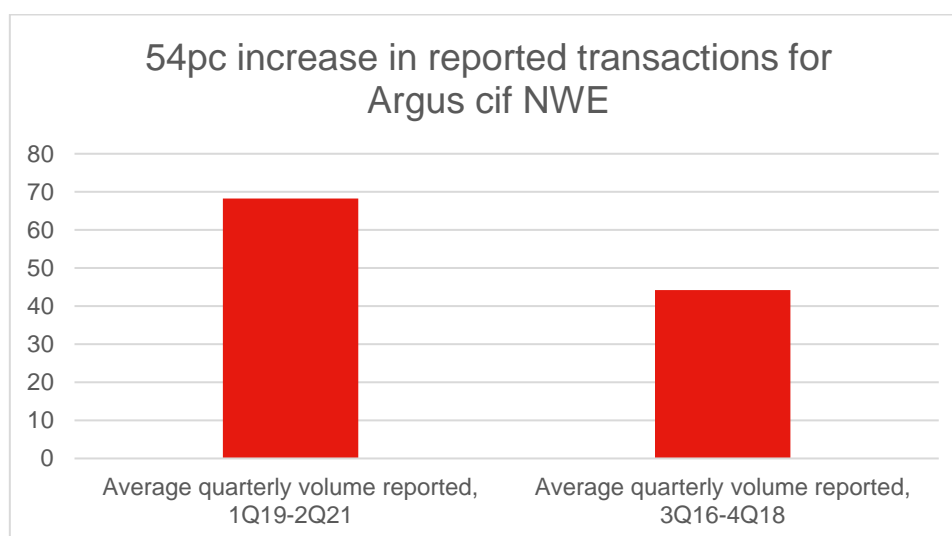


Argus biomass prices: Liquidity and usage increases in volatile pricing environment

Liquidity underpinning the Argus cif NWE and other key industrial wood pellet prices has continued its steady increase in recent times, as market participants become increasingly willing to contribute to and use Argus prices.

In the 10 quarters leading up to the third quarter of this year, average quarterly fixed price trade volumes reached nearly 70,000t, up by more than 50pc on the equivalent period from the third quarter of 2016 to the fourth quarter of 2018. This comes as the market has continued to grow in absolute terms over the past five years, and seasonal price volatility has led to a greater willingness to index-link contracts to Argus prices.

Furthermore, despite the price volatility, Argus indexes have continued to track the market consistently. For example, during the second quarter of this year, a 45,000t trade was reported and confirmed during the week ending 21 April at the equivalent of \$142.50/t, and the Argus cif NWE index outturned at \$141.90/t. Similarly, during the week to 23 June, a 40,000t trade was reported and confirmed at the equivalent of \$152.50/t and the Argus cif NWE index outturned at \$151.35/t.



Part of the reason for the very small discrepancy is that Argus' methodology relies on a market survey component, which is critical for the accuracy of prices during weeks of low or no liquidity. But it is safe to say that Argus prices across the biomass market are anchored in the physical market, and this explains in no small part the rising adoption of Argus prices as contract benchmarks as the market structure undergoes some fundamental changes.

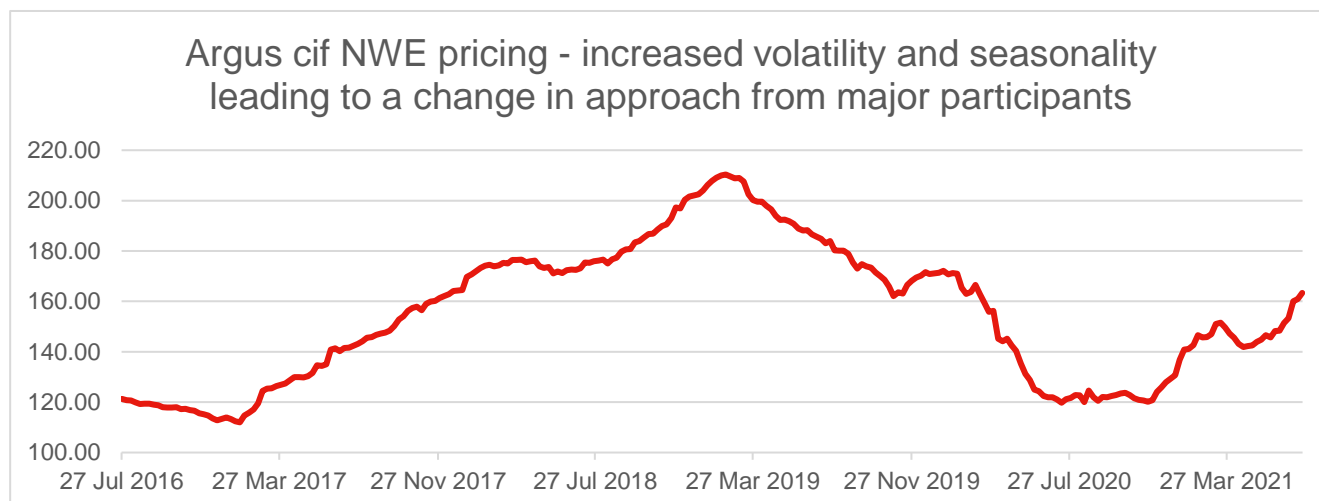
Since its inception, the market for industrial wood pellets used for power generation in Europe has relied on long-term, fixed-price contracts. These went some way to ensuring that there was adequate supply to meet demand (and vice-versa) over the long term. But in recent years, there has been a clear

change in the market structure that has prompted consumers, suppliers and traders alike to seek more exposure to the spot market.

Firstly, utilities have begun to operate on a more commercial basis. Subsidy regime evolution has brought about more of a focus on optimising how and when a power plant runs. For example, during winter, when power prices are typically significantly higher, a biomass-fired power station will typically now run much harder than during the summer when power prices are low. Furthermore, much of the generation fleet is geared towards generating district heat in winter as well, which typically causes a plant to run much harder. This has led to increased interest in the EEX-listed Argus cif NWE futures market, as utilities seek to hedge their exposure to adverse price movements during these volatile times.

Secondly, as long-term contracts elapse, there are signs that suppliers are willing to look at getting more exposure to market prices and becoming more commercially minded. Naturally, given the size of some operations, credit was required to build and run wood pelletising plants. When the debt is paid down, there is much more flexibility to try to follow the market and it could be the case that shareholders are seeking this exposure as well.

Thirdly, all market participants are looking at a point in time towards the end of this decade when subsidies are relaxed and the industrial pellet market has to stand on its own two feet. This requires internal market-based efficiencies and embedded optionality to be uncovered, and the best way to do this is to find and use an accurate pricing mechanism for the commodity itself.



With all of the above in mind, and the fact that more and more tonnes traded in the market are prices on an Argus-linked basis, it seems there is plenty of scope for the development of risk management tools to complement a market that sits very much at the heart of the energy transition.

At Argus we have reported extensively on shifts to the global energy mix and responded by adding coverage of biomass, IMO2020 compliant marine fuels and sustainable aviation fuel (SAF) in recent years.