

# BiofuelCircle Market Insights

January 2024

## Past Trends: Briquette Prices

### Historical Trends



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.

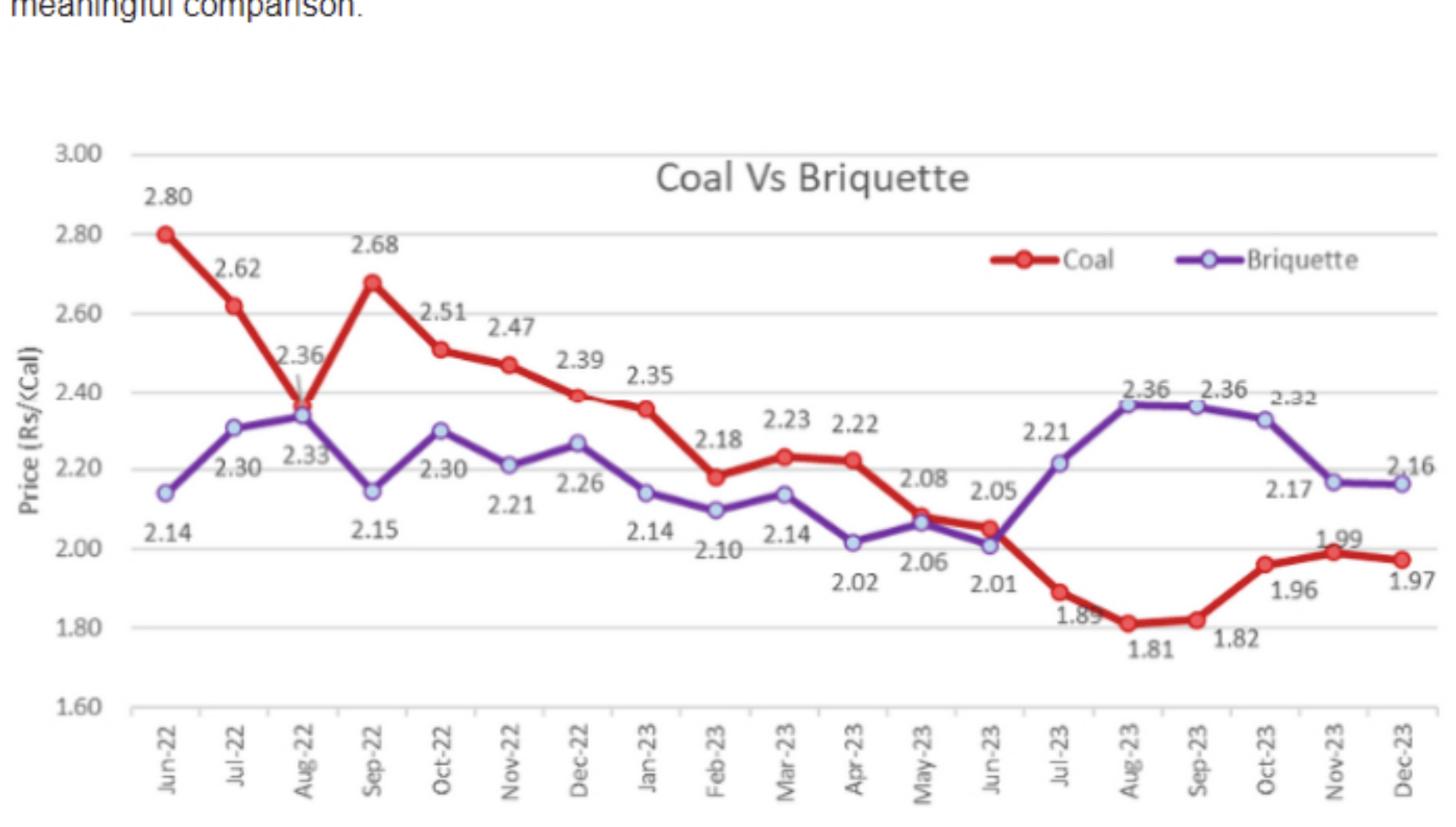
Buy/Bid prices (orange line) are expectations of Buyers (delivered basis). Sell/ Offer prices (yellow line) are based on responses and sells published by Sellers (again delivered basis). And finally, the Deal prices (purple line) are for deals concluded after platform-based negotiations between Buyers and 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.

Compared to November, both Seller's expectations and average Deal prices have remained more or less steady in December. They were in the ₹ 2.45 to 2.42 per Kcal-kg range for Sell prices, and just around ₹ 2.16 ~ 2.17 per Kcal-kg for Deals done. Buyers though were willing to pay about 2% higher in December and deals continue to happen closer to Buyer expectations.

Both Demand and Supply on the platform also remained about the same in November & December 2023. A more interesting comparison is with the same period last year: Sellers expected about the same price (₹ 2.42 vs 2.48 in Dec 2022). Buyers are willing to pay higher (₹ 2.11 vs 2.03 in Dec 2022). Yet deals are happening at about 4.5% lower levels (₹ 2.163 vs 2.264 last year). This is in contrast with the Demand-Supply gap in December 2022 vs 2023. The reason can be attributed to the commodity mix: a preference for Standard/ Superior briquettes in recent months as compared to Superior/ Premium briquettes a year ago.

## 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) spread has remained more or less the same since last month and continues to stay inverted, i.e. briquettes are more expensive than coal. We continue to believe this trend is against historical patterns.

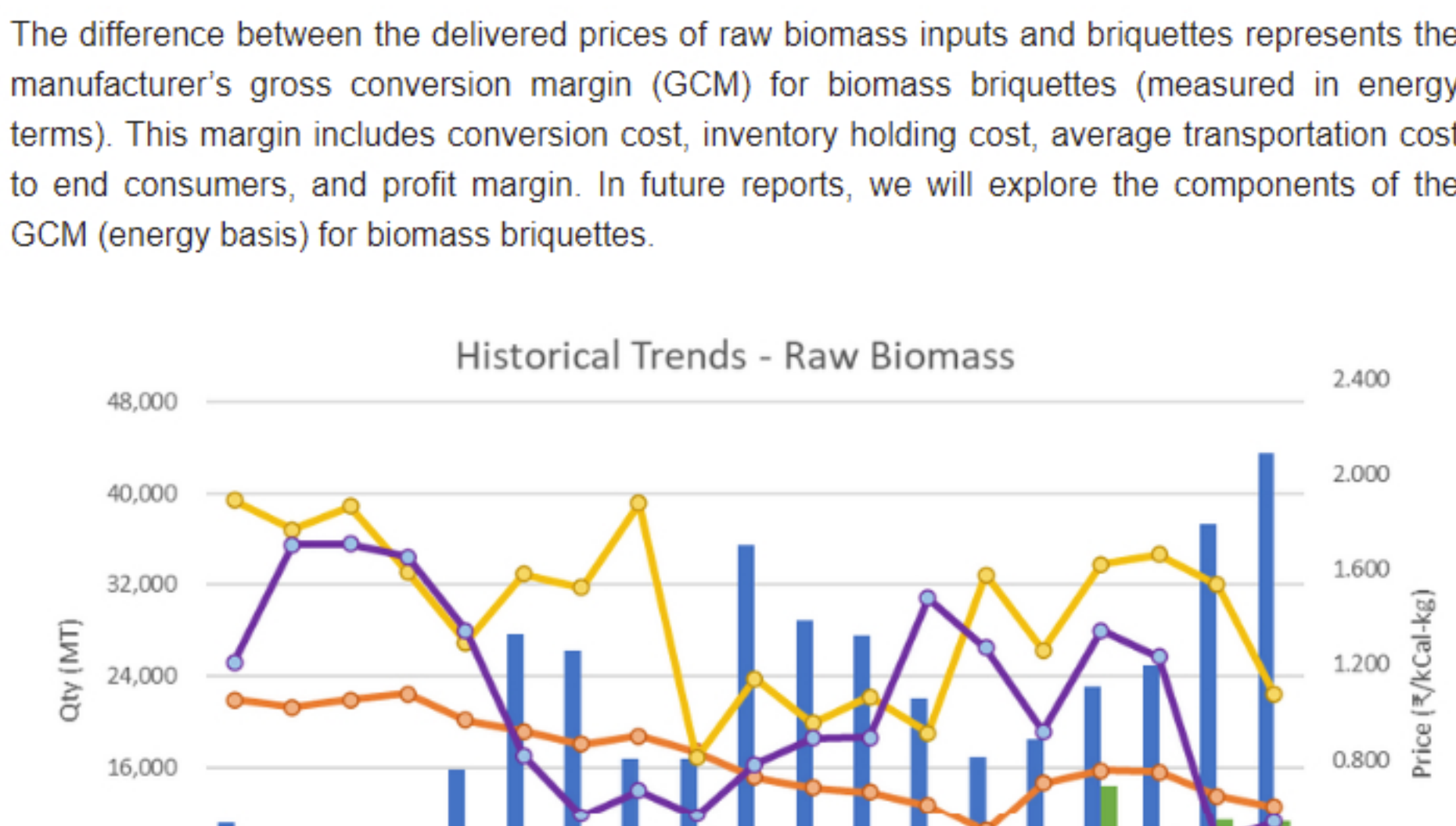
International Coal prices did not rise in December due to reduced demand for imported coal in various regions, particularly India & China. Coal imports to India may reduce as there is still an inventory stockpile at Indian ports, and domestic production has been adequate to meet local demand.

## Past Trends: Raw Biomass (Inputs)

Starting this month, we will share historical trends in prices of raw biomass inputs used for the manufacture of briquettes. 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, along with the availability & demand from platform users. 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 and 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.

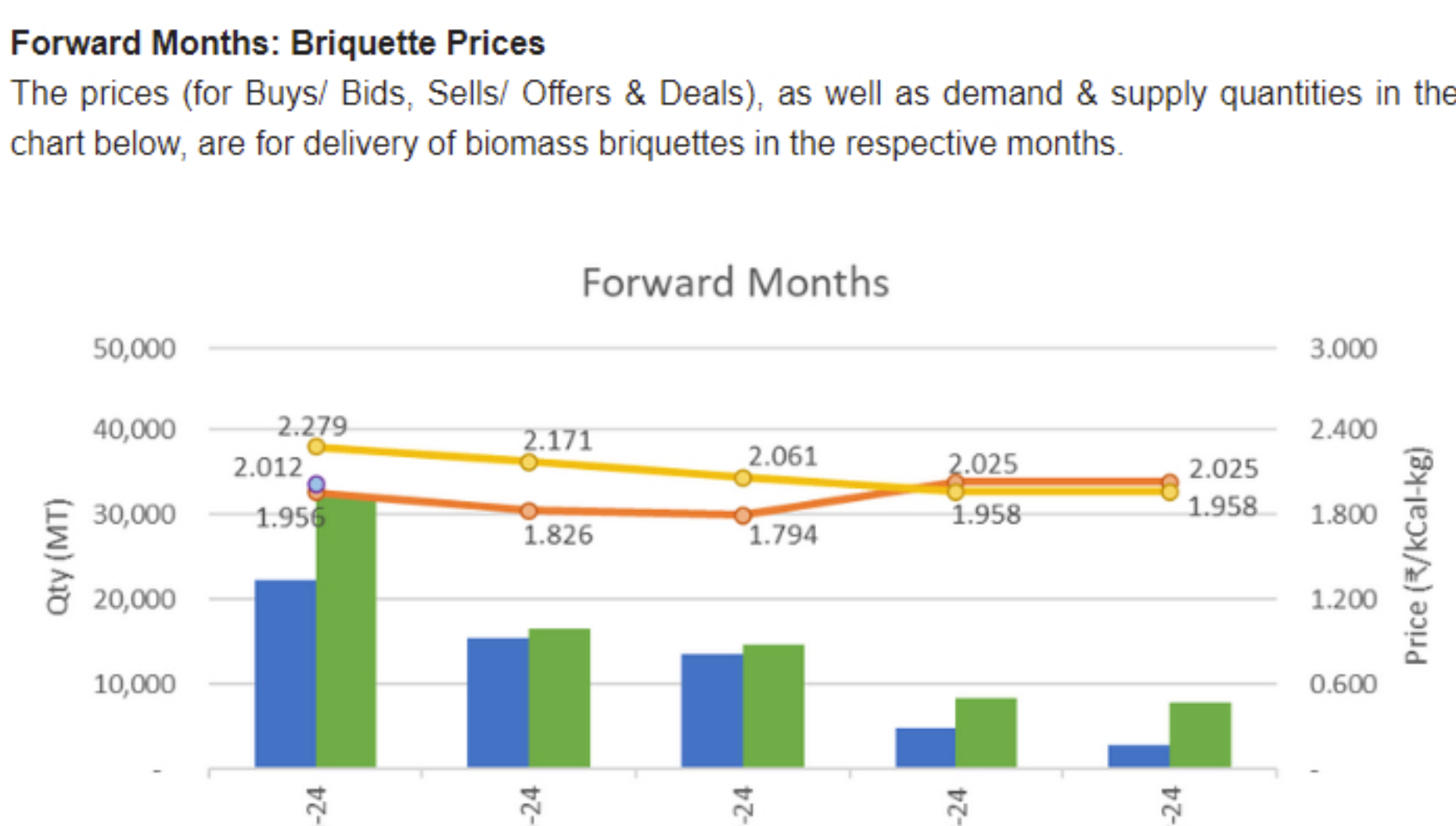
The difference between the delivered prices of raw biomass inputs and briquettes represents the manufacturer's gross conversion margin (GCM) for biomass briquettes (measured in energy terms). This margin includes conversion cost, inventory holding cost, average transportation cost to end consumers, and profit margin. In future reports, we will explore the components of the GCM (energy basis) for biomass briquettes.



The commodities considered in this mix include common inputs such as soyabean husk, sugarcane waste, groundnut shells, cotton stalk, mustard stalk, coriander stalk, various kinds of wood chips, sawdust, etc. This chart excludes commodities such as paddy straw, which are directly used for conversion to biogas or bioethanol. Over the past year, more and more manufacturers are sourcing their raw materials via the platform as seen in the rising demand. Supplies have come in through the Biomass Banks facilitated by the platform. The average deal prices have fluctuated largely based on the unavailability of biomass in the monsoon months. In June 2023, prices rose to almost ₹ 1.6 per kCal-kg before falling to a low of ₹ 0.44 in November.

## 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 respective months.



As more deals were concluded in December, the average price of deals done for Jan'24 delivery has risen from ₹ 1.76 per Kcal-kg as reported last month, to ₹ 2.01: a sharp increase of 14%. Seller expectations for Jan'24 deliveries are higher by ₹ 0.15, indicating that deals have started to happen closer to prices sought by Sellers. But for the months of February 2024 and beyond, Buyer and Seller price expectations are slightly lower as compared to the past, and very interestingly close to each other. In fact for Apr-May'24 deliveries expected prices are almost matching.

## Crop Forecasts

While there was an increased flow of raw materials in Nov-Dec'23 after the harvest, the last official estimates of Kharif crop production (as released by the Agriculture Ministry) indicate that except for tur & cereals, this year's overall crop output is lower compared to the 2022-23 season.

Sugarcane production across the country is expected to be about 435 million tons, 11% lower than last year. Soyabean crop output is likely to fall by 23% due to a significant shortfall in production in the key states of Madhya Pradesh and Maharashtra. And groundnut production may also drop by 8.5%. There was a long spell of limited rainfall in these regions in Aug'23, followed by heavy rainfall in Sep'23, which has affected the overall output of oilseeds. Lastly, cotton production is also expected to be lower by 6% or more, with reports of pink bollworm infection in northern states and parts of Gujarat.

To add to this, the sowing of rabi crop (as of mid-Dec'23) measured in acreage, is also lower compared to last season. This is largely due to the delayed harvest of kharif crops and official estimates expect that may be covered in the coming weeks. Acreage for mustard and rapeseed has actually increased compared to 2022, and we will be watching out for the availability of mustard stalk after the rabi harvest.

In general, these trends point to reduced overall availability of key raw biomass inputs for the manufacture of briquettes and pellets. If you are a manufacturer of Briquettes/ Pellets we are advising building up of your raw material inventories.

Our support representatives can help you connect to the Biomass Banks near you: [get in touch today!](#) Are you a consumer of Briquettes/ Pellets? Platform data continues to show that buying one to two months forward can help you lock in better prices compared to the previous quarter. Login to the platform and [click here](#) to find Sellers near you. [Contact your Support representative](#) to understand how BiofuelCircle can help you plan long term purchases.

Contact us to know more!