



Carbon Weekly Report

info@freightinvestor.com | freightinvestorservices.com | (+44) 207 090 1120

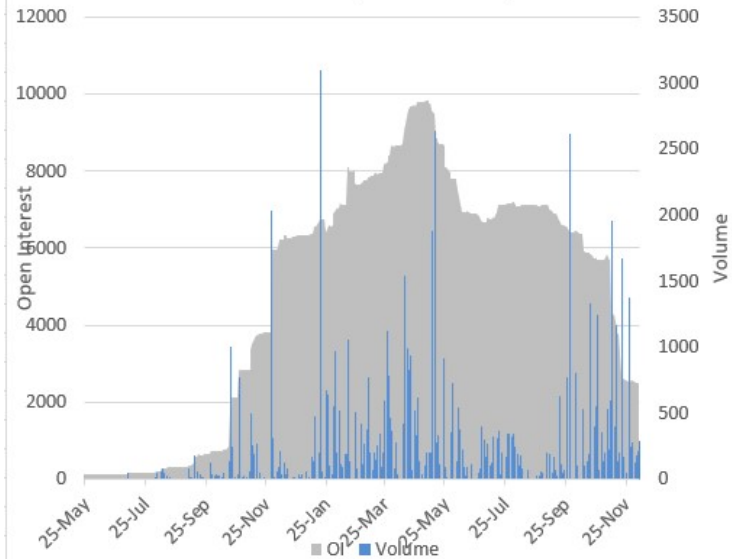
11/12/2023

(FISe View): 907kt traded on the NGO Dec23 for the week, with the contract settling at \$1.01, down \$0.04 for the week. Activity on the further dated contracts was muted. Open Interest on the Dec23 contract is at 2.673Mt with the closing out of positions on the contract prior to the contract expiry at the end of the month. 830kt traded on the GEO Dec23 Contract for the week with the contract settling at \$0.69 up \$0.04 for the week.

GEO DEC23/DEC24 Futures



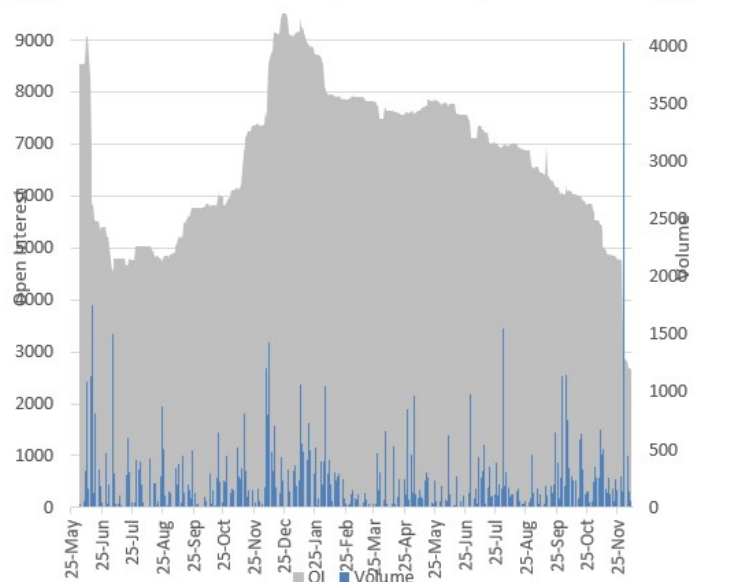
CME GEO DEC23 Open Interest/ Volume



CME NGO DEC23/ DEC24 Futures



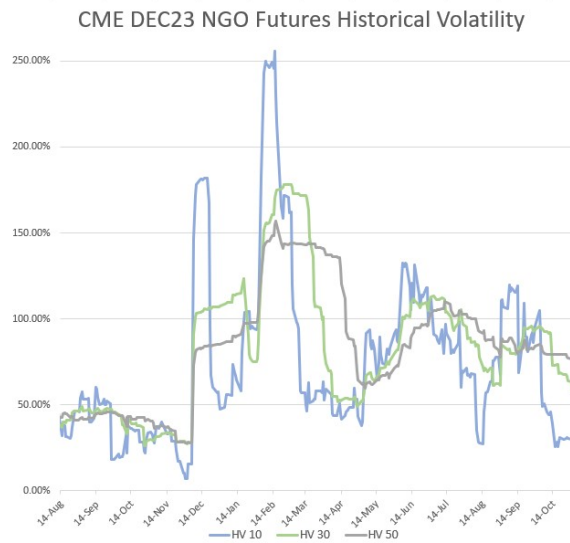
CME NGO DEC23 Open Interest/ Volume



source: Refinitiv

CME NGO Historical Volatility

10 day volatility at 144%. 30 day volatility flat down to 159% and 50 day volatility at 235%.
 NGO Dec23 contract is down \$0.04 for the week, settling at \$1.01



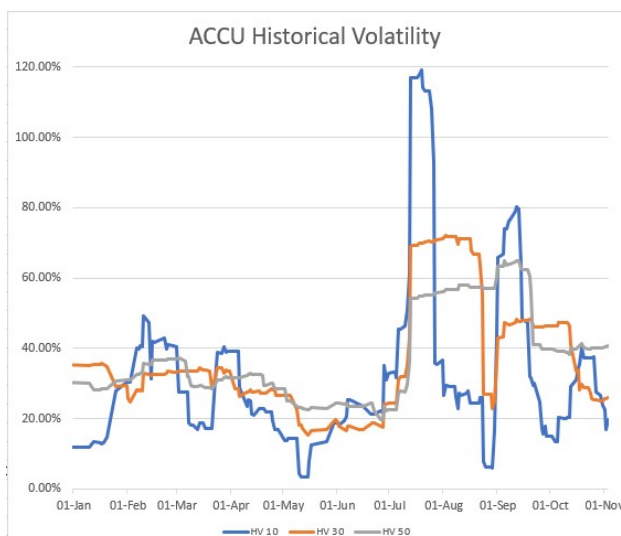
Source: Bloomberg

Block Trades on CME (w/c 8th Dec)

CME NGO DEC23/24, -0.55, 50kt
 CME NGO DEC 23/ 24 , -0.40, 25kt

ACCU & NZU Market

The ACCU market heated up over November with broker traded volumes reaching a 10 month high behind an uptick in compliance buying, led by demand for Generic ACCUs ex Avoided Deforestation units. High volumes were well absorbed in the oversupplied market, with ACCU prices generally flat month on month and price action continuing to trade in tight ranges. Sellers continue to remain patient with profit targets \$5-\$10/t above current prices. In the voluntary market, total cancellations remained flat with ACCU cancellations continuing to make up a larger contribution. ACCU cancellations over the month were led by Chevron, which has fallen behind on carbon capture targets set for its Gorgon project, regulated by the Western Australian government



| ACCU IMPLIED VOLATILITY SURFACE | | | | | |
|---------------------------------|---------|---------|-------|----------|----------|
| IO | 10% Put | 25% Put | ATM | 25% Call | 10% Call |
| Sep-23 | 49.00 | 46.50 | 44.00 | 45.00 | 46.50 |
| Dec-23 | 47.00 | 44.50 | 42.00 | 43.00 | 44.50 |
| Mar-24 | 45.00 | 42.50 | 40.00 | 41.00 | 42.50 |
| Jun-24 | 43.00 | 40.50 | 38.00 | 39.00 | 40.50 |
| Sep-24 | 41.00 | 38.50 | 36.00 | 37.00 | 38.50 |
| Dec-24 | 39.00 | 36.50 | 34.00 | 35.00 | 36.50 |

Source: Bloomberg

Compliance Markets

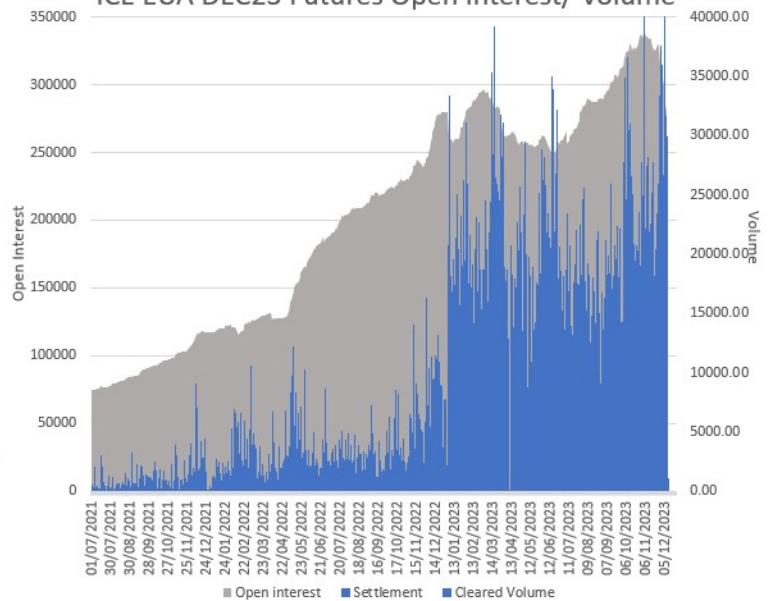
EUAs

European carbon prices slid back below a key level on Friday after an early rally had pushed the market to its highest in three days, maintaining a close correlation with energy prices that snapped a two-day rising streak amid continued mild weather. Dec-23 EUAs opened at the key options market level of €70.00 and climbed to the morning high of €70.76 within little more than an hour. The early rally coincided with a similar early increase in front-month TTF natural gas prices, and both markets appeared to switch direction at about the same time. Carbon then started a steady decline, which culminated in the benchmark contract reaching an early low of €69.17 in the final moments of the daily auction’s bidding window. The sale cleared 1 cent above the spot market value at 1000 GMT, the first time in a month there have been two consecutive auction premia. The buying ran out of steam shortly before the settlement window, and prices fell back to the day’s low of €68.45 as the window opened. A brief buying spurt at the end of the window was beaten back, and the final trade of the session went through at €68.62. The Dec-23 contract settled 1.5% lower at €68.63, one cent below Tuesday’s 13-month low settlement. Volume in the front-December was nearly 27 Mt, generating a weekly total of 166 Mt, the biggest five-day sum since March 2022. Other contracts traded a combined 18 Mt, with Dec-23/Dec-24 spread volume slightly down on recent days at 3.3 Mt.

ICE EUA DEC23 Futures



ICE EUA DEC23 Futures Open Interest/ Volume



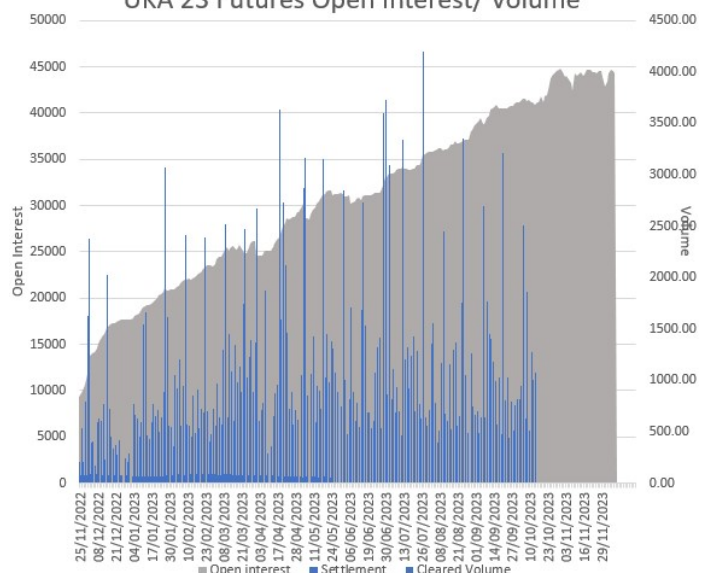
UK ETS

UK Allowances weakened during the morning, before rallying modestly in the afternoon. The Dec-23 UKA contract dropped from an opening £33.63 on ICE Futures Europe to a new record low of £32.15 shortly after midday. Levels then staged a small recovery, reaching £33.11 before easing back in the settlement window to £32.50. The benchmark contract settled 2.4% lower at £32.56, also a record low, with volume of 1.7 Mt. Despite high intra-month volatility, UKA prices posted positive performance of +3.8% on the back of the onset of a cold snap combined with low wind generation which supported power emissions. The UK also increased net power exports to the continent and natural gas off-take data suggests a slight uptick in industrial manufacturing activity

UKA DEC23 Futures



UKA 23 Futures Open Interest/ Volume



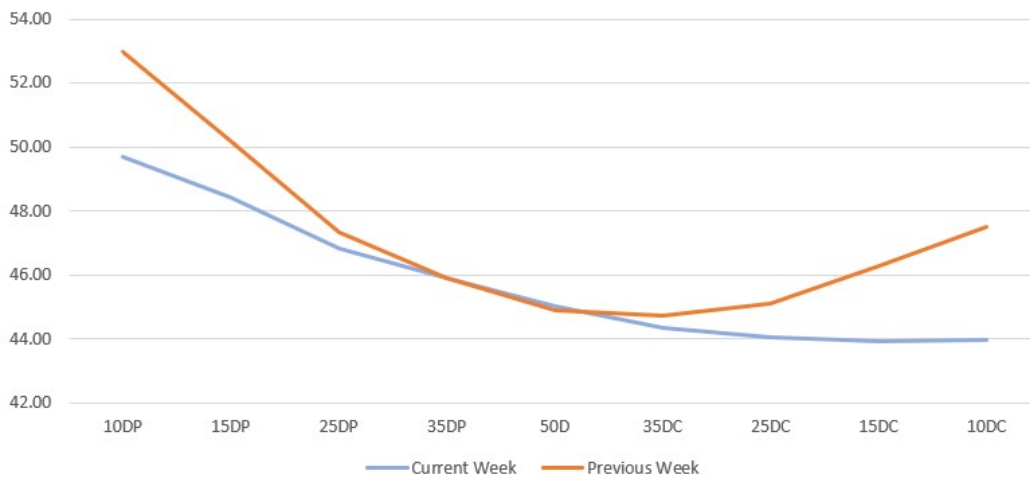
EUA Options Market

Put skew down 6.17% and call skew down 7.45% for the week. The Dec-23 contract settled 1.5% lower at €68.63, one cent below Tuesday's 13-month low settlement. Volume in the front-December was nearly 27 Mt, generating a weekly total of 166 Mt, the biggest five-day sum since March 2022.

| Volatility Surface: 11/12/2023 | | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| TERM | 10DP | 15DP | 25DP | 35DP | 50D | 35DC | 25DC | 15DC | 10DC |
| Current Week | 49.69 | 48.43 | 46.84 | 45.90 | 45.01 | 44.35 | 44.04 | 43.91 | 43.96 |
| WoW Change | -3.27 | -1.75 | -0.49 | -0.01 | 0.11 | -0.37 | -1.08 | -2.38 | -3.54 |
| Previous Week | 52.96 | 50.18 | 47.33 | 45.91 | 44.90 | 44.72 | 45.12 | 46.29 | 47.50 |

Source: Bloomberg

EUA Options Volatility



EUA DEC23 Historical Volatility



Source: Refinitiv

Market News

(OPIS): Singapore has announced two pilot projects to test the use of high-integrity carbon credits in financing the early retirement of coal-fired power plants in the Philippines, the Monetary Authority of Singapore (MAS) announced Monday. One pilot will involve the accelerated retirement of the South Luzon Thermal Energy Corporation coal plant in the Philippines, in collaboration with the Rockefeller Foundation's Coal-to-Clean Credit Initiative (CCCI) and energy firm ACEN Corporation. The other will be with the Asian Development Bank (ADB), which is advising the Philippine government over the early retirement of a coal plant in Mindanao under its Energy Transition Mechanism.

(XPansiv): CBL spot VCM volume totaled 478,950 tons last week, nearly all (96.4%) transacted through CBL's suite of GEO benchmark contracts. Nature credits led trading activity, accounting for 65% of CBL volume. CBL volume since the start of COP 28 through Friday was a bullish 2,631,701 tons—an amount not seen since this year's second quarter. GEO-suite block trade sizes ranged from 5,000 to 150,000 tons. Project-specific credit trades were led by African cookstove credits, which traded at prices between \$7.50 for VCS vintage 2021 Malawi tons, and \$2.00 for 2017 Ethiopian credits from the same standard. A block of new vintage African cookstove credits was also settled at \$5.40. Among smaller wind credit trades, GS vintage 2015 Turkish project credits were matched on screen at \$2.50, vintage 2022 VCS China wind were traded at \$1.90, and a small block of recent vintage Turkish credits was settled at \$2.60

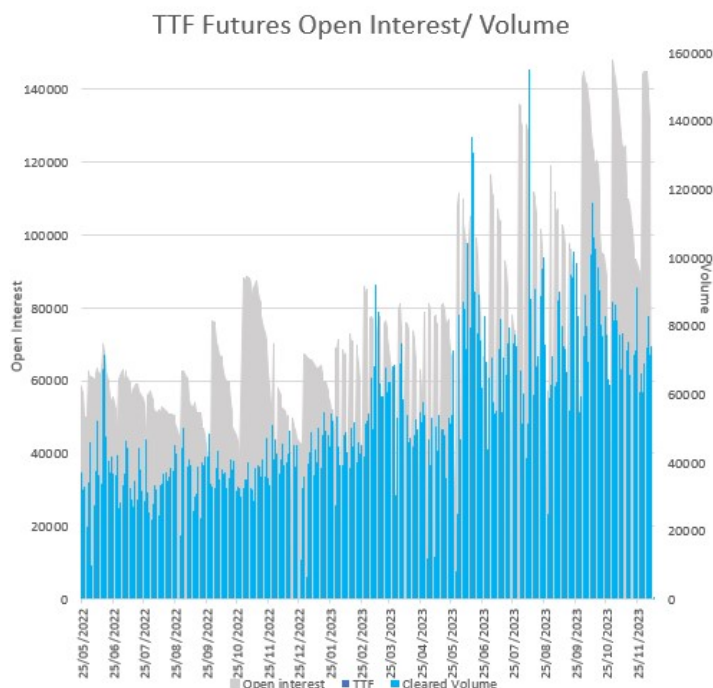
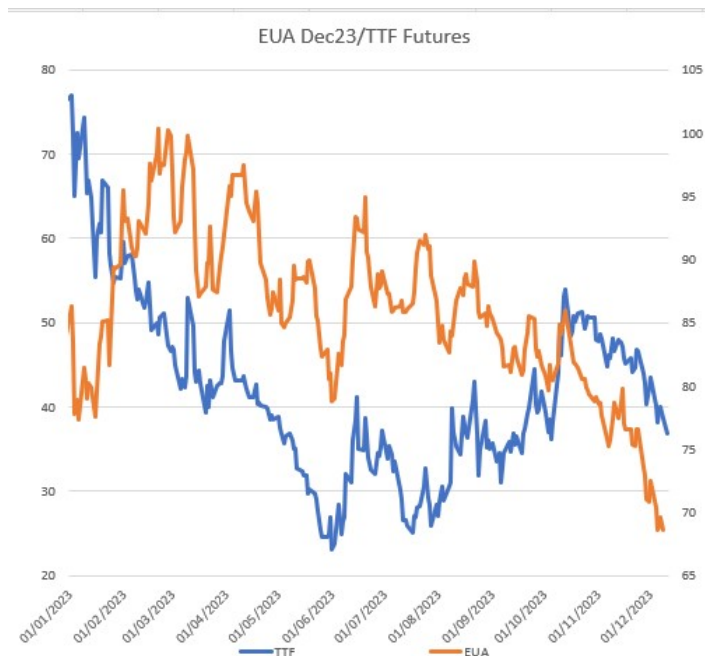
(CarbonPulse): Woodside Energy and Santos, which are both global 20 independent oil and gas companies, stressed there was no certainty of a transaction. Woodside as the larger company would take Santos' assets, liabilities, and carbon footprint which could give it additional obligations under expanded Safeguard Mechanism. "Santos continuously reviews opportunities to create and deliver value for shareholders," a statement said. Both companies have been on shopping sprees in recent years. Santos bought its former partner the private Quadrant Energy, then most of ConocoPhillips' Australian assets and then its partner in Papua New Guinea Oil Search. Woodside took all of BHP's petroleum assets in a deal that fouled its production footprint and shares on issue in June last year. The talks follow two large acquisitions by US oil giants ExxonMobil and Chevron. These were seen as doubling down on oil and gas as the world decarbonises and the Australian press has largely seen the nascent merger in the same terms, although the shared assets of a 'Wood-Tos' would be a very different proposition to what Chevron has gained via its US\$53 billion buy of US indy Hess, with its large swathe of offshore acreage in Guyana and next-door Suriname. The deal could be worth as much as A\$80 bln (\$52.5 bln). Both companies have added barrels to their portfolios via acquisitions rather than exploration in recent years.

(CarbonPulse): Australia said Thursday it will contribute A\$50 mln to the Green Climate Fund (GCF), and A\$100 mln to the Pacific Resilience Facility – a fund designed by Pacific nations for nature-based solutions, disaster preparedness, and loss and damage response projects. The Albanese government previously announced it would rejoin the GCF, after the previous Coalition government withdrew in 2018. By re-joining the GCF, Australia can effectively advocate for funding to meet Pacific needs, it said, however its contribution pales compare similarly-sized nations.

Source: CarbonPulse

Indicated Markets

Carbon's correlation to natural gas prices has risen to long-term highs in the last month. The five-day rolling correlation between EUAs and front-month TTF has been as high as 0.99, a level not seen since June, while the 10-day correlation has also climbed to six-month highs. January TTF natural gas drifted 3.4% to settle at €38.598/MWh on ICE, a 9.5% drop on the week, while next-year German baseload power last traded down 2.2% at €97.40/MWh on EEX, a 6.7% weekly decline. Cal-24 API2 coal was 0.1% higher at \$112.15/tonne on ICE, representing a 1.9% weekly fall.



Contact

Anand Ravindran

AnandR@freightinvestor.com

+65 9782 2445

Michael Derrett

MichaelD@freightinvestor.com

Oliver Kinkade

OliverK@freightinvestor.com

+44 (0) 207 090 1120

Theodore Goulios

TheoG@freightinvestor.com

+65 6535 5189

The information provided in this communication is not intended for retail clients. It is general in nature only and does not constitute advice or an offer to sell, or the solicitation of an offer to purchase any swap or other financial instruments, nor constitute any recommendation on our part. The information has been prepared without considering your investment objectives, financial situation, or knowledge and experience. This material is not a research report and is not intended as such. FIS is not responsible for any trading decisions taken based on this communication. Trading swaps and over-the-counter derivatives, exchange-traded derivatives, and options involve substantial risk and are not suitable for all investors. You are advised to perform an independent investigation to determine whether a transaction is suitable for you. No part of this material may be copied or duplicated in any form by any means or redistributed without our prior written consent. Freight Investor Services Ltd (FIS) is authorised and regulated by the Financial Conduct Authority (FRN: 211452) and is a member of the National Futures Association ("NFA"). Freight Investor Services PTE Ltd ('FIS PTE') is a private limited company, incorporated and registered in Singapore with company number 200603922G, and has subsidiary offices in India and Shanghai. Freight Investor Solutions DMCC ('FIS DMCC') is a private limited company, incorporated and registered in Dubai with company number DMCC1225. Further information about FIS including the location of its offices can be found on our website at freightinvestorservices.com