Coeli Energy Transition

-Energy Transition Review 2019-

A semi-annual report

ENERGY TRANSITION REVIEW

- 2019 was the year when fear of climate change went mainstream in Europe
- Second hottest year on record strengthening scientific consensus that climate change is man-made
- Positive signs on the horizon renewables overtook coal in the US for the first time ever
- European 'Green Deal' targets net zero emissions in 2050 carbon border taxes likely
- Risk of stranded assets and ESG flows decoupled Oil & Gas equities from oil prices

<u>More on page 2.</u> In this review we present some of the latest development in the Energy Transition. We discuss briefly our thoughts on renewable energy forecasts, planned and potential actions by governments including carbon taxes and recent trends in electrical vehicle adoption. We also discuss implications for investors; the decoupling of energy equities vs oil prices and the risk of investing with the current regulatory and technological framework in mind.





Energy Transition Review 2019

We believe 2019 was in many ways a pivotal year for the Energy Transition. The recognition that climate change is a significant challenge spread from the environmental idealists to boardrooms and parliaments. Greenwashing is plentiful, but we believe this is an improvement compared to climate change denial and climate change ignorance. Also, greenwashing is something that tends to catch up with you and might force constructive action at a later stage.

The evidence of global warming is mounting

2019 was the second hottest year since measurement started at the beginning of the industrial revolution, according to two separate studies¹. Similarly, the studies state that the last five years have been the hottest 5-year period since 1840. Hence, it is getting increasingly difficult to be a climate change sceptic as the evidence that the earth is warming is mounting. One of the consequences is a 350% increase in weather-related natural disasters since 1970². Although it is uncertain to what extent the warming is due to human activity, there are studies showing 97% or more of actively publishing climate scientists agree that the rapid change in temperature is down to human activities³.

Renewable cost curves are declining rapidly - subsidies are removed

The good news is that renewable cost curves are in rapid decline and wind and solar are becoming cost competitive with fossil fuels in more countries around the world. In fact, they have already become the cheapest source of new energy in over two thirds of the worlds' countries, see exhibit 1.

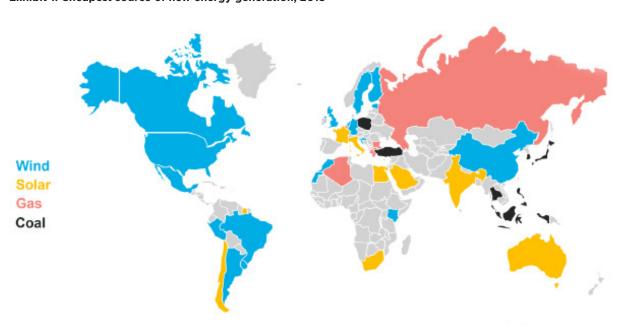


Exhibit 1: Cheapest source of new energy generation, 2018

Source: Various, Liebreich Associates

¹⁾ NASA and National Oceanic and Atmospheric Administration (NOAA)

²⁾ International Disaster Database

³⁾ https://climate.nasa.gov/scientific-consensus/



The year 2019 was important in many respects. Renewable energy in the US surpassed coal for the first time ever in April. In November, the International Energy Agency (IEA) in its 'World Energy Outlook' report increased the 2030 solar power generation assumptions by 23% versus the 2018 report. In fact, IEA and most forecasters have consistently underestimated the growth in renewables. The IEA's 2030 assumptions for solar installations is up almost 20x since the 2006 report.

As renewables have become cost competitive, we are not surprised to see subsidies lowered or removed in certain markets. This may slow down growth short term as demand is pulled forward, but it is only a temporarily setback and not a sign of weakness, we believe. In markets where renewables have become the cheapest energy source, government subsidies will and should be better employed by helping other segments of the energy transition.

Burn less fossil fuels or capture more carbon

Unfortunately, since wind and solar combined only cover about 5% of total energy demand⁴, the strong growth in these energy sources is not enough on its own to reach the Paris Agreement target of keeping a global temperature rise to less than 2 degrees Celsius above pre-industrial levels. We believe it is clear that in order to reach this target, the world will either have to find a way to burn less fossil fuels or significantly increase carbon capture. The fossil fuel industry must, voluntarily or not, be a key factor in this process.

How do we lower demand for fossil fuels beyond replacing it with affordable renewable energy? One way is increasing the price of fossil fuels through carbon taxes. As we discuss later in this report, we believe increased carbon taxes are inevitable. But carbon taxes are politically challenging to implement so it will likely take time until they have a significant impact. Another way to increase price and lower demand is to restrict new supply. Governments, with the indirect help of the capital markets, might do this by starving the industry of new capital. However, this will be politically sensitive, slow to implement and may create a period of "super profit" for the incumbents. Instead, we believe the easiest way to lower demand is to focus more on energy efficiency, for example through electrification to reduce heat losses when burning energy⁵. In the end, all the aforementioned measures will have to be taken, but it should be emphasized that it is not enough to only invest in renewable energy.

Hoping for the best-case is not a rational strategy

It is undeniable that we humans today have better standards of living than our ancestors. The advancements made in medicine, technology and the use of energy have improved our lives tremendously. However, this has been at the expense of almost all other species and our planet.

Although there is great uncertainty to the precise consequences of the earth warming by 2-degrees Celsius or more, there is a growing consensus that the cost in both economic terms and human suffering will be significant even in a best-case scenario. The base-case scenario of most climate experts is that a 2-degree warming will cause, among other things, large migration flows, more extreme weather events and melting ice caps resulting in significantly higher sea levels.

We are not climatologists, but as risk managers, we always *hope* for the best-case, *plan* for the base-case and *prepare* for the worst-case. Hoping that the effects of climate change will not be significant or passively waiting for more clarity seems irrational to us, when even the best projected outcome has significant negative consequences. Thankfully, public opinion is increasingly moving towards our position.

Carbon taxes will be an essential part of climate laws

Politicians all over the world are feeling the pressure from the change in public opinion on global warming. Although many politicians believe that other countries should do the heavy lifting to halt climate change, we believe there are encouraging signals from the European Union in particular. In December 2019, The European Commission outlined the proposed 'Green Deal' targeting net zero carbon emission by 2050. It will set standards for the rest of the world to follow. If implemented, it will be the first 'climate law' at the EU level.

Notably, by planning for increased carbon taxes not only on its own domestic industries, but also contemplating carbon border adjustments for imported goods, we believe the EU might drive other countries wanting to access the large EU domestic market to reduce their industries' own carbon footprint. Introducing carbon border adjustment tax will no doubt be complicated, costly to administrate and likely involve economic and trade inefficiencies.

⁴⁾ BP Statistical review of world energy 2018

⁵⁾ https://eto.dnvgl.com/2019/peak-energy-via-efficiency



However, the same arguments can be used against implementation of most taxes. In lieu of any better suggestion for how to internalise the external cost of CO2 emissions, we are open minded about the EU commissions' plans.

While COP25 in Madrid in December 2019 failed to reach an agreement on global carbon markets, the world is now looking to COP26 in Glasgow in November 2020.

Regulation can have large impact

Although countries and large bodies like the EU move slowly, they may have a big impact. We believe there is little doubt that the EU's strict CO2 emission targets for the car industry have helped focus the minds of the car manufacturers. The risk of fines of tens of billions of euros have clearly incentivised investment in electric vehicles and will likely speed up adoption rates of electric vehicles in the European Union. As of next year, 100% of new cars sold in the EU will be included in the calculation for the average emissions from the car manufacturers. Currently, most automakers are on track to miss their targets and hence face huge penalties. In order to reduce potential fines, we expect the automakers to aggressively push its electric vehicles towards European car buyers. They will be aided by large corporate fleet owners with their own CO2 targets to achieve. In many ways, 2020 could be a pivotal year for the approval of electric vehicles and it would not have happened, at least not this early, without EU regulation.

While the EU might get a Climate Law, Norway enacted a law in 2017 binding the government to the national emission targets agreed in the Paris Agreement in 2015. The goal is to be a low carbon society in 2050 with a first strict target of a 40% reduction in 2030 compared to the reference year of 1990. On the current trajectory, Norway will miss the target and we expect the government to announce drastic measures when it updates the parliament this year. One consequence, we believe, is accelerated electrification of the oil and gas installations in the North Sea. It doesn't seem likely to us that the operators on the Norwegian continental shelf, who are already by far the lowest CO2 emitting producers in the world, would prioritise electrification of existing infrastructure unless it was or would soon be a regulatory requirement.

Regulatory framework is changing

While most regulation takes years to implement, there are also examples of governments and regulators changing the framework from one day to another. In November last year, the California Department of Conservation announced that it would halt approval of new oil extraction wells that use high-pressure steam to break oil formations below the ground. The regulator argued that this action was part of the state's effort to achieve carbon neutrality by 2045. Based on the almost 40% decline in the market value of some of the shale explorers, we believe this was not expected by the industry nor its investors.

We would not be surprised to see more examples of swift regulatory change that has drastic impact on the market value of fossil fuel companies. We believe investors in the fossil fuel industry viewing the current framework as stable are taking a big risk.

The fossil fuel industry is adapting

We have long argued that the fossil fuel industry is seeing the writing on the wall. Not only has it accelerated its investments into alternative energy, but in order to reduce the risk of stranded assets, it has increasingly focused its investments away from long cycle projects to more short cycle projects. While the investments in renewables might initially have had a stint of greenwashing, we believe that it is now in the industry's long-term best interest.

Furthermore, many of the oil majors have also recently expanded their emission targets to include scope 3 emissions, i.e. the emissions from the end-user's consumption of the fuel, as opposed to scope 2, which only includes the discharges from the production of the fuel. So far only four of the larger producers (Shell, Total, Repsol and OMV) have set some form of target including scope 3, but we believe that more will soon follow, voluntarily or not. Repsol was first out in 2019 to set a target of net zero emissions, including scope 3, by 2050.

The industry is asking for carbon taxes

Moreover, the fossil fuel industry, at least the larger oil and gas producers, has recently increased its support for carbon taxes. We believe any industry asking to be taxed, should be taken seriously by governments.



Obviously, the industry has an interest in ensuring that carbon taxes are set at bearable levels. At the same time, carbon taxes will work as an entry barrier and make the incumbents relatively better off. Combined with higher cost of capital for all but the largest fossil fuel companies, we believe the oil majors will be in a *relatively* better position than their smaller competitors.

Although the majors in some ways are relatively better positioned than companies in other sub-sectors in the fossil fuel space, we do not necessarily believe they will be good long-term investments. The long-term relationship between oil producers and the oil price has already started to decouple. 2019 was a significant year of de-rating of the equities. See exhibit 2.

Exhibit 2: Oil equities versus Oil price

2yr forward WTI vs XOP (S&P Oil & Gas Exploration & Production ETF), 2018-2019



Source: Bloomberg

We believe this is partly driven by a lack of generalist interest in the space, either due to the increasing focus on ESG or simply a recognition that there is a large risk of stranded assets and highly uncertain cash flows as oil price volatility is, and will likely remain, elevated. Either way, this means a higher cost of capital and a lower valuation for all fossil fuel companies.

Impact investing works

We believe the commitment by some of the majors to include all emissions into their climate targets is unlikely to have come about if not for the pressure from impact organisations like Climate Action 100+6. We believe the fact that the oil majors have adopted more aggressive targets, and even linked long term management incentives to those targets, demonstrates the advantages for an investor to influence these companies rather than excluding them. As Bill Gates rightly pointed out: "divestment has to date probably reduced about zero tonnes of emissions".

TO SUM UP OUR THOUGHTS

We are excited to see the energy transition increasingly on politicians' and voters' minds, but more needs to be done. Capital allocators have a big role to play. As we are writing this, the *World Energy Outlook Global Risk Report* was released ahead of Davos 2020. The report states that not one, but <u>all</u> the top 5 global risks are climate change related. Climate risk is investment risk!

The energy transition is happening now and will have a profound effect on companies and our planet's future. The mission of the Energy Transition Fund is to profit from these changes, while influencing a change in strategy and capital allocation towards a sustainable future.

6) Climate Action 100+ is an investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change. To date, more than 370 investors with more than USD \$41 trillion in assets under management have signed on to the initiative.



About The Fund

MARKET NEUTRAL ENERGY EQUITY FUND FOCUSED ON THE ENERGY TRANSITION

Coeli Energy Transition is a market neutral energy equity fund seeking to produce high risk-adjusted returns that are uncorrelated to both market and commodity price risk. It aims to take advantage of the increased volatility and dispersion in the energy sector caused by the disruption from alternative energy and the shift in public opinion against the fossil fuel industry. The fund is committed to have a negative exposure to the fossil fuel industry at all times.

The investment universe consists of energy equities as well as companies in other sectors that are impacted by the ongoing energy transition. Geographic focus is North America and Western Europe. The fund's research process is centered around a top-down analysis of supply and demand in the sub-sectors, complemented with detailed bottom-up analysis to identify winners and losers within the many sub-sectors of the energy sector. The portfolio is generally composed of 60-80 single name equities divided into investment themes and pair trades. It targets a net exposure of +/-10%.

FUND DETAILS	
Assets	USD 52m (Additional USD 5m committed)
Inception	16-aug-19
Fund type / Strategy	UCITS / Market Neutral equities
Net Exposure Target	+/-10%
Liquidity	Daily
Target assets	Listed equities
Geographical mix	~50% North America, ~50% Europe
Benchmark	No benchmark
Management fee	1% p.a. institutional share class / 1.5% retail
Performance fee	20% with high-water mark (yearly crystallization)
Expected TER	0.2-0.4%
Cut-off	14:00 CET
Pricing	Closing price end of day
Share classes	SICAV share classes (institutional; GBP, USD and SEK / Retail; SEK)
Minimum investment	Institutional USD 1,000,000 / Retail SEK 100
ISIN Code / Bloomberg ticker	I USD - COENTIU LX / R SEK - COENTRS LX
Prime Brokers	Morgan Stanley & Co. International plc / Skandinaviska Enskilda Banken (SEB)
Custodian, Listing Agent, Central Administration, Registrar and Transfer Agent	RBC Investor Services Bank S.A



THE TEAM

Vidar Kalvoy

Portfolio Manager

Vidar Kalvoy is the lead Portfolio Manager and Founder of Coeli Energy Transition. He has more than 20 years' experience from portfolio management and equity research. For nine years, he was responsible for the energy investments at Horizon Asset in London, a market neutral hedge fund. Kalvoy also has experience from energy investments at another hedge fund in London and equity research within the technology sector in Frankfurt and Oslo.

Joel Etzler

Portfolio Manager

Joel Etzler is Portfolio Manager and Founder of the Coeli Energy Transition fund and has more than 13 years in the industry, with investment experience from both the public and private equity side. Etzler joined Kalvoy at Horizon Asset in London in 2012 and spent five years before that within Private Equity at Morgan Stanley. Etzler started his investment career within the technology sector at Swedbank Robur in Stockholm, 2006.



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