

Allowance prices largely immune to energy market volatility as gas supply returns to weigh on energy prices

EUAs continue to drift sideways but August half auction volumes looming into view. Our outlook: Neutral-bullish

- EUAs closed the week at €86.35, up just 0.2% with a narrower trading range of €3.26 (vs. €4.52 last week). A mixed, rangebound week with moves in both directions running out of steam and ultimately closing unchanged. The week's high at €88.30 traded on Wednesday but the bulls were unable to build on the gains into the weekend. Moves below €86 continue to find buying interest.
- Intraday volatility increased slightly to €1.96 per session; compared to last week's €1.77 average but trading remains subdued.
- Heatwave hits parts of southern Europe and is coupled with lower renewable generation. But returning gas supply helps keep a lid on front month energy prices.
- Norwegian gas flows return to levels not seen since mid-April as maintenance outages come to an end.
- Gas storage increased by 2%, reaching 80% last week 17% above this point last year.
- Full auction calendar, but only two weeks until August half auction volumes
- Macro: EU inflation and CPI data out on Wednesday
- EUAs have been rangebound for the past 3 weeks between €85.06 and €89.85. A break out of this range will set the new short-term trend.
- For daily carbon market updates sign up for the DailyRed here

UKA prices continue to suffer as end of week sell off breaks technical support at £49.30. Our outlook: Bearish

- In keeping with EUAs, most of the week was a rangebound affair with the mid-week auction inducing some more volatility. However, the bears took control on Friday afternoon, pushing UKAs to the week's low at £48.98 and breaking the technical support at £49.30. Intraday volatility drops back to £1.43 from £3.77 the previous week with the trading range a quarter of the previous week at £3.02 (vs £13.69)
- Friday's downside helped the UKA to EUA weekly average spread increase to -€27.39 (vs -€24.97 last week) see third chart.
- Strong renewable generation sees UK power prices negative for 17 hours on Sunday. Mixed weather for week ahead
- UK data: UK inflation data out on Wednesday
- Technical support broke at the end of last week. £46.50 and £42.25 next support below. £49.30, £52, £54.49 and £56 all resistance above

Carbon investors leave positions unchanged

 KFA Global Carbon ETF holdings are slightly increased for both EUAs and UKAs; NAV increased to \$558 million, up 3.7%.

Technical near-term outlook

- Futurestechs' next level: €86.42 above and €85.76-82 on watch below
 OTHER COMPLIANCE MARKET NEWS
- Emerging El Nino weather event may raise energy demand in Europe and Asia

VOLUNTARY CARBON MARKET NEWS

 Carbon credit prices are stable; Verra publishes methodology to tackle food loss and waste

RENEWABLE ENERGY NEWS

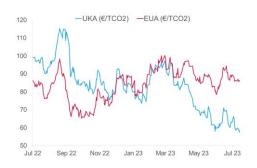
 AIB prices rise ~2%; Wind and solar to make up third of global energy mix by 2030, UK REGO prices jump to record high 17 July 2023

Key performance metrics

Weekly Price Changes				
Product	7/07/23	14/07/23	Change	% Change
EUA Dec 23 (€)	86.15	86.35	0.20	0.2%
UKA Dec 23 (£)	50.07	49.25	-0.82	-1.6%
UKA /EUA premium /discount (€) - weekly average	-24.97	-27.39	-2.42	-9.7%
DE Power Cal24 (€)	144.15	132.00	-12.15	-8.4%
Coal API2 Cal24 (US\$)	120.18	101.05	-19.13	-15.9%
Dutch TTF Cal24 (€/MWh)	54.80	48.60	-6.20	-11.3%

Krane Shares Global Carbon ETF (proxy investor interest)				
	7/07/23	14/07/23	Change (units)	Change (%)
EUA holdings (kT)	3495	3532	37	1.1%
UKA holdings (kT)	391	394	3	0.8%
NAV (US\$m)	538	558	20	3.7%









EUA Technical outlook



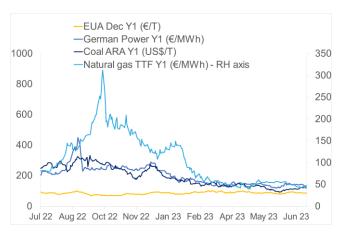
Analysis provided by the award-winning Clive Lambert at <u>Futurestechs Limited</u>. If you would like to receive his full daily commodities report, please <u>contact Clive directly</u>.

- Short Term trend: Bearish
- Medium Term trend: Neutral Bullish
- Yesterday's candle: We tried to retake €88.00 on Wednesday but couldn't sustain it. Yesterday was a Doji; back to posting in decisive candles... Friday was yet another Doji and this meant we posted a Doji on the weekly as well. This one is "lost" for now, uncertain of which way to jump.
- Favoured Trade(s): Keep an open mind. Shorts preferred still



Energy complex remains under pressure as gas supply returns, renewable generation strong and demand subdued

- The chart below on the left shows the forward year price performance of EUAs, German power, ARA coal and TTF natural gas
 - In the last week, Dec Y1 EUAs closed almost unchanged, Y1 German power ended down 8.4%, Y1 ARA coal dropped 15.9% while Y1 TTF saw an 11.3% decrease.
- The chart below on the right shows German forward year power generation margins where coal and gas are the fuel sources
 - Y1 coal margins now at c. €26.98/MWh (14% lower) vs Y1 gas margins at c. €19.56/MWh (up 4.71%).
 - Coal remains above gas in the power generation merit order.





	Auction Timetable: 10 July - 21 July, 2023				
Date	Volume	Auction Platform	Allowance Type	Cover Ratio	Total Bid Quantity
10-Jul-23	2,658,000	EEX	EUA - Phase IV	1.90	5,041,500
11-Jul-23	2,658,000	EEX	EUA - Phase IV	2.01	5,353,500
12-Jul-23	775,500	EEX	EUAA - Phase IV	2.12	1,645,000
12-Jul-23	3,154,500	ICE	UKA - Phase I	1.36	4,300,000
13-Jul-23	2,658,000	EEX	EUA - Phase IV	1.71	4,556,000
14-Jul-23	1,939,500	EEX	EUA - Phase IV	2.30	4,466,000
17-Jul-23	2,658,000	EEX	EUA - Phase IV		
18-Jul-23	2,658,000	EEX	EUA - Phase IV		
19-Jul-23	2,676,000	EEX	EUA - Phase IV		
20-Jul-23	2,658,000	EEX	EUA - Phase IV		
21-Jul-23	1,939,500	EEX	EUA - Phase IV		



OTHER COMPLIANCE MARKET NEWS

Emerging El Nino weather event may raise energy demand in Europe and Asia: Australia's ANZ bank has stated that an emerging El Nino weather event in the Pacific is poised to boost energy demand in Asia during the summer and potentially impact Europe during the winter. The Australian Bureau of Meteorology has reiterated its prediction of a 70% chance of an El Nino development this year, following a series of La Nina events with opposite effects across the globe. El Nino typically brings warmer and drier weather to Europe and Asia, both of which have already experienced above-average temperatures in the initial weeks of summer. The impact is expected to be more significant in Asia. China, the largest consumer of coal globally, has seen a 40% decrease in rainfall, resulting in a 12% decline in hydropower output. The country is already facing electricity supply curbs in certain regions, while coal and LNG imports have witnessed a surge. Chinese coal imports have risen by nearly 90% YoY in the first five months of 2023, reaching a cumulative 180 million tonnes. In Europe, higher solar output and lower gas demand have alleviated concerns of energy shortages in the short term. However, a colder and drier winter could drive up demand for LNG imports amidst intensified competition for the fuel. While a robust El Nino is anticipated, the impact on Europe's winter weather is expected to be less pronounced.

VOLUNTARY CARBON MARKET NEWS

The GER (Global Emission Reduction) was flat last week. The N-GEO (Nature-based Global Emission Offset) fell 2% and the AlliedOffsets500 index fell 1%.

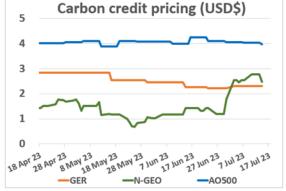
Verra publishes methodology to tackle food loss and waste.

The methodology published under Verra's Verified Carbon Standard (VCS) Program is the first one from a major standard to target food loss and waste (FLW), which accounts for 8% of global greenhouse gas emissions.

The methodology applies to activities that prevent loss or waste of food products at various levels of the food supply chain, from farming through to food processing and hospitality. It provides procedures for quantifying the downstream emission reductions resulting from diverting food from a FLW destination, such as landfill, through activities such as demand planning, the use of apps to facilitate food sharing, and food bank donations.

Verra has also released a revised version of the methodology which is utilised for improved cookstoves projects - VMR0006. The changes are intended to improve the integrity of the methodology, which was the subject of criticism by an academic study earlier this year.

Finally, Verra published a draft consolidated REDD methodology. Updates in this version included the removal of wetlands as a land type. The final methodology is expected in Q4 of this year.



Sources: ACX (GER mid), CBL (N-GEO mid), and AlliedOffsets (AO500, index price)

Product / index	Project coverage	14-Jul	07-Jul	US\$ change	% change
GER	Whole market	\$2.30	\$2.30	→ 0.00	→ 0.0%
N-GEO	Nature-based	\$2.48	\$2.54	- 0.06	⊎ -2.4%
AO500	500 most transacted projects	\$3.98	\$4.04	- 0.06	⊎ -1.5%



RENEWABLE ENERGY MARKET NEWS

Week 28 AIB Renewables current year:

Mid-price = 6.5550 EUR (+0.125 EUR/ 1.9%)

Indicative UK RGGO Prices:

Crop: £23.50-25.50; Waste: £32.50-34.50

Indicative UK REGO Prices:

CP23: £8.80; CP24: £6.90-7.10; CP25: £6.40

	Week 28 GO AIB Renewable				
Product €/GO	Bid	Ask	Mid Price	+/-	
2023	6.5000	6.6000	6.5500	0.1250	
2024	7.5000	7.5200	7.5100	0.3100	
2025	6.6600	6.7600	6.7100	0.3525	

Wind and solar to make up third of global energy mix by 2030: A report by the Rocky Mountain Institute (RMI) reveals that wind and solar projects are progressing towards generating over one-third of global electricity by 2030. This signifies the energy sector's capability to achieve necessary changes in order to meet global climate targets. Sultan al-Jaber, president of the upcoming UN climate summit, COP28, had earlier urged for a threefold increase in renewable energy generation by 2030 to reduce greenhouse gas emissions. The RMI study, conducted in collaboration with the Bezos Earth Fund, predicts that wind and solar will contribute at least 33% of global electricity, resulting in reduced fossil fuel usage and cheaper power. The report also highlights the declining cost of solar energy, which is expected to reach as low as \$20 per megawatt hour (MWh), compared to the current rate of around \$40 MWh, due to increased deployment and economies of scale.

<u>UK REGO prices jump to record high</u>: Prices for UK REGOs for the April to June 23 period hit a record high at £10.35/MWh, auction data showed. The jump in prices over the last year has been attributed to a ban on the import of EU GOs post-Brexit that came into effect on 1st April 2023 with price climbing since the ban was announced. Estimates suggest this cut supply by up to 40%, leading prices to jump from £4/MWh just a year ago.



Breakdown of Redshaw Advisors' full services

Redshaw Advisors' Compliance Carbon Services

INFORM	ADVISE	PROCURE
Unrivalled market intelligence bringing you the latest pricing and developments for EU and UK carbon allowances.	Advisory and risk management services to help you manage your carbon exposure and reduce the carbon cost to your business.	With decades of carbon trading experience, our award-winning team can provide a route to market for all carbon emissions products, including:
Consultancy and training on all aspects of emissions trading activities – delivered by renowned carbon market experts.	Bespoke consulting advice on any aspects of global compliance markets – tailored to your needs.	• EUAs • UKAs

Redshaw Advisors' Voluntary Carbon Market Services

INFORM	ADVISE	PROCURE
Tailored training programmes	Dedicated carbon market advisory	Our market specialists can assist
covering all aspects of the voluntary	services:	with carbon credit procurement
carbon market - delivered by market-	 Carbon market and strategy 	strategies – across all standards,
leading experts.	advice, footprinting guidance and	platforms and contract types.
	confidence in communicating	
Exclusive market outlook reports –	achievements	A commitment to transparent pricing
market pricing, analytics, supply and	 Leading carbon credit market 	with our maximum margin guarantee.
demand trends and developments	insight and analysis	
	 The latest pricing intelligence 	
	across all carbon credits	

Redshaw Advisors' Renewable Energy Services

INFORM	ADVISE	PROCURE
Latest renewable energy pricing for	Multi-lingual advisory and unique	Cost-effective EAC procurement to
Environmental Attribute Certificates	solution services to	address your Scope 1 and 2
(EACs) and Power Purchase	help you achieve your renewable	emissions through:
Agreements (PPAs).	energy targets.	
		• GOs
Custom-made training programmes		• REGOs
on global power markets and		• RECs
renewable technologies – delivered		• I-RECs
by market-leading experts.		• RGGOs
		• PPAs



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