

Biomass Market Update

Winter demand begins

(RBCN) European wood pellet prices have remained supported as winter begins and temperatures drop, despite a lack of spot demand, with production costs still high for producers.

I2 industrial wood pellets were assessed at an average of around €200/t (\$215/t) CIF ARA, much in line with the previous quarter, according to a survey of market participants. ENplus A1 residential pellets were seen at a €30 premium to the I2 price.

“The cold weather has been good for biomass, even though the heating season began later than usual,” said a Nordic biomass trader, noting plant and port stocks had depleted “very quickly” in recent weeks following Europe’s first cold snap of the 2023-2024 winter season.

Combined inventories at several monitored Amsterdam, Rotterdam and Antwerp (ARA) import terminals have dropped by 5,500 tonnes – or more than 15% – compared with the end of the previous quarter, to around 31,000 tonnes, RBCN estimates showed.

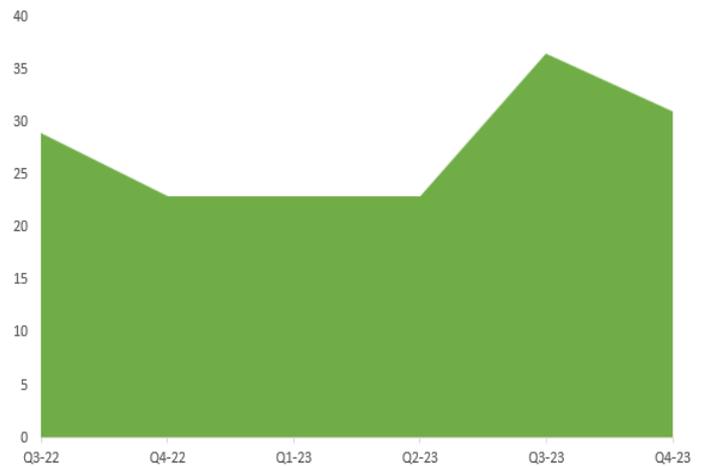
“There is very little spot demand for industrial pellets. But the cold weather [in recent weeks] has increased power consumption, even in the UK,” the trader said.

Nevertheless, he said the market was sufficiently stocked still, with RBCN estimates showing ARA stocks, for example, still 8,000t higher than at the same time last year.

RBCN Wood Pellet Price and Stock assessments		
	End Q4 2023	Vs. Q3 2023
Industrial (I2), CIF ARA	€ 200/t	Unchanged
ENplus (A1), CIF ARA	€ 230/t	-17.9%
ARA stocks, tonnes	31,000	-15.1%

**Assessments reflect Europe-origin spot cargoes, loading up to 3 months ahead*

ARA wood pellet stocks, '000 tonnes



“There is no rush to buy,” he said, yet noting while industrial wood pellets had been selling at around €160/tonne CIF ARA a few months ago, they were now commanding levels of €200/tonne CIF ARA for supplies delivered at the start of next year.

“That’s a pretty big rise,” he said.

Continues on p.2...

Wood Pellet Imports*, tonnes	Q3-23	Q2-23	Year-to-date	vs. Q3-22	vs. YTD-22
Netherlands	309,315	570,409	1,417,701	-65%	-26%
UK	1,056,693	1,430,563	3,986,782	-45%	-30%
Belgium	47,931	99,630	395,400	-73%	-43%
Denmark	441,184	282,120	1,188,687	64%	-31%
<i>Of which in Q3-23</i>	US	Canada	Russia	Portugal/Spain	Baltics**
Netherlands	276,690	0	0	369	32,256
UK	883,955	56,471	0	568	115,699
Belgium	43,432	195	0	0	4,305
Denmark	185,941	42,770	0	48,706	163,767

**Source: Eurostat & BEIS **Latvia, Lithuania and Estonia*

The information in this newsletter is provided solely for informational purposes and should not be regarded as a recommendation to buy, sell or otherwise deal in any product mentioned. All pricing information is indicative only, and subject to change.

Continued from p.1...

“However, I don’t think there were any deals at the lower levels, as production costs have been so high,” he said.

He added that Baltic suppliers were unable to sell at below €200/tonne on a FOB basis.

“For Europe, the main problem is high raw material costs, but also increased transportation costs and rising wages,” he said adding that raw material costs were high as Russian and Belarussian material was not permitted in Europe any more, due to sanctions related to the war in Ukraine.

“Raw material prices can’t come down too much until there is a boom in house building,” he added.

Another biomass trader also said prices would not drop unless production costs come down too.

“US spot supply can be a bit cheaper though, and some deals have been done below European production costs,” he said, adding “for US producers, the only real thing that changes in the cost of production is transport costs.”

“It’s interesting that US supply is cheaper than European, as it’s almost always been the other way around – European sellers are very frustrated,” he said.

Meanwhile, with Europe actively phasing out coal as a generation fuel, some traders from the coal market were looking to biomass as an alternative market of interest.

“I’m looking to wood pellets due to decline in coal demand,” said a German coal trader, with a trading house, noting he had been sourcing material from the Baltic region.

“I had initially intended to source from Russia and Ukraine,” he said, however EU-wide sanctions had put a halt to such trade.

“We’re still looking at moving some biomass from Ukraine to Poland, but the market is also very quiet – like coal,” he said.

“Consumption is not so good, so prices are lower. Until Q1 we have to be patient,” he said.

Drax contracts over 17m tonnes to mid-2030

UK independent generator and pellet producer Drax has contracted over 17 million tonnes of long-term biomass sales to third parties in Asia and Europe extending to the mid-2030s, it said in a trading update.

“Against the backdrop of a more challenging operational and market environment the business has continued to deliver a robust performance,” it said, noting it had, for example,

commenced supply of a new 450,000 tonne five-year contract with a Japanese customer.

“In December, Drax agreed a Letter of Intent for the sale of up to one million tonnes of biomass to a major European utility, for projects including a biofuel project which is targeting a final investment decision during 2025,” it added.

Drax said these developments demonstrated the growing demand for biomass pellets in Asia and Europe and its wider application in the energy transition, sustainable aviation fuel and other industrial processes

“With its robust and diversified global supply chain Drax believes that it is well placed to support increased demand for sustainable biomass in a wider range of applications and in doing so create value for stakeholders,” it said.

Drax also said in the report that the current volatile operating environment for power generators highlighted the importance of continued investment to ensure good operational performance and availability at its 6 GW biomass-fired plant in northern England.

As a part of this investment programme, two major planned outages were completed at Drax power station in July and November, it said.

“The group has a robust and diversified global supply chain comprised of third-party suppliers, as well as operating around five million tonnes of production capacity across the Group’s own 17 facilities in the US and Canada,” it said.

“This diversification provides a high level of operational redundancy designed to mitigate any potential disruption at supplier level.”

In the UK, Drax utilises dedicated port facilities at Hull, Immingham, Tyne and Liverpool, with annual throughput capacity and biomass rail sets providing supply chain capacity significantly in excess of the Group’s typical annual biomass usage.

Drax Power Station has around 300,000 tonnes of onsite biomass storage capacity.

“Taken together with volumes throughout its supply chain the group currently has visibility of around one million tonnes of biomass in inventories,” it said, noting this added significantly to the “resilience and security” of the UK power market over the winter period.

The information in this newsletter is provided solely for informational purposes and should not be regarded as a recommendation to buy, sell or otherwise deal in any product mentioned. All pricing information is indicative only, and subject to change.

Biomass takes 5.5% of Britain's third quarter power mix

Biomass supplied 5.5% of Britain's power demand in July-September 2023, with renewables as a whole providing 40% of the country's power mix – the highest third-quarter share on record – according to a report published by Drax Electric Insights.

"This made it the lowest carbon quarter on record, with emissions falling below 150 g/kWh for the first time ever," it said.

In the report, by Imperial College London but commissioned by Drax, total demand for power reached 59.1 TWh in the third quarter.

Of this total, wind provided 25.9%, while solar contributed 6.6%.

Gas remained the main source of power, providing 32.9% of the mix, while the share of coal fell to less than 1%.

"Getting coal off the grid and replacing it with renewables such as biomass has been transformational for the UK," said Penny Small, Drax's interim COO.

"By converting Drax Power Station to use biomass we have secured jobs and simultaneously strengthened the UK's energy security through generating a reliable source of dispatchable, renewable electricity for millions of homes and business," she said.

Small said the company was now planning to "go further" by using bioenergy with carbon capture and storage (BECCS) to permanently remove millions of tonnes of carbon dioxide from the atmosphere each year, and was engaged in discussions with the UK government to move this project forward.

"The global momentum for converting coal-fired power stations to biomass is growing as more countries work to reduce their emissions by moving away from fossil fuels to renewables while maintaining their energy security," she said.

"If BECCS were eventually added to each of these sites, they would be able to remove carbon from the atmosphere while generating renewable power".

Britain's move away from coal took shape over the last decade. A combination of air quality regulations, increasing carbon prices, and converting coal plants to run on biomass meant that Britain's coal output fell by over 40% per year in

the five years to 2020, the report noted.

"In contrast, the share of electricity from coal has remained almost static in China, India, and Japan since 2015," it added.

Around the world, 48 countries have committed to stop using coal for electricity over the coming decades.

EU improves biomass sourcing and use – EC report

The EU is becoming increasingly resource-efficient with improved wood, food and other bio-waste re-use and recycling, but it is also producing and consuming more biomass overall, according to a new report by European Commission's Joint Research Centre (JRC).

"The trend in biomass supply is increasing from both primary domestic production and secondary sources," the November report found, noting while biomass could play an important role in fuelling the Europe's energy transition, it was a limited resource.

The total sources of biomass in the EU, which includes domestic production and net imports, amounts to approximately 1 billion tonnes of dry matter (tdm), whereas the uses amount to 1.2 billion tdm.

"The additional biomass in uses with respect to sources is due to the recovery of waste from industry and households," the report stated.

It found that the EU was sourcing more biomass over time, both from primary (virgin) sources, and secondary sources (by-products and waste).

Forestry accounts for 27% of biomass sources with an estimated that 551million cubic metres (mcm) removed from forests in 2017, including bark, it said.

"Secondary wood (such as wood chips) amounted to 179.6mcm in the same year," it said>

It added that the felling rate in forests for 2020 was 77% for merchantable fellings and 88%, all fellings considered.

"The fellings rate has increased this past decade at EU level, which is partially explained by natural disturbances and the resulting salvage logging operations," it added.

The EC's JRC concluded that the report confirmed a trend in increase in biological resource efficiency at EU level, but also an overall increase in supply and uses of biomass, including from virgin sources.

France to switch remaining coal-fired capacity to biomass

France will convert the country's remaining 1.8 GW of coal-fired capacity to biomass by 2027, French president Emmanuel Macron said in late September.

France has just two coal-fired plants left – the 1.2 GW Cordemais plant owned by French utility EDF and Gazelenergie's 600 MW Emile-Huchet plant, in Saint-Avold,.

The latter plant was previously due to close in March last year, but it reopened in July 2022 following the Russian invasion of Ukraine and ensuing efforts to secure power supply.

The announcement came amid plans for the country to slash greenhouse gas emissions 55% below 1990 levels by 2030, in line with the EU targets.

EU sees switch from industrial to residential pellets

Europe has seen a rise in domestic usage of wood pellets, amid soaring competing fuel prices, lobby Bioenergy Europe said in a report.

"2022 caused a significant shift from industrial use towards residential and commercial use; 56% of the total was residential and commercial use, the highest share since 2014," it said.

This was partly in response to skyrocketing gas and electricity prices, which encouraged individuals to use pellets even though volatility was also experienced in the pellet market, it said.

"Additionally, the price volatility also impacted financial decisions by industrial users leading to reduced consumption," it added.

A key factor behind the increasing popularity of wood pellets was their cost-competitiveness compared to other energy carriers, such as natural gas, electricity and oil, lobby said.

"In 2021, industrial wood pellet prices even fell below coal, highlighting their competitiveness," it noted.

However, the invasion of Ukraine and resulting energy crisis in 2022 caused dramatic price fluctuations unlike anything the market had previously experienced, though still less than what was seen in the gas and electricity markets, it said.

"In many countries, pellet prices doubled in the short term, as there were questions about how Europe would be able to

cope without Russian gas, but now prices have fallen closer to the historical average while still remaining a bit elevated," it added.

At the same time, residential consumers needed to be sure of the quality of the pellets used in their appliances, Bioenergy Europe said.

"In this regard, the ENplus fuel quality certification scheme has been a huge success for over ten years now, ensuring wood pellet quality by guaranteeing it over the entire supply chain," it said.

According to lobby's estimates, around 13.6 million tonnes of pellets were certified by the system in 50 countries all over the world in 2022.

"Although Europe is the leading market when it comes to certification having both the highest number of certified producers and volume of ENplus certified pellets, the scheme's strong international presences show it is on its way to becoming the global standard for the pellet industry."

The EU continued to be the global leader in wood pellet production, producing 20.6 million tonnes in 2022, followed by North America, which produced 14.3 million tonnes, the lobby said.

"Production rose in all regions except Other Europe, where trade restrictions in response to the Russian invasion of Ukraine led to a sharp drop in Russian production," it said.

Consumption also fell in the EU and Other Europe as markets experienced volatile prices related to the energy crisis, it said.

"Noticeably, there was a large increase in consumption in Asia as Japan and South Korea increasingly invest in pellets," it added.

On the production side, the countries with the greatest growth in pellet production between 2021 and 2022 were split between Europe and Asia, the group said.

On the other hand, the largest contraction was seen in Russia, followed by Belarus, which were heavily targeted by sanctions.

"Other countries with decreases – including Latvia, Romania and Serbia – can be explained by high electricity prices, which affected the profitability of pellet production," it added.