Issue Brief



Stranded Assets as Investment Opportunities

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A stranded asset is the term used to describe an investment that loses its value well ahead of its anticipated useful life because of the impact of various transformational changes. Examples include products like camera film (think of Kodak) and industries like nuclear power (think of Japan and Germany). The term has also been applied to the fossil fuel sector.

Because there are many more transformational factors at work in our world these days – notably environmental shocks, new technology and disruptive innovations, evolving societal norms – the concept is increasingly important. The critical point is that these new sources of transformational risk are not necessarily captured in financial reporting. Examples like risk of loss from extreme weather, supply chain problems and financial systemic risks are not easy to measure. Hence, not surprisingly, these ideas are not yet well-shaped in investment thinking.

The fossil fuel issue has come a long way in a short time. There is a growing realization that we face a tension between the fossil fuel reserves of the global energy industry and the carbon budget to use before we undergo a transformational change in our climate. The global accord from Copenhagenⁱ which aspires to a 2 degree Celsius rise in global temperature limits us to burning up to around half of current reserves. Considerable new cap ex is being invested in finding additional new reservesⁱⁱ. This thinking suggests that companies in the sector may face increasing headwinds in the longer term as these arguments gain clarity and traction. On top there is the collision of the investment–lead arguments with the values-lead aspects that often muddles both the characterization of the problem and potential investment solutions.

The investment thesis is no doubt complex. It is a long-term theme and that may have little relevance in many portfolios. It also has to deal with multiple layers of uncertainty around climate change scenarios, second order effects and timeframes. The policy uncertainty adds to the mix. How and when will future governments influence fossil fuel usage through carbon emissions trading or taxes?

This is an unfolding situation where reading the trajectory of change in sentiment is a necessary part of the well-informed fund's intelligence; witness the South African divestment era where over time the stigmatizing of certain companies significantly altered the behavior of businesses and institutional investors.

The choice of investment response at this point remains wide open. Apart from wait and see, the investment choices involve both allocation and engagement, with some notable examples as follows:

- The strategy of more targeted divestment from coal by Stanford as the most prominent endowment fund action so far
- Low carbon tilted investment strategies of funds like Sweden's AP4 and Fonds de Réserve pour les Retraites (FRR) in France
- The carbon disclosure approaches of funds like Local Government Super in Australia and Environment Agency Pension Fund in the UK



Data and Tools

Wide dispersion of institutional investor responses is expected given a lack of high quality data and analytical tools to build a picture of the timeframes and scenarios involved. In fact, much of the debate is reminiscent of other periods of experimentation and learning when markets have faced transformational change; witness how investors and markets dealt with the technology revolution at the turn of this century.

Luckily, just as with the 'S'-shaped adoption curve that we have seen with previous innovations, investors are now climbing that steep upward learning curve to better understanding of carbon-related risks and opportunities in their portfolio. High quality information and tools are coming to market, making it easier for investors to measure their exposure to assets at risk of being stranded and to analyze the impact of various options.

Data to measure portfolio carbon exposure has improved significantly in the past year. While measures of the current carbon intensity of a portfolio have been improving incrementally, more recently estimates of potential *future* emissions have become available. This brings more focus on stranded asset risks.

It is primarily the availability of issuer-level data on the size and type of carbon reserves that can sharply focus institutional investor attention on the coal reserves in their portfolio. In the MSCI World Index of approximately 1,600 companies, only 26 companies own thermal coal reserves; these companies comprise only 1.3% of the market cap of the index. Yet, we estimate that the carbon emitted by burning the thermal coal reserves of these 26 companies in the future would account for roughly 50% of all the future carbon emissions currently embedded in the fossil fuel reserves owned by MSCI World Index companies.

The ability to have this type of portfolio level estimate of the embedded carbon footprint as well as granular attributions of carbon intensity and carbon footprint down to specific assets is allowing investors to explore the myriad options between the simple 'do nothing' and divesting from an entire sector.

Engagement

Among the 'do something' options, engagement with companies has been a favored choice thus far, in part because many of the largest asset owners and managers are becoming more comfortable with engagement as a form of exercising active ownership. The last couple of years have seen increased attention and resources to engagement activities from institutional investors, although corporate governance and in particular executive compensation issues continue to dominate discussions with targeted companies.^{III} With either an internal program or outsourced service in place at some of the largest institutions, adding climate-related risk to the agenda for company engagement is relatively easy. The hurdle for engaging energy companies specifically on stranded assets risk is further lowered by the opportunity to join coalitions that lend scale and the appearance of unity while committing few resources to the effort. Coordinated by the investor advocacy group Ceres, last year over 70 institutional investors jointly called on approximately 50 fossil fuel companies to provide assessments of the financial risks they face from climate change scenarios.

The initiative was important in signaling that global investors are now paying attention to potential risk of carbon stranded assets. But judging by the response from energy companies so far to this call, engagement with companies is simply an opening move and can be only one facet of a broader strategy to align capital with a different energy future.

Both Exxon and Royal Dutch, in their published responses to investor engagement, essentially supported the scenario that the world will breeze past the 2 degree Celsius temperature rise because the need for cheap energy to fuel economic growth will trump all other considerations in the policy making calculus. This is basically a political assumption. If investors do not buy into the same assumptions, or simply choose to work with a range of assumptions, a different path will be needed for both companies and investors.

Allocation and Strategy

In the 'do something' choices for institutional investors, in addition to engagement, there is allocation and strategy. Asset owners have historically used three allocation routes. The most blunt-edged is divesting from sectors. More subtle are strategies that are tilted to low carbon and place limits on stranded asset exposures. In both cases, a range of carbon indexes can be used to implement the strategy through index tracking mandates or active mandates using these indexes as benchmarks.

The third route is an allocation strategy that directly exploits those assets thought to be favorably positioned from these changes. For example, this can be mandates that are focused on clean technology, renewable energy and energy transition.

If there is one clear takeaway it is that those setting strategy of the big pools of capital – be it asset managers or asset owners – will have to develop new thinking on all the forces at work that are reconfiguring our resource assumptions: science and technology; their inter-section with public policy, the environment and society's 'pulse'; and their influences over time on how businesses will be run and assets will be priced.

Institutional investors are used to thinking through growth, inflation and monetary policy; and the gradation of those factors by geography in developed and developing economies. Building understanding on sustainability follows naturally.

And it's not just coal and oil that sustainability and stranded assets cover. The tentacles to the subject lie in a complex nexus of issues involving energy, water and food. Projections suggest demand for food growing by about 35% running up to 2030. Over the same period, demand for water is expected to grow by 40%, energy by 50%^{iV}. The capacity of business as usual scenarios to cope with escalating resource demands needs to be understood. Certain discontinuities in growth may be factored in as a result. For example, the effects of water stranding extend from too much – flooding – to too little. Regulation will likely stretch increasingly into water usage. Food has a critical dependency on water and energy. And so on.

To achieve consistent long-term performance, sustainability factors and their stranded assets consequences are critical issues for institutional investors to understand, to take a view and to address. This is a tough call on institutional investors already hard-pressed for time and attention. But the rewards for getting on top of this seem worth the effort.

¹ United Nations Framework Convention on Climate Change (2010). *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009.* FCCC/CP/2009/11/Add.1 30 March 2010. ¹¹ Carbon Tracker (2013). *Unburnable Carbon 2013: Wasted Capital and Stranded Assets*.

^{III} See for example: IRRC and ISS (2011). *The State of Engagement between US Corporations and Shareholders*, IRRC Institute, New York, NY; and Towers Watson (2012), *The World's 500 Largest Asset Managers*.

^{iv} National Intelligence Council (2012). *Global trends 2030: Alternative Worlds*. NIC 2012-001. ISBN 978-1-929667-21-5.

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¹As of March 31, 2014, as reported on June 25, 2014, by eVestment, Lipper and Bloomberg

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