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Commodity exchange of the year Nodal Exchange



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The wake of the global pandemic, extreme weather events in the US and geopolitical conflict in Europe caused uncomfortably high levels of uncertainty and volatility in US gas and power markets throughout 2022.

These extreme conditions tested even the most robust risk and margining models at exchanges, yet Nodal Exchange and its clearing house Nodal Clear – a fully owned subsidiary – operated without a hitch. Furthermore, amid this market turmoil, the exchange developed and launched a raft of new environmental contracts, expanded its power contracts and registered record trading volumes across power and environmental futures. These achievements led to it being selected as the 2023 winner of Energy Risk's Commodity exchange of the year award.

"Nodal's risk models performed exceptionally well in the face of the global natural gas and power price volatility last year," says Paul Cusenza, chairman and chief executive of Nodal Exchange. "The fact that we were able to successfully manage the additional price volatility is testament to our expected shortfall portfolio risk modelling approach," he adds.

Nodal Clear's pioneering expected shortfall methodology uses recent portfolio returns as well as the portfolio's potential returns during historical stress periods to generate a portfolio level initial margin that is appropriate to the risk in each participant's portfolio. In all, Nodal Clear's expected shortfall model uses more than 1,000 return observations in its expected shortfall calculation for each portfolio. This model is calibrated to cover a one- or two-day loss to a 99.5% confidence level.

In a year of extreme energy price volatility, when many energy producers and consumers needed access to markets to increase or adjust hedging programmes, many found huge margin hikes constrained their ability to do so. Nodal's expected shortfall margin risk model proved to be extremely robust, allowing the exchange to not only operate smoothly amid the turmoil but enabling firms to continue trading, something reflected in Nodal's volumes and open interest last year.

The exchange achieved record volume growth in 2022, with power futures volume reaching 2.4 billion megawatt hours (MWh), up 8.3% on 2021. The expansion of its power futures contracts in 2022 included offering separate weekend and night off-peak power futures contracts for all locations in PJM.

"Nodal Exchange continues to be the market leader in North American power futures having the majority share of the open interest with a record 1.1 billion MWh as of end of year 2022," says Cusenza. "The open interest represents over \$133 billion of notional value."



Paul Cusenza

Over the course of 2022, the exchange launched numerous contracts in the voluntary and compliance carbon markets and first-ever products in renewable energy certificates (RECs) and renewable fuel credits. These included carbon removal futures, renewable natural gas certificate futures and various renewable energy certificates.

The new contracts also included the Washington Carbon Allowance futures, which is the first exchange-listed and cleared contract corresponding with the Washington carbon 'cap-and-invest' programme, the newest carbon market in North America.

"Nodal now has an even broader slate of North American listed carbon products and we're proud to be a leader in clearing the world's largest set of environmental futures and options," says Cusenza.

In the environmental markets space, Nodal posted a record 280,603 lots of environmental futures and options volume traded in 2022, representing 13% growth over 2021. Total notional value of environmental products traded on Nodal hit a new record of \$2.2 billion in 2022. REC volume rose 16% from 2021, while volumes in carbon contracts rose by 6%.

Nodal Clear also grew its clearing members, adding three more – Marex North America, StoneX Financial and Advantage Futures – in 2022. This takes the total to 19.

"We not only successfully managed extreme price volatility, but we hit record volumes and introduced many new environmental and power contracts," reflects Cusenza. "It has been an outstanding year."