

# MADISON'S LUMBER REPORTER

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## News & Updates

### US Log and Lumber Exports Up : 2013

Log and lumber exports from Washington, Oregon, northern California, and Alaska increased by 20 per cent in volume in 2013 compared to 2012, the US Forest Service's Pacific Northwest Research Station reported Friday. The total value of these exports also jumped, by nearly 37 per cent for log exports and by 23 per cent for lumber exports.

Compared to 2012, China increased its imports of west coast logs by 48 per cent and of west coast lumber by 45 per cent in 2013. Last year, total US log and lumber exports to the country increased by more than 35 per cent. CONT'D PAGE 7

### Japan Housing Starts : December and Full-Year 2013

Total 2013 housing starts in Japan recovered to 980,025 units, up from a low in 2009 of 788,000 units, said the Japan Lumber Reports Friday. This compares to 834,117 total starts for 2011, according to the February 12, 2012 issue of the Reports. That year starts improved by 2.6 per cent over 2010.

Condominium starts were 127,000 units, a 3.6 per cent increase over the previous year. CONT'D PAGE 7

### Housing Starts, Sales : US

Groundbreaking on new US homes dropped 16 per cent in January compared to December, and dipped 2 per cent lower than their level one year earlier, data released by the US government Friday shows. The decrease had been widely expected, thanks to January's cold and stormy weather.

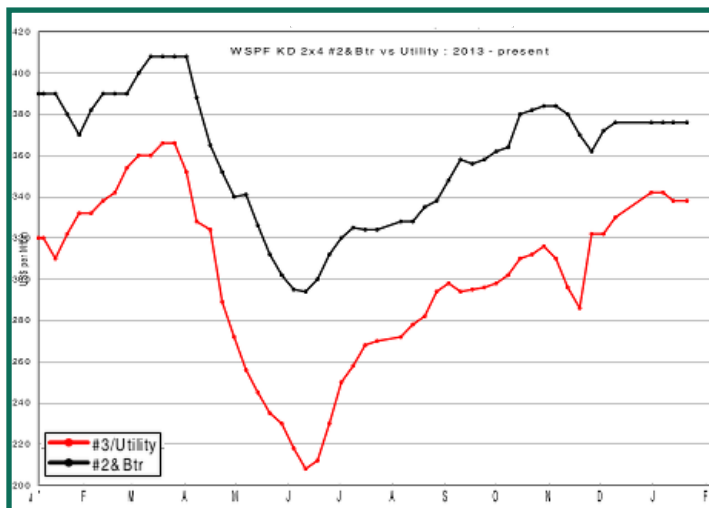
New home starts in January were at an annual rate of 880,000 (seasonally adjusted), well below December's revised estimate of 1,048,000. In January 2013, the annualized rate was 898,000 (seasonally adjusted). The rate of groundbreaking on single-family homes, by far the largest piece of the market, saw a 15.9 per cent dip in January compared to December.

Sales of previously owned homes, meanwhile, fell 5.1 per cent in January from December to a seasonally adjusted annual rate of 4.62 million, the National Association of Realtors said, also Friday. The drop, the fifth in the past six months, pushed sales down to the lowest level in 18 months. CONT'D PAGE 7

### Biochar from Wood Residue

This week the British Columbia government tabled its latest budget in the Legislature. The focus was on fiscal restraint, with most attention aimed at LNG and future revenue streams from that sector. The Ministry of Forests, Lands, and Natural Resource Operations receives an additional \$30 million in funding, which replaces what was slashed in the previous budget. Most of this increased funding will be used to address the timber permitting backlog.

There is also a very small amount for capital improvements in the public sector to reduce carbon emissions. CONT'D PAGE 9



### U.S. HOUSING STARTS

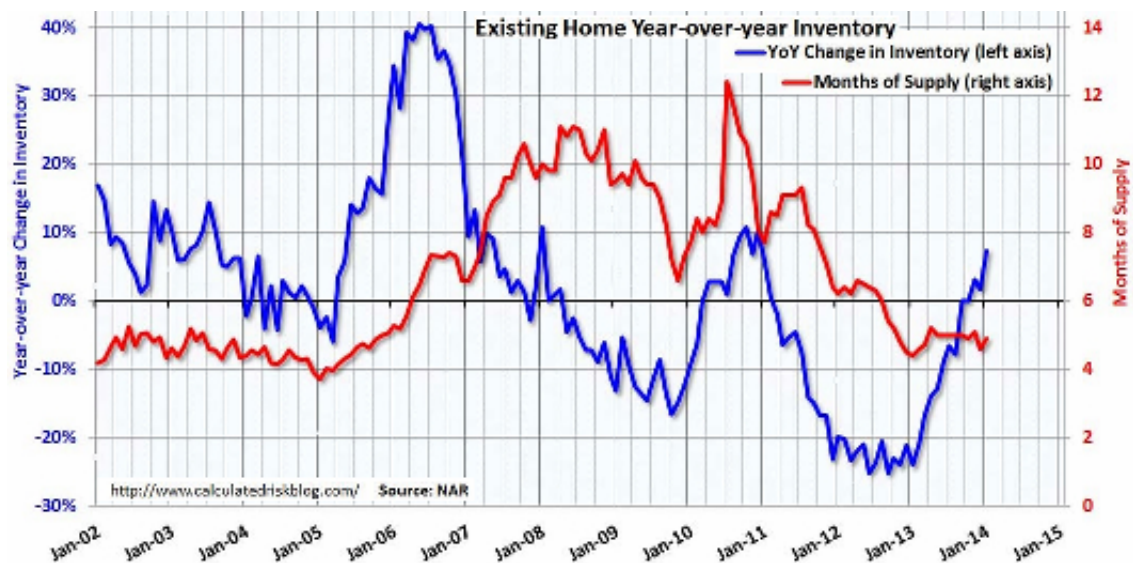
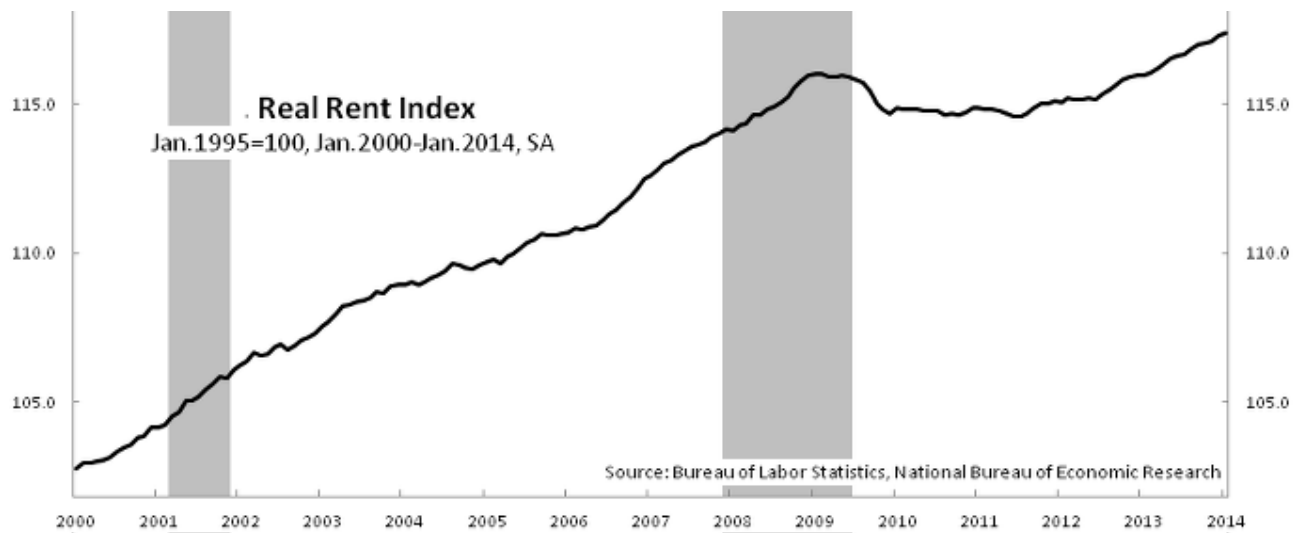
	Jan-14	Dec-13		Jan-14	Dec-13
<b>Starts</b>			<b>Permits</b>		
Actual	59,100	69,500	Actual	64,300	75,500
SAAR*	880,000	1,048,000	SAAR*	937,000	991,000
1 Unit	573,000	681,000	1 Unit	602,000	610,000
2-4 Units	(s)	(s)	2-4 Units	26,000	26,000
5+ Units	300,000	344,000	5+ Units	309,000	355,000
<b>Starts by Region</b>			<b>Permits by Region</b>		
Northeast	136,000	84,000	Northeast	104,000	116,000
Midwest	50,000	155,000	Midwest	151,000	139,000
South	457,000	522,000	South	483,000	467,000
West	237,000	287,000	West	199,000	269,000

Seasonally adjusted annual rate.

## December starts and total year

SOURCE: Japan Lumber Reports

	December	'13/'12	Jan.-Dec.	'13/'12
Total	89,578	118.0	980,025	111.0
Owners	31,858	119.1	354,772	113.9
Rental	35,634	129.8	356,263	111.3
Units built for sale	21,902	102.1	263,931	106.9
(Condos)	9,736	92.6	127,599	103.6
Wood based units	51,505	118.3	549,971	113.0
Prefabricated	14,490	122.2	146,402	110.7
2x4	11,209	109.3	120,111	111.7



## Key Prices

	This Week	Last Week	Change	Month Ago	Change	Year Ago	Change
WSPF KD R/L 2x4	368	368	0	376	-8	390	-22
WSPF KD R/L 2x6	354	354	0	358	-4	386	-32
WSPF KD R/L 2x8	340	338	+2	346	-6	375	-35
WSPF KD R/L 2x10	406	406	0	405	+1	400	+6
WSPF KD PET 2x4 Stud	350	350	0	340	+10	366	-16
WSPF KD PET 2x6 Stud	305	310	-5	305	0	366	-61
Douglas Fir Green R/L 2x4	390	375	+15	405	-15	380	+10
Douglas Fir Green R/L 2x10	445	420	+25	500	-55	380	+65
ESPF KD 2x4 8ft Stud	400	405	-5	385	+15	420	-20
OSB Ontario 7/16" (CDN\$)	230	230	0	225	+5	445	-215
CSplywood Toronto 3/8" (CDN\$)	389	402	-13	394	-5	433	-44

## Weekly News

### Log and Lumber Export, US

CONT'D FROM PG 2 Other 2013 year-end highlights from US Forest Service PNW Research Station:

- Total US log exports in 2013 increased by over 19 per cent in volume compared to 2012, while the value increased by more than 25 per cent;
- Total US lumber exports in 2013 increased about 12 per cent in volume compared to 2012, while the value increased by 18 per cent;
- West coast lumber exports in 2013 represented 31 per cent of the total US lumber export in volume;

At west coast ports, 63 per cent of outgoing logs and 40 per cent of outgoing lumber were destined for China in 2013, compared to 58 per cent of logs and 33 per cent of lumber in 2012.

### Japan Housing Starts, 2013

CONT'D FROM PG 2 In total for 2013, units built for owners increased by almost 14 per cent over 2012, to 354,000, the highest since 2006's 358,000 units, said Japan Lumber Reports Friday.

### US Home Sales, Housing Starts

CONT'D FROM PG 2 the rate of new groundbreakings in the US fell most precipitously in the snow-covered Midwest, where the pace dropped 67.7% (seasonally adjusted annual rate) in January compared to December, said the US Census Bureau. The pace of groundbreakings fell 12.5 per cent in the South, which has also been

hit hard by winter weather this year. The West saw groundbreaking slow 17.4 per cent in January. Only the staunch Northeast increased its rate of groundbreakings, with 61.9 per cent (seasonally adjusted annual rate) more starts in January compared to December.

Permits also dipped in January compared to December, by 5.4 per cent to a seasonally adjusted annual rate of 937,000. However, this rate is still 2.4 per cent above the rate in January 2013.

As for sales, Friday's report showed existing-home sales were down 5.1 per cent from a year earlier.

The median sales price of existing homes in January was US\$188,900, up 10.7 per cent from a year earlier. Inventory remains tight by historical standards but is growing. At the January sales pace, it would take 4.9 months to exhaust the supply of homes on the market, up from 4.6 months in December.

As well, home-builder confidence fell sharply this month, the National Association of Home Builders reported this week. Housing starts—a measure of new construction—fell by 16 per cent in January from December, the Commerce Department reported.

### Resolute Settles

Resolute Forest Products, out of Montreal, QC, Monday announced a five-year renewal of the master collective agreement covering four unionized US pulp and paper mills. Unionized employees voted overwhelmingly to ratify the agreement at mills in Augusta, GA; Calhoun, TN; Catawba, SC; and Coosa Pines, AL, effective as of February 14, 2014.

The agreement covers about 1,500 employees, represented by the United Steelworkers, the International Brotherhood of Electrical Workers, and others.

### Domtar Declares . . .

Domtar Corporation, also based in Montreal, announced Thursday that its Board of Directors has approved its fourth quarterly dividend for the 2013 fiscal year on its common stock and on Domtar (Canada) Paper Inc. exchangeable shares.

The dividend of US\$0.55 per share is payable on April 15, 2014 to stockholders of record on March 14, 2014.

Domtar designs, manufactures, and distributes a wide variety of fiber-based products. In 2013, Domtar had sales of US\$5.4 billion from some 50 countries.

## Calendar

### March 2014

Western Wood Products Assoc. Annual Meeting  
March 3-9 – Portland, OR  
<http://www.wwpa.org>

IWPA's World of Wood Convention  
March 5-7 – St. Petersburg, FL  
<http://www.iwpawood.org>

### April 2014

Council of Forest Industries Annual Convention  
April 4-5 – Prince George, BC  
<http://www.cofi.org>

# Biochar

## Made from Wood Residue

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The subject of emissions is currently a hot topic for both the forest and energy industries. There is a lot of effort being put into realizing new ways to find value in reducing carbon volumes, usually in some form of tradable offset. As well, researchers are investigating outright reductions of carbon released from decomposing materials.

The production of biochar -- a type of high-quality char or charcoal that can be used as a soil amendment -- from woody biomass residues presents an opportunity to displace coal combustion and decrease greenhouse gas emissions.

Biochar is the umbrella term which describes the material created with the application of heat and pressure, whether through thermochemical conversion or pyrolysis. The process also produces heat and gas. A type of charcoal, biochar can be made simply and cheaply from any organic material.

The process converts 'labile' carbon in biomass, carbon that is easily degraded and recycles continuously in the biota, into 'recalcitrant' carbon which resists degradation and can sequester carbon in soil for centuries. The product is identical to charcoal, except it is primarily used for soil amendment purposes. However, it has myriads of applications like cleaning water, reducing odour, and adsorbing toxic pollutants on soil, just to name a few.

Whereas decomposition and combustion return about 99 per cent of the carbon in biomass to the air, pyrolysis traps up to half of it in the form of biochar.

Another process, hydrothermal carbonization (HTC), creates 'HTC-biochar' or hydrochar, which can easily be separated from the water. Approximately 75 - 80 per cent of the carbon input from HTC is found in the solid phase; about 15 - 20 per cent is dissolved in the liquid phase, and the remaining 5 per cent is converted to mostly CO<sub>2</sub> gas.

The elemental composition and calorific value of most of the HTC-outputs are very similar to brown coals.

The properties of biochar vary depending on the process and the agricultural material used. It can improve soil health and resilience in crop production, and, proponents say, may be

one of the best defences against climate change through sequestration of carbon in the soil. Researchers hope to find an economical way to produce biochar that can boost crop yields, add organic matter to soil, and reclaim soil that's become too acidic.

Work is also being done to use the gas created by the process to generate electricity or heat a farmer's home or out-buildings.

Other higher value end-uses of biochar include soil amendment, media filtration, carbon sequestration, and energy storage. And, in extremely dry conditions, biochar retains water, making it available to plants for a longer time.

Lakeland College and Alberta Innovates Technology Futures, with assistance from Western Economic Diversification Canada and industry support, have developed the Alberta Biochar Initiative (ABI), says the agency website. The ABI is intended to develop and demonstrate technologies that will enable the large scale commercial deployment of biochar products and biochar applications, and envisions a robust commercial-scale biochar production, application and carbon trading market in Alberta by 2016.

ABI has submitted a proposal to include biochar in the American Carbon Registry, a carbon offset program.

The mission of the ABI is to support the development and commercial deployment of biochar production technologies and the generation and collation of data that assists in the establishment of commercial markets for biochar products made from local feedstock.

Biochar could also be used in existing voluntary markets or future regulatory markets for carbon sequestration, according to the non-profit International Biochar Initiative, based in Westerville, OH. Climate change advocates say using a gasifier reduces the amount of greenhouse gas emitted compared with burning the waste.

Forestry residue is a top choice due to its low value and accessibility compared with other agricultural residues such as straw and seed cleanings, researchers at Biochar Initiatives explain.

In BC, a new report by the Pacific Institute for Climate Solutions (PICS), a collaboration of BC's research-intensive universities led by the Univer-

sity of Victoria -- "Industrial and Market Development of Biochar in BC" -- says biochar can substitute for coal in electricity or heat production. This provides an immediate opportunity to reduce net carbon emissions.

"BC has enough excess forest residue and wood waste to create five million tonnes of biochar per year, which would account for 270 per cent of the province's internal coal usage," said lead author Geoff de Ruiter, from the University of Northern British Columbia. "Substituting that amount of biochar for coal or natural gas could drop GHG emissions by 22 per cent, which would take BC two-thirds of the way toward its legislated emissions reduction target of at least 33 per cent below 2007 levels by 2020."

Elsewhere, according to Eurostat, in 2011 the EU-27 imported carbon products worth around €22.6 billion. Meanwhile, the European Compost Network's report, Strategies for Sustainable Management of biowaste in Europe, states that the EU generates some 80 million tonnes of wet biowaste which could be effectively recycled to carbon materials by means of Hydrothermal Carbonisation (HTC).

With this in view, the recently launched NEWAPP ('new technological applications for wet biomass waste stream products') project hopes to help meet this challenge by turning wet biowastes into high-value products through Hydrothermal Carbonisation. NEWAPP is funded by the European Commission, under the 'Research for SME associations instrument of the 7th Framework Program'.

