# U.S. Forest Products Annual Market Review and Prospects,

2005-2008

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## **ABSTRACT**

This report provides general and statistical information on forests products markets in terms of production, trade, consumption and prices. The current state of the United States economy is described. Market developments are described for sawn softwood, sawn hardwood, softwood log trade, wood based panels, paper and paperboard, fuelwood and forest product prices. Policy initiatives that can impact domestic markets and international trade in wood products are also discussed in some detail. Estimates are made through the end of year 2008.

**Keyword**s: production, trade, prices

# **Executive Summary**

Economic activity in the United States is expected to weaken during the second half of 2008 as noted by the 1.8% projected growth in gross domestic product during the fourth quarter. The U.S. economy will likely expand at a slower rate in 2008 than predicted earlier in the year, according to 47 forecasters surveyed by the Federal Reserve Bank of Philadelphia. Growth in U.S. real output over the near term looks a bit slower and inflation a bit higher than it did during the second quarter. Although forecasters expected a slight rise in the 2008 unemployment rate, measured on an annual-average basis, unemployment is expected to increase to 5.5% in 2008. The forecasters see prices rising slightly higher in 2008 and then lowering in 2009. Even with falling mortgage rates, the expectation for returning strength in the housing sector has waned due to the increase in mortgage rates resets on subprime loans in 2008. If the value of the dollar stays weak, and lumber prices fall, this should bolster U.S. lumber and paper products production and exports. But this scenario appears unlikely in the near-term as the turmoil in the U.S. financial markets dominate the economic climate.

# General Economic and Major Market Trends

The U.S. economy will grow at a slower rate during the second half of 2008 compared with the first half before increasing slightly in 2009 according to 47 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters expect real Gross Domestic Product (GDP) to grow at an annual rate of 1.7% in the fourth quarter 2008, for an annual average of 1.5% for

2008. Measured on an annual-average basis, unemployment is expected to be 5.5% for 2008, and forecasters expect unemployment to increase to 5.6% in 2009.

Core inflation as measured by the Consumer Price Index is expected to average 2.3% in 2008 and 2009. On an annual-average over annual-average basis, inflation in the GDP price index is projected to remain around 2.4% over the next 5 years (Federal Reserve Bank of Philadelphia 2008).

With a large forest resource and high production and consumption of wood products, the United States continues to play an important role in world forest product markets. The United States has the world's highest consumption of paper and paperboard (about 87 million metric tons in 2007), which is mostly supplied by domestic production and imports from Canada (AF&PA 2005). The U.S. solid wood industry manufactured about 84 million cubic meters of lumber and 25 million cubic meters of structural panel products in 2007. The U.S. forest products industry annually harvests more than 451million cubic meters of softwood and hardwood timber.

New housing construction shows continued weakness during the third quarter of 2008. With unsold houses, a weak economy, and no end in sight for the subprime crisis, the housing market will probably remain weak throughout 2008 and 2009. This construction accounts for more than a third of U.S. annual consumption of softwood sawn wood and structural panels and for substantial volumes of other softwood and hardwood products. Total housing starts decreased 42% in July 2008 to a seasonally adjusted annual rate of 1,355,000 units, continuing the decline that began in 1996. Three of four regions in the United States contributed to the July 2008 decrease in housing starts. The largest decrease of 55% was recorded in the Mid-West (154,000 annual rate for July), followed by a loss of 43% in the West (190,000 annual rate for July), a loss of 31% in the South (190,000 annual rate for July), and a gain of 13% in the Northeast (174,000 annual rate for July). Authorizations for building permits decreased in July by 32% to a seasonally adjusted 937,000. Seasonally Adjusted Annual Single-family starts totaled 641,000 in July of this year, a 39% decrease from the same period one year earlier. Approximately 324,000 multifamily units at a seasonally adjusted annual rate were begun in July 2008, 3% above one year earlier. Both sectors are on course to fall below their 2007 production levels. The housing market began to contract in May 2006, and with the exception of the Northeast, total starts for 2008 will have a difficult time improving on the 2007 performance level.

In July 2008, the value of new construction was at a seasonally adjusted \$1,084 billion, 4.8% below the July estimate of \$1,139 billion. Residential construction was \$358 billion in July, 28% below the July estimate of \$494 billion. Nonresidential construction was at a seasonally adjusted \$322 billion in July, 15% above the July estimate of \$281 billion in 2007. The National Association of Home Builders forecast calls for the housing sector continued decline, with starts and sales for 2008 ending slightly below 2007 levels.

Investment in residential repair and remodeling remained strong, along with a slight increase, while new residential construction weakened during 2008. Expenditures for improvements and repairs of residential properties were at a seasonally adjusted annual rate of \$226.4 billion in 2007. This estimate is just 1% below the 2006 estimate of \$228.2 billion. Expenditures for maintenance and repairs to all properties amounted to a seasonally adjusted annual rate of \$54.7 billion during 2007, increasing slightly over the \$53.4 billion during 2006. Improvements amounted to \$171.6 billion in 2007, below the \$174.8 billion in improvements during 2006.

Two of the major indicators of demand for wood products—furniture and related products, and paper products output, were lower during the first 7 months of 2008 relative to 2007 while total industrial output exceeded year ago levels:

- **Industrial production**—an important demand determinant for pallet lumber, containerboard, and some grades of paper—increased 1% over the first 7 months of 2008.
- **Furniture and related products**—a determinant of high-grade lumber production—decreased by 7.8% in the first 7 months of 2008 compared with the 2007 average.
- **Paper products output**—a determinant of pulpwood and wood residue use, as well as recycled fiber availability and use—decreased during the first 7 months of 2008 compared with the 2007 average. The index (2002 = 100) of paper products output for the first 7 months of 2008 was at 94.0, almost 2% behind the 2007 average.

In summary, the housing sector weakened during the third quarter of 2008 and this weakness will probably continue into 2009. Starts in 2008 will probably fall below year-ago levels as a result of the expected continuation of the housing sector melt-down forecast to continue through the middle of 2009. With the rate of growth slowing, most analysts predict that conditions favorable to the growth of timber markets won't occur until the 2<sup>nd</sup> half of 2009. Selected U.S. economic indicators are shown in Table 1.

Table 1. Selected U.S. economic indicators, 2004–2008

|   | Actual |        |        | Estimate |        |
|---|--------|--------|--------|----------|--------|
| Indicator   | 2004   | 2005   | 2006   | 2007     | 2008   |
| <sup>a</sup> Gross domestic product (billion 2000 dollars)                  | 11,704 | 11,049 | 11,415 | 11,567   | 11.602 |
| <sup>b</sup> New housing starts (thousand units)                            | 1.956  | 2.068  | 1.801  | 1.355    | 1.001  |
| <sup>b</sup> Mobile home shipments (thousand units)                         | 131    | 147    | 117    | 95       | 85     |
| <sup>a</sup> Nonresidential investment in structures (billion 2000 dollars) | 248.7  | 251.5  | 298.1  | 304.6    | 295.6  |
| <sup>c</sup> Total industrial production (Index: 2002 = 100)                | 104.7  | 108.2  | 107.5  | 111.4    | 112.3  |
| <sup>c</sup> Furniture and related products (Index: 2002 = 100)             | 101.9  | 100.7  | 104.7  | 102.0    | 94.0   |
| <sup>c</sup> Paper products (Index: 2002 = 100)                             | 104.8  | 105.4  | 101.6  | 95.8     | 93.5   |

<sup>&</sup>lt;sup>a</sup> Economic Indicators, August 2008.

# Timber Products Production, Trade, and Consumption

#### Sawn Softwood

Housing and other construction markets started off weaker in 2008 and that weakness has continued into the 3<sup>rd</sup> quarter. The housing market is likely to finish the year at a much lower level than recorded a year ago. The decline in the housing sector continues to have a negative impact on softwood lumber consumption. According to the Western Wood Products Association, during the first 5 months of 2008, softwood lumber consumption decreased 22% from last year, and shipments of softwood lumber from western mills decreased 18.4% during the first 5 months of 2008 compared with 2007 shipments (WWPA 2008). Production decreased during this period in the West as well as the South, 20.6% and 11.2%, respectively. Apparent consumption for the first 5 months of 2008 was 30.5 million cubic meters, 21.8% below the apparent 39.1 million cubic meters for the first 5 months of 2007. The U.S. housing construction industry is predicted to decline over the second half of 2008. Timber production therefore could also continue falling after its slow start this year.

Production of sawn softwood decreased 15.8% in the first 5 months of 2008 compared with the same period in 2007. In 2007, 59.7 million cubic meters of sawn softwood were produced. Production of sawn softwood for 2008 is forecast to fall below 2007 levels.

Sawn softwood imports decreased 30.8% during the first 5 months of 2008 relative to the same time period a year ago. The volume of Canadian imports, which constituted 92% of all sawn softwood imports, decreased by 32.5% over this period. Total sawn softwood imports were 43.4 million cubic meters in 2007, a decrease of 19.4% from 2006.

<sup>&</sup>lt;sup>b</sup> National Association of Home Builders, *Housing Economics*, September 2008.

<sup>&</sup>lt;sup>c</sup> Federal Reserve Bulletin, August 2001 through August 2008.

During the first 5 months of 2008, U.S. sawn softwood exports increased 2.2% compared with exports for the same period in 2007. Exports to Canada increased 43.6%, exports to Japan fell 5.5%, and exports to Mexico fell 0.8%.

#### Sawn Hardwood

Sawn hardwood production decreased by 6% to 24.3 million cubic meters in 2007. Imports in 2006 decreased by 15.8% compared with 2005. During the first 3 months of 2007, exports and imports fell 30.4% and 36.7%, respectively. Exports to European Union countries decreased by 6.6%, and exports to Pacific Rim nations decreased 31%. Given the decrease in United States production, volatile trade figures, and a declining housing market, apparent consumption for 2007 is forecast to fall below the 2006 volume.

# **Softwood Log Trade**

Softwood log exports to the Japan decreased 21.4% in the first 5 months of 2008 when compared with exports in the same period of 2007. Softwood log exports to Canada decreased by 12.1%. Softwood log exports to all other countries increased 34% during the first 5 months of 2008 when compared to the same time period of one year ago. This level remains well below export levels throughout the 1990s. Softwood log imports declined by 53.1% in the first 5 months of 2008 compared to a year earlier. During 2007, the decline in timber harvest slowed to a lower rate than that in previous years.

## **Hardwood Log Trade**

Hardwood log exports decreased as well as imports during the first 3 months of 2007. Exports decreased 11.5% and imports decreased 42.2%, compared with this period in 2006. During the first 3 months of 2007, exports to the Pacific Rim increased 13.7% and exports to the European Union increased 26.8%. During 2006, hardwood log imports from Canada decreased 45.4% from the previous year. In the first 3 months of 2007, hardwood log imports from Canada fell 41.0%, compared with the same period in 2006. Canada traditionally provides about 95% of U.S. imports.

#### **Pulpwood**

Roundwood production for pulp and wood-based panel mills was 160 million cubic meters in 2007, down slightly from 2006. Roundwood pulpwood consumption is expected to continue to decrease slightly during 2008. Pulpwood supplied from residues is decreasing relative to roundwood. The roundwood portion of pulpwood was 140 million cubic meters in 2007, a 1.4% increase from 2006 (estimate based on pulpwood receipts data from the Forest Resources Association prior to 2008). Trade patterns have continued to have a significant impact on paper and paperboard production and have affected pulpwood use. Exports of paper, paperboard, and converted products increased by 3.6% in 2007. Imports of paper and paperboard increased by 1.4% during 2007. Paper and paperboard production decreased 0.8% in 2007.

# **Softwood Plywood**

Softwood plywood production was 10.8 million cubic meters in 2007, according to APA–The Engineered Wood Association (2007). This level of production was 8.8% below 2006. The volume of softwood plywood production fell throughout the 1990s, and the decline has continued through 2007. Softwood plywood production for the first 5 months of 2008 decreased by 14.7% compared with the first 5 months of 2007. The APA–The Engineered Wood Association's forecast that plywood production would decrease in 2008 is supported by the decline in production during the first 5 months of this year. Softwood plywood imports decreased in 2007 by 41% compared with 2006 data, while softwood plywood exports increased the first 5 months of 2008 by 40.3%. Plywood exports to Canada increased by 60% during the first 5 months of 2008 compared to a year earlier, and plywood imports from Canada decreased 35%. Apparent consumption of softwood plywood is expected to decrease in 2008.

#### **Oriented Strandboard**

According to APA—The Engineered Wood Association, OSB production for the first 6 months of 2008 was 8.6% below production compared with this same period in 2007. In 2007, 13.1 million cubic meters of OSB were produced, compared with 14.8 million cubic meters in 2006.

In 2007, structural panel consumption decreased 14.4% to 30.1 million cubic meters. OSB consumption totaled 18.8 million cubic meters, below its record of 22.5 million cubic meters, and constituted 63% of the structural panel total, a 2% share increase from 2005. Because OSB now accounts for 62% of structural panel consumption (1% decline from 2006), OSB consumption is expected to continue to decline as well as plywood consumption. Structural panel production over the first 6 months of 2008 was 11.4% below the year earlier level.

# **Hardwood Plywood**

Hardwood plywood production, including core material such as softwood plywood and OSB, was estimated at 1.6 million cubic meters in 2007, down from 2006 production. Hardwood plywood imports increased 13.8% in 2007 rising to 4.8 million cubic meters when compared with 2006.

# **Particleboard and Medium Density Fiberboard**

Information from the Composite Panel Association (2007) indicates that particleboard and medium density fiberboard (MDF) production decreased during 2007. Particleboard production was 6.9 million cubic meters, a decrease of 5.5%, and MDF production was 3.4 million cubic meters, a decrease of 10.4%. During 2007, particleboard imports decreased by 32.4% and MDF imports decreased by 1% on a volume basis, compared with 2006. Particleboard exports decreased by 9.4% while MDF exports remained unchanged from a year earlier.

#### Hardboard

Based on data from the Composite Panel Association, 1.1 million cubic meters of hardboard were produced in 2007; this level of production is expected to increase slightly in 2008. Hardboard imports and exports are expected to remain flat over the next two years.

#### **Insulation Board**

Information from the AF&PA showed that 2.7 million cubic meters of insulation board was produced in 2006, unchanged from 2005. Production of insulation board has been flat for several years, resulting in a stable level of apparent annual consumption of about 3.0 million cubic meters.

#### **Fuelwood**

Using data from a 2007 Department of Energy survey and adjusting for the 2007 winter weather and a increasing trend in fuelwood use per household, fuelwood consumption was estimated to be 45.4 million cubic meters in 2007—an increase of less than 3.2% from 2006. Households use most fuelwood for heating and aesthetic enjoyment. Industry uses mill residues rather than roundwood for fuel. A small portion of roundwood fuelwood is used for electric power production. Use for electric power is limited by the low cost of coal and natural gas alternatives. Fuelwood consumption for 2007 is estimated to be above the level for 2006 due to rising alternative fuel costs.

#### **Forest Products Prices**

Recent trends in the wholesale price of forest products are different across two broad categories: lumber and wood products (such as lumber and wood-based panels) and pulp and paper products (Figure 1). Throughout the late 1990s, the producer price of lumber and wood products as reflected by the producer price index (PPI) continued to fluctuate around a level reached by the mid-1990s before peaking during the second half of 1999. The PPI for lumber and wood products has continued to decrease during the first half of 2008, peaking in the third quarter. Changes in the price of softwood lumber accounted for much of this change and most of the volatility in the index. In 1999, the deflated composite price index reached an all-time high (at a level more than 50% higher than that of the base year, 1982), followed immediately by a sustained decline that continued throughout 2000 and into 2008. The PPI reached its lowest level in 5 years during this period. In spite of these sustained low prices, U.S. demand for lumber and wood products during 2000 and into 2005 remained near record levels. But the current situation in the housing market could cause record low price levels if the downturn persists. In contrast, the PPI of prices in the pulp and paper sector has exhibited considerably less short-term volatility. The period of declining prices from the previous peak (1994–1995) ended in 1997, and by early 1998 the composite index had reached the level of the mid-1990s. In deflated terms, the composite index has had little volatility in 2008 and a flat to declining trend with a recent upturn in the 3<sup>rd</sup> quarter of 2008.



#### **Summary of Timber Products**

Economic activity in the United States slowed in 2007 and continues to decline during the first half of 2008, as evidenced by real GDP growth of 0.2 % in the 2<sup>nd</sup> quarter, signaling continued weakness in major sectors of the economy. With GDP growth slowing during the first half of 2008, and the economy health in decline as indicated by such fundamentals as declining building permits, increasing unemployment and anxieties about the financial system resulting from the government bailout of American International Group (AIG), there is very little reason to expect better economic conditions over the next few months. With 2008 being another year of subprime loan resets many home owners will face mortgage rates propelled higher by the continuing credit crisis, and inflationary pressures will add to the current U.S. housing woes. The future strength for other domestic and foreign trade sectors of the wood products industry depends on the general economy, future lumber prices, which have been weak so far this year, the declining housing sector, and the value of the dollar.

The United States furniture industry in retreat since 1999 continues its decline in 2008 as low cost furniture imports continue to erode the domestic industry market share. Employment in the domestic furniture industry has fallen by nearly 50% since 1999 Figure 2.

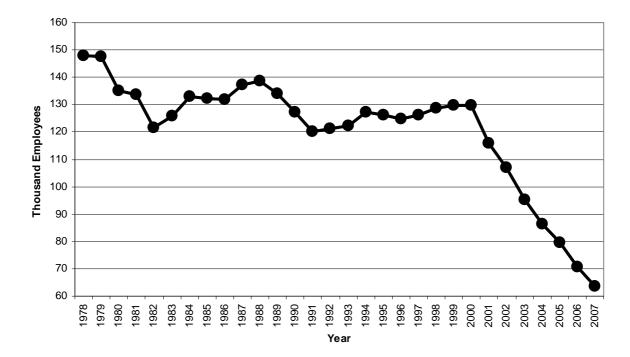


Figure 2 - Employment in Wood Household Furniture Industry, 1978 to 2007

# **Policy Initiatives**

#### **Climate Change**

The United States has taken a leading role in addressing the issue of climate change. The United States is on track to cut greenhouse gas intensity by 18 percent by 2012. U.S. greenhouse gas intensity – the amount emitted per unit of economic activity – declined by 2.3 percent in 2005 and by 4.2 percent in 2006. During 2001-2006, the U.S Government will have devoted more than \$29 billion to climate programs, more than any other nation. During his State of the Union address, President Bush announced the Advanced Energy Initiative (AEI), which proposes a 22-percent increase in funding for clean energy technology research, supporting new biofuels such as cellulosic ethanol and bio-diesel. The United States is also leading the global effort to promote clean development, enhance energy security, and reduce harmful air pollution worldwide. Multilaterally, the United States provides the most funding of any country for activities under the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel on Climate Change (IPCC).

The 2002 Farm Bill provided nearly \$40 Billion in funding over ten years for conservation on working lands, enabling the Federal government (largely through the USDA) to provide targeted

incentives to encourage wider use of land management practices that remove carbon from the atmosphere or reduce emissions of greenhouse gases. The 2007 Farm Bill added additional funding, \$7.8 billion over 10 years above the current conservation baseline.

The U.S. Federal government supports an extensive array of scientific and technological research on climate change in addition to domestic and international actions to address greenhouse gas emissions and carbon sequestration. The 2003 Strategic Plan for the United States Climate Change Science Program identified 21 synthesis and assessment products that represent principal responses to the top-priority research, observation, and decision support needs of society. The Climate Change Science Program (CCSP) Synthesis and Assessment Product 4.3 (SAP 4.3) will address the effects of climate change on agriculture, land resources, water resources, and biodiversity. These areas are addressed under the ecosystems, land use, and water research elements of the CCSP. One of the primary goals of these research elements is to enhance understanding and ability to estimate impacts of future climate change on these systems.

#### **Green House Gases**

On April 17, 2006, the U.S. Department of Energy (DOE) issued revised guidelines for the voluntary reporting of greenhouse gas emissions, sequestration and reductions, known as the 1605(b) program. The program was implemented by DOE during 2007. The initial program guidelines were issued in 1994 and over 200 utilities, industries, institutions and other entities now report annually. The U.S. Department of Agriculture provided the technical methods for estimating greenhouse gas emissions, carbon sequestration, and emission reductions on farm, forest, and grazing lands. The revised guidelines include "state-of-the-science" guidance and tools for estimating emissions from agricultural, forestry, and conservation activities important for carbon sequestration efforts, as well as from other sources of greenhouse gases. As noted in the Forest Appendix of the revised guidelines, international agreements recognize forestry activities as one way to sequester carbon, and thus mitigate the increase of carbon dioxide in the atmosphere; this may slow possible climate change effects. Forest ecosystems and forest products represent a significant carbon dioxide sink in the United States. Over 90 percent of the sequestration in agriculture and forests occurs in the forest sector, with an additional 7 percent sequestered in urban trees. Total carbon stocks in forest ecosystems of the conterminous United States are estimated at 184,800 Tg CO2 eq. The net amount of carbon stored in forest ecosystems in the conterminous U.S. increased by an estimated 547 Tg CO2 eq. This estimate does not include increases in biomass harvested from a portion of U.S. forests, used largely as lumber, panels, paper and fuelwood.

Carbon is sequestered in growing trees, principally as wood in the tree bole. However, accrual in forest ecosystems also depends on the accumulation of carbon in dead wood, litter, and soil organic matter. When wood is harvested and removed from the forest, not all of the carbon flows immediately to the atmosphere. In fact, the portion of harvested carbon sequestered in long-lasting wood products may not be released to the atmosphere for years or even decades. If carbon remaining in harvested wood products is not part of the accounting system, calculation of the change in carbon stock for the forest area that is harvested will incorrectly indicate that all the harvested carbon is released to the atmosphere immediately. Failing to account for carbon in wood products significantly overestimates emissions to the atmosphere in the year in which the

harvest occurs. Tables of estimates of forest carbon stock are provided for common forest types within each of 10 U.S. regions. Six distinct forest ecosystem carbon pools are listed: live trees, standing dead trees, understory vegetation, down dead wood, forest floor, and soil organic carbon. The Forest Appendix can be found at: http://www.usda.gov/oce/global\_change/Forestryappendix.pdf

# **BioEnergy**

Several recent key laws, Executive Orders, and regulations are helping to drive bioenergy production and use in the United States including: Presidential Executive Order 13101, Greening the Government Through Recycling and Waste Prevention (required Federal agencies to give preference in their procurement and grant programs to the purchase of specific recycled content products); Presidential Executive Order 13134, Developing and Promoting Biobased Products and Bioenergy (set a goal of tripling the U.S. use of bioenergy and bioproducts by 2010.); the Biomass Research and Development Act of 2000, (Title III of the Agricultural Risk Protection Act of 2000, P.L.106-224); and Section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA) the first farm legislation containing a separate title (Title IX) devoted to energy, which creates a Federal government preferential purchasing program for biobased products in order to help promote emerging markets for these products.

On August 8, 2005, the Energy Policy Act of 2005 (Public Law 109-58) was signed into law. The act promotes investments in energy conservation and efficiency, including provisions for promoting residential efficiency, reducing Federal government energy usage, modernizing domestic energy infrastructure, diversifying the nation's energy supply with renewable sources (wind, solar, and biomass energy), and supporting energy-efficient vehicles.

The Farm Security and Rural Investment Act of 2002 created the U.S. Federal Biobased Products Preferred Procurement Program (FB4P). The FSRIA provides for development of a preferred procurement program for biobased products under which federal agencies are required to purchase biobased products. Research is currently underway on biodiesel fuels, ethanol fuels, and other sources of biomass energy and associated research is underway on the measurement of atmospheric emissions associated with renewable energy and the potential effects of deregulation of electric utilities on rural communities. On August 17, 2006, the U.S. Department of Agriculture (USDA) announced two proposed rules under the FB4P which designate 20 items that must receive special consideration by all federal agencies when making purchases. The designation of these 20 biobased items is a major step in advancing the federal preferred procurement program for biobased products. The 20 biobased items include: adhesive and mastic removers, insulating foam for wall construction, hand cleaners and sanitizers, composite panels, fluid-filled transformers, biodegradable containers, fertilizers, metalworking fluids, sorbents, graffiti and grease removers, two-cycle engine oils, lipcare products, biodegradable films, stationary equipment hydraulic fluids, biodegradable cutlery, glass cleaners, greases, dust suppressants, carpets, and carpet and upholstery cleaners. When finalized, 1,500 biobased products will be given procurement preference by federal agencies, generating new economic opportunities for biobased product producers while providing new choices for U.S. consumers. Federal agencies must give preference to designated biobased products in government purchases within one year of publication of the final designation rule. The USDA has assembled a list of

biobased items that will be used for designation under the FB4P. The USDA has previously issued final guidelines for the biobased procurement program and developed a model procurement program of training and education to help Federal procurement officials and users of biobased products identify and purchase qualifying biobased products. Information on the guidelines and the model program are available at <a href="http://www.usda.gov/biobased">http://www.usda.gov/biobased</a>.

The Energy Independence and Security Act of 2007 will improve vehicle fuel economy and help reduce U.S. dependence on oil. The bill the President signed t responds to the challenge of his bold "Twenty in Ten" initiative, which President Bush announced in January. It represents a major step forward in expanding the production of renewable fuels, reducing our dependence on oil, and confronting global climate change. The goal is to increase energy security, expand the production of renewable fuels, and make America cleaner for future generations.

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# **Statistics and Prospects**

Table 2–Statistics and Prospects--Prospects for wood and wood products are shown in the following table. All volumes are reported in 1,000 cubic meters. Figures for 2008 are estimates.

| Sawn softwood      |         | •       |         | Oriented Strandboa | Oriented Strandboard (OSB)      |         |         |  |  |
|--------------------|---------|---------|---------|--------------------|---------------------------------|---------|---------|--|--|
| _                  | 2006    | 2007    | 2008    |                    | 2006                            | 2007    | 2008    |  |  |
| Production         | 65,549  | 59,769  | 56,392  | Production         | 13,240                          | 13,065  | 12,846  |  |  |
| Imports            | 53,724  | 43,389  | 41,221  | Imports            | 8,972                           | 6,114   | 6,036   |  |  |
| Exports            | 2,195   | 2,343   | 2,206   | Exports            | 159                             | 222     | 195     |  |  |
| Consumption        | 117,078 | 100,815 | 95,407  | Consumption        | 22,053                          | 18,957  | 18,687  |  |  |
| Coniferous logs    |         |         |         | Particleboard      |                                 |         |         |  |  |
| _                  | 2006    | 2007    | 2008    |                    | 2006                            | 2007    | 2008    |  |  |
| Production         | 182,390 | 163,748 | 159,008 | Production         | 7,414                           | 7,362   | 9,032   |  |  |
| Imports            | 2,133   | 2,133   | 1,690   | Imports            | 1,221                           | 1,201   | 478     |  |  |
| Exports            | 7,044   | 7,044   | 7,442   | Exports            | 86                              | 88      | 246     |  |  |
| Consumption        | 177,479 | 158,837 | 153,256 | Consumption        | 8,549                           | 8,475   | 9,264   |  |  |
| Sawn hardwood      |         |         |         | Medium density fil | Medium density fiberboard (MDF) |         |         |  |  |
|                    | 2006    | 2007    | 2008    |                    | 2006                            | 2007    | 2008    |  |  |
| Production         | 25,986  | 24,811  | 23,006  | Production         | 3,896                           | 3,400   | 3,216   |  |  |
| Imports            | 1,626   | 1,036   | 1,102   | Imports            | 1,408                           | 1,408   | 1,344   |  |  |
| Exports            | 3,123   | 2,167   | 2,803   | Exports            | 307                             | 307     | 296     |  |  |
| Consumption        | 24,489  | 23,680  | 21,305  | Consumption        | 4,997                           | 4,501   | 4,264   |  |  |
| Hardwood logs      |         |         |         | Insulation board   |                                 |         |         |  |  |
| <u>.</u>           | 2006    | 2007    | 2008    |                    | 2006                            | 2007    | 2008    |  |  |
| Production         | 59,869  | 59,700  | 55,897  | Production         | 2,755                           | 2,755   | 2,755   |  |  |
| Imports            | 233     | 136     | 130     | Imports            | 360                             | 360     | 360     |  |  |
| Exports            | 2,105   | 2,325   | 2,360   | Exports            | 201                             | 201     | 201     |  |  |
| Consumption        | 57,997  | 57,511  | 53,667  | Consumption        | 2,914                           | 2,914   | 2,914   |  |  |
| Coniferous plywood | d       |         |         | Roundwood pulpw    | ood                             |         |         |  |  |
|                    | 2006    | 2007    | 2008    |                    | 2006                            | 2007    | 2008    |  |  |
| Production         | 11,884  | 10,835  | 10,001  | Production         | 160,813                         | 160,662 | 159,562 |  |  |
| Imports            | 1,635   | 974     | 1,097   | Imports            | 940                             | 899     | 750     |  |  |
| Exports            | 375     | 489     | 450     | Exports            | 2,777                           | 2,780   | 2,662   |  |  |
| Consumption        | 13,144  | 11,320  | 10,648  | Consumption        | 143,730                         | 140,349 | 157,650 |  |  |
| Non-coniferous ply | wood    |         |         | Hardboard          |                                 |         |         |  |  |
|                    | 2006    | 2007    | 2008    |                    | 2006                            | 2007    | 2008    |  |  |
| Production         | 1,602   | 1,602   | 1,502   | Production         | 1,282                           | 1,131   | 1,290   |  |  |
| Imports            | 4,496   | 4,494   | 3,060   | Imports            | 1,441                           | 1,441   | 1,363   |  |  |
| Exports            | 186     | 187     | 190     | Exports            | 389                             | 389     | 349     |  |  |
| Consumption        | 5,912   | 5,909   | 4,372   | Consumption        | 2,335                           | 2,183   | 2,304   |  |  |