Marketing communication

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Market update

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Climate change has been called the "greatest threat to mankind" with much of the debate being focussed on the devastating effect of the increase in carbon and greenhouse gas emissions, rising sea levels and temperatures, soil erosion, deforestation and toxification of natural resources. All of these issues pose a major threat to populations and the fight against poverty around the world leading to a devastating and lasting effect for life on planet Earth.

On cue, the UN IPCC issued a major new climate report in February 2022 highlighting an unavoidable increase in risks in the coming years, with the next several tenths of a degree of warming being critical.

CLIMATE CHANGE, NOT JUST AN ENVIRONMENTAL PROBLEM… …IT'S THE GREATEST THREAT TO GLOBAL SECURITY TODAY

As if the threat to life on planet Earth is not enough to make the world "*Look Up*", there is unfortunately plenty of other reasons it should. The latter reference is related to the American apocalyptic black comedy, "*Don't Look Up*", that tells the story of two astronomers attempting to warn humanity about an approaching comet that will destroy human civilization as we know it - with a distracted response from the world that simply doesn't care – a clear allegory for the climate crises of today.

CLIMATE CHANGE, NATIONAL SECURITY AND ENERGY INDEPENDENCE

Another reason one should care about climate change, however, revolves around another significant issue that climate change poses to the world today, namely "climate security". Whilst this is certainly nothing new, it has been an often-overlooked aspect of the energy transition. Indeed, this was already brought to the public sphere in September 2006 when the scientific Centre for Naval Analysis, CNA, in the US convened 11 retired three- and four-star U.S. military generals and admirals -comprising a Military Advisory Board- to study the threats posed by climate change and propose ways in which the United States could address the consequences of climatic shifts.

After eight months of deliberation, the board outlined **four findings**:

1. Projected climate change poses a **serious threat to national security**
2. Climate change acts as a **threat multiplier for instability in some of the most volatile regions of the world**
3. Projected climate change **will add to tensions even in stable regions**
4. **Climate change, national security, and energy dependence are a related set of global challenges**

"THE EU ENERGY PLAN (...) IS LIKELY TO DISCUSS ACCELERATING RENEWABLE DEVELOPMENT AND THE ELECTRIFICATION OF THE ECONOMY"

We have already seen a number of conflicts as a direct consequence of climate change and scarcity of resources – and we are likely to see more in the future if climate change remains unaddressed. Indeed, drought in Syria contributed significantly to its descent into war and the subsequent refugee problem. A meta-analysis of over 60 quantitative studies that examine the link between climate and conflict found that **"for each 1 standard deviation change in climate toward warmer temperatures or more extreme rainfall, median estimates indicate that the frequency of interpersonal violence rises 4% and the frequency of intergroup conflict rises 14%."** It goes on to say that: **"Because locations throughout the inhabited world are expected to warm 2σ to 4σ by 2050, amplified rates of human conflict could represent a large and critical impact of anthropogenic climate change."**

The human tragedy that is unfolding before our eyes in Ukraine at ever intensifying strength does not relate to the type of conflict described above caused by resource scarcity, but instead to the 4th point highlighted by the CNA in 2006, namely the issue of energy dependence.

Europe has effectively become hostage to Russian gas supplies receiving roughly 40% of its gas via Russian pipelines, several of which run through Ukraine. On top of this, food prices are making all-time highs as Ukraine is "the breadbasket of Europe", if not the world. The Black Sea region today is a vital hub of global agricultural production and trade, and Ukraine is one of the world's breadbaskets. According to a recent FT article, the two countries account for 29% of global exports of wheat. They also contribute 25% of global corn and 80% of global sunflower oil exports.

The risk of material oil & gas disruptions from Russia and geopolitical tension has now seen oil prices soar above $110 per barrel of oil equivalent and UK gas has risen to all-time highs. This in turn has seen power prices rally significantly also. It is also important to note that as oil and gas prices rise, renewable energy (for example residential solar) and electric vehicles become more cost competitive, that is they save you your money. This is also true for the comparative economics of green hydrogen that competes with grey hydrogen, which has natural gas as an input. But carbon markets are another story all-together.

ENERGY FREEDOM: GERMANY ACCELERATES RENEWABLE ENERGY TARGET BY 15 YEARS

In response to the Russian invasion, a number of European countries have argued for speeding up the energy transition. Germany in a rather historic move has turbocharged its transition by moving forward its plans to be 100% renewable by 15 years, to 2035 – bringing them in line with US and UK. The German government wants 80% of power to come from renewables as soon as 2030, helped by onshore wind additions that hit 10GW a year from 2027 through 2035 (versus only 2 GW a year now) and solar installations of 20GW from 2028 (versus 5 GW a year now). In addition, the newly installed government intends to dramatically shorten the permitting time for onshore wind significantly, which has been a significant barrier for growth in renewables. New offshore wind additions are due to reach 6GW in 2029, 9GW in 2030 and then continue at 4GW annually from 2031. The new EU Energy Plan, which could be disclosed on March 8th, is likely to discuss accelerating renewable development and the electrification of the economy.

CARBON PRICES: BIGGEST FALL SINCE 2014

What has not rallied is carbon prices, in fact, carbon prices had one of its biggest single day losses since 2014 down -16.25% on 1st March 2022.

By way of background, the EU ETS is a market on which emission allowances are sold to and traded between industries, utilities and airlines in order to allow them some flexibility on their path to decarbonisation. Most allowances are held and traded by polluting companies that need them to comply with the ETS. However, banks, investment firms and brokers also participate in the market. In doing so, they provide a necessary service to the companies affected by the ETS, helping to establish more market liquidity and price visibility, and allowing operators to hedge against future price fluctuations. A rise in carbon prices, everything else equal, will incentivise more renewables and less polluting businesses.

There are a number of reasons for this sell-off in European carbon credits. Household energy bills are sky rocketing and there are very few levers governments can pull to bring them down as gas supplies dry up and renewables are not yet a big enough part of the power mix to "pick up the slack" and wind speeds generally have been unusually low during the winter. In addition, the "financialization" of European carbon credits with a number of available ETF's have some industry observers arguing that the market is subject to "excessive speculation". Indeed, the European lead on the reform of the EU carbon market Mr Peter Liese, has proposed a relaxation of the parameters for injecting additional supply to the EU ETS in the event of a price spike.

High gas prices, however, typically mean higher carbon prices as power generators switch to using coal, which emits double the amount of carbon dioxide as gas plants, and in turn increases demand for carbon permits. But this effect is less relevant under current circumstances. Spiking gas and power prices are more likely to cause some participants to offload their EUA positions to cover losses elsewhere. Also, there are fears of industrial demand destruction which could see demand fall.

BIDEN´S STATE OF THE UNION: THE ENERGY TRANSITION HAS CHANGED NARRATIVE

The theme of decarbonising, digitalising and decentralising the global energy system could hardly have more catalysts for a real turbocharge in the coming 5-10 years in particular. Here we argue that the energy transition narrative has changed significantly in the past few weeks from being more than mere "environmental challenges" that will significantly affect life on Earth and its future generations. The world has woken up to the significant and broader risks to "climate security" and that that means for the world geopolitically too. As the world deals with more inflation, a new element of the discussion is the ability for green energy to help bring down energy and power prices. The sun and wind do not charge for the marginal unit of energy, the cost of producing power from solar and wind has gone down dramatically and the efficiency has gone up significantly. In contrast, from 1970 to today, the price of oil has gone up roughly 30x. Fossil fuels are more volatile and are a significant driver of economic boom and bust cycles as well as inflation, whilst renewables over time have been very disinflationary.

In his State of the Union speech, Biden mentioned that fighting climate change will translate into energy savings for American households. Biden understands that climate is important, energy security matters, and there is a role for cost lowering technologies to play in fighting inflation. Our view is that he and the Democrats need to secure a legislative win ahead of the mid-terms and so we expect progress on renewable tax credits this year. Themes like hydrogen are particularly bi-partisan and look to have Joe Manchin's support. In his words, "Let's provide investments and tax credits to weatherise your home and your businesses to be energy efficient and get a tax credit" and "Double America's clean energy production in solar, wind and so much more. Lower the price of electric vehicles, saving you another $80 a month that you're not going to have to pay at the pump."

On the 2nd March 2022, Politico (a political journalism company) reported: "Manchin, who also chairs the Senate Energy Committee, said that the **climate portion of any theoretical bill will look different now that Russia is invading Ukraine**. He's calling for the US to ban oil imports from Russia and ramp up domestic energy production. [..] **He would support big clean energy investments in a potential deal, he said.** [..].

"You want to be able to defend your people, have reliable, dependable and affordable power? You have to use 'all of the above,'" Manchin said, defending his support for clean energy investments. "They say 'Manchin doesn't care … he's killing the environment.' I'm not killing anything."

This all leads to the same conclusion – we need to do more, and do it faster. And climate change narrative has changed to becoming one of climate security too.

VALUATIONS AT THROUGH

Equity market volatility and macro concerns have significantly impacted the theme that has never been in a better fundamental state. Valuations at levels not seen since the lows of the flash crash in March 2020 from Covid-19 and relative performance vs. the broader market, we have to go back to the Great Financial Crises, GFC, to find similar levels.

A few numbers, the price-earnings ratio of Nasdaq today stands at 31.7x whilst the BNP Paribas Energy Transition strategy stands at 26.9x – despite significantly higher revenue and earnings per share (EPS) growth. Indeed, Nasdaq 2Y sales growth stands at 18%, whilst the BNP Paribas Energy Transition strategy sees 111% 2Y sales growth. Similarly, the 3Y EPS compound annual growth rate for BNP Paribas Energy Transition is 98% vs. Nasdaq at just 25%. **The valuation support is very strong for the environmental impact theme today**. Suggestions of good value can also be seen by the fact that industry is starting to look at merger and acquisition opportunities. This is not only from Siemens Energy looking at buying the minorities of Siemens Gamesa, but also from Chevron putting forth a cash bid for renewable fuel producer Renewable Energy Group, with the stock up 88% from its low last week.

Both Siemens Gamesa and Renewable Energy Group are / have been holdings of the BNP Paribas Energy Transition Fund.

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As at March 2022.