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# BiofuelCircle Market Insights

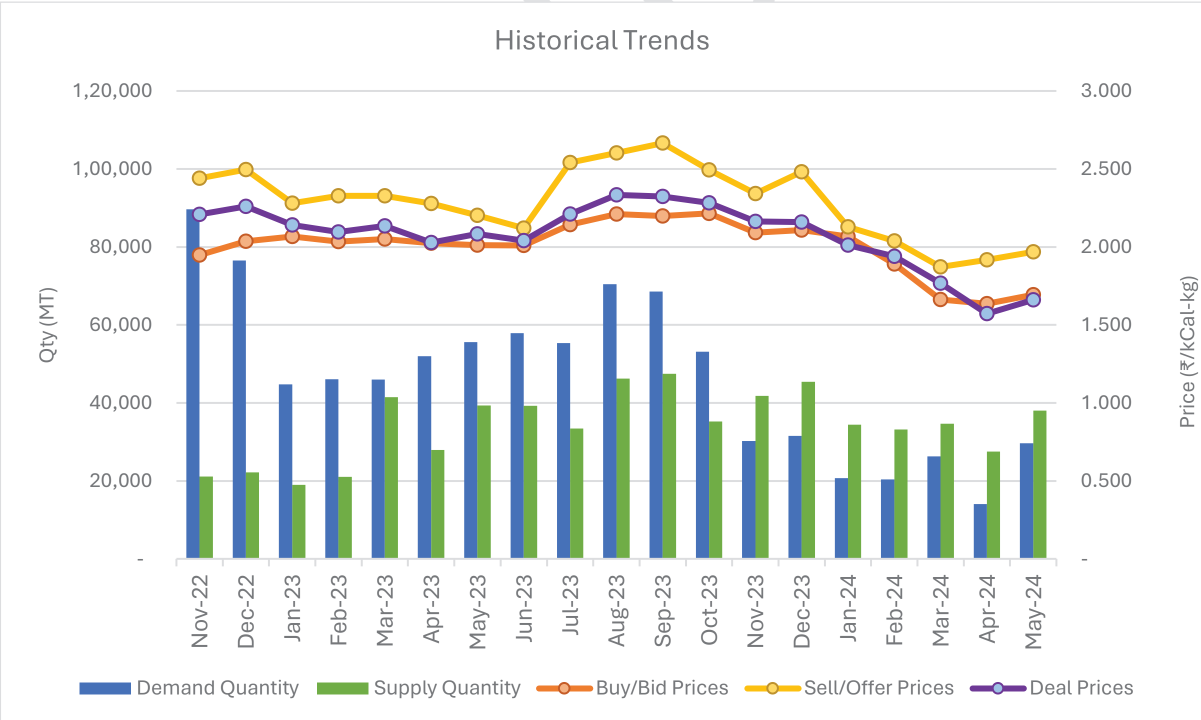
June 2024

## From the Editor's Desk: signs of trend reversal

Last month saw a reversal of price trends in deals done for immediate delivery. We do believe the price of briquettes has bottomed out and is borne by a continuing upward trend going into delivery months of June & July. Coal prices fell by 3% in May, leading to a narrowing of the spread with briquettes. Is this reversal of trends the sign of things to come as we head into the monsoon?

Read on for our analysis.

## Past Trends: Briquette Prices




This chart shows the pan-India trend on the BiofuelCircle platform, for weighted average delivered prices of Biomass Briquettes, converted to Rs per Kcal-kg over the past months, along with the availability & demand from our subscribers. Weighted average is calculated using quantity sought/ offered/ deals done, averaged over a month.

Buy/Bid prices (orange line) are expectations of Buyers (delivered basis). Sell/ Offer prices (yellow line) are based on responses and sells published by Sellers (again delivered basis). And finally, the Deal prices (purple line) are for deals concluded after platform-based negotiations between Buyers & Sellers. Demand (blue bars) is the total Buy quantity the month, and Supply (green bars) is the total quantity Offered by Sellers for that month.

May 2024 saw a reversal of the falling trend in prices of Deals done, Buy/Bid prices and Sell/ Offer prices. The trend in Deal prices will typically lag that of Buyer & Seller expectations, and there were enough signs in the previous months pointing to an increase in average price of deals. In May 2024, deals done on the platform averaged ₹1.66 per Kcal-kg, 6% higher than the previous month's average of ₹1.57.

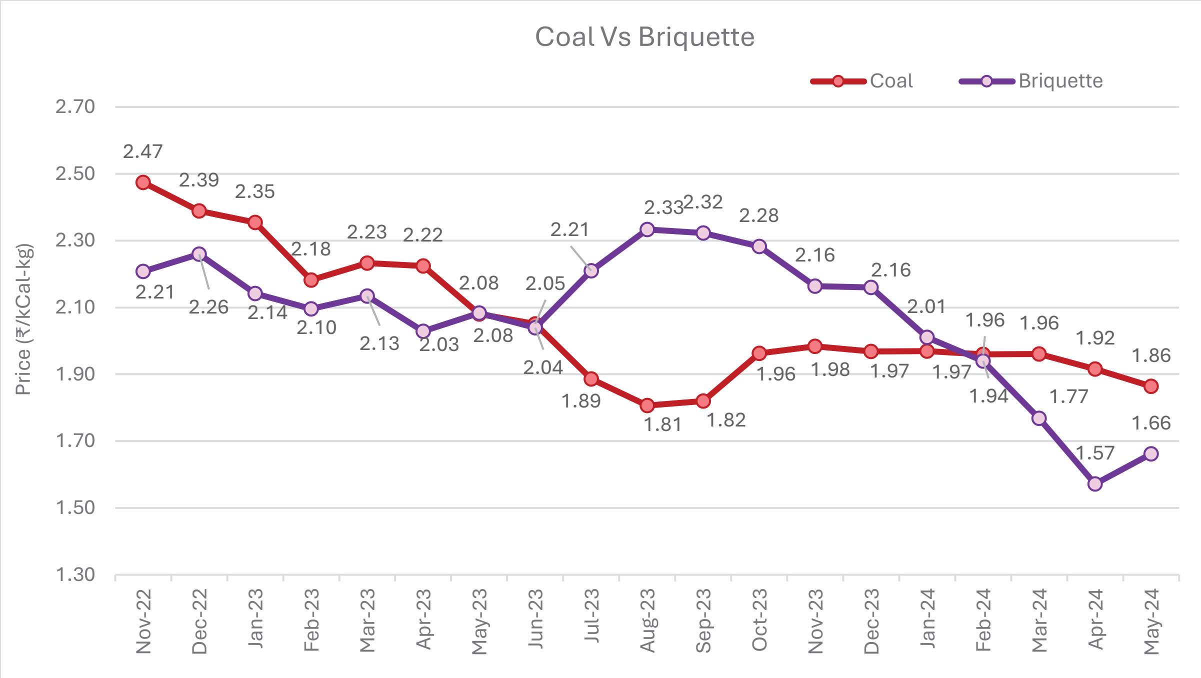
The biggest increase in price over the previous month was seen in Superior briquettes (GCV ~ 3400 to 3800, Ash ~ 8 to 12%): from ₹1.70 per Kcal-kg to ₹1.90, a jump of almost 12%. These formed only 4% of deals done. Volumes last month continued to be dominated by Standard briquettes (GCV< 3400, Ash >12%) at 82% of the biomass briquette deals, at an average price of ₹1.56 per Kcal-kg, a recovery of ₹0.06 (~2%) over Apr 2024. Premium briquettes (GCV> 3800, Ash < 8%) at an average of ₹2.19, up by 0.06 (~3%) compared to last month made up the rest 14% of all deal volumes on the platform. Superior briquettes which were not favoured by Buyers last month saw increased volumes in May. Even the volume of Premium briquettes was up by 60% in May.

Sellers' expectation of prices in May (at ₹1.97) showed a continued uptrend since March (₹1.87). Even Buyers have now reconciled themselves to higher prices: in May, they were willing to accept up to ₹1.68 per Kcal-kg on average. Deals are still happening almost at levels expected by Buyers. So like last month, it seems Sellers start with a higher expectation but are open to negotiation and conclude deals closer to Buyers' requirement.

Both demand and supply of briquettes on the platform rose in May 2024: this time demand doubled over the previous month with Buyers looking to lock in the lower price range. Sellers also responded with supply in May going up by 38% over April.

## Price Comparison

The chart below compares the weighted average delivered prices of Biomass Briquettes to those of imported coal (GCV 3400 GAR). We call the difference between these prices as the 'spread.' Coal prices in this chart (maroon line) are sourced from market publications, for Indonesian origin coal (3400 GAR), imported at Kandla and delivered on average 300 km inland. Briquette prices (purple line) are based on deals done on the platform. Both are converted to GCV basis, for meaningful comparison.



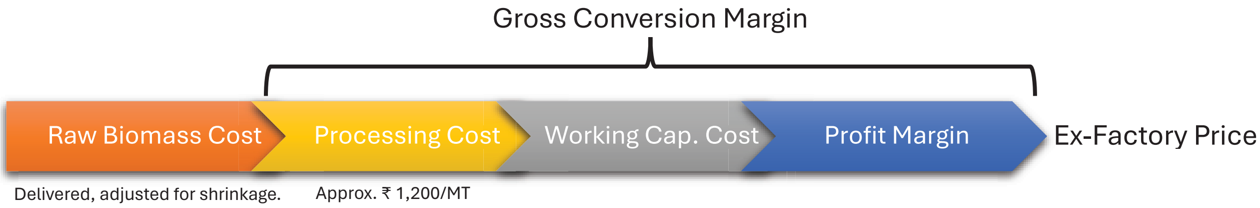

Prices of imported coal prices saw a fall in May 2024, reaching ₹1.86 per kCal-kg, the lowest in eight months, but still in the ₹1.82 to ₹1.98 band that seems to be range for almost a year now. Globally coal is showing a bearish trend. Interestingly, India saw historic power demand of 250GW on 30 May 2024. Not only did the national power grid sustained the demand, sufficient stock of coal at the thermal power stations allowed generation infrastructure to meet this demand. Both import sources and domestic supply of coal in May 2024 have been adequate to meet the higher demand. In price per GCV terms, the spread between Biomass briquettes saw a sharp narrowing due to a combined effect of rising briquette prices rising and falling coal prices. The spread narrowed to negative ₹0.20 per kCal-kg, but still in favour of briquettes. Briquettes are still ~11% cheaper to comparable coal (3400 Kcal/kg), measured in energy terms.

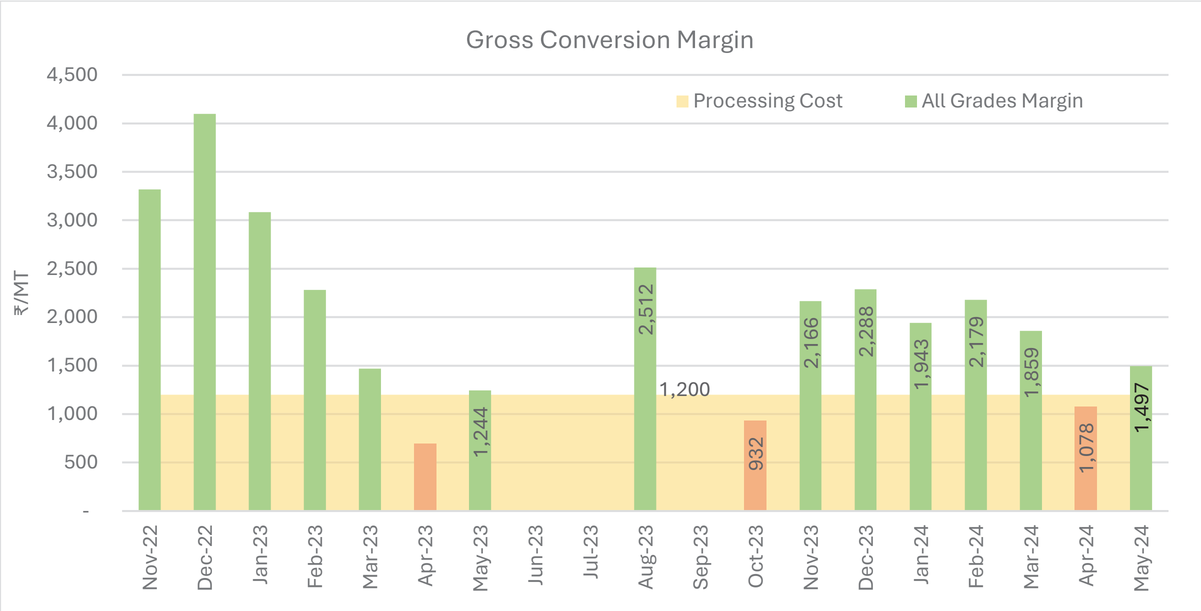
With the onset of rains, coal prices are expected to soften. While briquettes are showing a seasonal increase. We will be tracking the spread closely in the coming weeks & months.

## Past Trends: Gross Conversion Margin

This chart shows the pan-India trend on the BiofuelCircle platform, of the difference between weighted average ex-factory price of Briquettes and weighted average delivered prices of Raw Biomass, converted to Rs per Kcal-kg over the past months. Weighted average is calculated using quantity sought/ offered/ deals done, averaged over a month. This chart excludes commodities such as paddy straw, which are directly used for conversion to biogas or bioethanol.

To assess the inherent value of briquettes, we have compared the delivered price of raw biomass, with the ex-factory price of briquettes. Raw biomass prices have also been adjusted for expected shrinkage across various inputs. The difference represents the GCM (Gross Conversion Margin), which includes the processor's cost of conversion, inventory holding cost, and a profit margin. We have tried to benchmark this against an average processing cost of ₹ 1,200/MT (approx. ₹0.34 per kCal-kg) as represented by the shaded region in the graph below. On top of this will be the cost of working capital, which varies from processor to processor.

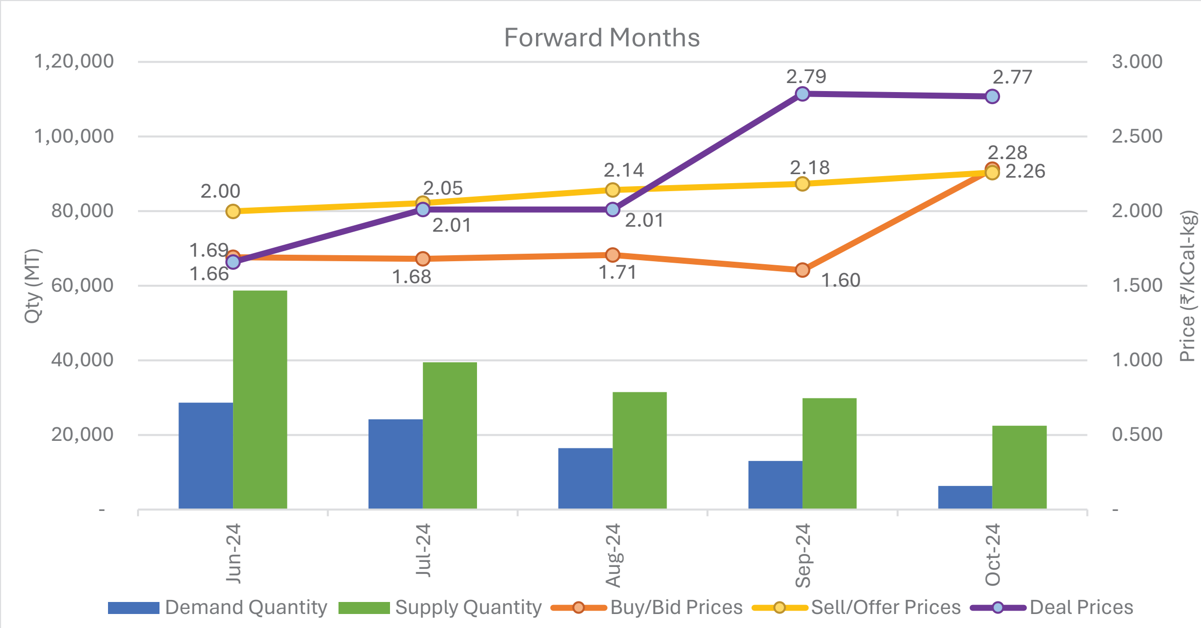



The Gross Conversion Margin (average of all grades) made a recovery in May 2024, rising to ₹1,497 per MT, on the back of higher briquette prices and more or less stable raw biomass prices. Standard Briquette manufactures saw some improvement in their GCM to ₹800-900 range, but they are still below our benchmark of ₹1,200 (which we consider as average processing cost for a typical briquette manufacturer). With adjustment for shrinkage, delivered price of raw biomass for Standard briquettes averaged ₹ 2,600-2,700 range, putting a continued squeeze on their GCM. Superior and Premium Briquettes continue to give higher GCM, which saw a major improvement in May 2024 to a ₹ 2,600-2,800 range. In this category, Mustard stalk (Superior) and Groundnut Shell (Premium) are a few examples of deals seen on the platform in May.

## Forward Months: Briquette Prices

The prices (for Buys/ Bids, Sells/ Offers & Deals), as well as demand & supply quantities in the chart below are for delivery of biomass briquettes in the months to come.




In the forward months, prices for June delivery are equal to May 2024 averages at ₹1.66 per Kcal-kg, but quickly rise 21% to ₹2.01 for Jul and Aug 2024 delivery. This lower by ₹0.30 as compared to the deals that happened Apr 2024 for deliveries in the same corresponding forward months – this indicates a softening of prices as the average deal price has come down. Deals for near month (July) delivery happened closer to Buyer expectations but going further into July and Aug, Sellers seem to be commanding a better position. Seller expectations (Sell/Offer prices) have remained a very tight range between ₹2.00 to 2.30 per Kcal-kg, without much since April. Buyers too are asking for prices around ₹1.70. The dip in prices expected for Sep 2024 is more because of the mix of commodities sought – a larger demand for lower priced Standard briquettes has pulled down the average.

The higher prices seen for Sep and Oct 2024 delivery are inventory deals. Buyers have stocked briquettes at a warehouse close to their factory, for supply in these months. The price reflects the cost of carrying the inventory for four to five months and are thus on the higher side.

In April demand and supply for forward delivery were almost balanced. May 2024 has seen increased availability from Suppliers. There is interest amongst Suppliers to they look to lock in their GCM for monsoon months using inventory deals. Demand has followed suit but currently lags the supply for forward delivery.

The Indian Meteorological Department (IMD) has forecasted a normal monsoon, and the advance of the monsoon has followed predicted timelines, if not being a bit early.

## In Conclusion

There are clear signs of rebound in prices of briquettes. While near month prices remain close to those for immediate delivery, all three indicators: deals done, Buyer expectation and Seller expectations all point to an increase that is typically seen at the onset of monsoon. We see a switch to Superior and Premium briquettes in the coming months, with demand for raw material from industrial biowastes & perennially available biomass residues.

The coal vs briquette spread, while narrowing, is still attractive in favour of briquettes and makes a case for continued use or switching to biofuels. A stocking programme for July and August is feasible though beyond September it might pay to wait and watch.

If you are consumer of briquettes or pellets, Contact your BiofuelCircle representative who can help navigate the supply and price uncertainty of the monsoon. Or log in to the platform to get a quotation.

If you are a Briquette/ Pellet manufacturer, BiofuelCircle can offer term processing deals to contract your production capacity for a fixed conversion fee. Get in touch with your Support representative to know more.

Let's Discuss! Reply if you are interested.

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