the TC in 2010, Canada's output of sawn softwood grew by almost 20%, reflecting an improvement in domestic demand but also a significant increase in exports, especially to China. Import statistics released by China Customs in July 2011, indicate that Canadian sawn softwood exports to China in the first six months of 2011 were almost double the figure for the equivalent six months in 2010 (3.14 million m<sup>3</sup> against 1.6 million m<sup>3</sup>). The US softwood market remains highly uncertain, but US production gained 5.0% in 2010 and increased further by 8% through the first half of 2011. For 2011, Canada is forecast to produce 38.8 million m<sup>3</sup> (although Eastern Canadian output is lagging 2010 production levels and, therefore, is lower in 2011 as compared with earlier predictions) and the US is trending towards 43.4 million m<sup>3</sup> (+3%). Canada's western sawmills are continuing to benefit from extensive salvage logging of the forests infected by the mountain pine beetle and higher exports to China.

36. In the Russian Federation, sawn softwood production increased by an estimated 4% in 2010 and is forecast to move up again in 2011.

### Sawn hardwood

37. The sawn hardwood industry took its first tentative steps towards recovery in 2010. Production across the UNECE region rose by 3.3% to 33.2 million m<sup>3</sup> but was constrained by the permanent loss of capacity and low levels of harvesting, which were particularly pronounced in the USA. In Europe, production increased by 9.4%, to 13.2 million m<sup>3</sup> (consumption rose by about 7%), with the main increase occurring in Turkey, Germany and Croatia. Demand for sawn hardwood remains highest in North America, though

consumption in 2010 declined there by 2% from 2009, to stand at just under 16.4 million m<sup>3</sup> – continuing a long-term trend, which has seen consumption fall steadily from almost 28 million m<sup>3</sup> in 1999.

38. The long-term future of global sawn hardwood markets is becoming increasingly dependent on markets outside the UNECE region, with China becoming especially influential. Globalization in the furniture sector and the weak construction and housing markets have resulted in falling demand for appearance-grade sawn hardwood within the UNECE region but export demand, particularly to China, has helped to offset this.

39. The increasing emphasis on the legality of wood, supported by stronger legislation placing obligations on suppliers to be able to demonstrate "low risk" of timber having been harvested illegally may confer an advantage to those producers in regions where there is good forest governance and may offer incentives to others for improvements in sustainable forest management.

### Panels

40. The wood-based panels sector continues to face challenging market and trading conditions. The absence of any clear revival in the construction and housing markets, and the effect on furniture sales of depressed consumer confidence, might have been expected to reduce demand for panel products. In fact, overall consumption in the UNECE region increased by almost 5%, with Europe (6%) and the CIS (16.8%) showing a much stronger performance than North America, where consumption rose by only 0.5% in 2010. Production largely mirrored consumption, except in North America, where production fell by just under 1%, so that the low rise in consumption that was registered there, was met by increased imports. In North America, companies increased utilization levels of manufacturing capacity to 57% for OSB (forecast to rise again in 2011 to 60%), and to 70% for plywood (forecast to rise in 2011 to 71%), representing a welcome recovery from 2009, which had recorded the lowest capacity utilization levels for 25 years. In Europe, in spite of the welcome lift in production and consumption in 2010, manufacturers find themselves squeezed between rising prices for energy, wood and transport and weak demand.

41. In spite of weak construction activity in most of Europe, Russian exports of plywood continued to increase in 2010 and this trend is forecast to continue in 2011 and 2012. After falling in 2009, domestic demand for MDF and particleboard, as well as exports, rose again. Consumption of MDF is forecast to rise by 10% and 7% in 2011 and 2012 and for plywood by 22% and 8%. China has doubled production of panels since 2006 to reach 153.6 million m<sup>3</sup> in 2010 and is expected to provide significant competition for UNECE region producers.

### **Paper and pulp**

42. In spite of the economic crisis, global production of paper and paperboard reached record levels in 2010 at 400 million tonnes, of which the UNECE region's share was 183 million tonnes (46%). China accounts for about 100 million tonnes. The sector enjoyed robust market conditions in 2010 and early 2011 with higher consumption and prices for most pulp, paper and paperboard commodities. Since 2000, the main expansion in production capacity has occurred outside the UNECE region, signalling a continuing shift in growth within the sector to Asia, and Latin America.

43. The UNECE region's paper and paperboard consumption is forecast to rise to 181 million tonnes in 2011 (up 0.5% from 2010). The growth rate for 2012 is forecast to be the same. Wood pulp consumption is expected hardly to change in 2011 and to increase by 0.7% in 2012 to reach 108 million tonnes. Despite industry restructuring, Finland has increased its production as a result of improved production efficiency in the remaining mills.

44. Europe's consumption of paper and paperboard is expected to stay flat in 2011 but to increase by 1% in 2012 to 93 million tonnes. Europe's wood pulp consumption is expected to decline marginally in 2011 and to exceed the 2010 figure in 2012, reaching 45.7 million tonnes. North America's paper and board consumption is forecast to continue falling by 0.8% to 78.8 million tonnes in 2011, and remain unchanged in 2012.

45. Growth in Russia's paper and paperboard consumption is forecast to climb by 2% in 2011

and to climb further by 3 % in 2012. This will raise consumption to 6.9 million tonnes in 2012. Russia is forecast to record 1% growth in pulp production in 2011 and 2012, to reach 6.1 million tonnes. Russia has a trade deficit in paper and paperboard (\$2 billion) because it exports mostly low-value grades but imports high-quality printing paper, packaging and tissue grades. There are large investment opportunities in refurbishing the existing mills in Russia.

### **Value-added and engineered wood products**

46. As the global economy shows signs of recovery, so too does the global wood furniture market. China continues to be the largest supplier, with the US as the primary market.

47. Markets for profiled wood products are showing a strong recovery, with nearly a 20% increase in 2010 in the US. Demand has also grown in Europe, especially in Germany, with Asian and Latin American supply displacing domestic supply.

48. Production and consumption of most engineered wood products (such as glulam timber, I-beams and laminated lumber) in the US showed modest gains in 2010, with further gains expected in 2011. The popularity of oriented strand lumber (OSL) and veneer strand lumber (VSL) appears to be growing as well, particularly in non-residential applications in North America. Finally, cross-laminated timber (CLT), a product/system being popularized in Europe, is beginning to make inroads in North America. CLT offers a green alternative to steel-reinforced concrete in structures where wood framing cannot compete.

