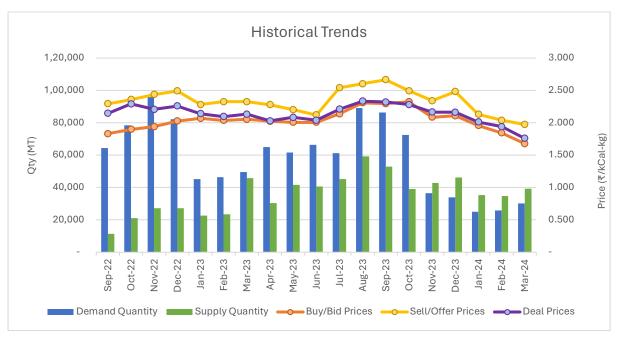
## From the Editor's Desk: should buyers stock briquettes for the monsoon?

Briquette prices have continued to fall month on month. For delivery in the near months of April & May, deals have closed around ₹1.5 per Kcal-kg. Considering that prices tend to rise in the monsoon, is there a case for buyers to start stocking briquettes for the monsoon months?

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.

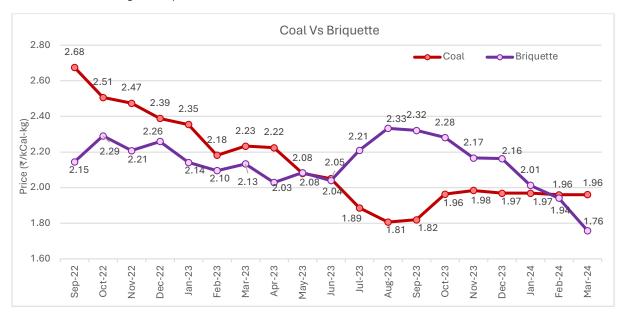
The average price of deals done on the platform in March 2024 fell even lower to ₹ 1.76 per Kcalkg, a 25-month low! 80% of the volume of biomass briquettes transacted on the platform was for Standard briquettes (GCV< 3400, Ash >12%) at an average of ₹ 1.67 per Kcal-kg, which was ₹0.16 (~10%) lower than the month before – this contributed to taking the combined average lower. Comparatively, Premium briquettes (GCV> 3800, Ash < 8%) in March were slightly higher than February by 0.05 at ₹ 2.20 per Kcal-kg, and Superior briquettes (GCV ~ 3400 to 3800, Ash ~ 8 to 12%) moved about 9% lower to ₹ 1.83.

Buyer behaviour remained unchanged: average prices sought in March 2024 were lower at ₹1.68 as compared to ₹1.85 last month: a sustained downward trend since October 2023. And Sellers also reduced their expectations, but at a slower pace: ₹1.97 in March vs ₹2.04 in February. Sellers seem to be tempering their response to the buyers, trying to hold the price of biomass briquettes (on average) around the ₹2 per Kcal-kg level.

Both demand for briquettes on the platform in March 2024 rose 17% over February. Supply on the other hand also increased by 13% over the previous month. More buyers were active on the platform in March as compared to the previous month, but Demand is still behind Supply for the fifth consecutive month now.

## **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.

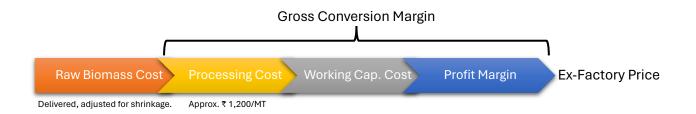


In price per GCV terms, Biomass briquettes are now definitely cheaper to similar quality Coal: the spread between Coal and Biomass Briquette (measured on a ₹ per kCal-kg) in March 2024 was negative ₹0.20 per kCal-kg. The last time this was seen was almost a year ago in April 2023. Imported Coal prices have remained almost unchanged since Oct 2023, while briquette prices have continued to fall in the same period. With Coal prices not expected to fluctuate significantly, dual fired boiler users can now see about 11% savings in fuel costs by switching from Coal to Biomass Briquettes: an economical & environmentally friendly choice!

#### Past Trends: Gross Conversion Margin

This chart shows the pan-India trend on the BiofuelCircle platform, of the difference between weighted average exfactory 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.

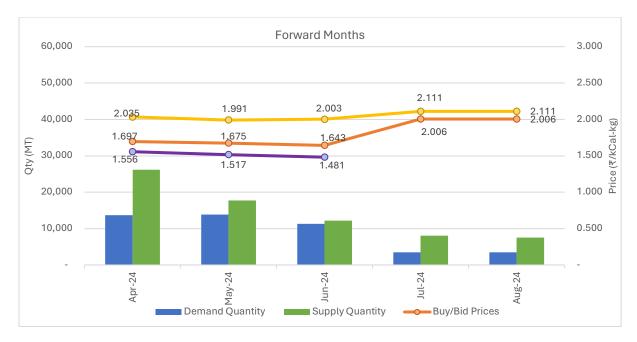




The average Gross Conversion Margin for all grades has remained in a band of  $\ref{1,800}$  to  $\ref{2,300}$  over the last five months, with March being on the lower side. Backing out the average processing cost of  $\ref{1,200}$  leaves about  $\ref{600}$  to cover cost of working capital & profit for the same month. These indicate a continued pressure on the GCM for briquette manufacturers.

## 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.



At ₹1.56 per Kcal-kg Prices for April delivery are marginally lower as compared to average deal prices for the same month in February 2024. This is borne out by a large demand supply gap in the month. A further fall is seen in deal prices for deliveries into next two months of May (₹1.52) & June (₹1.48). These are some of the lowest prices seen for biomass briquettes for a long time! Deals that happened last month were again largely for Standard briquettes, and on an average basis, below the average expected prices of Buyers.

Buyer & Seller expectations again remain in a set range between ₹2.00 to ₹1.65 for the summer months of April to June. But into monsoon (July), both Buyers expect a jump in prices by almost 20%.

#### In Conclusion

Looking at the current price levels, and expectations beyond three months, and considering cost of holding inventory at an average of 9-12% per year, there can be a case for buying up front during April, May & June 2024, and holding on for consumption from July onwards. If you are a consumer of Briquettes/ Pellets, this is a suitable time to start stocking up for the monsoon.

<u>Contact your Support representative</u> to know how BiofuelCircle can help you prepare a stocking plan in the coming months and 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. <u>Get in touch with your Support representative</u> to know more.

