



Forest Products

Annual Market Review 2011-2012



UNITED NATIONS

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NOTE

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ABSTRACT

The UNECE/FAO *Forest Products Annual Market Review, 2011-2012* provides general and statistical information on forest products markets and related policies in the UN Economic Commission for Europe region (Europe, North America and the Commonwealth of Independent States). The *Review* begins with an overview chapter, followed by a description of the macro-economic situation. Next it includes an analysis of government and industry policies affecting forest products markets. Five chapters are based on annual country-supplied statistics, describing: wood raw materials, sawn softwood, sawn hardwood, wood-based panels, and paper, paperboard and woodpulp. Additional chapters discuss markets for wood energy, certified forest products, value-added wood products, forest carbon and innovative wood products. In each chapter, production, trade and consumption are analysed and relevant material on specific markets is included. Tables and graphs provided throughout the text present summary information. Supplementary statistical tables may be found on the website of the UNECE Timber Committee and the FAO European Forestry Commission at www.unece.org/forests/fpamr2012.

KEYWORDS

Bioenergy, biomass, builders joinery, carbon, cardboard, carpentry, certification, certified forest products, climate change, China, construction, consumption, engineered wood products, EWP, exports, fiberboard, fibreboard, forest products markets, forestry industry, forestry statistics, fuelwood, furniture, housing market, imports, innovative wood products, lumber, market analysis, MDF, OSB, paperboard, particle board, particleboard, plywood, production, pulp and paper industry, pulplogs, pulpwood, REDD, roundwood, sawlogs, sawn hardwood, sawn softwood, sawnwood, sustainable forestry, timber, tropical timber, wood energy, wood fuels, wood industry, wood pellets, wood products, wood-based panels, woodpulp.

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FOREWORD

Forest products have continued to expand their share of the market this year. Presenting an analysis of the latest trends, the *UNECE/FAO Forest Products Annual Market Review 2011-2012* aims to provide industry, policymakers and opinion formers with the background they need for informed decision-making.

Every year, the *Review* offers the first comprehensive analysis of the year's forest products markets and policies for the UNECE region. It focuses on the various sectors of the industry, presenting market data along with the policy and economic factors that lie behind the data, and analysing the most recent market changes.

2012 is the International Year of Sustainable Energy for All. Any sustainable energy future will have to depend on a mix of energy sources. The world's forests, as well as being huge stores of carbon, are also enormous stores of energy.

In the UNECE region, wood is the principal source of renewable energy. It also contributes to energy security by reducing dependence on fuel imports; and it stimulates social and economic development through making forestry more profitable. It has been creating new investment and job opportunities, especially in rural areas.

The recent United Nations Conference on Sustainable Development (Rio+20) highlighted that fundamental changes in the ways societies consume and produce are indispensable for achieving sustainable development. UNECE and FAO, by promoting the use of sustainably produced forest products, hope to contribute to transforming environmental challenges into economic opportunities and boosting the demand for better products and production technologies.

We take this occasion to express our great appreciation to all those who have played a part in the production of this joint publication—the experts, the many partner organizations, the information suppliers and, last but not least, the secretariat.



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The data on which the *Forest Products Annual Market Review* is based are collected from official national correspondents through the FAO/UNECE/Eurostat/ITTO Joint Forest Sector Questionnaire, distributed in April 2012. Within the 56-country UNECE region, data for the 31 EU and EFTA countries are collected and validated by Eurostat, and for other UNECE countries by UNECE/FAO Geneva.

The statistics for this *Review* are from the TIMBER database system. As the database is continually being updated, any one publication's analysis is only a snapshot of the database at that particular time. The database and questionnaires are in a state of permanent development. Data quality differs between countries, products and years. Improvement of the quality is a continuing task for the secretariat, paying special attention to the CIS and south-east European countries. With our partner organizations and national correspondents, we strongly believe that the quality of the international statistical base for analysis of the forest products sector is steadily improving. Our goal is to have a single, complete, current database, validated by national correspondents, with the same figures available from FAO in Rome, Eurostat in Luxembourg, ITTO in Yokohama and UNECE/FAO in Geneva. We are convinced that the data set used in the *Review* is the best available anywhere as of July 2012. The data appearing in this publication form only a small part of the total data available. *Forest Products Statistics* will include all of the data available for the years 2007-2011. The TIMBER database is available on the website of the joint Timber Committee and European Forestry Commission at www.unece.org/forests/fpm/onlinedata.html

The secretariat is grateful that correspondents provided actual statistics for 2011 and, in the absence of formal statistics, their best estimates. Therefore all statistics for 2011 are provisional and subject to confirmation next year. The responsibility for national data lies with the national correspondents. The official data supplied by the correspondents account for the great majority of records. In some cases, where no data were supplied, or when data were confidential, the secretariat estimated figures to keep region and product aggregations comparable and to maintain comparability over time. Estimations are flagged within this publication, but only for products at the lowest level of aggregation.

In spite of everyone's best efforts, there are still some significant problems. Chief among these problems are differing definitions, especially when these are not mentioned, and unrecorded removals and production. In certain cases, for example woodfuel removals, the officially reported data may be as little as 20% of the actual figures. The Joint Wood Energy Enquiry has gone some way towards improving the quality and coverage of data for wood energy. Conversions into the standard units used here are also not necessarily done in a consistent manner. The Joint FAO/UNECE Working Party on Forest Statistics, Economics and Management is currently carrying out work to increase awareness of problems in measurement and how to deal with these. Intra-EU trade is less reliable than extra-EU trade.

In addition to the official statistics received by questionnaire, trade association and government statistics are used to complete the analysis for 2011 and early 2012. Supplementary information came from experts, including national statistical correspondents, trade journals, the United Nations trade database (COMTRADE) and Internet sites. These sources are cited where they occur in the text, and at the end of the chapters.

EXPLANATORY NOTES

“Apparent consumption” is calculated by adding imports to a country’s production and subtracting exports. Apparent consumption volumes are not adjusted for levels of stocks. It is synonymous with “demand” and “use”.

“Net trade” is the balance of exports and imports and is positive for net exports, i.e. when exports exceed imports, and is negative for net imports, i.e. when imports exceed exports. Trade data for the 27 European Union countries include intra-EU trade, which is often estimated by the countries. Export data usually include re-exports. Subregional trade aggregates in tables include trade occurring between countries of the subregion.

For a breakdown of the regions, please see the map in the annex. References to EU refer to the 27 countries members of the EU in 2011. The term Commonwealth of Independent States (CIS) refers to 12 countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan, and is used solely for the reader’s convenience.

The term “softwood” is used synonymously with “coniferous”. “Hardwood” is used synonymously with “non-coniferous” or “broadleaved”. More definitions appear in the electronic annex.

All references to “ton” or “tons” or “tonnes” in this text represent the metric unit of 1,000 kilograms (kg).

A billion refers to a thousand million (10^9).

Please note that all US and Canadian sawn softwood production and trade are in solid m^3 , converted from nominal m^3 . An explanation of this is provided in the *Forest Products Annual Market Review 2001-2002*, page 84.

Russian sawn softwood production data have been estimated to avoid negative apparent consumption. Please see the *Forest Products Annual Market Review 2009-2010* page 58 for an explanation of the procedure used.

The use of the term “oven-dry” in this text is used in relation to the weight of a product in a completely dry state, e.g. an oven-dry metric tonne of wood fibre means 1,000 kg of wood fibre, containing no moisture at all.

SYMBOLS AND ABBREVIATIONS USED

(Infrequently used abbreviations spelled out in the text may not appear in this list)

...	not available
€	euro
\$	United States dollar, unless otherwise specified
ATFS	American Tree Farm System
BC	British Columbia, Canada
BJC	builders' joinery and carpentry
CAN	Canadian dollar
CFP	certified forest product
CIS	Commonwealth of Independent States
CLT	cross-laminated timber
CO ₂	carbon dioxide
CoC	Chain-of-custody
CSA	Canadian Standards Association
EFI	European Forest Institute
EFTA	European Free Trade Association
EQ	equivalent of wood in the rough
EU	European Union
EWPs	engineered wood products
FSC	Forest Stewardship Council
FOB	Free on board
GDP	gross domestic product
GHG	greenhouse gas
Gj	gigajoule
GWh	gigawatt hour
ha	hectare
IMF	International Monetary Fund
ITTO	International Tropical Timber Organization
kWh	kilowatt hour
LVL	laminated veneer lumber
m.t.	metric ton or tonne
m ²	square metre
m ³	cubic metre
MBF	one thousand board feet
MDF	medium-density fibreboard
MSF	one thousand square feet
MWe	megawatt electrical
MWth	megawatt thermal
NGO	non-governmental organization
OSB	oriented-strand board
PEFC	Programme for the Endorsement of Forest Certification
PJ	petajoule
PoC	Province of China
REDD	Reducing Emissions from Deforestation and Forest Degradation
SAR	Special Administrative Region (of China)
SFI	Sustainable Forestry Initiative
SFM	sustainable forest management
SWE	the equivalent volume to what it was in the solid green roundwood
VAWPs	value-added wood products