Annex

Forest products market statement

I. Overview of forest products markets in 2013 and 2014

1. Despite improving conditions in the five years since the economic crisis hit bottom in 2009, the production of major forest products in the UNECE Region (Europe, the Commonwealth of Independent States (CIS) and North America) is still 10-15% below the average annual output for the four years preceding the crisis (2004-2007).

2. The region holds 80% of temperate and boreal forests (40% of global forest) and supplies a majority of global wood and wood products. What can be said is that the industry has made many adjustments (cost cutting, consolidations and finding overseas outlets for products) which have contributed to a more stable and predictable market (a key element in attracting investment into the sector). In 2013, the consumption of forest products within the UNECE region has been uneven, with Europe stagnating and the CIS and North America showing modest growth.

3. Demand for many forest products has been deeply affected by developments in the key housing and construction sector. Recession, sovereign debt problems, low rates of household formation and lethargic economies continue to constrain Europe’s housing construction market; with no improvement expected before 2015 or 2016. Housing completions in the Russian Federation achieved record levels in 2013, with a total of 912,100 new dwellings built, an increase of 10.3% over 2012 and the largest number of new dwellings built in a single year for more than 20 years. In North America, the US housing market remains in the early stages of recovery, although housing starts and new house sales are still at the lowest levels recorded since 1963.

4. Although recent developments in most forest products markets still do not warrant being labeled as a “recovery”, the industry is looking forward to the promise of increased global demand, pent up domestic demand and the fact that wood products hold many solutions to improving the sustainability of the region’s economy and the global environment.

Economic developments with implications for the forest sector

5. The International Monetary Fund and the World Bank project lacklustre economic performances for the United States and the Euro Area in 2014 and 2015. For the United States (US), they project GDP growth at 2.2 per cent in 2014 and 3.1 in 2015. The Euro area GDP growth is projected at 1.2 per cent in 2014, increasing to 1.5 per cent in 2015. For the OECD countries, GDP growth is forecast at 1.5 per cent in 2014, increasing to 1.9 per cent in 2015.

6. The World Bank has stated, “Developing countries are headed for a third consecutive year of disappointing growth below 5 per cent…the Euro Area is on target to grow by 1.1 per cent and the US by 1.9 per cent in 2014”\(^3\). In developed and high-income

regions such as Europe, growth is being restrained by fragile consumer and business confidence, high-unemployment in some member countries, continued banking-sector and fiscal restructuring, and lingering sovereign debt problems. In the Euro area, these trends are primarily due to the enduring after-effects of the 2008 financial crisis. In the US, the economy appears to be incrementally improving, but several of the same uncertainties expressed for the Euro area, particularly business uncertainty, also are affecting the US economy.

7. The prospects for Russia’s economy were downgraded in 2014 by the IMF, with GDP growth estimated at 0.2 per cent for 2014 and 2.3 per cent in 2015.

Policy and regulatory developments affecting the forest products sector

8. Policies related to wood and forest product markets – from trade agreements to building codes – continue to influence wood use as a material across industries including building, energy and packaging and wood’s overall contribution to economic development. The EU Timber Regulation, the new EU Forest Strategy and the developing Transatlantic Trade and Investment Partnership (TTIP) trade agreement are key developments.

9. The EU Forest Strategy, which was adopted on 20 September 2013, responds to new challenges facing the EU forest sector and to key policy developments in the EU. Key outputs of the EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, which marked its tenth anniversary in 2013, are voluntary partnership agreements (VPAs) between the EU and tropical timber-supplying countries.

10. A report published by the European Commission assessed the impact on deforestation of EU consumption of all products and services, not just those derived directly from forest management. The report estimated that worldwide, 33% of the deforestation embodied in crops and 8% of deforestation embodied in livestock products enter international markets. This implies that policy measures targeting the consumption of agricultural commodities would be at least as effective in reducing deforestation as those targeting timber products.

11. In May 2014, the major global certification schemes – the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) – reported a total gross area of 440.3 million hectares under their individual (endorsed) certification standards. The total certified area grew by 3.8% (16 million hectares) during the preceding year ending in May 2014, which was half the growth seen in the previous 12 month period. Estimated industrial roundwood production from certified forests increased by 20-30 million m$^3$ per year between May 2011 and April 2014, reaching 524 million m$^3$. Thus, about 30% of global industrial roundwood production (1.7 billion m$^3$) was derived from certified forest.

12. The US Green Building Council (USGBC) approved version 4 of the Leadership in Energy & Environmental Design (LEED) green building standard in June 2013. In the Materials and Resources section of that standard, prescriptive measures have been replaced with credits related to life-cycle analysis based environmental product declarations, materials ingredients verification, and raw-material extraction.

13. The main carbon market, the EU Emissions Trading System (EU ETS), is still marked by uncertainty about its cost-efficiency and impact. In the first quarter of 2014, a record 2.8 billion European carbon allowances were traded on Europe’s four main
emissions exchanges, an increase of 12% over the same quarter in 2013, despite a cut in supply.

**Innovative wood-based products: textiles**

14. Developments in the wood-derived fabric industry continue to support the status of wood as a preeminent sustainable source of fibre for the world’s clothing. Wood-derived viscose in its various forms is already an important player, accounting for 6% of the world fabric market. It occupies third place in that market, after synthetics and cotton and ahead of wool.

15. Traditional viscose has its environmental downside because toxic chemicals are used in its production. However, various “closed loop” systems have ensured that such chemicals are re-used and not released into the environment, and second-generation wood-derived fabrics, such as produced by the Lyocell process, have strong green credentials.

16. Wood-derived fibres are a close substitute for cotton, which carries significant undesirable environmental consequences. Because there are land and water restrictions on the continued expansion of cotton plantations, it is expected that the production of wood-based fibres will increase over the next few years. Proximity to a competitively priced source of wood is a key variable driving production costs for wood-derived fibres; many countries in the UNECE region are well-placed to take advantage of this potential.

17. With this in mind, UNECE arranged the “Forests for Fashion – Fashion for Forests” event in Geneva in 2014, showcasing wood-based fabrics to designers and commentators in the fashion and related industries. The market for fashion and fabrics is highly dependent on demand and consumer preferences. Consumer demand for wood-fibre-based fabrics could imply a need for greater cooperation, both between producers of sustainable fibres and with other parts of the fabric production chain to ensure clear labeling and consumer confidence.

II. **Summary of regional and subregional markets**

18. The overall condition of forest products markets in the UNECE region is improving. However, markets in the European subregion are stagnant, but industry consolidations and increased exports (created by demand from China and other extra-regional export destinations) have helped much of the wood sector to diversify and adapt to the current market situation.

19. The CIS experienced moderate growth in most forest products in 2013, assisted by a strong year for construction in the Russian Federation and many of the other CIS countries. Investments in new plants and the recapitalizing of old plants were a sign of optimism and confidence. Exports have been a strong feature of growth in the subregion. There was a drop in the production and consumption of pulp and paper in the CIS in 2013; however, the reconstruction and restructuring of the Russian pulp and paper industry is now a priority and should help future prospects.

20. North America continued to show strong positive movements in markets for most wood products. This was a result of the recovery in the housing sector, an improved economic situation, and increased exports of products and roundwood to Asia and of wood pellets to Europe.
Wood raw materials

21. A worldwide rise in demand for forest products in 2013 resulted in the highest timber harvest in the UNECE region in six years. Removals of industrial roundwood reached 1 billion m$^3$ in 2013, have been trending upward for five years and were more than 17% higher in 2013 than in 2009. Overall harvest levels increased by almost 2% in Europe and the CIS in 2013 (compared with 2012) and by 0.3% in North America.

22. The consumption of roundwood by the forest industry in the UNECE region was 984 million m$^3$ in 2013, which was 1% higher than in the 2012. This was the fourth consecutive annual increase, with the manufacturing industries in all UNECE subregions consuming more logs in 2013 than they did five years ago. Europe recorded the biggest rise in roundwood production and consumption in 2013 compared with 2012, while roundwood production and consumption increased only slightly in North America.

23. Much of the higher demand for roundwood was the result of improved sawnwood markets. The production of sawn softwood increased by 3.3% in the UNECE region in 2013 to meet higher demand both in the region and in extra-regional markets such as China, Japan, the Middle East and North Africa.

24. The trade of industrial roundwood into and from the UNECE region increased by more than 8% in 2013, with net exports of 27 million m$^3$. The largest increases in shipments in 2013 were in US exports of softwood logs to China; softwood log imports to Germany from neighbouring countries; imports of both softwood and hardwood logs to Finland from the Russian Federation; and exports of softwood logs from Norway to Sweden. The major global log trade flows continue to be driven by Chinese imports from New Zealand, the Russian Federation and the US, with New Zealand surpassing the Russian Federation in 2013 as the world’s largest exporter of softwood logs.

25. The improving housing market in North America should lead to strong growth in domestic demand for forest products, leading to higher prices. Indirectly, this could encourage China to source more wood products from the Russian Federation, as it is the most logical supplier for China’s ever increasing need for wood.

26. In addition to the removal of industrial roundwood, 194 million m$^3$ of wood fuel was reportedly produced in the UNECE region in 2013. Most of this was consumed in Europe, which accounted for almost 60% of total wood fuel consumption in the UNECE region.

27. COFFI forecasts that industrial roundwood removals is expected to increase in the UNECE region at an annual rate of 1.1% in 2014 and 0.3% in 2015, with a subregional breakdown as follows: Europe +1.6% in 2014 and +0.2% in 2015; CIS +1.7% in 2014 and +0.8% in 2015; and North America at +0.3% in 2014 and +0.2% in 2015.

Sawn softwood

28. In line with generally improving but unsettled global economic trends, 2013 was characterized by recoveries in North America and the CIS countries and by varying conditions – from unsettled to improving – in Europe. Sawn softwood consumption increased by 5.2% in North America in 2013 due to gains in the housing market, and by 8.8% in the CIS. Europe recorded a 1.7% drop in apparent consumption, as some countries continued to struggle economically, but there were production gains in all the UNECE subregions: North America (5.2%); CIS countries (4.0%); and Europe (1.3%).
29. As European demand for sawn softwood stabilized and overseas exports increased, production in Europe grew slightly – by 1.3% – in 2013, to 97.9 million m$^3$. This growth was due mainly to increased production in Finland, Romania and Poland, which collectively added 1.3 million m$^3$ of production. In Europe and the Middle East, sawn softwood prices increased moderately in 2013 compared with 2012. Improved capacity utilization led to price increases, and sawmilling companies with export market exposure were able to improve their profitability. Most European mills made at least some profit in 2013, instead of the losses seen in 2012.

30. Apparent sawn softwood consumption in the CIS increased to 19.44 million m$^3$, and production amounted to 35.78 million m$^3$, an increase of 4.0% over 2012. Fuelled by strong export demand as well and the strength of the euro and the US dollar at the end of 2013 and early 2014, sawmills increased production and prices increased in 2013 compared with 2012. In 2013, Russian exports increased: to China (by 21.5%, to 7.5 million m$^3$); Uzbekistan (by 28%, to 2.66 million m$^3$); Azerbaijan (by 16%, to 1.0 million m$^3$); Tajikistan (by 14%, to 955,000 m$^3$); and dropped in Egypt (-21% to 1.37 million m$^3$).

31. Apparent sawn softwood consumption increased in North America by 5.2% in 2013, to 80.33 million m$^3$. This was due to gains in new residential housing starts, repairs and remodelling. Apparent sawn softwood consumption increased in the US by 7.1% (to 65.95 million m$^3$) in 2013, but it declined in Canada by 2.6% (to 14.38 million m$^3$) due to a slowdown in its overheated housing market. US sawn softwood output was 51.05 million m$^3$ (+4.7%) in 2013, and Canada’s output rose at a faster rate (5.8%), to 41.55 million m$^3$, despite negative domestic market growth.

32. China has become a key alternative market for producers: in 2013, record exports of sawn softwood were made by the Russian Federation (7.5 million m$^3$), Canada (6.8 million m$^3$), the US (875,000 m$^3$) and Europe (1.3 million m$^3$). Extremely bad weather in the eastern half of North America in the first quarter of 2014 and a port strike in Vancouver caused difficult logistical issues for sawmills, creating a surplus of lumber and eroding prices in key markets.

33. The outlook for sawn softwood for the remainder of 2014 is for improving prices in most key markets, including the US, China and Europe, but some markets – such as those in Japan, North Africa and the Middle East – may see prices soften due to excess supply.

34. COFFI forecasts that the production of sawn softwood is expected to increase in the UNECE region at an annual rate of 2.2% in 2014 and 1.7% in 2015, with a subregional breakdown as follows: Europe +3.0% in 2014 and +0.3% in 2015; CIS +2.0% in 2014 and +0.8% in 2015; and North America at +1.4% in 2014 and +3.5% in 2015.

35. Economic development in Europe, however, is expected to be uneven, with a few countries experiencing strong growth and others contraction. For those countries indicating a positive outlook, exports appear to the biggest driver and not consumption in the subregion. Turkey highlighted that 2013 was better than expected, with housing starts up by 10% in 2013 and as good or better growth expected to continue through 2014, with positive implications for the forest-based industries there.

**Sawn hardwood**

36. There was a significant shift in sawn hardwood trade away from the UNECE region and towards emerging economies during the global financial crisis. This trend slowed in 2013 as demand in the UNECE region began to recover. Total apparent consumption of
sawn hardwood in the UNECE region was 31.5 million m$^3$ in 2013, a 5.1% increase compared with 2012. The increase in consumption in 2013 followed two years of decline and was driven primarily by rising demand in the US.

37. Sawn hardwood production increased in North America and the CIS in 2013 but declined in Europe, due mainly to log shortages in parts of eastern Europe. The 2012 downturn in imports in the UNECE region continued into 2013, but at a slower pace.

38. European consumption and production of sawn hardwood fell by about 4% in 2013, to 12.6 million m$^3$. Declining consumption was due partly to a lack of supply as hardwood was diverted to more active markets in North America and to emerging economies.

39. Apparent consumption of sawn hardwood increased by 12% in the CIS in 2013, to 2.1 million m$^3$. Production increased by 2%, to 3.1 million m$^3$, while exports declined by 11.8%. Imports increased by 12.8% in 2013, but from a very low base. In the Russian Federation the increase in sawn hardwood consumption was 16.5%, driven by rising residential construction.

40. North American sawn hardwood consumption increased by 11.9% in 2013, to 17.0 million m$^3$. Low mortgage rates, an improved job market and higher consumer confidence bolstered home sales. North American sawn hardwood production increased by 11.4%, to 19.5 million m$^3$, due to rising domestic consumption and exports. Although US production stepped up again in the first half of 2014, several factors may begin to moderate the pace of growth. Profitability in the hardwood processing sector has fallen in part because high-margin “grade sawnwood” markets declined more than low-margin “industrial sawnwood” during the global financial crisis.

41. COFFI forecasts that the production of sawn hardwood is expected to increase in the UNECE region at an annual rate of 1.7% in 2014 and 0.7% in 2015, with a subregional breakdown as follows: Europe +1.7% in 2014 and +0.4% in 2015; CIS +6.5% in 2014 and +3.0% in 2015; and North America at +0.9% in 2014 and +0.5% in 2015.

Wood-based panels

42. Despite the mixed economic performance in the UNECE region in 2013, there was moderately strong growth in the consumption of wood-based panels in each of the subregions. North America had the strongest growth (5.4%), driven by the continuing recovery of the housing sector. The consumption of wood-based panels grew in Europe by 2.0%, despite the overall sluggish economy there. Wood-based panel consumption in the Russian Federation increased in 2013 (+3.9%), and oriented strand board (OSB) jumped by more than 20%.

43. The production of wood-based panels was up by just 1.3% in Europe in 2013, although there were major differences among specific panel products, with plywood production falling by 7.2% and OSB production jumping by 9.9%. Similarly, while overall panel production grew by 3.0% in the CIS in 2013, there was a 4.7% increase in plywood production and a 0.5% decline in medium-density fibreboard. Wood-based panel production showed moderate to strong growth in all product categories in North America in 2013, with the exception of plywood, which grew by a relatively low 1.4%. Overall, capacity utilization rates in the UNECE region remained quite low – below 80% in almost all product categories – in 2013.
44. Europe was the only UNECE subregion to report a trade surplus in wood-based panels in 2013, and this surplus is expected to increase in 2014. Both the CIS and North America reported trade deficits in 2013, and these deficits are projected to carry over into 2014. China remains an influential player in the global trade in wood-based panels, generating 34.3% of global plywood exports and 15.8% of global fibreboard exports. Regulations governing the legality of timber in both the EU and the US could have an impact on imports of tropical hardwood plywood in 2014.

45. COFFI forecasts that the production of wood-based panels is expected to increase in the UNECE region at an annual rate of 0.7% in 2014 and 0.9% in 2015, with a subregional breakdown as follows: Europe +0.5% in 2014 and +0.7% in 2015; CIS +2.4% in 2014 and +1.2% in 2015; and North America at +0.3% in 2014 and +1.3% in 2015.

**Paper, paperboard and woodpulp**

46. The pulp, paper and paperboard market remained in flux in 2013 as graphic paper capacity continued to be rationalized in Europe and North America – a development that has persisted now for a decade. Chemical market pulp capacity continued to expand in South America, with Southeast Asia being the favoured target market, despite a marked slowdown in investment in new paper and paperboard installations serving rapidly growing economies. These and other changes are resulting in a possibly unprecedented global shift in pulp and paper supply.

47. The global pulp, paper and paperboard industry faced another challenging year in 2013. Despite significant capacity closures across several pulp, paper and paperboard grades in Europe, Japan and North America, production capacity is still too high when measured against falling or static demand for some grades. Overall paper and paperboard production and consumption rose in North America while it fell in Europe. Graphic paper and chemical woodpulp output fell across all UNECE subregions.

48. The production of paper and paperboard weakened in the CIS in 2013. However, significant investments have been made in pulp and paper facilities in the region with an eye to taking advantage of future growth opportunities in both domestic and export markets.

49. Growth in China’s gross domestic product slowed to a relatively weak 7% in 2012 (down from 9-10% in 2007-2011). It rebounded to 7.7% in 2013, however, following economic reforms that included stimulating domestic consumption and reducing money supply. As a result, global demand for pulp, paper and paperboard grew slightly in 2013.

50. Electronic communication via the internet and the use of smart phones continued to play a major role in the evolution of the pulp and paper segments, while paperboard benefited from increased online shopping.

51. In the pulp sector, expansions in bleached hardwood kraft capacity in South America were by far the most important factor influencing the market in 2013 and through to mid-2014. In the paper sector, the trend of converting production to paperboard and packaging grades continued.

52. Prices in the pulp sector generally rose in 2013 and into early 2014, but since then discounts continued to hamper the profitability of high-cost producers, leading to capacity rationalization in North America, Europe and even South America.
53. COFFI forecasts that UNECE region production of paper and paperboard is expected to change by an annual rate of -0.3% in 2014 and +0.1% in 2015, with a subregional breakdown as follows: Europe no change in 2014 and -0.5% in 2015; CIS +0.1% in 2014 and +0.1% in 2015; and North America with -0.7% in 2014 and -0.3% in 2015.

**Wood energy**

54. Wood energy markets continued to grow in the UNECE region in 2013. Although wood energy consumption in the industrial sector declined slightly, residential and power-sector demand expanded. Considerable growth in wood energy consumption is forecast in Europe and in the CIS, driven partly by renewable energy targets in the EU.

55. The EU is – and will continue to be – the world’s largest market for pelletized wood energy. Total wood-pellet imports into the EU27 from Canada, the Russian Federation, the US and the rest of the world reached 4.5 million tonnes in 2012. Nevertheless, trade within the EU27 was larger, at about 4.7 million tonnes in 2012 of wood pellets.

56. New and existing capacity in Canada, the CIS, southeastern Europe and the US should be able to match the growing demand. There are signs of excess capacity in wood-pellet manufacturing in North America and southeastern Europe, although investment in new plants continues to grow. New markets in Asia will also increase the consumption of wood fuels and could eventually create price pressures in the global wood energy market.

57. The Russian Federation’s domestic consumption of different kinds of wood energy for heat production is growing, including the use of sawmill co-products, firewood, wood briquettes and pellets. Russian wood-pellet production is reported to have increased by about 50% and may have reached 1.5 million tonnes in 2012. An estimated 96% of production was exported. Wood briquette production rose by 20% to approximately 300,000 tonnes, of which approximately 40% was sold domestically in 2012.


59. Growth of wood energy production in Canada will continue to be linked to exports of wood pellets. Projections for the US show growth in wood energy use to 2030, but at a lower rate than previously forecast.

60. Wood pellet production capacities in North America are estimated at 11.6 million tonnes in spring 2013 and could soon reach 20 million tonnes, based on planned capacities. The actual wood-pellet production is estimated at 1.7 million tonnes in Canada and 4.0 million tonnes in the US in 2013.

61. A key issue for the further development of wood-pellet trading appears to be pending requirements for certification of the forests and wood used in pellet production. Clear regulations about financial support for renewable energy projects and renewable energy mandates will be a driving force for new investment in wood energy. Public policy debate on targets beyond 2020 will also affect developments and spur or limit investments, primarily in power generation projects.

62. Pellet manufacture is the most positive segment of the wood energy sector, but it is almost entirely dependent on the EU market, however, there are questions as to whether energy users in the EU will continue to absorb the high energy costs that result from
subsidizing wood energy. Crude oil and natural gas prices on the global markets are dropping and wood energy is becoming less competitive.

**Value-added wood products**

63. The value of global furniture production, most of which is wooden, was an estimated $437 billion in 2013. China was by far the largest furniture-manufacturing country. Furniture trade continues to grow faster than consumption as manufacturing moves to lower-cost countries.

64. In 2013, markets for builders’ joinery and carpentry continued to recover in the US, the UK and Germany and to decline in France. These markets are characteristically regional, with most imports originating from countries that are close-by. The exception is the US market, which Asian producers have penetrated strongly.

65. The profiled-wood market continues to recover in the US, fuelled by strengthening housing markets. Imports of profiled wood are growing steadily, with Brazil the largest exporter in the softwood mouldings market (36% of market share), followed by Chile (31%) and Canada (11%). European profiled-wood markets continue to stagnate.

66. Global laminate flooring production increased from 890 million m$^2$ in 2012 to 925 million m$^2$ in 2013. China produced 28% of global laminate flooring in 2012, replacing Germany (27% in 2012) as the main producer of this product; Germany’s share declined further, to 26%, in 2013.

67. Engineered wood products comprise: glue laminated beams (glulam), laminated veneer lumber (LVL), wooden I-beams, finger-jointed timber and cross laminated timber (CLT) (and a few other relatively minor products). Most markets for engineered wood products are stagnant in Europe. The exception is CLT: the production and consumption of this product has grown impressively and growth is expected to be at well over 10% per year for the foreseeable future.

68. In contrast to Europe, the production of engineered wood products is increasing in North America, with most products experiencing 10-20% growth in 2013. CLT is now being produced in North America but is yet to make serious inroads into building construction there. Currently, the mining and oilfield industries consume a large percentage of the CLT produced in North America for use as equipment pads and platforms.

69. Engineered wood products have made inroads into areas where, before, concrete and steel formerly were used exclusively. Builders of bridges and large buildings (such as apartment complexes and sports venues), for example, are now considering wood for its natural beauty as well as its utility, cost-effectiveness and environmental credentials.

70. Building codes and construction regulations are slowly being amended to accommodate wood based on its performance, moving away from prescriptive standards which stipulate the materials that may be used. In addition, many governments are actively encouraging the use of wood. These developments could all be beneficial for the use of engineered wood products in the future.

**Housing**

71. In most of the eurozone (Germany being the exception), a robust housing recovery is being delayed by a number of economic factors. Some analysts believe that the value of
new residential construction in Europe will increase through 2016, from €232.13 billion in 2014 to €251.47 billion in 2016.

72. In North America, the US housing market is still in the early stages of recovery. Spending on private residential construction (single- and multi-family housing) continues to improve, but remodelling is decreasing slightly, as are public expenditures. Several housing analysts project that a robust US housing recovery remains several years away. The Canadian housing market is considered stable.

73. There were record housing completions in the Russian Federation in 2013. Along with setting a 20 year record for new dwellings, residential space construction totalled 69.4 million m² in 2013, an increase of 5.6% over 2012.

74. In the first quarter of 2014, 178,000 apartments were commissioned in the Russian Federation, with a total area of 13.6 million m². This is nearly 31% greater than the number commissioned in the same quarter of 2013, when 10.4 million m² were commissioned. In the first quarter of 2014, individual developers built 47,600 residential houses with a total area of 6.4 million m², an increase of 19.2% over the same period in 2013.