
TRCC CANADA

Monthly Bulletin



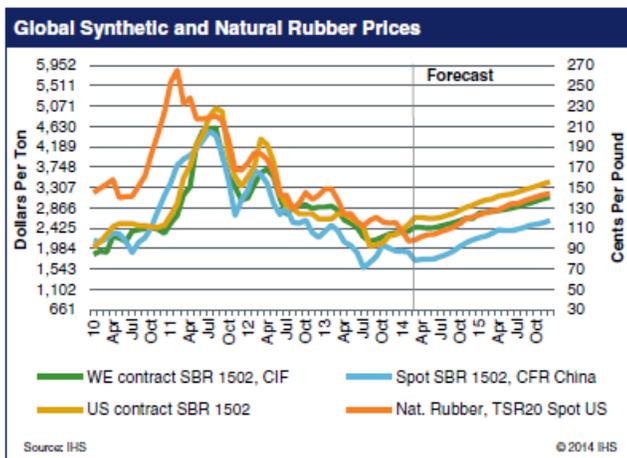
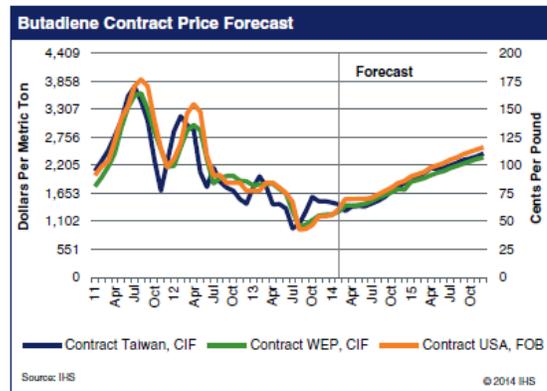
TRCC Canada

Leading World Technologies Through Innovation

April 2014 issue

Executive Summary

Butadiene: The US butadiene contract price marker posted by IHS Chemical rolled over at 69.8 cents per pound (\$1,539 per ton) for April. The split range this month is 68 to 78 cents per pound.

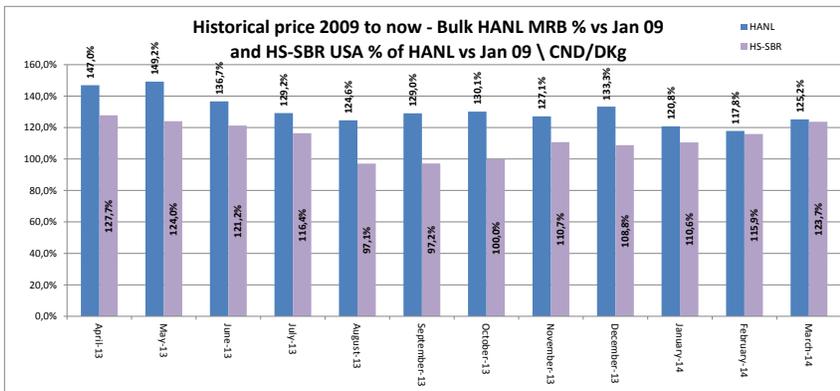


Synthetic Rubber: In the US, signs of an emerging recovery continue. Demand for commodity synthetic rubber remains much better than it has been in the past couple of years. IHS Chemical's posting for the March medium buyer negotiated SBR 1502 price increased to the 119 to 122 cents per pound range. The butadiene price increase more than offset a decrease in the styrene price.

Natural Rubber: Natural rubber prices increased in March. The average price on the SICOM rose by 1.7 cents per pound. TOCOM natural rubber futures increased strongly in March. Monthly prices on the TOCOM through September 2014 also increased from last month. SICOM TSR20 futures prices through September 2014 were slightly higher than the strip at the end of last month. IHS Chemical forecasts that USTR20 prices will increase in April to \$1.01 per pound and move higher through the rest of 2014, averaging \$1.08 per pound for the year.



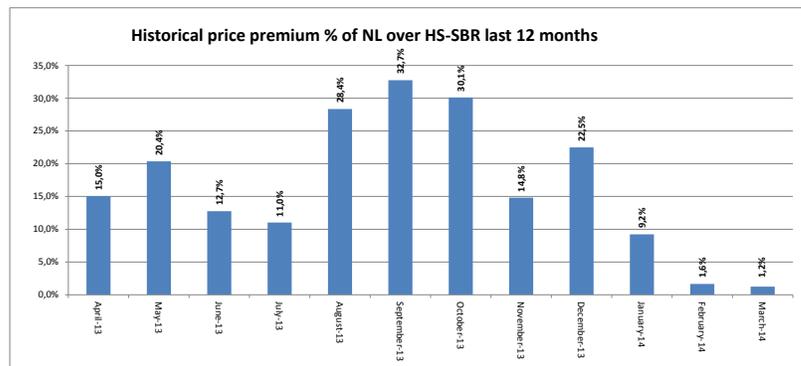
Trending between Natural and Synthetic Rubber Latexes



The reported price of bulk natural rubber latex published on the Malaysian Rubber Board (MRB) increased in March versus the previous month. The North American price of bulk synthetic rubber latex (HS-SBR) also continued its rise. Both latex types increased by almost the same percentages, maintaining their gap practically unchanged (both expressed on

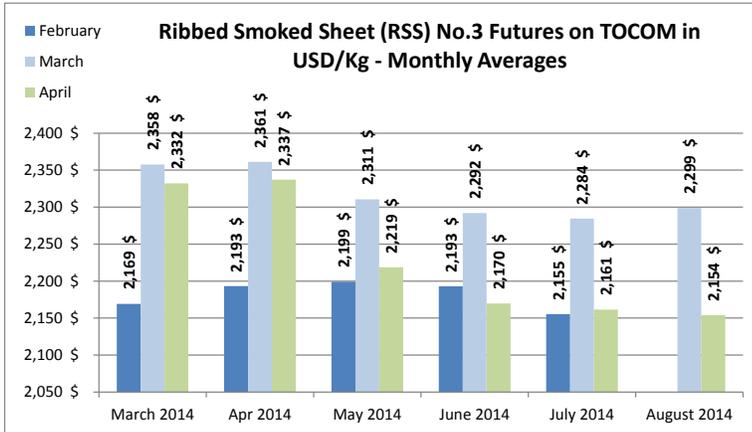
a dry basis). At the end of March, that gap was 1.2% versus 1.6% the month before.

The price of Natural Latex posted on the Malaysian rubber board has been increasing for what it believed to be wintering period related (yields are lower at this time of the year) despite a slowdown of the Chinese economy and historically high global inventory levels. The price of Synthetic Rubber Latex has been on the rise since the beginning of the year due to some level of tightness on the side of some of the HS-SBR feedstock, mainly benzene (a precursor of styrene) and butadiene and more recently, because of strong demand for cars types in emerging economies.

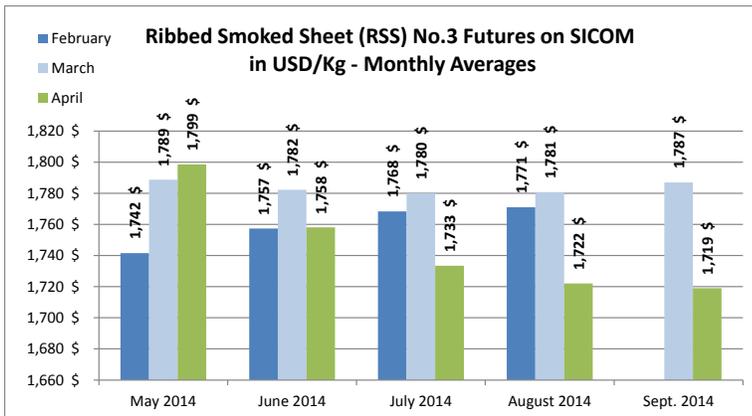


Users of gel foaming compounds used in the carpet and rug mill industry might want to consider using a natural latex rich compound at present given that it can withstand a higher load of filler than synthetic latex rich compounds but the economics must be evaluated on a case by case basis and depends on the system currently in use as well as the secificity of the manufacturing process used in any given mill.

Trending on Natural Latex Futures on key Commodity Exchanges



The March monthly average RSS3 Futures running down to August 2014 on TOCOM (light blue bars on the left hand side graph) are reaching a maximum on the month of April to then decline, a pattern that is not unusual given the seasonality of natural latex rubber prices on the market which is related the wintering period and its accompanying low yields.



The April month to date average RRS3 Futures running down to August 2014 currently shows a lower price on any given month, indicating that the market is on the decline over the last month. Indeed, the April month to date average futures are converging toward the February month to date average futures around May. Nothing indicates an upcoming rise on the market fore the time being. The situation is similar on the side of SICOM.

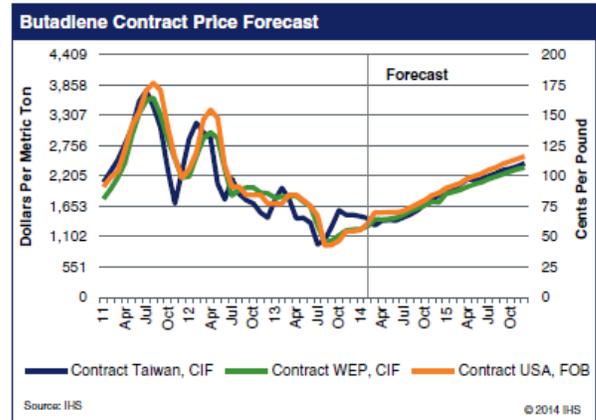
We do believe at present that supply agreements should be put in place

not so much to secure a price in the eye of a potential rise but more to provide the assurance to have material available from suppliers for the month to come as some American suppliers seem to be tight with available inventory (stock not allocated on contract already).

Butadiene (building block of HS-SBR and XSBR)

Contract prices

The US butadiene contract price marker posted by IHS Chemical rolled over at 69.8 cents per pound (\$1,539 per ton) for April. The split range this month is 68 to 78 cents per pound.



Monthly Market Summary North America

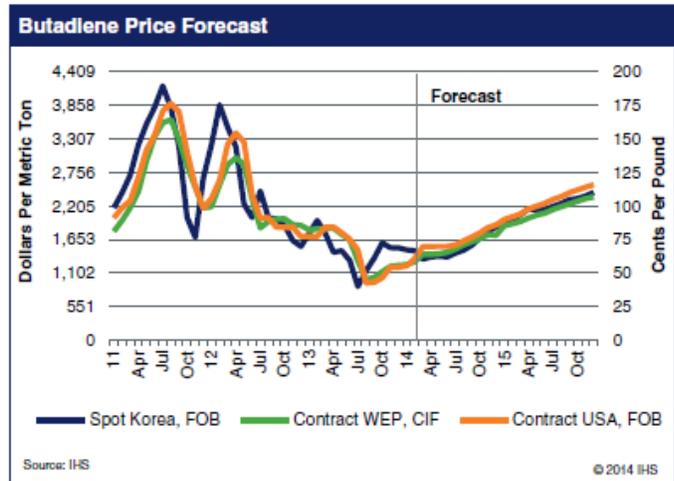
Domestic butadiene production in March suffered from unplanned events affecting two producers. These events, an unplanned outage and an equipment issue that resulted in a specification issue, were contained within the month, but did result in a pretty tight market balance for the second half of March and early April. The combination of a return to more normal production levels and arriving imports will send the market back to a more balanced situation as April progresses.

Nominating Company	Capacity On Line Million Pounds	Nomination Cents Per Pound
ExxonMobil	Baton Rouge	379
	Baytown	331
	Total	710
LyondellBasell	Channelview	240
	Channelview	615
	Total	855
Shell	Dear Park	331
	Norco	575
	Total	906
TPC	Houston	838
	Port Neches	573
	Total	1,411
Total Capacity		3,882
IHS Chemical Wtd. Avg. Marker		69.8

Domestic butadiene demand is not weak. That is a statement IHS has not been able to make for nearly two years. However, not weak is not the same thing as strong. North American demand for tires and other rubber products has rebounded. However, this demand can be met by imported butadiene or rubber just as easily as it can be by domestic butadiene production. So the market balance is in a precarious situation with butadiene and derivative producers in other regions, especially Asia, where demand is not so strong looking to export incremental production. The domestic players will need to exercise discretion to keep imports from negatively impacting domestic demand.

Market analysis

In the extreme short term, the next 2-3 months, IHS forecasts market prices to be flat to even slightly down. The market dynamics in Asia, while they have strengthened modestly over the last week or so, remain difficult. Natural rubber prices are soft, which prevents synthetic rubber, especially SBR 1502 prices from moving up. Synthetic rubber margins remain nearly breakeven, so butadiene prices have no room to increase. Finally, butadiene margins are slim, so there is no significant room for prices to go down. The price levels in Asia are below the rest of the world, especially North America, so any attempt to raise prices outside of Asia will be met with increased butadiene and rubber imports lengthening the market balance and driving prices back down. This stagnation will remain generally in place until there is some movement in Asia to break the deadlock. This movement will come from increased demand growth, which will result in higher prices in Asia for both the butadiene value chain and natural rubber. This is not likely to happen before early to mid-Q3. After that, we expect butadiene prices to gradually increase through the remainder of the year. IHS states that their outlook is not aggressive. Butadiene prices at the end of this year are forecast to be about where they started the year in 2013, which the market thought at the time was relatively weak. However IHS will acknowledge that there is probably more downside than upside to their current view.



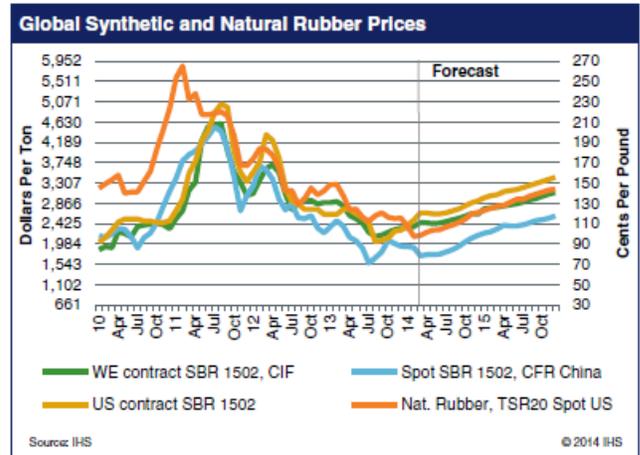
In 2015, the global economic recovery continues to progress. As a result, butadiene demand continues to grow and prices increase fairly consistently. To keep this increase in perspective, the price level at the end of 2015 is about the level seen in 2012 after the major downward correction in the first half of the year. IHS do not consider this to be an aggressive price level given the fact that by the end of next year, the base case economic outlook is for growth to be approaching trend line levels. One important feature of this outlook is that there is no significant regional separation.

In general, IHS current price outlook is much less aggressive than the actual market performance in each of the past three years. It is driven by a view of a gradually tightening market balance and strengthening demand growth. However, that is not likely to start before the second half of this year.

Synthetic Rubber

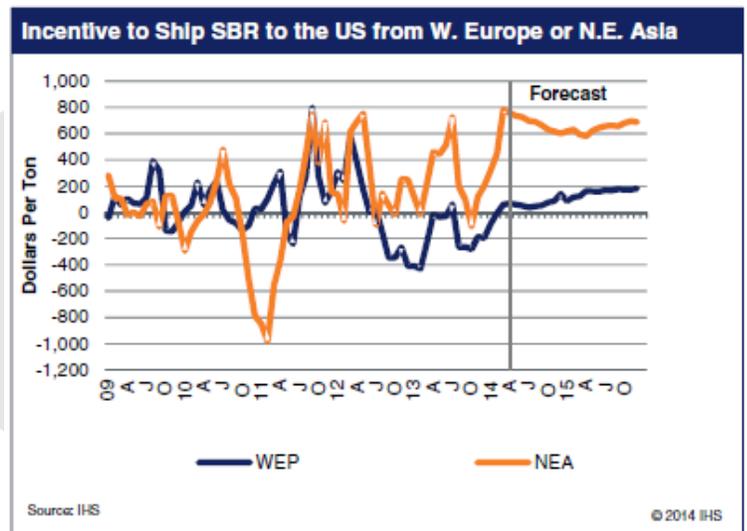
Monthly Market Summary

In the US, signs of an emerging recovery continue. Demand for commodity synthetic rubber remains much better than it has been in the past couple of years. The automotive sector continues to be strong, and even though there has not been a significant increase in miles driven, the replacement market appears to be strengthening. IHS's economic view for 2014 reflects the developed world as the engine of global growth and this is clearly happening in the tire markets right now. North America synthetic rubber supply is also good with many producers running at healthy operating rates at the current time. The emerging threat to the current situation comes from the fact that U.S. prices are so high that the arbitrage window is wide open. Demand in Asia remains weak and prices are depressed. Therefore, the opportunity to export to the US is welcome. As in the past, the concern of domestic rubber producers is that the increased imports will soften demand for domestic production. **IHS Chemical's posting for the March medium buyer negotiated SBR 1502 price increased to the 119 to 122 cents per pound range. The butadiene price increase more than offset a decrease in the styrene price.** The IHS Chemical posting for **SBR 1712** continues to reflect a large differential. The price also **increased to the 102.5 to 105.5 cents per pound range.** The HIS Chemical PBR price increased to the 126 to 130 cents per pound range.



Market Analysis

One of the key market drivers along the C4 olefins value chain is the incentive to ship rubber between the regions. This is important to pricing relationships along the value chain. IHS has noted a number of times that the incentive to ship rubber to the US from Asia is currently strong and will prevent some other trends that some market participants might find desirable such as raising North American butadiene prices to make crude C4 imports from Europe more attractive. IHS presents the analysis behind that view. SBR, in this case eSBR, is the most commoditized of the synthetic rubbers. As such, in many applications, it does not matter to the consumer if the rubber is produced in the Americas, Asia, or Europe as long as it is the lowest cost delivered to the plant gate. Synthetic rubber is easy to ship across regions. It moves containerized and the packing





factor is high, so the key market dynamic is low cost. Recent trends in the rubber and butadiene markets have brought the market to a condition where there is an extremely strong incentive to move SBR from Asia to North America. These trends have been described before and include: weak natural rubber prices and overall rubber demand keeping prices and operating rates weak in Asia, reasonable butadiene demand in North America, combined with a number of supply side issues resulting in increasing butadiene prices in the region, which have also forced synthetic rubber prices upward, and domestic weakness in West Europe that has resulted in market prices that allow some level of export. **The net result of all of these trends is North America is a very attractive target market for exports from Asia. This will have a regulating impact on the market in North America sooner or later as a surge of rubber imports will soften butadiene demand, leading to lower prices relative to Asia, which eventually closes the arbitrage window. However, a lot of reaction will be required to bring balance back to the global market.**

Natural Rubber

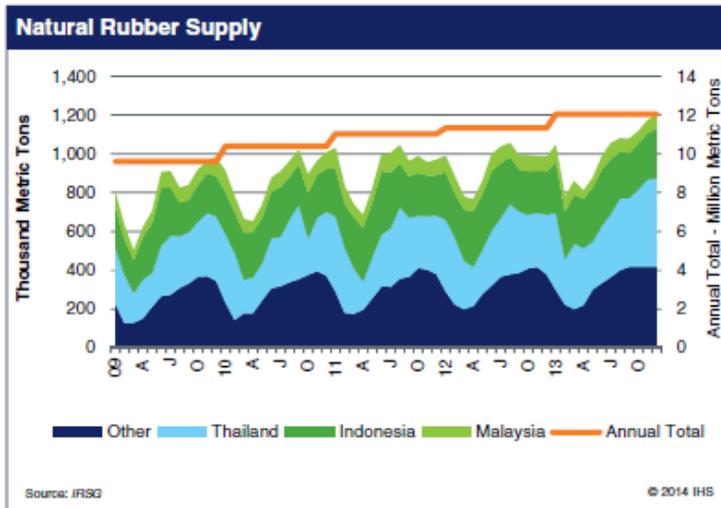
Monthly Market Summary

Natural rubber prices increased in March, the first monthly price increase since December. **The average price on the SICOM rose by 1.7 cents per pound** from February to 83.7 cents per pound (\$1,925 per ton). Daily futures on the SICOM traded between 85 and 91 cents per pound for the month, reaching the peak at mid-month before settling down around 86 cents by the end of the month. Current price levels are roughly 40 – 50 per pound lower than during March 2013. Natural rubber prices have been affected by slower growth in the major economies and by improving global natural rubber supplies. As shown in the graph Daily Natural Rubber (TSR20) Prices, prices have trended lower over the past three years. Prices in New York and West Europe also increased by around 2 cents in March, averaging 98 and 92 cents per pound, respectively.



TOCOM natural rubber futures increased strongly in March, ending the month \$270 per ton higher than the February closing price. The March RSS3 contract closed at \$2,395 per ton. **Monthly prices on the TOCOM through September 2014 also increased from last month**, ranging from \$2,223 to \$2,401 per ton. TSR20 futures on the SICOM closed at \$1,925 per ton in March, an increase of roughly \$40 per ton from the February contract price. **SICOM TSR20 futures prices through September 2014 were slightly higher than the strip at the end of last month**, ranging from \$1,900 to \$1,960 per ton. **TSR20 prices in New York were roughly 2 cents higher than February**, averaging just over 98 cents per pound. **IHS Chemical forecasts that USTR20 prices will increase in April to \$1.01 per pound and move higher through the rest of 2014, averaging \$1.08 per pound for the year.** USTR20 prices averaged \$1.25 per pound in 2013, which was the lowest annual price since 2009. It is forecast that 2014 will see a much lower annual price barring a large change in the rubber markets before the end of the year.

Market Analysis

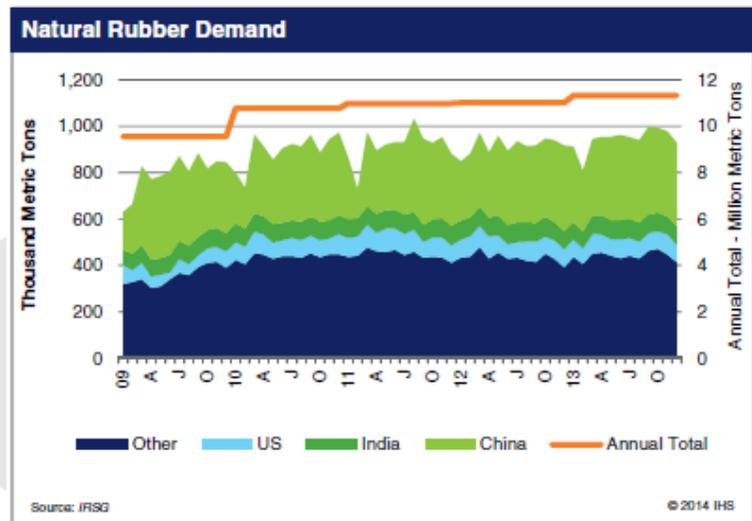


In this month's market analysis section, IHS reviews the full year 2013 natural rubber supply/demand data from the International Rubber Study Group as Q4 numbers are now available.

Global natural rubber production for Q4 2013 totaled 3.46 million tons, an increase of 250,000 tons from Q3 2013 and roughly 500,000 tons higher than Q4 2012. The Q4 production total marked the highest quarterly total on record as each month during the quarter also saw record monthly highs at over 1.1 million tons. **Full-year global production for 2013 totaled a record 12.04 million tons, up roughly 700,000 tons from the 2012 total.** The large increase in Q4 production was driven by Thailand, the world's largest producer of

natural rubber. Thailand produced 1.3 million tons in Q4 2013, 250,000 tons more than the country produced in Q3 2013. Production levels in Q3 and Q4 typically move higher following the wintering season in Southeast Asia, which typically runs from February to May. For the year, Thailand produced a record 4.1 million tons of rubber, or roughly 34 percent of the global total. The world's second largest producer of natural rubber on an annual basis, Indonesia, saw a decrease in production during Q4 relative to Q3 producing 21,000 tons less than Q3. This follows a 66,000 ton decrease from Q2 to Q3. The graph Natural Rubber Supply helps to illustrate the seasonality seen in natural rubber production. **Production in Q1 2014 is expected to dip relative to Q4 as the wintering season is underway in Southeast Asia.**

Natural rubber demand in Q4 was mostly flat relative to Q3, with global consumption rising roughly 8,000 tons 2.9 million tons. China, the world's largest consumer of natural rubber, consumed 1.09 million tons of natural rubber in Q4, up marginally from 1.08 million tons in Q3. The Chinese government made efforts to improve falling demand last year by pledging to increase spending and introduce new projects within the country. The effort seemed to work as **China consumed 300,000 tons more natural rubber in 2013 than 2012.** India remains the second largest consumer of natural rubber ahead of the US, though the advantage is typically less than 20,000 tons per quarter. Demand in India has generally increased throughout the past two years while demand in the US has fallen during that period. To show just how large of a natural



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rubber consumer China is, combining the consumption of India and the US equals around one half of the amount of natural rubber that China consumes.

Natural rubber inventories have improved strongly over the last two years, climbing to 109 days supply for 2013. This is the second highest inventory number since IHS Chemical began calculating inventories in 2002. Natural rubber prices declined over that time period as strong global production was met with lower global demand. The number of days inventory is calculated as the annual supply minus annual demand divided by the estimated demand per day. **Looking ahead, it is expected that global natural rubber demand will remain mostly stable in the short-term. Production levels are expected to remain fairly strong which will help to further increase the global natural rubber supply and keep prices at a relatively low level around \$1.00 per pound in the short term.**