Financial specialists making carbon investment risk real today in the capital markets.

A financial system that operates within a carbon budget

It is clear that the energy system will need to change to be compatible with a greenhouse gas emissions budget which limits global warming below dangerous levels. This energy transition will need to be financed, yet it is clear that the current financial system is not currently fit for addressing this challenge. The International Energy Agency have confirmed the analysis that the majority of fossil fuel reserves that are already booked cannot be burnt unmitigated, even with a fairly generous carbon budget. This raises a question about which coal, oil or gas reserves are more likely to be used under a lower emissions scenario.

Using alternative demand and price assumptions for equity valuation

Why is this important? – because currently the market assumes that demand will continue to increase, maintaining high prices. This single-point analysis does not allow for the possibility that a combination of factors could impact future demand for high-carbon fuels, despite evidence this is already happening. This divergence between market assumptions and the energy transition pathway means that the longer this stands uncorrected, the greater the readjustment that will be required. This has been referred to as the carbon bubble – the potential for high carbon asset values to be inflated.

Some initial efforts have been made to understand the potential impacts on valuation. However these are the exceptions amongst the mass of broker research produced every day. This gives little confidence that the majority of analysis is even considering the possibilities and pricing this in.

Making credit ratings integrate climate risk

Credit ratings methodologies are not currently reflecting climate change risks, resulting in a debt market which assumes that the future will continue to repeat the past. Credit rating horizons continue to be around 3 years, regardless of whether the bond matures in 5 years or 20 years. It is clear that the creditworthiness of fossil-fuel based businesses will be impacted as emissions are constrained.

The operating context in 2020 could be very different, with efficiency improvements, peak demand in key markets and the increasing competitiveness of alternative technologies. If ratings are not even reflecting a medium-term horizon, then it could easily affect the credit ratings, and the ability of the borrowing company to refinance upon maturity. This has implications for financial stability measures with financial institutions being driven back to fossil fuels under the current ratings system.

“This report makes it clear that ‘business-as-usual’ is not a viable option for the fossil fuel industry in the long term. Management should already be looking to new business models that reduce the risk of stranded assets destroying shareholder value. In future, capital allocation should emphasise shareholder returns rather than investing for growth.”

Paul Spedding, Oil & Gas Sector Analyst, HSBC

‘Financial models that only rely on past performance and creditworthiness are an insufficient guide for investors. By analysing the potential impact of future carbon constraints driven by global climate change policies, our study shows a deterioration in the financial risk profiles for smaller oil companies that could lead to negative outlooks and downgrades.’

Mike Wilkins, Head of Environmental Finance, Standard & Poor’s
Exposure of markets

As the world’s major financial centres, New York and London have an established history of providing capital to the corporate sector, with high exposure to extractives companies. There continue to be new listings of fossil fuel based companies from around the world, using the reputations of these financial markets to access western capital. Professionals such as accountants, lawyers and investment banks all play a role in bringing these offerings to market, and need to advise their clients on representing these risks.

The US coal industry is already having to deal with impaired assets and falling demand and prices – but the market failed to see it coming. This demonstrates the limitations of the current focus on historical performance. The assumption that the past will just keep repeating itself quickly comes unstuck when that stops holding true. Markets did not see it coming that a range of factors including emissions measures and cheaper alternatives would displace coal.

Investor concern

There is growing investor interest in gaining more information about the exposure of companies and markets. Carbon Tracker is co-ordinating with CERES to facilitate engagement between 70 investors with $3trillion of assets under management with 45 of the largest coal, oil & gas and utilities companies.

“Companies must plan properly for the risk of falling demand by stress-testing new investments to minimize the risk our clients’ capital is wasted on non-performing projects.” Craig Mackenzie, Head of Sustainability, Scottish Widows Investment Partnership

“We have a fiduciary duty to ensure that companies we invest in are fully addressing the risks that climate change poses. We need robust long-term strategies that reflect the reality we face. This is using science and evidence to underpin the economics. We cannot invest in a climate catastrophe.” Anne Stausboll, CEO of the California Public Employees Retirement System (CalPERS)

Structural problems – the need for regulators to intervene

The majority of funds are tied in to the composition of the market. This may be directly as passive funds, which have no choice but to match market composition. But even ‘active funds are linked to benchmark indices and performance metrics which drive fund managers to closely track the sectors and components of an index, with only some variation in weightings between companies.

“Investors are in blatant breach of their fiduciary duty if they ignore the clear scientific evidence”. Christiana Figueres, Executive secretary of the UN framework convention on climate change.

If fund managers continue to be rewarded for merely outperforming the market, there is no incentive to avoid major systemic risks, as they only have to lose less than the market. We know from previous financial crises that not everyone can get out the train door at the same time – most will still be on board for the crash. Given these structural restrictions, there is a need for regulators to protect investors from sudden adjustments to stranded assets, by ensuring the market delivers a smooth energy transition. At present the market does not have the right signals to redirect capital before it gets tied up in more fossil fuel based assets.
Tackling market myopia

It is clear that the capital markets continue to be short-term, which can result in excessive discounting of future revenues. This has been referred to as market myopia by some regulators, who recognise that public policy needs to address the issue.

Many renewables projects suffer from not passing investor return tests because of the short-term bias. They would also provide greater social benefits by reducing the economic impacts of climate change. Climate change risk is the ultimate test of whether capital markets have been adjusted to become sufficiently long-term. Regulators have yet to demonstrate they have got to grips with these issues.

Efficient markets redirecting capital

Carbon Tracker’s analysis of the flows of capital for the largest listed 200 coal, oil and gas companies indicated that $674 billion of capital expenditure went towards exploring and developing fossil fuel reserves and technologies in 2012. If this continues over the next decade, up to $7 trillion could be invested in future fossil fuel production. Yet it is clear that this balance of flows does not take into account an emissions ceiling. The feedback effects of reduced emissions, are that earnings will fall, and it makes less sense for further capital to be invested in developing more reserves. This indicates that shareholders need to ensure capital diverted into an alternative strategy or returned to them. Otherwise future shareholder returns and the ability to repay debt could be affected.

Emerging risks need a response

Risks change over time, and new issues emerge. Regulators need to be on top of developments to protect investors. For example companies were previously not required to disclose pension fund liabilities. Following some cases where large funding gaps became evident, these items were disclosed to the market. Concerns over extractives companies making excessive mineral reserves claims when listing on London’s AIM market led to guidance on including a Competent Person’s review in documentations. Climate change risk needs to be integrated in the same way, with regulators monitoring the adequacy of disclosures. The level of carbon embedded in a company’s reserves should be a basic indicator disclosed to the market.
Accounting for emissions

Companies need to provide investors with material information. Carbon Tracker’s work with the Association of Chartered & Certified Accountants on ‘Carbon Avoidance’ demonstrates that the emissions associated with the fossil fuel reserves of extractives companies are not being disclosed. Companies are assuming that these emissions will be permitted in the future in order to realise the value of the assets through revenues streams. Companies are keen to count future revenues in valuations and keep up reserves replacement ratios, but are not being transparent about the emissions implications.

“Higher-quality business reporting and disclosure are needed to better reflect the climate change uncertainties facing companies. This information is required by both companies and their investors in order to take appropriate action. To start improving the current situation, companies need to commit to material climate change-related disclosures. To understand the potential environmental impact of carbon stocks, companies need to measure uncalculated stores of GHG emissions within their fossil fuel reserves and account for them accordingly.”

Warren Allen, President, International Federation of Accountants (IFAC)

Recognising new business models and strategies

Our partner the Climate Disclosure Standards Board, (CDSB), is developing tools which can help companies understand and explain material risks and opportunities to their shareholders in a way which is compatible with existing accounting standards. Current reporting on market and regulatory risks may contain basic statements, but more information is needed about how resilient a company’s business model and strategy is under a number of scenarios. For example:

• If demand and prices fall, what impact does that have on returns and future investment plans of a mining or oil & gas company?

Regulators need to encourage companies to conduct and disclose sensitivity analysis which addresses these issues, in order to give adequate detail on the full range of market, technology and regulatory risks they face. The composition of the markets have always changed over time. However the sheer scale of the energy sector makes it vital that markets promote a smooth transition. Regulators have an opportunity to prevent a carbon bubble inflating by ensuring capital markets are aligned with climate targets. Otherwise there could be a sharp adjustment at a later date. Without new measures, it will not be possible for investors to identify how the systemic risk of the energy transition will affect them, as this could affect all sectors and asset classes.

For further information
Visit www.carbontracker.org/wastedcapital
Contact: Anthony Hobley, CEO, ahobley@carbontracker.org