



**NEW Fluff Pulp Study!**

For a five-year outlook on supply, demand, prices and costs of fluff pulp globally.

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**Summary of Changes**

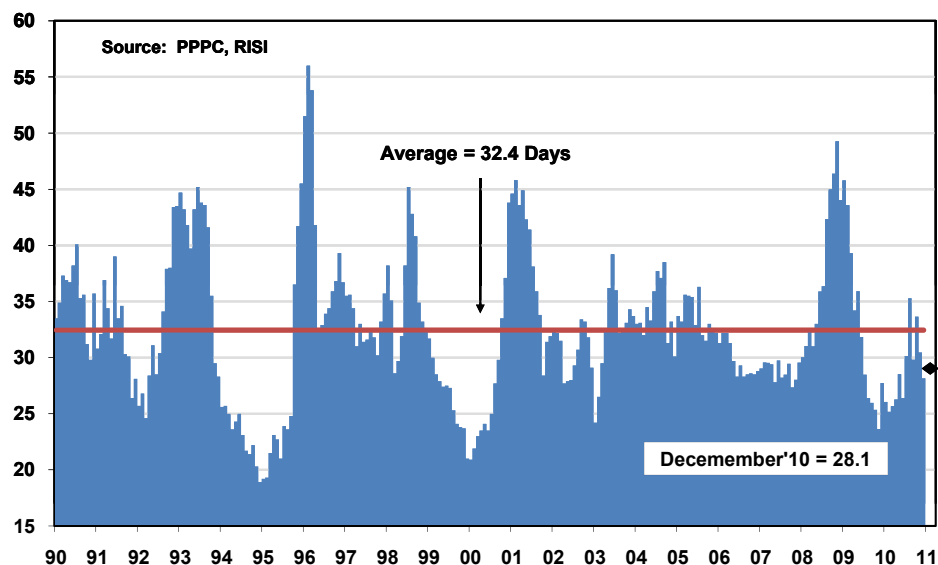
*We have recognized the recent change in momentum in the market and revised our forecast to show somewhat higher prices in the next several months. We continue to see prices declining later this year, as supply outpaces demand growth, but there continue to be risks here.*

**Recent Developments**

December was a blockbuster month for pulp shipments. Inventories at producers' mills dropped significantly. How long the party will last for producers is still questionable in our view, because port data and consumer inventory data indicate that pulp inventories have been rising in some key consuming regions, and there are likely to be further increases in those stocks in January. But there is no denying the strength of the December report: producers in the "World 20" reportedly shipped an all-time high level of 122,300 tonnes per day and shipments to China reached a all-time one-month high of 984,000 tonnes, more than double the pace of mid-2010. Every region showed increases over November, except for Europe, where demand has drifted downward over the past few months.

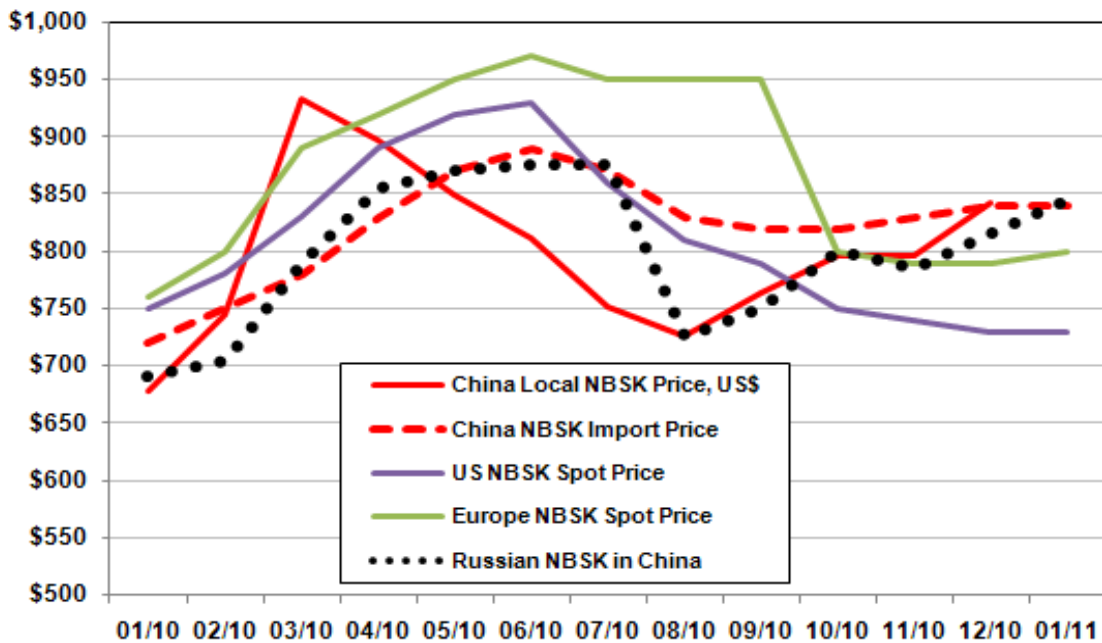
The biggest move up was in BHK shipments, which soared to 1.936 million tonnes. Producers appear to have not ramped up production in response to the surge in demand, so producer inventories of BHK fell sharply, perhaps by 200,000 tonnes, not seasonally adjusted. This put producer inventories, on a seasonally-adjusted days of supply basis, below the key level of 35 days, which is the point at which BHK producers tend to gain pricing power. In October,

**Figure 1**  
**Seasonally Adjusted Producer Inventories of Chemical Grade Market Pulp (20 Countries)**  
 Days of Supply



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**Figure 2**  
**Bleached Softwood Kraft Spot Price Comparison**  
 US Dollars per Metric Ton



in contrast, producer BHK stocks were at 41 days. BSK shipments in December totaled 1.9 million tonnes. Producer stocks dropped by an estimated 42,000 tonnes, or to 23.7 days of supply, seasonally adjusted. That is again below what we normally consider to be the threshold for pricing power in the BSK market. Producer stocks were as high as 29.7 days last August. At the margin, BSK demand has been boosted by the very wide price gap between dissolving and paper grade pulp, with perhaps 10,000-20,000 tonnes per month of paper grade BSK being converted to "modified wood dissolving pulp" (MWDP) in China. This is discussed in more detail in the China Update section below.

We think the recent surge in demand indicates the many buyers have thrown in the towel for now on price declines in the very near term. The decline in pulp prices over the past six months has been much less than almost anyone in the market expected, so buyers moved back into the market as they saw conditions firming up in China. We think this marks a short-term bottom on the market. Spot prices for BSK have clearly firmed up, and spot prices for BHK appear to be doing the same. We expect to see at least a small amount of upward price movement in the next several months. The potential is there for the move to be substantially larger than we are considering, depending on how paper markets behave over the next several months.

After China returns to work from the seven-day Spring Festival (Lunar New Year) celebration on February 9, we will know more about the appetite of Chinese pulp buyers for overseas tonnage.

### Forecast Still Calls for Price Declines

We are not yet ready to abandon our call for more widespread price declines later this year. Given our current economic and paper forecast, it appears that there will be a weaker tone to the market after the current round of buying ends. We noted above that we have already seen some indications that inventories are rising (and are at above normal levels) in two or three key consuming regions. We would not be surprised to see further consumer restocking in the next few months, as buyers respond to the change in momentum.

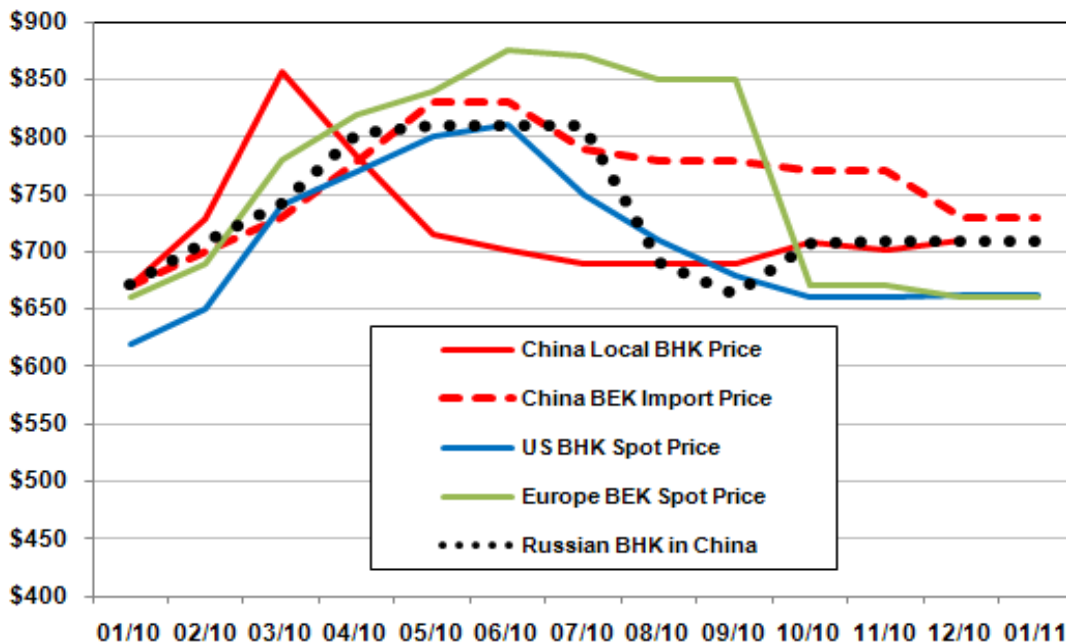
Once this process plays out, it appears that growth in pulp consumption will not be sufficient to keep up with the increase in capacity that is happening right now, especially for BHK in Asia.

The key here is that we are expecting growth of paper demand to slow rather sharply in 2011. The consumer inventory tailwind in the paper markets should dissipate. Paper demand is now projected to grow by just 2.9% in 2011. Breaking this down into segments within the industry, we are showing a gain of 1.3% for printing and writing paper demand (reflecting some inventory destocking), and 4.2% for tissue and sanitary papers. The weak performance that we are expecting in the graphic paper segment plays a key role in our outlook for market pulp demand and prices in 2011.

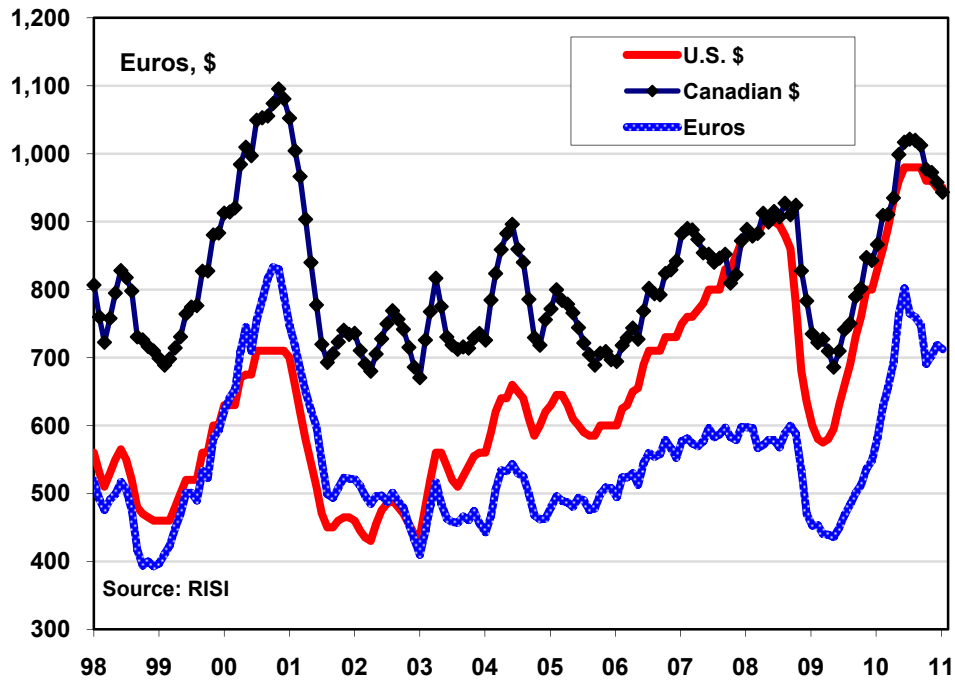
### China Update: Modified Wood Dissolving Pulp; Drought Threatens Wheat Crop

We have been working here in China to better understand and to quantify the degree to which paper grade pulp is being processed and converted to a dissolving pulp grade in China. With the commodity viscose grade recently at \$2,200/tonne in China, and bleached radiata kraft at just over \$800/tonne, there are huge incentives to find ways to use paper grade pulp in dissolving applications. It is now, in fact, common for producers of cotton linter dissolving pulp in China to also make and sell what is being called "modified wood dissolving pulp" (MWDP), which is a chemical paper grade wood pulp that has received a soda treatment to remove impurities and increase cellulose levels. MWDP in China is being made from softwood kraft pulp (both domestic and imported) and from bamboo pulp; we are not aware of hardwood kraft pulp being used. We believe the practice has become quite common, but there are practical limitations as to how far it can penetrate the market for viscose staple fiber (VSF), which is by far the largest end use for dissolving pulp (DP) in China. MWDP has higher levels of impurities than standard dissolving pulp, so VSF producers have blended MWDP with DP, commonly at levels of 10-15%, and as high as 20%. We understand that there is a noticeable degradation of quality when the 20% level is approached, as higher levels of impurities cause production problems for VSF producers. Obviously these are important numbers for pulp market participants, for they indicate the potential upside surprise we may

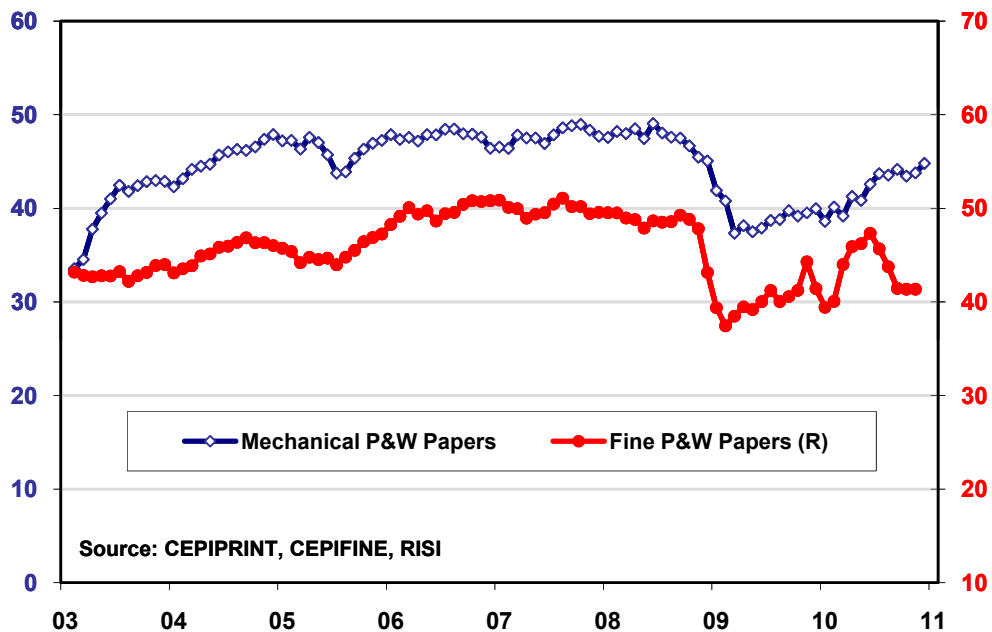
**Figure 3**  
**Bleached Hardwood Kraft Spot Price Comparison**  
 US Dollars per Metric Ton



**Figure 4**  
**NBSK Transaction Prices in Three Currencies**  
 Currency Units per Metric Ton, Del. Northern Europe



**Figure 5**  
**W. Europe Monthly Printing/Writing Paper Shipments**  
 Thousand Metric Tons/Day, Seas. Adj., 3 Mo. Mov. Avg.

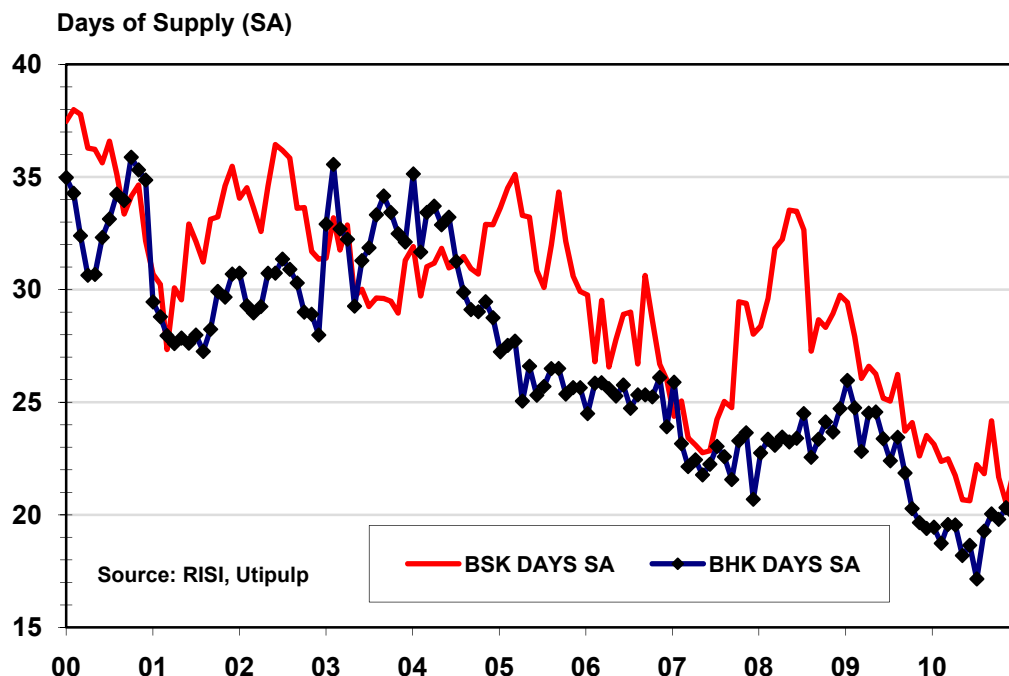


see to paper grade pulp demand because of the extreme price gap between paper grade and dissolving pulp. We will be digging more deeply for further confirmation of these numbers after the Chinese Lunar New Year celebration ends on February 9.

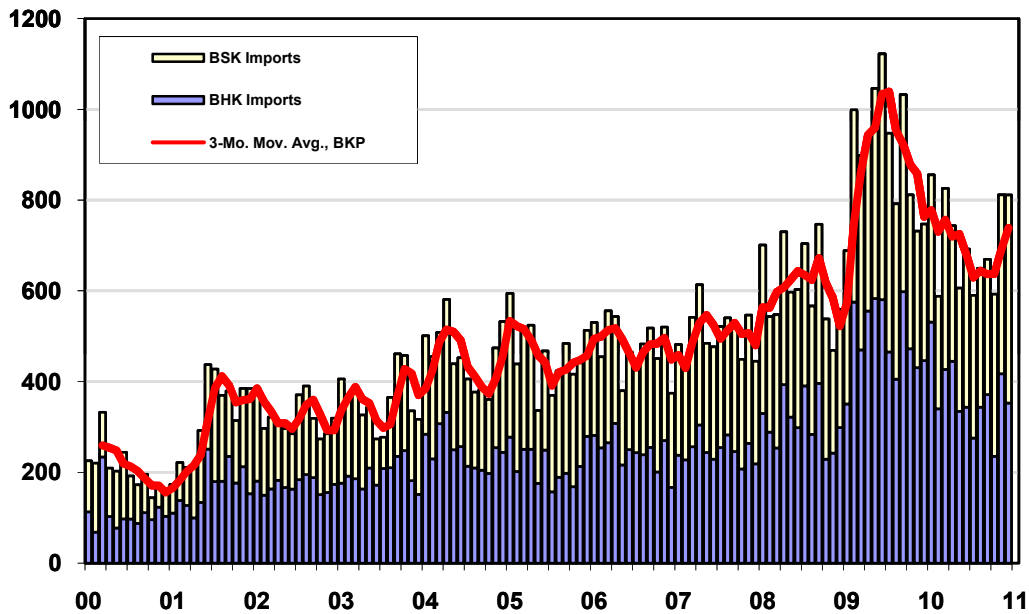
In terms of tonnages involved, we have heard indications that MWDP accounts for 10,000 to 20,000 tonnes per month of chemical paper grade pulp demand, which appears to refer to imported pulp. How realistic is that? According to RISI's newly-published study of the world dissolving pulp market, China's demand for dissolving pulp in 2011 will reach 1.875 million tonnes. The acetate market is important in China and that market demands very high quality dissolving pulp -- mixing in MWDP is not a realistic option for this market segment. Overall, then, if MWDP is used at levels averaging 10% across all dissolving pulp applications, and considering conversion losses as the cellulose concentration is raised during the modification process, then a tentative ballpark estimate for MWDP consumption in China for 2011 could be as much as 300,000 tonnes. That is 25,000 tonnes per month. Again, some of the MDWP is being made from domestic pulp (including bamboo) so the effect on import demand for BSK is probably in the neighborhood of the 10,000-20,000 tonnes per month figure that we have been hearing. This is not a game-changing level of demand in terms of the world pulp market, but it is enough to be felt in the market, at least until the price gap between paper grade pulp and dissolving pulp returns to a more normal level. That will happen when cotton prices correct downward.

Meanwhile, the key wheat-growing region of Northern China is experiencing its worst drought in 50 to 100 years (depending on the location). It is too early to know yet, but this could substantially depress harvest levels of the winter wheat crop that was planted last September/October, and thus limit straw pulp production in the second half of this year. Four provinces in Northern China (Shandong, Shanxi, Henan and Hebei) account for the large majority of winter wheat production in China, and all have seen extreme drought conditions over the past several months. (Beijing, for example, which is located inside of Hebei province, has had no precipitation for over 100 days.) Winter wheat is the dominant wheat crop grown in China, and is harvested in May/June. The lack of water may not yet be a critical problem for this year's wheat crop, as it is in its dormancy stage, so some forecasters say that if the March/April period is wet, the harvest may not be badly affected. Others disagree, saying there is

**Figure 6**  
**European Consumer Pulp Inventories**  
 Utipulp Seasonally Adjusted Days of Supply



**Figure 7**  
**Bleached Kraft Pulp Imports into China**  
 Thousand Metric Tons/Month, Not Seas. Adj.



already serious damage in some locations. A key risk is the temperature over the next month or so. The dormant wheat is not covered by snow so it is not protected from extreme bouts of cold weather. Temperatures in Northern China have generally not been extremely cold so far this winter, but we will see how this develops over the next few weeks. We are not ready to revise our forecast for China's BHK demand based on these developments, but we are keeping a watchful eye on the situation.

## Risks

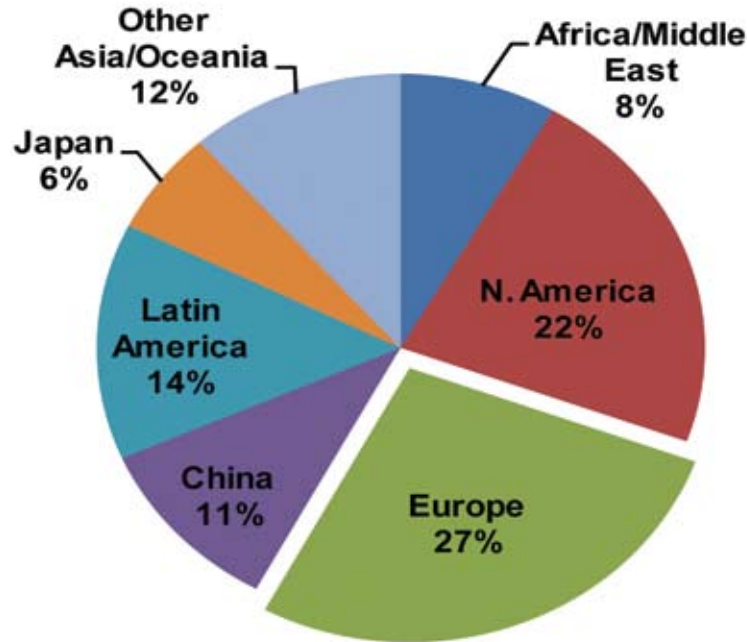
The recent acquisition of Myllykoski by UPM in Europe could trigger a wave of capacity closures in the printing and writing segment of the industry in 2011, in the view of RISI's economist for graphic paper in Europe. This poses some upside risk to paper prices and demand, as the anticipation of higher prices could encourage hedge buying by paper buyers. This would give a false signal of market strength to paper producers, and pulp demand would almost certainly be boosted in unison.

On the supply side, a key source of risk is wood availability (and cost) in Asia, as BHK capacity enters (or renters) the market. Wood in Europe is also a potential source of risk, but to the downside. The Russians are prepared to reduce export tariffs on logs as part of a WTO entry arrangement, which will lower fiber costs in Europe and China. In Europe, however, the effect will be limited by the fact that the Finnish industry has already closed a large amount of capacity that used to rely on Russian imports. The chances that these mills will be reopened because of a change in Russian policy strikes us as being imperceptibly different from zero.

Perhaps a greater risk in our view is on the demand side in North America and Europe, given the potential for both regions to see stronger economies and paper demand that we have projected. There is a substantial amount of structural change occurring in print media, making it challenging to assess the current and near-term relationship between GDP growth and consumption of communication papers.

Finally, downside economic risk in China has to be considered, as that country is seeing rising inflation and a continuing property bubble in the first-tier cities.

# Outlook for World Fluff Pulp Market



2009 Fluff Pulp Demand by Region  
(Share of Total Demand)

For a five-year outlook on supply, demand, prices and costs of fluff pulp globally.

## Provides:

- Good Introduction to end-use markets
- Analysis of cost & price trends for fluff pulp globally 1995-2015
- Capacity estimates by mill to 2012
- Capacity by grade 1995-2012

**Table 1\***  
**20 Country Chemical Paper Grade Market Pulp Summary**  
 Thousand Tonnes, Seasonally Adjusted

	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010
<b>20 Major Producing Countries**</b>															
Shipments (Actual)	3,477	3,400	3,475	3,329	3,338	3,408	3,296	3,241	3,531	3,335	3,176	3,630	3,355	3,471	3,986
Shipments (Seas Adj)	3,492	3,564	3,308	3,488	3,458	3,287	3,278	3,228	3,453	3,305	3,170	3,629	3,370	3,647	3,792
%Ch - Year Earlier	10.2	16.6	0.4	14.0	10.1	-1.6	-8.0	-3.5	-0.9	-6.7	-11.5	3.0	-3.5	2.3	14.6
Producer Inventories (Actual)	2,980	2,869	3,038	3,272	3,170	2,922	2,795	2,905	2,766	3,186	3,711	3,527	3,830	3,792	3,526 ***
Producer Inventories (Seas Adj)	2,950	2,807	3,058	3,029	2,901	2,813	2,870	3,070	3,037	3,321	3,728	3,606	3,780	3,703	3,558 ***
Days Of Supply	25.3	23.6	27.7	26.1	25.2	25.7	26.3	28.5	26.4	30.1	35.3	29.8	33.6	30.5	28.1
Capacity	3,739	3,752	3,762	3,771	3,779	3,784	3,789	3,794	3,799	3,804	3,809	3,820	3,832	3,842	3,845
Strike-Adj Capacity	3,739	3,752	3,762	3,771	3,779	3,784	3,789	3,794	3,799	3,804	3,809	3,820	3,832	3,842	3,845
Shipments/Capacity	0.93	0.95	0.88	0.93	0.92	0.87	0.87	0.85	0.91	0.87	0.83	0.95	0.88	0.95	0.99

**PRICES AND COSTS**  
 (U.S. DOLLARS PER TONNE)

**Prices Del. to N. Europe**

No. Bl. Softwood Kraft	760	800	800	830	860	890	930	960	980	980	980	980	960	960	950
No. Bl. Birch Kraft	650	700	700	730	760	790	840	890	920	920	870	870	870	870	850
No. Bl. Hardwood Kraft	640	690	690	720	750	780	835	885	910	910	860	860	860	860	835
So. Bl. Softwood Kraft	715	760	760	790	820	850	900	930	950	950	950	950	930	915	915
So. Bl. Hardwood Kraft	630	680	680	710	740	770	820	870	900	900	850	850	850	850	825
Bl. Brazilian Eucalyptus Kraft	650	700	700	730	760	790	840	890	920	920	870	870	870	870	850

**Prices Del. to United States**

No. Bl. Softwood Kraft	800	830	830	850	880	910	960	1000	1020	1020	990	990	970	970	960
No. Bl. Hardwood Kraft	685	710	710	740	770	820	870	920	950	930	890	870	840	825	815
So. Bl. Softwood Kraft	750	780	780	805	830	860	910	950	970	970	940	940	920	920	910
So. Bl. Hardwood Kraft	670	700	700	730	760	790	855	905	930	920	880	860	830	830	820
Bl. Brazilian Eucalyptus Kraft	700	730	730	760	790	820	870	920	950	950	900	900	900	900	890

**Prices Del. to China**

No. Bl. Softwood Kraft	670	700	700	720	750	780	830	870	890	870	830	820	820	830	840
Bl. Radiata Pine Kraft	620	640	650	670	710	750	810	860	880	830	810	810	810	810	820
Bl. Eucalyptus Kraft	570	620	640	670	700	730	780	830	830	790	780	780	770	770	730

**Avg Var. Cost Del. to N. Europe, High Cost Region**

Bl. Softwood Kraft	594	587	591	598	592	614	626	606	606	600	600	606	618	625	634
Bl. Hardwood Kraft	502	517	504	490	466	465	476	461	464	462	464	469	478	482	484

**Price/Var. Cost Ratios Before Discounts, High Cost Region**

Bl. Softwood Kraft	1.35	1.41	1.40	1.42	1.49	1.48	1.53	1.65	1.68	1.70	1.65	1.63	1.57	1.55	1.52
Bl. Hardwood Kraft	1.40	1.41	1.45	1.55	1.70	1.76	1.83	1.99	2.05	2.05	1.94	1.92	1.88	1.87	1.84

\* Data revised December 2006, adding estimated German BSK, removing Portugal to conform to revised industry association reporting

\*\* Canada, United States, Finland, Sweden, Norway, Brazil, Chile, Argentina, Germany, Spain, France, Belgium, Austria, South Africa, Swaziland, Morocco

New Zealand, Japan, South Korea. These countries represent 81% of world supply in 2006.

\*\*\* Estimated

**Table 2\***  
**20 Country Chemical Paper Grade Market Pulp Summary**  
 Thousand Tonnes, Seasonally Adjusted

	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012
<b>20 Major Producing Countries**</b>															
Shipments (Actual)	3,465	3,504	3,764	3,575	3,569	3,635	3,517	3,492	3,486	3,559	3,402	3,758	3,402	3,441	3,696
Shipments (Seas Adj)	3,630	3,630	3,630	3,555	3,555	3,555	3,485	3,485	3,485	3,575	3,575	3,575	3,565	3,565	3,565
%Ch - Year Earlier	4.1	5.0	10.4	8.5	10.1	3.0	5.4	9.9	-4.0	6.1	-2.0	-5.7	-1.8	-1.8	-1.8
Producer Inventories (Actual)	3,339	3,348	3,525	3,879	4,084	4,278	4,057	3,865	3,880	3,646	3,555	3,683	3,953	4,008	3,812
Producer Inventories (Seas Adj)	3,607	3,659	3,662	3,777	3,864	3,896	3,892	3,848	3,795	3,694	3,640	3,650	3,659	3,667	3,669
Days Of Supply	29.8	30.2	30.3	31.9	32.6	32.9	33.5	33.1	32.7	31.0	30.5	30.6	30.8	30.9	30.9
Capacity	3,846	3,848	3,850	3,852	3,852	3,839	3,825	3,813	3,822	3,833	3,845	3,855	3,866	3,874	3,874
Strike-Adj Capacity	3,846	3,848	3,850	3,852	3,852	3,839	3,825	3,813	3,822	3,833	3,845	3,855	3,866	3,874	3,874
Shipments/Capacity	0.94	0.94	0.94	0.92	0.92	0.93	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92

**PRICES AND COSTS**  
**(U.S. DOLLARS PER TONNE)**

**Prices Del. to N. Europe**

No. Bl. Softwood Kraft	950	950	960	970	970	970	945	920	895	875	865	865	865	875	890
No. Bl. Birch Kraft	850	850	860	860	860	850	835	810	785	765	765	765	775	785	800
No. Bl. Hardwood Kraft	835	835	845	845	845	835	820	795	770	750	750	750	760	770	785
So. Bl. Softwood Kraft	915	915	925	935	935	935	910	885	860	840	830	830	830	840	855
So. Bl. Hardwood Kraft	825	825	835	835	835	825	810	785	760	740	740	740	750	760	775
Bl. Brazilian Eucalyptus Kraft	850	850	860	860	860	850	835	810	785	765	765	765	775	785	800

**Prices Del. to United States**

No. Bl. Softwood Kraft	960	960	970	980	980	980	955	940	925	905	895	895	895	905	920
No. Bl. Hardwood Kraft	815	815	825	825	825	815	800	785	770	750	750	750	760	770	785
So. Bl. Softwood Kraft	910	910	920	930	930	930	905	890	875	855	845	845	845	855	870
So. Bl. Hardwood Kraft	820	815	825	825	825	815	800	785	770	750	740	740	750	760	775
Bl. Brazilian Eucalyptus Kraft	890	890	900	900	900	890	875	840	815	795	795	795	805	815	830

**Prices Del. to China**

No. Bl. Softwood Kraft	840	850	860	870	870	845	820	800	780	760	750	750	750	760	775
Bl. Radiata Pine Kraft	830	840	850	860	860	835	810	780	760	740	730	730	730	740	755
Bl. Eucalyptus Kraft	730	730	740	730	715	710	695	675	655	640	640	640	645	665	685

**Avg Var. Cost Del. to N. Europe**

Bl. Softwood Kraft	649	639	637	634	631	631	631	632	635	639	643	642	641	640	639
Bl. Hardwood Kraft	490	478	477	475	474	474	474	474	476	478	480	480	479	479	478

**Price/Var. Cost Ratios Before Discounts**

Bl. Softwood Kraft	1.48	1.50	1.52	1.55	1.55	1.55	1.51	1.49	1.46	1.42	1.39	1.39	1.40	1.41	1.44
Bl. Hardwood Kraft	1.82	1.86	1.89	1.89	1.90	1.88	1.85	1.77	1.71	1.66	1.66	1.66	1.68	1.70	1.74

\* Data revised December 2006, adding estimated German BSK, removing Portugal to conform to revised industry association reporting

\*\* Canada, United States, Finland, Sweden, Norway, Brazil, Chile, Argentina, Germany, Spain, France, Belgium, Austria, South Africa, Swaziland, Morocco

New Zealand, Japan, South Korea. These countries represent 81% of world supply in 2006.

\*\*\* Estimated

**Table 2\* (Continued)**  
**20 Country Chemical Paper Grade Market Pulp Summary**

	CANADIAN DOLLARS PER TONNE														
	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012
<b>Prices Del. to N. Europe</b>															
Exchange Rate (US\$/C\$)	1.01	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
No. Bl. Softwood Kraft	943	966	979	993	996	997	971	946	923	904	896	898	901	913	932
No. Bl. Birch Kraft	844	864	877	880	883	873	858	833	809	791	793	795	807	819	838
No. Bl. Hardwood Kraft	829	849	862	865	868	858	843	818	794	775	777	779	791	804	822
So. Bl. Softwood Kraft	909	930	943	957	960	961	935	910	886	868	860	862	864	877	895
So. Bl. Hardwood Kraft	819	839	852	855	857	848	833	807	783	765	767	769	781	793	811
Bl. Brazilian Eucalyptus Kraft	844	864	877	880	883	873	858	833	809	791	793	795	807	819	838
<b>Prices Del. to United States</b>															
No. Bl. Softwood Kraft	953	976	989	1,003	1,006	1,007	982	967	953	935	927	930	932	945	963
No. Bl. Hardwood Kraft	809	829	841	844	847	837	822	807	794	775	777	779	791	804	822
So. Bl. Softwood Kraft	904	925	938	952	955	956	930	915	902	884	875	878	880	892	911
So. Bl. Hardwood Kraft	814	829	841	844	847	837	822	807	794	775	767	769	781	793	811
Bl. Brazilian Eucalyptus Kraft	884	905	918	921	924	915	899	864	840	822	824	826	838	851	869
<b>Prices Del. to China</b>															
No. Bl. Softwood Kraft	834	864	877	891	893	868	843	823	804	785	777	779	781	793	811
Bl. Radiata Pine Kraft	824	854	867	880	883	858	833	802	783	765	756	758	760	772	791
Bl. Eucalyptus Kraft	725	742	755	747	734	730	714	694	675	661	663	665	672	694	717
	EUROS PER TONNE														
<b>Prices Del. to N. Europe</b>															
Exchange Rate (US\$/Euro)	1.33	1.35	1.35	1.35	1.34	1.33	1.31	1.30	1.29	1.29	1.28	1.27	1.26	1.25	1.26
No. Bl. Softwood Kraft	713	705	713	720	721	729	720	709	693	680	675	680	686	698	704
No. Bl. Birch Kraft	638	631	639	639	639	639	636	624	608	594	597	601	615	626	633
No. Bl. Hardwood Kraft	626	620	628	627	628	628	625	613	596	583	585	590	603	614	621
So. Bl. Softwood Kraft	686	679	687	694	695	703	693	682	666	653	647	652	658	670	677
So. Bl. Hardwood Kraft	619	613	620	620	621	620	617	605	588	575	577	582	595	606	613
Bl. Brazilian Eucalyptus Kraft	638	631	639	639	639	639	636	624	608	594	597	601	615	626	633
<b>Prices Del. to United States</b>															
No. Bl. Softwood Kraft	720	713	721	728	729	737	728	725	716	703	698	704	710	722	728
No. Bl. Hardwood Kraft	611	605	613	613	613	613	610	605	596	583	585	590	603	614	621
So. Bl. Softwood Kraft	683	676	683	691	691	699	690	686	678	664	659	664	670	682	689
So. Bl. Hardwood Kraft	615	605	613	613	613	613	610	605	596	583	577	582	595	606	613
Bl. Brazilian Eucalyptus Kraft	668	661	669	668	669	669	667	648	631	618	620	625	638	650	657
<b>Prices Del. to China</b>															
No. Bl. Softwood Kraft	630	631	639	646	647	635	625	617	604	590	585	590	595	606	613
Bl. Radiata Pine Kraft	623	624	631	639	639	628	617	601	588	575	569	574	579	590	598
Bl. Eucalyptus Kraft	548	542	550	542	532	534	530	520	507	497	499	503	511	531	542

**Table 3\***  
**Chemical Paper Grade Market Pulp**  
**Shipments by Grade and Destination**  
 Thousand Tonnes, Seasonally Adjusted

	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010
<b>SHIPMENTS BY GRADE</b>															
20 Major Producing Countries**															
Shipments	3,492	3,564	3,308	3,488	3,458	3,287	3,278	3,228	3,453	3,305	3,170	3,629	3,370	3,647	3,792
%Ch Year Ago	10.2	16.6	0.4	14.0	10.1	-1.6	-8.0	-3.5	-0.9	-6.7	-11.5	3.0	-3.5	2.3	14.6
Bleached Softwood Kraft															
Shipments	1,676	1,682	1,644	1,724	1,690	1,647	1,693	1,654	1,746	1,686	1,554	1,770	1,739	1,825	1,877
%Ch Year Ago	2.2	8.7	3.8	12.5	9.0	1.0	-5.5	-1.7	5.1	-0.6	-7.6	6.2	3.8	8.5	14.2
Bleached Hardwood Kraft															
Shipments	1,669	1,746	1,526	1,632	1,640	1,548	1,489	1,467	1,605	1,503	1,506	1,741	1,502	1,668	1,777
%Ch Year Ago	16.5	23.9	-5.9	15.0	10.8	-2.0	-9.4	-4.1	-4.7	-12.4	-13.7	1.4	-10.0	-4.5	16.4
Unbleached Kraft															
Shipments	136	125	126	120	117	79	84	94	90	103	97	106	117	142	126
%Ch Year Ago	52.8	35.9	53.7	18.8	13.6	-35.8	-30.6	-24.8	-30.8	-15.6	-32.2	-17.2	-14.0	13.6	0.0
Sulfite															
Shipments	11	11	12	12	11	13	12	13	12	13	13	12	12	12	12
%Ch Year Ago	37.5	37.5	50.0	50.0	22.2	62.5	33.3	44.4	33.3	44.4	8.3	0.0	9.1	9.1	0.0
<b>SHIPMENTS BY DESTINATION</b>															
To North America	619	623	614	634	649	705	628	632	639	582	633	621	577	643	681
%Ch Year Ago	-4.9	6.2	3.4	8.8	13.1	24.9	11.5	10.8	5.1	-7.0	1.3	-1.0	-6.8	3.2	10.9
To W. Europe	1,190	1,205	1,214	1,183	1,189	1,295	1,212	1,226	1,276	1,272	1,255	1,282	1,185	1,231	1,189
%Ch Year Ago	-5.7	4.1	6.7	11.0	8.6	19.9	9.4	10.8	9.8	5.9	9.9	9.9	-0.4	2.1	-2.0
To E. Europe	68	75	66	85	74	83	68	74	72	69	69	67	74	79	89
%Ch Year Ago	-1.3	31.5	11.8	61.4	27.8	48.6	4.7	17.1	11.3	6.3	4.6	-7.4	9.5	5.7	33.3
To Lat. America	246	266	247	296	260	259	248	233	267	276	247	264	237	277	280
%Ch Year Ago	9.5	36.1	24.9	51.0	25.1	22.2	7.8	0.9	15.6	14.8	-5.4	8.9	-3.6	4.3	13.3
To Japan	146	179	164	177	173	156	177	143	187	175	158	165	161	160	185
%Ch Year Ago	-23.7	7.1	10.1	18.6	16.3	4.1	20.6	-4.7	24.0	9.6	2.9	-2.5	10.4	-10.7	12.8
To Asia/Africa	1271	1209	948	1151	1158	807	945	931	983	964	836	1207	1182	1251	1267
%Ch Year Ago	66.6	37.7	-12.2	10.0	5.9	-35.1	-34.4	-23.3	-20.8	-25.4	-38.1	-2.0	-6.9	3.4	33.6

\* Data revised December 2006, adding estimated German BSK, removing Portugal to conform to revised industry association reporting

\*\* Canada, United States, Finland, Sweden, Norway, Brazil, Chile, Argentina, Germany, Spain, France, Belgium, Austria, South Africa, Swaziland, Morocco New Zealand, Japan, South Korea. These countries represent 81% of world supply in 2006.

\*\*\* Estimated

**Table 4\***  
**Chemical Paper Grade Market Pulp**  
**Inventory and Days of Supply**  
**Thousand Tonnes, Seasonally Adjusted**

	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010
<b>20 Major Producing Countries**</b>															
Inventories	2,950	2,807	3,058	3,029	2,901	2,813	2,870	3,070	3,037	3,321	3,728	3,606	3,780	3,703	3,558 ***
Days Of Supply	25.3	23.6	27.7	26.1	25.2	25.7	26.3	28.5	26.4	30.1	35.3	29.8	33.6	30.5	28.1
<b>Bleached Softwood Kraft</b>															
Inventories	1,168	1,102	1,254	1,241	1,232	1,227	1,237	1,269	1,271	1,382	1,538	1,540	1,532	1,515	1,481 ***
Days Of Supply	20.9	19.7	22.9	21.6	21.9	22.3	21.9	23.0	21.8	24.6	29.7	26.1	26.4	24.9	23.7
<b>Bleached Hardwood Kraft</b>															
Inventories	1,612	1,537	1,639	1,665	1,540	1,523	1,496	1,697	1,711	1,860	1,993	1,960	2,052	2,112	2,029 ***
Days Of Supply	29.0	26.4	32.2	30.6	28.2	29.5	30.1	34.7	32.0	37.1	39.7	33.8	41.0	38.0	34.3
<b>Unbleached Kraft</b>															
Inventories	165	163	160	118	124	58	132	99	50	74	192	101	191	71	43 ***
Days Of Supply	36.4	39.1	38.1	29.5	31.8	22.0	47.1	31.6	16.7	21.6	59.4	28.6	49.0	15.0	10.2
<b>Sulfite</b>															
Inventories	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5 ***
Days Of Supply	13.6	13.6	12.5	12.5	13.6	11.5	12.5	11.5	12.5	11.5	11.5	12.5	12.5	12.5	12.5

\* Data revised December 2006, adding estimated German BSK, removing Portugal to conform to revised industry association reporting

\*\* Canada, United States, Finland, Sweden, Norway, Brazil, Chile, Argentina, Germany, Spain, France, Belgium, Austria, South Africa, Swaziland, Morocco New Zealand, Japan, South Korea. These countries represent 81% of world supply in 2006.

\*\*\* Estimated

**Table 5**  
**Market Pulp Price Summary**  
 US Dollars Per Tonnes, Transaction Prices

	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011
<b>DELIVERED TO N. EUROPE</b>														
<b>Northern</b>														
Bl. Softwood Kraft	800	830	860	890	930	960	980	980	980	980	960	960	950	950
Bl. Birch Kraft	700	730	760	790	840	890	920	920	870	870	870	870	850	850
Bl. Hardwood Kraft	690	720	750	780	835	885	910	910	860	860	860	860	835	835
<b>Southern</b>														
Bl. Softwood Kraft	760	790	820	850	900	930	950	950	950	950	930	915	915	915
Bl. Hardwood Kraft	680	710	740	770	820	870	900	900	850	850	850	850	825	825
Bl. Kraft Fluff (Untreated)	840	880	895	900	980	1,010	1,040	1,050	1,050	1,050	1,050	1,050	1,040	1,040
Bl. Eucalyptus Kraft	700	730	760	790	840	890	920	920	870	870	870	870	850	850
Bl. Hardwood CTMP	660	690	720	750	795	860	870	870	820	820	810	810	780	780
<b>DELIVERED TO UNITED STATES</b>														
<b>Northern</b>														
Bl. Softwood Kraft	830	850	880	910	960	1,000	1,020	1,020	990	990	970	970	960	960
Bl. Hardwood Kraft**	710	740	770	820	870	920	950	930	890	870	840	825	815	815
Maple	720	750	780	830	880	930	960	940	900	880	850	835	825	825
Mixed	710	740	770	820	870	920	950	930	890	870	840	825	815	815
Aspen	710	740	770	820	870	920	950	930	890	870	840	825	815	815
<b>Southern</b>														
Bl. Softwood Kraft	780	805	830	860	910	950	970	970	940	940	920	920	910	910
Bl. Hardwood Kraft	700	730	760	790	855	905	930	920	880	860	830	830	820	820
Bl. Kraft Fluff (Untreated)	840	880	895	900	980	1,010	1,040	1,050	1,050	1,050	1,050	1,050	1,040	1,040
Bl. Eucalyptus Kraft	730	760	790	820	870	920	950	950	900	900	900	900	890	890
Bl. Softwood CTMP	695	715	745	775	825	865	885	885	855	855	835	835	825	825
Deinked Pulp	665	690	720	730	750	760	760	760	760	760	760	760	760	750
<b>DELIVERED TO CHINA</b>														
Northern Bl. Softwood Kraft	700	720	750	780	830	870	890	870	830	820	820	830	840	840
Bl. Radiata Pine Kraft	650	670	710	750	810	860	880	830	810	810	810	810	820	830
Bl. Eucalyptus Kraft	640	670	700	730	780	830	830	790	780	780	770	770	730	730

\* Denotes Revision

\*\* Reflects wet lap pulp prices as well as dried; not an average of the maple, mixed, and aspen prices.

For Europe and North America, prices are reported before any large buyer or fidelity discounts. These discounts are currently 15-20% in recent months and would reduce this month's reported prices by this amount to arrive at a net price. Small, buyer-specific discounts may apply in China.

**Table 6**  
**China Pulp Imports, by Supplying Region**  
Thousand Tonnes

	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	YTD 2010	YTD 2009	%Ch	12M Total*
<b>CHINA IMPORTS</b>											
<b>BSK</b>											
Total	348	315	306	298	357	394	459	4,019	4,816	-17%	4,019
Canada	101	112	122	94	112	135	186	1,385	1,286	8%	1,385
United States	56	65	35	32	107	59	78	693	1,224	-43%	693
South America	65	58	55	76	64	79	79	783	897	-13%	783
Eastern Europe	48	21	48	53	46	65	33	537	609	-12%	537
Western Europe	68	51	38	30	16	36	64	484	706	-31%	484
Oceania/Asia/Africa	10	8	8	12	12	21	19	137	94	47%	137
<b>BHK</b>											
Total	344	276	344	372	235	417	353	4,419	5,935	-26%	4,419
South America	186	173	236	173	95	197	153	2,385	3,596	-34%	2,385
Oceania/Asia/Africa	102	56	54	148	89	157	131	1,263	1,462	-14%	1,263
Eastern Europe	13	3	20	24	17	20	7	194	221	-12%	194
Canada	11	10	5	1	11	18	29	181	242	-25%	181
United States	30	30	27	25	24	16	28	367	315	16%	367
Western Europe	1	4	2	1	0	9	5	29	99	-71%	29
<b>MEC</b>											
Total	145	119	101	128	136	146	161	1,426	1,337	7%	1,426
Canada	119	100	80	103	115	105	136	1,166	1,099	6%	1,166
Oceania/Asia/Africa	5	9	6	16	6	13	9	94	88	7%	94
Western Europe	6	2	5	4	5	12	6	55	61	-9%	55
Eastern Europe	14	7	10	6	10	15	11	104	85	21%	104
United States	0	2	0	0	0	0	0	7	4	94%	7
South America	0	0	0	0	0	0	0	0	0	N.C.	0
<b>UKP</b>											
Total	31	28	26	33	35	58	59	467	634	-26%	467
Eastern Europe	15	9	12	7	11	17	13	152	150	2%	152
United States	4	4	3	6	9	12	17	92	182	-49%	92
South America	8	9	9	13	8	13	16	127	145	-12%	127
Oceania/Asia/Africa	2	2	1	3	3	12	6	64	102	-37%	64
Canada	2	3	1	3	3	4	8	30	50	-39%	30
Western Europe	0	0	0	0	0	0	0	1	5	-79%	1

Source: China Customs Data

\* Rolling 12-month total

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