One of World's First Power Funds Achieves Best Year Yet

Stockholm (HedgeNordic) – An important role hedge funds play is to deliver uncorrelated excess returns, and managers employ a variety of strategies in different markets to achieve that goal. Shepherd Energy Portfolio, a Stockholm-based multi-strategy futures-based trend-follower, aims to generate such uncorrelated returns exclusively by trading futures in the Nordic power market.

HedgeNordic sat down with portfolio manager Arne Österlind *(pictured)* in their new office on Eriksbergsgatan to understand how the Nordic electricity market works and how the team behind Shepherd Energy Portfolio trade in the Nordic market for power derivatives.

How Does the Nordic Electricity Market Function?

The Nordic power market operates as a common market for electricity in the Nordic countries, but each country's power system differs for each other. "Almost all of Norway's power production comes from hydro-electric power plants, while Sweden and Finland generate electricity from a mixture of hydro, nuclear, wind and thermal power plants," Arne Österlind explains. "Denmark's power production, meanwhile, has undergone a rapid shift away from coal towards wind power, which has made the Nordic system even more weather-dependent," he adds.

The power market gathers a lot of different actors such as producers, distributors, traders, brokers, clearing companies, among others. Every day around noon, all purchase and sell orders for electricity are aggregated on Nord Pool – the first and largest physical power market in Europe – into two curves, one aggregated demand curve and an aggregated supply curve, to determine the Nordic spot price for electricity for the next day. The spot price serves as the reference price for all financial instruments on the Nordic power market traded on the Nasdaq OMX Commodities. Nasdaq serves as a market for financial contracts used for price hedging and risk management, with these contracts having time horizons of up to ten years (ranging from daily, weekly, monthly, to quarterly and annual contracts).

How Does Shepherd Energy Portfolio Trade?

Shepherd Energy Portfolio employs both trend-following and relative-value strategies in the Nordic market for electricity futures, relying on both discretionary- and systematic-based investing. The fundamentals of power production vary between the Nordic countries, and the Shepherd team considers a variety of fundamental parameters that influence the price of electricity in the Nordics. "When analysing the Nordic electricity market, we use data on water reservoir deviation from average, snow-pack development that affects hydropower generation, the nuclear power, weather forecasts, the fuel complex, the price of carbon emission rights, and many more," the portfolio manager tells HedgeNordic.

"We gather a lot of external data that we combine in a predictive model to estimate the power balance reflecting supply and demand dynamics," adds Österlind. The model allows the team at Shepherd Energy to predict both short- and longer-term trends in the power balance, which eventually determines the spot price for electricity. "Our predictive model allows us to catch big long-term trends as well as capture shorter-term trends within the big trends," says Österlind.

"In February of last year, for instance, we initiated a long position in power contracts for delivery in

the third quarter of 2018 that we held out until the end of the summer," Österlind puts forward an example of a longer-term trend. Power prices surged due to a combination of diminishing water reserves as a result of a historically warm and dry summer and a rally in the price of carbon emission rights. "We did not observe any divergent tendencies in the dry weather trend, so we held onto our long position until the end of the summer," says the manager.

Multi-Strategy Approach to Trend-Following in Nordic Power Market

Although Shepherd Energy Portfolio mainly invests in electricity futures, Österlind says "we use a multi-strategy approach, so we don't put all the eggs in one basket." Shepherd Energy Portfolio, structured as a pooled managed account but also available as a Delaware-domiciled fund, attempts to capture both short- and long-term trends, as well as engages in electricity swap trades between Nordic and German electricity markets.

Strategy diversification allows Shepherd Energy Portfolio to limit downside risk. "We can lose between two to three percent in a terrible month, but we can earn four to five percent in a good month," says the portfolio manager. "What we try to do, however, is to earn at least one percent each month with low risk," continues Österlind. Shepherd Energy Portfolio aims to generate between ten and 15 percent annually regardless of broader market developments. The vehicle successfully reached its return target last year after earning 13.8 percent, achieving its best year since launching in March of 2004. This return helped Shepherd Energy Portfolio become the second-best performing member of the Nordic Hedge Index (NHX) in 2018.

Arne Österlind, who has been active in the Nordic power market since its launch in the 1990s, and portfolio manager Andreas Edlund already have some ideas of how to position their fund for the current year. "Right now, there is a deficit in the Nordic hydrological balance of around 20 TWh, which corresponds to the yearly production of three nuclear blocks," says Österlind. "This is quite a big deficit, but it is not extreme. In 2010, the deficit was twice as large as today's deficit," he adds. Electricity prices are high at the moment due to a hydro shortage in Nordic reservoirs after an extremely dry summer and a fall without significant rainfall. The portfolio manager reckons the price for electricity could go higher shorter term, but a sharp turnaround is looming in the medium-term should an abrupt change in weather occur.