

TRADING OUR WAY TO NET ZERO

The role of sophisticated commodity trading
in the energy transition

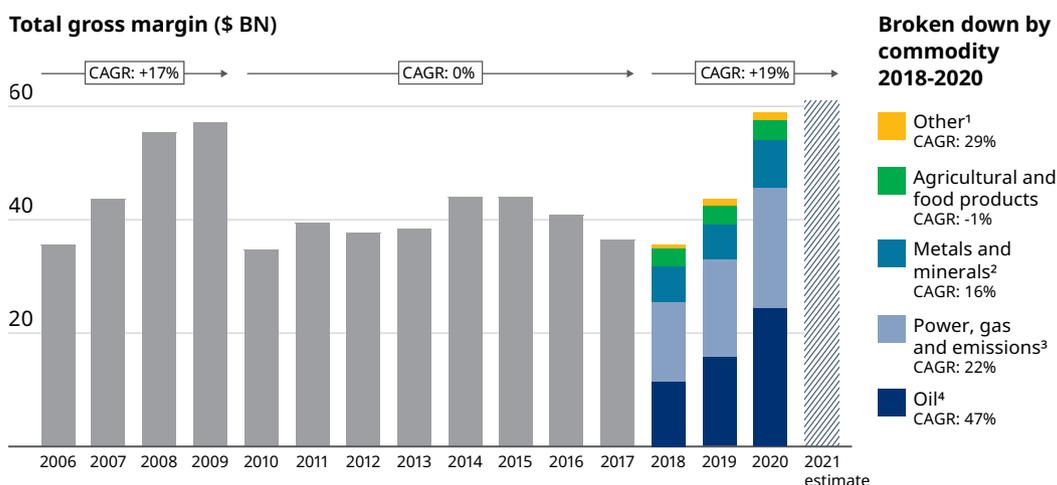


Alexander Franke
Roland Rechtsteiner
Adam Perkins
Graham Sharp

For centuries, traders have ensured products in the global economy arrive at the right place, at the right time, to the right specifications, and for the right price. The commodity trader acts as the essential lubricant of international commerce. They make sure transactions continue to close, despite shifting prices and an economic landscape in constant flux.

Since 2020, the global economy has faced two of the toughest years in the last fifty — with a pandemic, drought, wildfires, civil unrest, and now war in Europe. Despite this, commodity markets have not only functioned but successfully grown in the face of these disruptions. The 2020 gross trading margins were just under \$60 billion, and preliminary estimates for 2021 put margin levels above this (See Exhibit 1).

Exhibit 1: Commodity Trading’s Historical Gross Margin



1. Including investor products
2. Including coal
3. Including traditional fossil power, renewable power, pipe gas, LNG, emissions, exotic weather derivatives
4. Including crude, products, and biofuels

Source: Oliver Wyman proprietary data and analysis

The beginning of 2022 has given us plenty of reasons to suspect the disruption is here to stay, which would suggest an increasingly bullish outlook for the commodity trading industry.

DRIVING VOLATILITY

Traders generate value by assuming risk and mitigating the impact of volatility. Through their broader portfolios, they increase the overall liquidity of the economic system which improves stability. Even in uncertain times, they make sure physical supplies end up where they need to be. The current high margins are being primarily driven by the capture of premiums paid against high volatility and for having made physical inventories readily

available, as they were in 2008 and 2009. Three global cross-commodity trends behind the volatility are:

1. The turmoil caused by the 2020 pandemic, including the sudden drying up of consumption in the months after the pandemic was declared and the later ripple effects as demand rebounded that caused delays and disruption in global supply chains
2. Deepening of ongoing geopolitical tensions — the Russian incursion into Ukraine being the most pronounced and dangerous — that are stoking concerns over energy security and supply chain stability globally, but especially in North America and Europe
3. Imminent radical changes from the energy transition with the growing acceptance of the need to move more expeditiously toward net zero, coupled with a lack of clarity on how this will be accomplished

While the direct effects from COVID will pass, the anxiety over the potential for drastic shifts in the status quo and barriers to entry erected at a moment's notice will remain as the pandemic's enduring legacy. The increased sensitivity to uncertainty has imposed higher premiums on readily available inventory to the benefit of traders.

The market impact of geopolitical tensions is also transitory, so long as tensions do not worsen. Though such conflicts can introduce increased transaction costs, whether through supply chain disruption or the implementing of sanctions, ultimately the market balances and moves towards a different equilibrium.

In this case, however, geopolitical tensions are apt to exacerbate the volatility trend of the energy transition — and potentially accelerate the implementation of solutions — by creating additional supply-demand imbalances in an already volatile marketplace. The current conflict in Europe is spotlighting energy security problems created by the region's energy mix and is prompting a search for alternatives to Russian fossil fuels. For instance, Germany recently announced its intention to accelerate its expansion of wind and solar power so the country can switch to almost all renewable energy by 2035.

While these impacts have been great on uncertainty, ultimately, the energy transition will be the most significant long-term driver over the next two decades of volatility within the commodity markets and trading itself.

THE LOOK OF ENERGY TRANSITION VOLATILITY

Unlike the pandemic and growing geopolitical tensions, the energy transition won't drive the market with sudden bursts of change or disruption. Instead, the transition should have a transformative effect by nudging markets to low-carbon solutions. Unfortunately, a series of unanswered questions about how the transition will play out is likely to generate a lot more volatility than may be necessary.

First, there is a lack of clarity about the optimal energy mix to reach net zero, with policy makers and companies undecided about what role fossil fuels should play after the transition. This is partially a consequence of the disparity among regions in terms of the progress each has made decarbonizing. Asia, for instance, remains much more dependent on coal than either Europe or North America. Coal plants are still being built in places in the region. China, the largest global emitter, has set reaching its net-zero goal in 2060, 10 years after other regions.

Second, neither governments nor companies have a clear and agreed upon road map to net zero. This is closely connected to the lack of clarity on the energy mix, but extends well beyond the boundaries of the energy industry. Having such a consensus strategy could help companies, markets, and governments make more expeditious investments in technologies, infrastructure, and commodities.

Finally, in trying to bring about this change, there is a huge range of knock-on effects that have not yet been fully understood within the energy sector and the marketplaces for non-energy commodities such as metals and agricultural products. This makes it almost inevitable that there will be surprises down the road. For example, even as the energy transition leaves the starting gate, the markets are already having to deal with shortages in the complex of commodities required for low-carbon transportation, such as the feedstocks for biofuels and the lithium and other nonferrous metals needed for electric vehicle batteries. For example, the vast majority of the lithium that will be required for electric vehicle batteries in 2030 has yet to be identified.

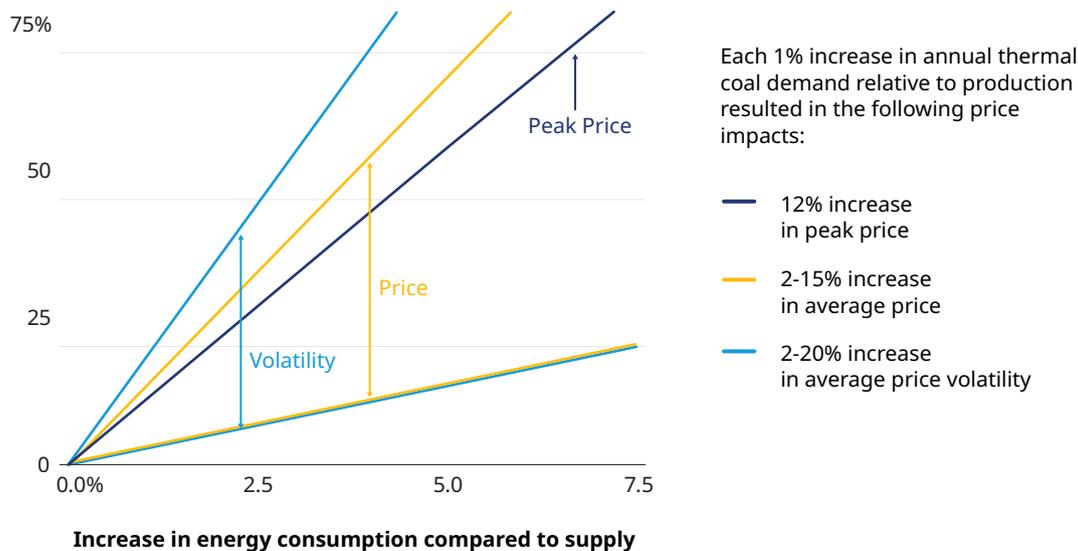
This lack of clarity and consensus has caused systemic underinvestment across the energy sector. For fossil fuels, the uncertainty has meant that attempts to invest in production are written off as foot-dragging on the transition, rather than being seen as efforts to develop sufficient supply to make sure the transition can happen without major societal disruption. Consequently, the potential for reputational risks dissuades investors and producers. Meanwhile, investors in alternative energy sources and technologies hesitate on investment in infrastructure and supply chains because of insufficient inroads in the consumer and business markets.

On both sides of the green divide, the consequence of this systemic underinvestment and the inevitable supply shortfalls it leads to will be more marketplace volatility and higher prices, particularly as the transition picks up speed. For instance, policy decisions to reduce the use of coal in Europe and the US led to significantly larger declines in supply than they did in demand in thermal coal markets. In normal circumstances, a 1% increase in supply tightness would herald a corresponding 12% rise in peak pricing. But the shifts back to coal required by Russian sanctions have compounded the shortfall and resulted in a 10-fold increase in standard benchmarks relative to historic prices (See Exhibit 2).

Exhibit 2: Coal price sensitivity in an increasingly tight market

% compared to 2015

Increase in price/volatility



Source: Thomson Reuters Datastream, IEA data from IEA (2022) Data and Statistics/Data Tools/Energy Balances, Oliver Wyman analysis

WHAT THIS MEANS FOR TRADERS

The presence of traders, drawn by this volatility, is likely to increase the pace of the energy transition by providing much needed market liquidity and encouraging investments in renewable technologies. For instance, biofuel refiners can have the confidence to invest sooner in production capacity with the presence of traders ensuring sufficient feedstock availability and pricing transparency. This will allow physical players to build out their green value chains more efficiently and, in the longer term, it will enable energy transition projects based on the traders’ origination capabilities.

Never is liquidity more important than during periods of high volatility. Inevitably, these times are more lucrative but also riskier. More risk prompts commodity exchanges to raise the amount of working capital required for margin calls. For some traders, those tougher requirements will push them to the side lines or out of the game entirely.

At the same time, traders are also wrestling with higher credit risk as interest rates creep upward and access to capital also becomes more restrictive because of the higher rates. These trends favor bigger players and particularly independent traders with more lenient ratings agency debt-to-equity targets than integrated operations.

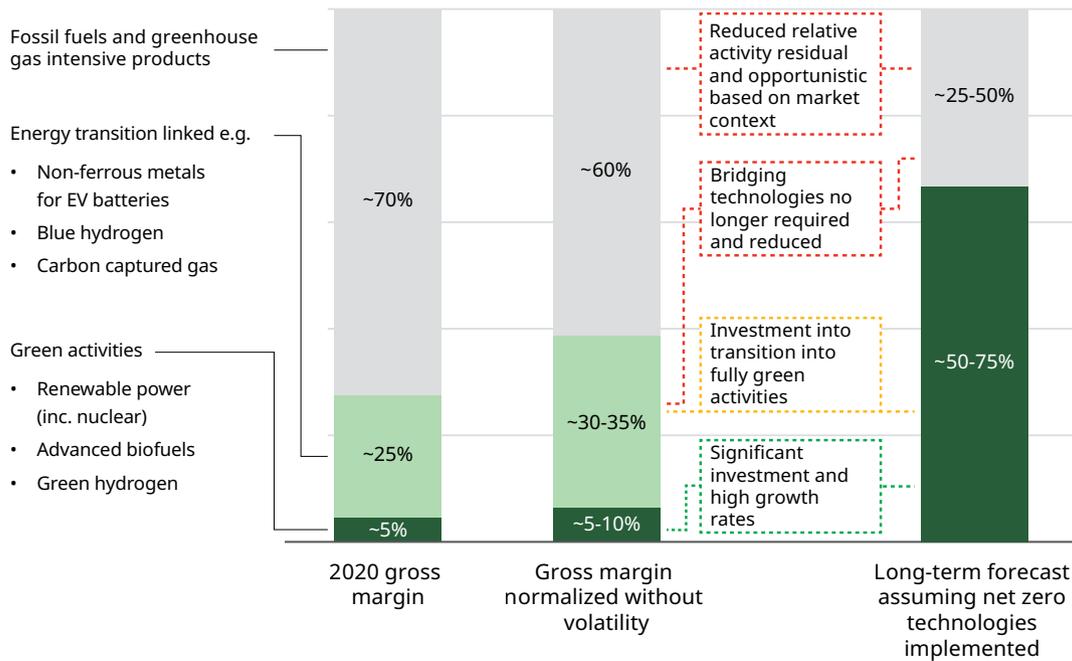
Finally, periods of great risk and volatility raise the likelihood of dramatic one-off losses. Some bets on markets, technologies, or geographies will come up short, and without the

cushion liquidity provides companies can fail based on one bad bet. But for larger, well-capitalized players, it can become an unpleasant footnote on an annual report.

However, the traders to survive will be those that not only weather the storm but place the right bets on the right emergent commodity classes, business models, and technologies. Existing traders may be in a more advantageous position relative to new entrants, as they can leverage knowledge from experiencing similar nascent markets previously, and can then apply these lessons to the current emerging ones.

The increased trade in these new markets should mean that we see a significant increase in the proportion of green and energy transition-related trading (from an admittedly thin base), with an outsize proportion taken by those who have successfully used their experience in other nascent markets (See Exhibit 3). As green trading increases, we will also see the reduction in the trading margins from the exiting commodity ecosystem as less of our energy mix is supplied by fossil fuels.

Exhibit 3: Proportion of green-linked trading remains thin but will grow



Source: Oliver Wyman proprietary data and analysis

WHO WINS?

Short-term impact: Current volatility in commodity pricing is pushing capital requirements higher with the level of price and risk in the market. Rating agency treatment of debt to service these requirements adversely penalize integrated traders over independents coupled with the natural liquidity advantage of the bigger players over smaller operations. Thus, those with fewer limits on their access to capital will be able to take full advantage of opportunities the energy transition generates; the more limits on capital, the lower potential for growth. Because of this, only some traders will stay in business long enough to help with the transition. Over the short term, smaller players unable to capitalize on a niche are likely to lose out. Looking forward, we can expect to see a wave of consolidation echoing that of the 2008-2009 financial crash in which the top 10 players increased their market share by 10%. And the advantage held by independent trading companies is already playing out in the market: In recent years, they've had 15% to 20% higher annual growth rates than integrated operations.

What Can Integrated Traders Do

To best position themselves for growth, asset-backed traders need to find a way to mitigate the effect of these liquidity requirements. This can be done by effectively restructuring balance sheets, distancing themselves from parent companies in the eyes of rating agencies, and exploring off-balance sheet financing. The downside extends beyond their ability to invest in new opportunities; it also can have a negative impact on their ability to retain high performers who may be offered more generous compensation by independents flying high on expanding gross margins.

The larger integrated players will need to capitalize on their existing advantage of being able to build scale in new markets, where they can invest more heavily in new production and technologies. To succeed they will need to make sure that the trading capabilities are now fully integrated into the structuring of investment projects, rather than held outside.

Higher liquidity requirements will be with us for as long as the uncertainty in the energy transition continues to inflate volatility, so smaller players also need to adapt by developing niche markets in which they can dominate or be at least one of the biggest players.

Medium-term impact: Moving beyond the shorter-term impact of regulatory requirements, traders can succeed through innovation and technology plays that create and monetize opportunities such as the synergy between battery technologies and metals supply rights. All traders can benefit by bringing forward the lessons learned from experiences in other markets, such as how they can apply the models of global seaborne arbitrage from LNG to hydrogen. Traders will need to apply them to the new markets brought about by energy transition driven connectedness and will allow for traders to expand their strategies and reach. Successful traders will also account for regional variation in decarbonization plans when trading.

Long-term impact: Over the long term, the uncertainty brought about by the energy transition will lead to a fundamental shift in the character of commodity trading. In recent years, commodity trading has been the business of marginal gains. Better analytics, better technology, and gaining the edge on your competitor in the same goods was the recipe for success. The transition to net zero is reviving a marketplace built on a future of plentiful opportunity. To succeed, traders need to be able to embrace the new, to be the first mover to exploit a potential niche market. Commercially agile and responsive business models, with infrastructure that facilitates the easy adoption of new businesses, will be vital. Successful traders will be those that prioritize agility in their deal life cycles to become the major players in these emerging niches.

Customer Centricity

Uncertainty and accompanying volatility from the energy transition will characterize the commodity market over the next five to 10 years. Given this lengthy timeframe, proximity to customers through strategic partnerships and investment in new technologies will be increasingly important.

The energy transition brings with it the promise of radical change. The winners in this transformation will be those who can adapt to the evolving landscape's new rules, who are strategizing with not only the 2023 energy and technology mix in mind but also where the broader economy will be in 2050. Traders who evolve and adapt to best exploit the changing conditions will sit at the top of the food chain in the upcoming era of profitable commodity trading.

Alexander Franke and **Roland Rechtsteiner** are Zurich-based partners and **Adam Perkins** is a London-based principal in Oliver Wyman's Energy and Natural Resources practice. **Graham Sharp** is a co-founder of Trafigura and a senior advisor to Oliver Wyman.

Ernst Frankl, a Frankfurt-based partner, **Christian Lins**, a Zurich-based partner, **David Knipe**, a London-based partner, and **Tilman Schnellenpfeil**, a Zurich-based engagement manager in Oliver Wyman's Energy and Natural Resources practice, contributed to this report.

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation.

For more information, please contact the marketing department by phone at one of the following locations:

Americas
+1 212 541 8100

EMEA
+44 20 7333 8333

Asia Pacific
+65 6510 9700

Copyright ©2022 Oliver Wyman

All rights reserved. This report may not be reproduced or redistributed, in whole or in part, without the written permission of Oliver Wyman and Oliver Wyman accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Oliver Wyman. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisors. Oliver Wyman has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Oliver Wyman disclaims any responsibility to update the information or conclusions in this report. Oliver Wyman accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. The report is not an offer to buy or sell securities or a solicitation of an offer to buy or sell securities. This report may not be sold without the written consent of Oliver Wyman.