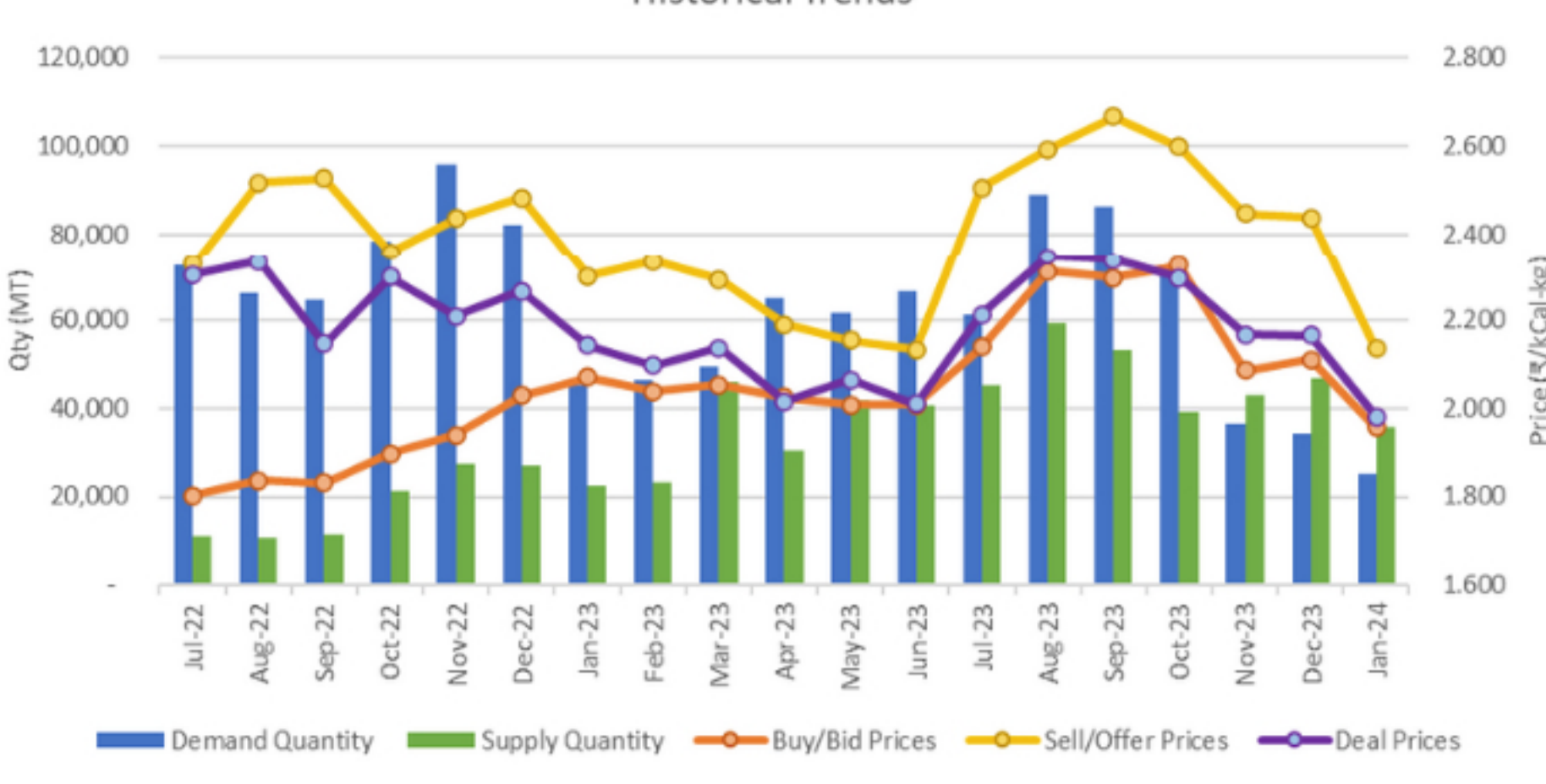


BiofuelCircle Market Insights

February 2024

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.

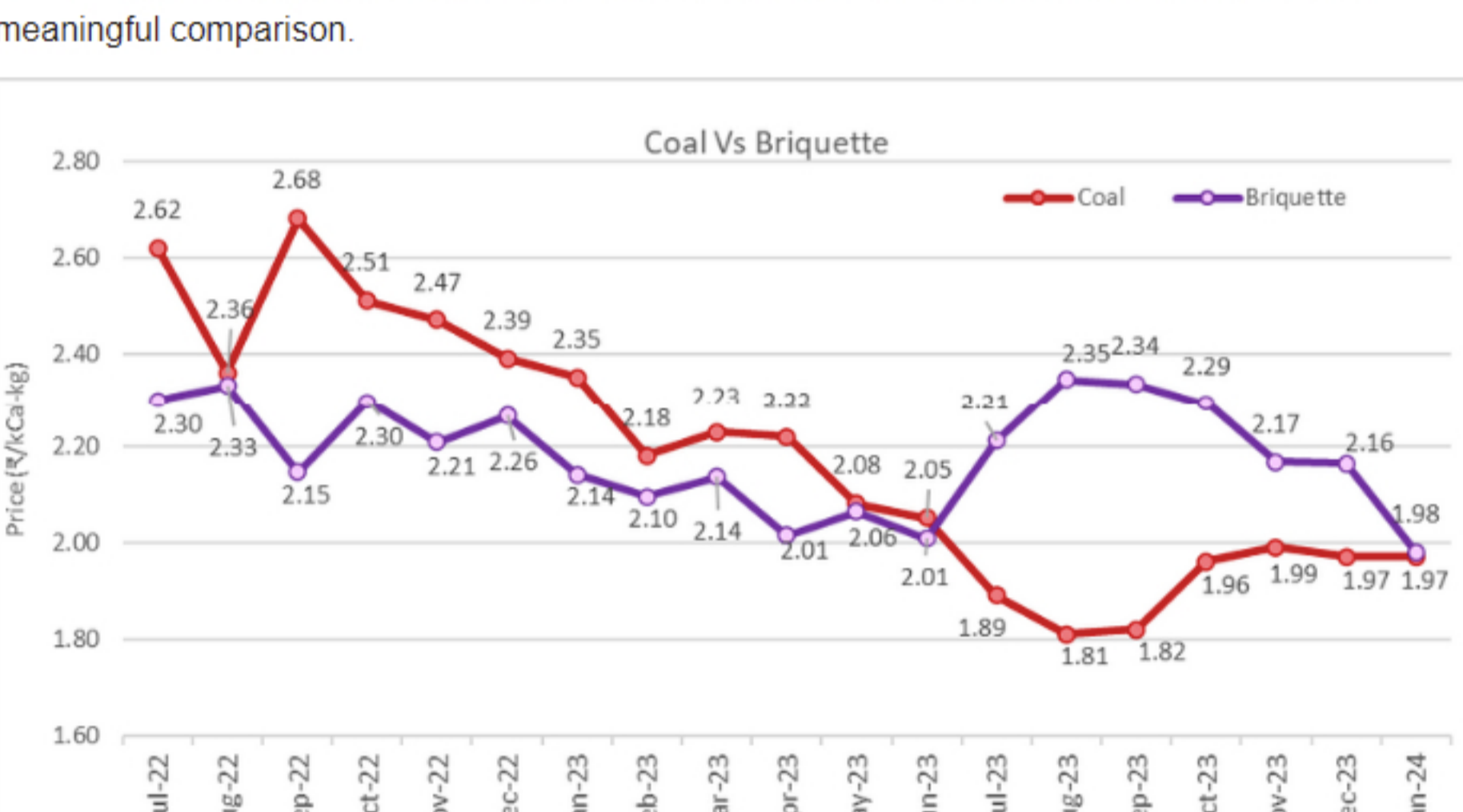
In January 2024, average deal prices fell by almost 8.5%, to ₹ 1.98 per Kcal-kg. This is the first time that prices have fallen below ₹ 2.00 since Nov 2022. The breakdown of the weighted average price for January, by grade is ₹ 2.16 per Kcal-kg for Premium briquettes (GCV > 3800, Ash < 8%), about ₹ 1.89 for Superior (GCV ~ 3400 to 3800, Ash ~ 8 to 12%), and ₹ 1.87 for Standard briquettes (GCV < 3400, Ash > 12%)

Buyers were looking to Buy for January, at a much lower delivered price of ₹ 1.96, and Seller's also lowered their expectations to ₹ 2.13, a drop of 12.5% below the previous month. Once again, deals are happening closer to Buyers' expectations, a trend that has been seen for more than a year now as supply caught up with demand.

Both demand and supply in January 2024 were comparatively lower than the previous month, but demand continues to be lower than supply. There is an indication that Buyers are deferring purchases with an expectation that prices may fall further.

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.

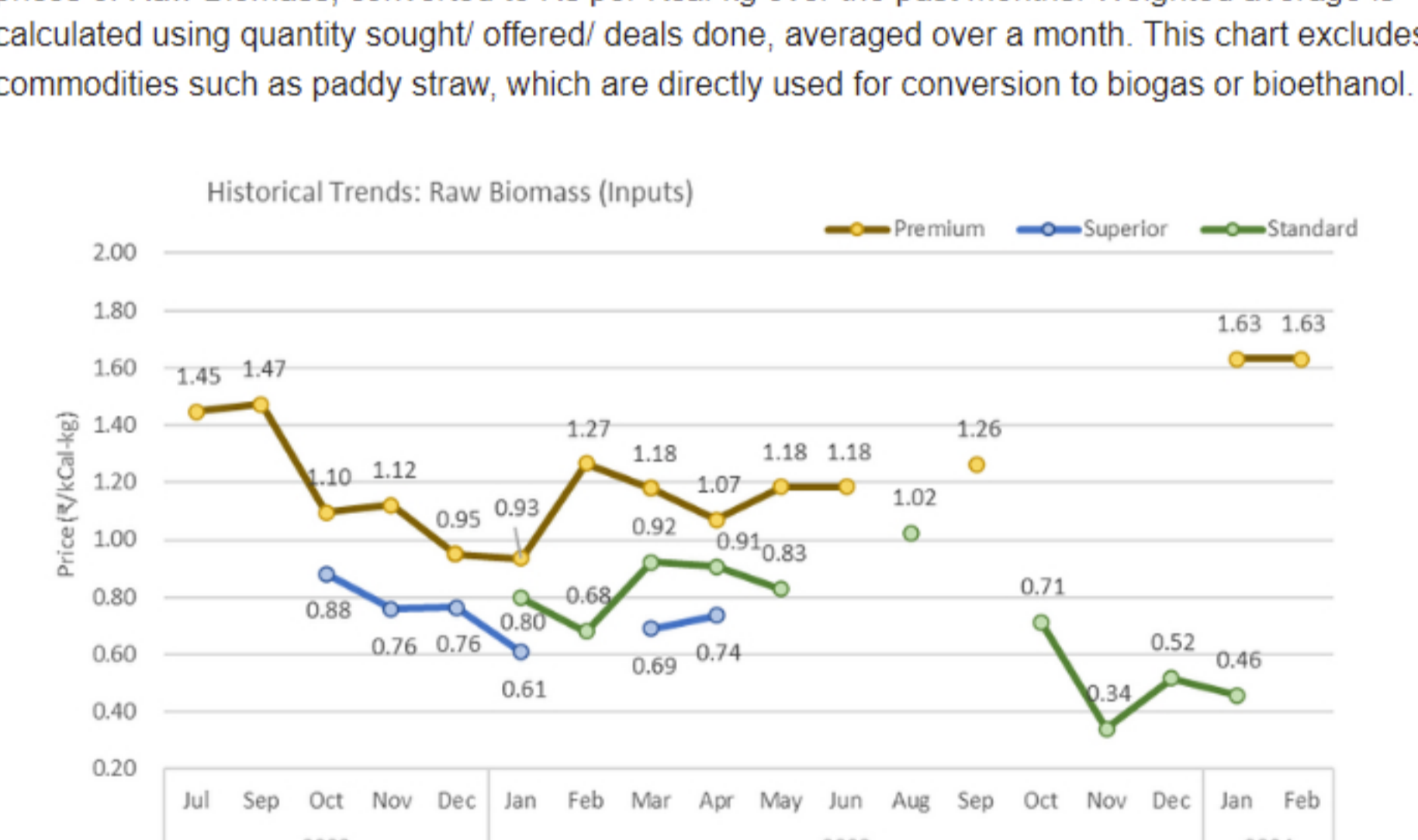


The spread between Coal and Biomass Briquette (measured on a ₹ per kCal-kg) has narrowed significantly in January to about 1 paise per kCal-kg, making biomass briquettes a value-proposition over fossil fuel coal. Coal prices remained steady from December to January, the steep fall in briquettes made it almost equal to coal when measured in GCV terms.

Prices of thermal coal imported into India have continued to remain at almost the same levels since November. Traders & importers in India have yet been unable to clear their inventories, which is going to push prices lower unless demand picks up. International coal prices are expected to remain subdued in the coming months as the EU has extended the ban on Russian coal for another six months, until July 2024.

Past Trends: Raw Biomass (Inputs)

This chart shows the pan-India trend on the BiofuelCircle platform, for 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.



The Premium group includes groundnut shells, saw dust etc. that go into making Premium grade briquettes. Raw materials such as soyabean husk, sugarcane waste, etc. typically result in Superior grade briquettes. And inputs such as cotton stalk, mustard husk/stalk, corn cob, poultry waste, etc. will give briquettes that fall into the Standard classification.

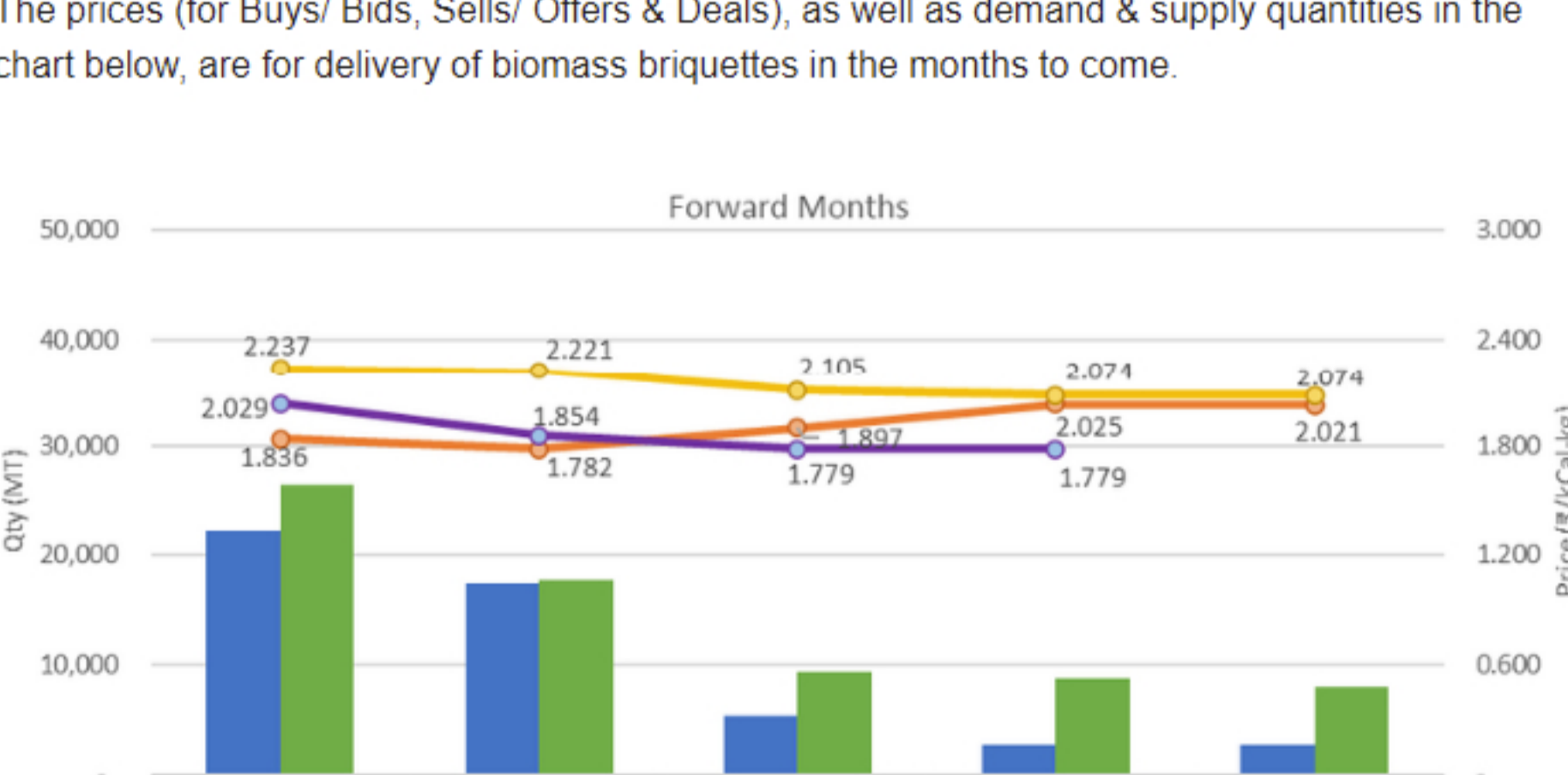
The price trends show that biomass inputs for Standard briquettes obviously fall after the harvest season. In the last couple of months, these have been around ₹ 0.50 per kCal-kg. As availability reduces in the months past February, the prices increase to ₹ 0.70- 0.90 range. Raw material inputs for Superior briquettes tend to stay in a tight zone between ₹ 0.60- 0.90 per kCal-kg. Whereas biomass for making Premium briquettes is comparatively higher, in a wider band between ₹ 1.00 to 1.60. In this category groundnut shell prices are towards the higher end of this range (seen in January & February 2024) and sawdust prices are at the lower end.

In very broad terms, over the last 12 months, the average cost of raw biomass inputs to a processor have been around ₹ 0.90 to 1.00 per kCal-kg. Compared to this to the average delivered price of biomass briquettes in the same period, has varied between ₹ 2.00 to 2.30 per kCal-kg. This translates to a Gross Conversion Margin (GCM) of ₹ 1.10 to 1.20. Note this includes the processor's cost of conversion, inventory holding cost, transportation cost to end consumer, and a profit margin.

In future reports, we will dwell further into the components of the GCM (energy basis), and the relationships between input costs and landed price of briquettes.

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.



The sharp downtrend in prices in January is reflected in a further reduction in prices for delivery in the months of March and April (₹ 1.85 to 1.78). Sellers continue to expect prices above ₹ 2.20 for February and March, but the gap from Buyer expectations is quite wide in the same period. Deals may continue to happen closer to the Buyer's prices. Like last month, price expectations for deliveries beyond three months from tend to converge close to ₹ 2 per kCal-kg.

Crop Forecasts

There is no official update or revision from the Agriculture Ministry on the production of the kharif crop in this season. It may be prudent to stay guided by the estimates shared in last month's newsletter.

In Conclusion

If you are a consumer of Briquettes/ Pellets, platform data points to a downward trend in prices for current and the two near months. Login to the platform and [click here](#) to find Sellers near you using our new Green Navigator. [Contact your Support representative](#) to understand how BiofuelCircle can help you plan long-term purchases.

If you are a Briquette/ Pellet manufacturer, the Green Navigator can also help you locate customers nearby using the [Find Buyer feature here](#). BiofuelCircle is facilitating collection of raw biomass through multiple Biomass Banks in Maharashtra & Gujarat. [Reach out to your Support representative](#) to know how you can secure your raw material supplies.

Contact us to know more!