



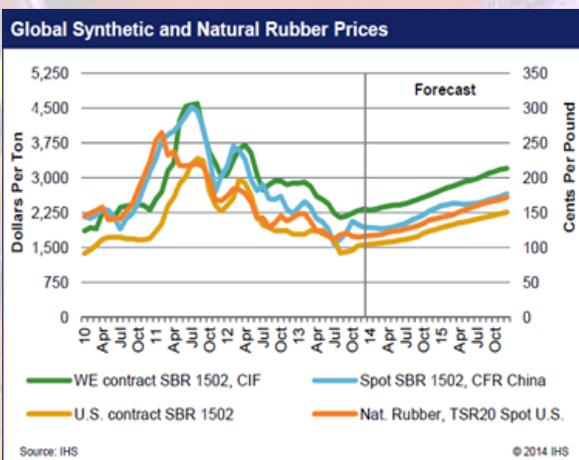
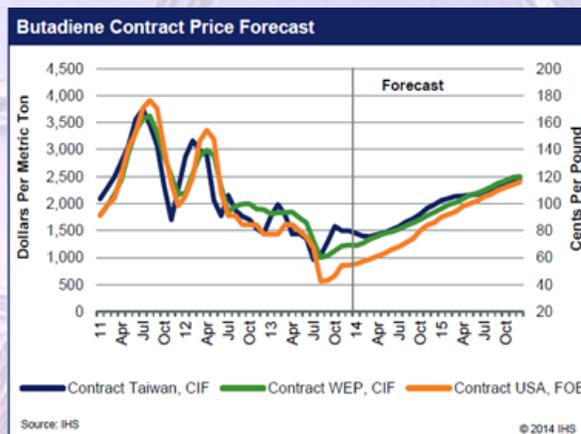
TRCC Canada

Leading World Technologies Through Innovation

Monthly Bulletin– January 2014

Executive Summary

Butadiene: The US butadiene contract price marker posted by IHS Chemical increased 1 cent per pound to 55.4 cents per pound (\$1,221 per ton) for January. At the current time, it appears that the market will begin to tighten as the year progresses, though it will take some time before the full impact is felt throughout the market.



Synthetic Rubber: In the US, synthetic rubber market conditions remained about the same as they have been for a number of months. Production capacity is significantly greater than demand and prices are kept under control by the threat of imports. IHS Chemical's posting for the December medium buyer negotiated SBR 1502 price increased to the 102 to 105 cents per pound range, reflecting an increase in styrene prices.

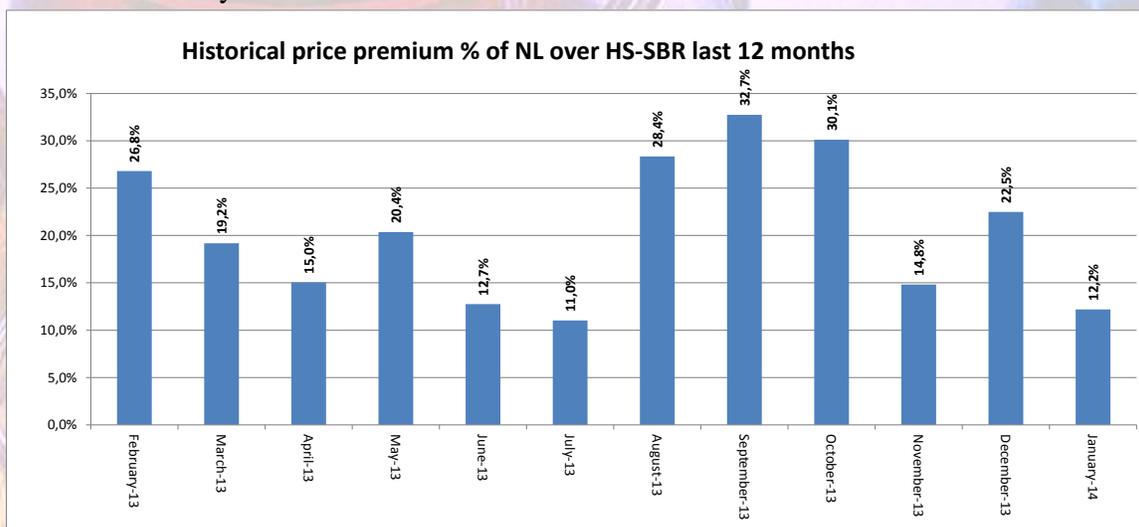
Natural Rubber: Natural rubber prices increased slightly in December. Monthly prices on the TOCOM through June 2014 also increased from last month. IHS Chemical forecasts that U.S. TSR20 prices will move slightly higher in the coming months.





Executive Summary (Cont.)

Natural vs. Synthetic Rubber: The gap between the price of natural and synthetic latex for the beginning of January 2014 is about 10% lower than it was at the beginning of the previous month. For the beginning of the month, the price of Natural Latex posted on the Malaysian rubber board is lower than it has been for the whole month of December whereas the price of Synthetic Rubber Latex increased slightly versus last month due to an increase in both styrene and butadiene. Expectations are such that the price of NL should increase modestly over the months to come.



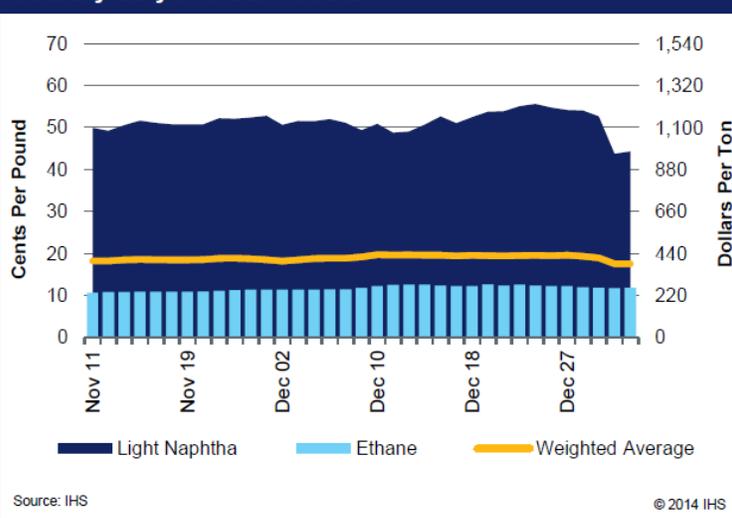
Feedstocks & Crude C₄s

Market update

Global crude oil prices again traded in a tight range during December. Brent prices trended essentially flat through the month. WTI prices closed the gap with the other global markers before remaining effectively flat for most of the month. [HIS] outlook for the coming months calls for more of the same price stagnation. *US natural gas prices in December were somewhat*

higher than in recent months, but not significantly. January levels [are] higher still, but the outlook remains stable. The outlook calls for relatively flat prices through 2014.

US Daily Ethylene Cash Costs:

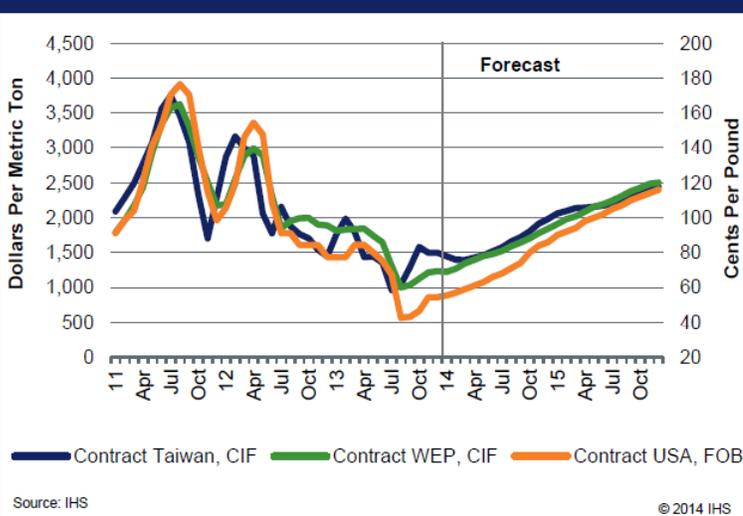


Butadiene (building block of HS-SBR and XSBR)

Contract prices

The US butadiene contract price marker posted by IHS Chemical increased 1 cent per pound to 55.4 cents per pound (\$1,221 per ton) for January. The split range this month remains 55 to 57 cents per pound.

Butadiene Contract Price Forecast





Market update

IHS Chemical's marker for the January US butadiene contract price increased one cent per pound to 55.4 cents per pound (\$1,221 per ton). This reflects a split settlement with final nominations ranging from 55 to 57 cents per pound.

Calculation of Butadiene Contract Marker with Split Settlement January-2014			
Nominating Company	Capacity On Line Million Pounds	Nomination Cents Per Pound	
ExxonMobil	Baton Rouge	379	
	Baytown	331	
	Total	710	57.0
LyondellBasell	Channelview	240	
	Channelview	615	
	Total	855	55.0
Shell	Deer Park	331	
	Norco	575	
	Total	906	55.0
TPC	Houston	838	
	Port Neches	573	
	Total	1,411	55.0
	Total Capacity	3,882	
	IHS Chemical Wtd. Avg. Marker		55.4

Butadiene supply remains roughly the same as it was a month ago from a domestic perspective. The ethylene industry continues to run at similar operating rates and feedslates. The North American butadiene extraction units also remain on stream. The difference to

the overall supply picture is on the import side, which is primarily driven by demand pull, not supply push. As a result, overall supply was somewhat reduced, though the market balance was no tighter. *At the current time, it appears that the market will begin to tighten as the year progresses, though it will take some time before the full impact is felt throughout the market.*

There has been no sign of improvement on the butadiene demand side. This would not be expected at the end of the year in more normal conditions, much less the weak market conditions that dominated 2013. *While butadiene consumers remain cautiously optimistic that 2014 demand will be stronger than 2013, actual improvement will need to be seen before more aggressive buying patterns emerge.* The unrealized expectations for demand growth in 2013 are too fresh in buyers' memories to allow a strong start to 2014.



Market analysis

The defining global market dynamic for 2013 was weak demand. The demand weakness in some cases was in absolute terms, in others relative to expectations. In either case, the result was a long market balance and significant price decreases. The term significant may not be sufficient to capture the full impact of the price decreases. For a time in the summer, butadiene spot prices in all of the world's major butadiene producing and consuming regions were at, or even below, alternate values – generally thought of as cracking value. This is remarkable given the fact that the world was not in the midst of deteriorating economic conditions. The weak global economic recovery, combined with capacity additions more appropriate for an environment of stronger demand growth, drove the result.

In North America, butadiene demand is projected to be somewhat weaker than it was in 2012. Synthetic rubber production, especially eSBR, was weaker in the region as tire production growth was muted and pressure from rubber imports limited domestic demand. The sharp price adjustments in the second half of the year were a response to the global arbitrage opportunities that developed over the summer. The correction was effective at closing the arbitrage windows, preventing further demand deterioration.

So, the big question for 2014 is, will demand growth be sufficient to tighten the market enough to drive higher prices. [IHS] outlook for the global economy in 2014, combined with a slowdown in capacity additions, does point to a tightening market. However, it will take some time before the full impact is felt. As a result, [IHS] see prices trending generally higher with the pace accelerating through the year. To put the magnitude in perspective, [IHS] forecast for prices at the end of 2014 is roughly the same as early 2013 levels.



Other Rubber Feedstocks

Styrene (building block of HS-SBR and XSBR)

The spot styrene market continues to remain firm, but the stronger spot benzene prices have not been able to push spot styrene prices much over 75 cents per pound so far. As usual, the market activity was strong in the first half of the month and has slowed in the second half of the month due to the holidays. Production volumes are gradually improving with the restart of Shell's Scotford facility and the lifting of the styrene Force Majeure. Styrolution's Texas City facility remains down for an extended maintenance outage through the end of the year. In January, several other plants will shut down to perform maintenance thereby keeping industry production constrained. Demand remains seasonally soft. *A strong increase in spot benzene prices has pushed January costs upwards* and has squeezed styrene margins.

Spot styrene prices continued to climb in December and January with levels now over the \$1,700 per ton mark. The climb continues on the back of stronger benzene levels with the spread over \$320 per ton at the end of December. The market was extremely quiet at the end of December due to the holidays. No deals have been done recently but the price levels are currently sitting at \$1,720-1,730 per ton notionally for both January and February.

Synthetic Rubber

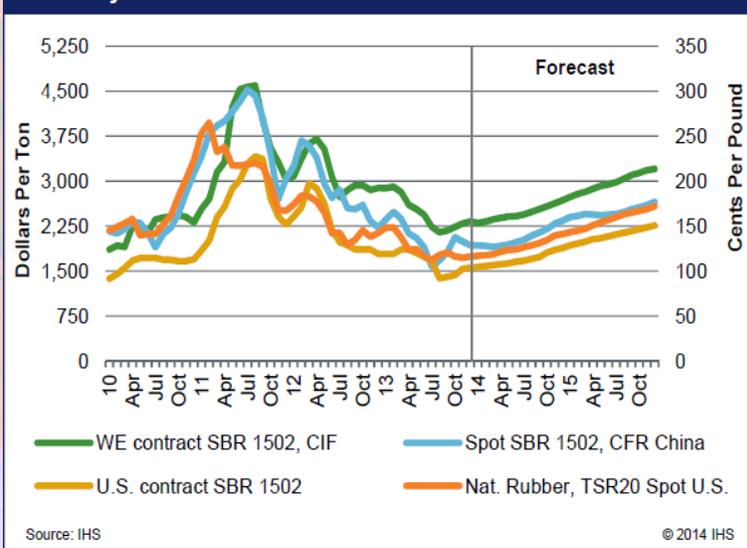
Market update

In the US, synthetic rubber market conditions remained about the same as they have been for a number of months. Production capacity is significantly greater than demand and prices are kept under control by the threat of imports. In December, the additional complicating factor is the need to hit challenging year-end inventory targets. None of this fuels expectations of higher near term volumes, even though from a cost perspective, SBR has clearly pushed off the bottom. If there were another time of year, one might expect some inventory build along the chain to lock in lower cost positions. However, [IHS] has seen no evidence of it. *It is possible that inventories will increase somewhat in Q1 as it appears likely that costs will not fall, but rather increase in the coming months.*



In December, it is particularly difficult to get a view of fundamental demand. This is particularly true in years, like this one, when consumers conclude that there is limited risk to running inventories down as they can be relatively easily replenished. In this case, however, there has not been too much room to lower inventories along the chain since they have been low for most of the year. As a result, demand seemed to be about the same in December as it has been for much of the second half of the year. [IHS is] optimistic that 2014 will bring stronger performance along the value chain; however, it is fair to say that many market players are yet to be convinced.

Global Synthetic and Natural Rubber Prices



IHS Chemical's posting for the December medium buyer negotiated SBR 1502 price increased to the 102 to 105 cents per pound range, reflecting an increase in styrene prices. The IHS Chemical posting for SBR 1712 continues to reflect a large differential. The price also increased to the 85.5 to 88.5 cents per pound range. The IHS Chemical PBR price rolled over in the 110 to 114 cents per pound range.



Market Analysis

For many synthetic rubber producers, memories of 2013 are the stuff of nightmares. The year was defined by disappointing demand, increasing capacity and stubbornly high inventories. This led to operating rate cuts, especially in Asia, and global arbitrage, ensuring a race to the lowest price and resultant weak margins. The 2013 tire markets were soft, though tire companies' earnings were generally strong. From a synthetic rubber producer's perspective, tire manufacturers' strong earnings based on falling feedstock costs more than offsetting weak volume reflects the double negative of weak demand and low prices.

In North America, synthetic rubber producers, especially eSBR producers, battled much of the year with lower cost imports, primarily from Asia. In the early part of the year, U.S. butadiene prices were strong, especially relative to Asia, which opened the door for imports. In the summer, a significant butadiene price correction restored domestic competitiveness, but also created issues related to inventory value for many market participants. Domestic demand has been weak this year as well. Last month, one of the region's eSBR producers announced an extended shutdown of their production asset, reflecting the difficult market conditions.

Many rubber producers hold out hope that 2014 will be the year that we expected 2013 to be. That is, increasing demand as the year progresses, driven by steadily improving global economic conditions. The automotive sector has shown signs of strength in many regions. However, the replacement tire market, which is much larger than the OE market in the developed world, has continued to disappoint. ***At this point, there are no firm signs of improvement in the market, even though [IHS expects] them to emerge. As such, rubber producers are taking a wait and see approach for 2014. [IHS is] more optimistic and expect the market to gain momentum as the year progresses.***



Natural Rubber

Market Update

Natural rubber prices increased slightly in December with the monthly SICOM average rising by a quarter of a cent from November at \$1.05 per pound (\$2,312 per ton). Daily futures on the SICOM traded between \$1.03 and \$1.06 per pound for the month, as was the case in November. Current price levels are around 20-30 cents per pound lower than



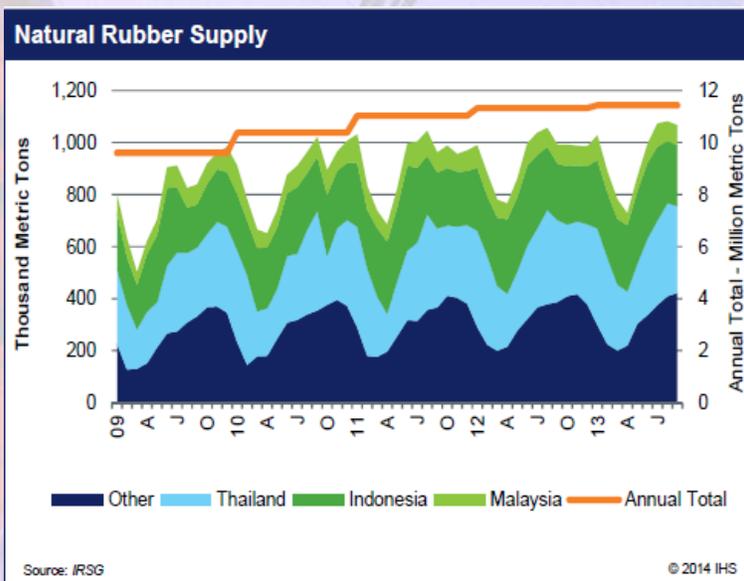
during the same month last year. Natural rubber prices have been affected by slower growth in the major economies and by improved natural rubber supplies. As shown in the graph Daily Natural Rubber (TSR20) Prices, prices have been stable for the past few months and currently sit over \$1.50 per pound lower than the record highs seen in early 2011. *Prices in New York and West Europe also increased this month*, averaging \$1.16 and \$1.10 per pound, respectively.

TOCOM natural rubber futures increased in December, ending the month \$331 per ton higher than the November closing price. The December RSS3 contract closed at \$2,800 per ton. *Monthly prices on the TOCOM through June 2014 also increased from last month*, ranging from \$2,716 to \$2,770 per ton, an increase of roughly \$100 per ton from the period in November. *TSR20 futures on the SICOM closed at \$2,312 per ton for December, an increase of \$6 per ton from the November contract price. SICOM TSR20 futures prices through June 2014 were mostly flat from the futures strip at the end of November*, ranging from \$2,266 to \$2,292 per ton. TSR20 prices in New York were just over one cent higher than November, averaging \$1.16 per pound. *IHS Chemical forecasts that U.S. TSR20 prices will move slightly higher in the coming months*, averaging just \$1.20 per pound during the first half of 2014.



Market Analysis – Supply and Demand

In this month's market analysis section, [IHS reviews] the Q3 2013 natural rubber supply/demand data from the International Rubber Study Group. *Global natural rubber production for Q3 2013 totaled 3.22 million tons, an increase of 633,000 tons from Q2 2013*, and roughly 135,000 tons higher than Q3 2012. The Q3 production total marked the highest quarterly total on record as each month during the quarter also saw record monthly highs at over 1 million tons.

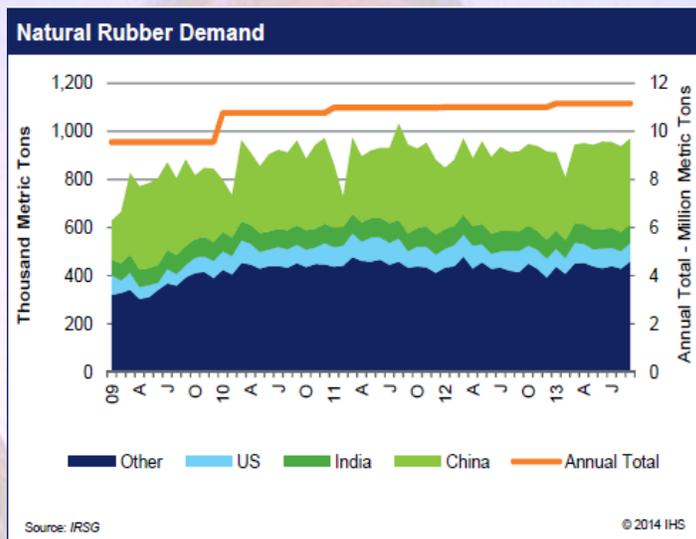


Full-year global production for 2013 is now projected at 11.43 million tons, up roughly 100,000 tons from the 2012 total. Final 2013 supply/demand data should be released sometime in March 2014. Thailand, the world's largest producer of natural rubber, produced 1.01 million tons in Q3 2013, 270,000 tons more than the country produced in Q1 2013. Production levels in Q2 typically move lower due to the wintering season in Southeast Asia, which typically runs from February to May. The world's second largest producer of natural rubber on an annual basis, Indonesia, saw a decrease in production during Q3 relative to Q2, producing 66,000 tons less than Q2. The graph Natural Rubber Supply helps to illustrate the seasonality seen in natural rubber production. Production in Q4 is expected to dip relative to Q3, but remain fairly strong as producers take advantage of the favorable weather conditions and improving global demand.

Natural rubber demand increased slightly in Q3, with global consumption rising roughly 12,000 tons from Q2 2013 to 2.86 million tons. China, the world's largest consumer of natural rubber, consumed 1.07 million tons of natural rubber in Q3, up from 1.05 million tons in Q2. 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 seems to be taking hold as China has already consumed 235,000 tons

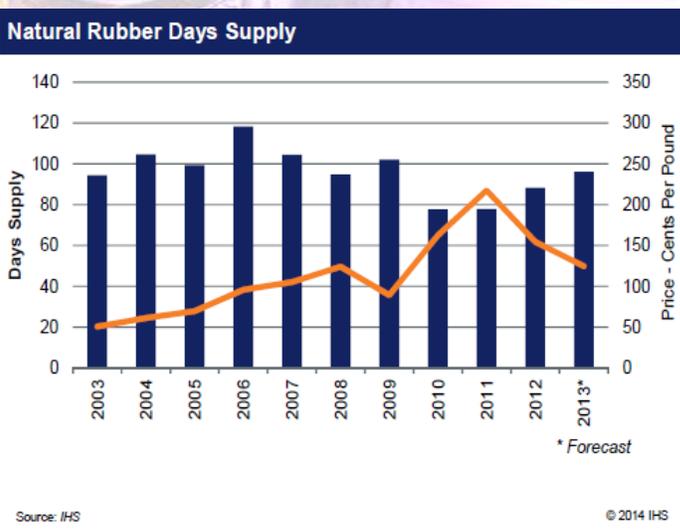


more natural rubber through September than during the same period in 2012. India remains the second largest consumer of natural rubber ahead of the U.S., though the



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. Year to date demand in the US is down roughly 40,000 tons. For comparison, combining the consumption of India and the U.S. equals around one half of the amount of natural rubber that China consumes.

As shown in the graph Natural Rubber Days Supply, natural rubber inventories have improved over the last two years, currently projected at 96 days supply for 2013. Natural rubber prices declined in 2012 as inventories increased with improved global production combined with lower global demand. Prices have remained mostly flat through 2013 as inventories have climbed. The graph shows as bars the number of days inventory globally compared to the U.S. spot price. The number of days inventory is calculated as the annual supply minus annual demand divided by the estimated demand per day.



supply minus annual demand divided by the estimated demand per day.

Looking ahead, it is expected that global natural rubber demand will remain mostly in the short-term. Production levels are expected to remain fairly strong which will help to increase global natural rubber supply and keep prices at a relatively low level around \$1.20 per pound in the short term.