

Staying Afloat as Assets Get Stranded

Mike Scott | June 23, 2013

Stranded assets – assets that are unexpectedly or prematurely devalued, converted to liabilities or written off – are part of the creative destruction that drives capitalism.

Asset stranding of this kind regularly results from changes in technology, regulation or public opinion. Horse-drawn carriages and public telephone boxes have been consigned to history by the car and the mobile phone, respectively. Regula-



tion will close Germany's nuclear power stations, which were due to produce power until 2036. Following the Fukushima disaster in Japan and a wave of public opposition to nuclear power, Chancellor Angela Merkel announced that the country's nuclear plants would be mothballed by 2022, causing havoc among the country's utilities.

Some analysts believe a large number of assets around the world are at risk for reasons that many investors are currently ignoring. These include climate change, water shortages, resource scarcity, technological developments, policy and regulatory changes, and changes in social norms.

"There are many environmentally unsustainable assets that will become devalued or converted to liabilities," says Ben Caldecott, director of the Stranded Assets Programme at Oxford university's Smith School of Enterprise and the Environment. "This will lead to unanticipated write-offs because of issues that are not currently being factored in by investors, who have very little visibility on these factors."

The assets at risk range from gold mines in South Africa and coal-fired power stations in China and India, to grand cru vineyards in France and ski resorts in the US.

The Economics of Ecosystems and Biodiversity programme run by the UN reports that the top 100 environmental externalities are costing the world economy \$4.7tn a year, caused by greenhouse gas emissions, loss of natural resources, an erosion of nature-based services such as carbon storage by forests, climate change and air pollution-related health costs.

Climate change will move crop-growing regions, causing huge upheavals for agribusinesses and farmers. A recent report in the Proceedings of the National Academy of Sciences journal highlights one example of this. Warmer temperatures will threaten up to 70 per cent of today's traditional wine-growing areas such as Bordeaux, Tuscany, Chile and South Africa's Cape region. Conversely, it could open up opportunities in northern

Europe and central China.

According to the World Resources Institute, 1,199 new coal-fired power plants are being proposed around the world, yet the coal industry is one of the most exposed to many of the issues outlined above.

No one is suggesting that the coal industry will disappear, but cheap shale gas has reduced demand in the US. Onshore wind and solar power are rapidly approaching cost competitiveness with coal generation, while sentiment and the policy environment are shifting against it. The International Energy Agency has asserted that two-thirds of current fossil-fuel reserves must stay in the ground if we are to have even a 50 per cent chance of limiting global temperature rises to 2C. Nations must also phase out the \$550bn that they currently spend on fossil fuel subsidies.

Europe's carbon market has foundered recently, but China is rolling out seven pilot cap-and-trade schemes in provinces and cities including Beijing and Shanghai, as part of a plan to create a national carbon market by 2015. South Africa, South Korea and Brazil are all setting up carbon markets that will make high-carbon investments less profitable.

Meanwhile, the shift in public opinion can be seen in campaigns such as that run by advocacy group 350.org, which calls on investors to sell out of fossil-fuel stocks. The campaign has had limited success so far – just a few US colleges and the city of Seattle have committed to divest – but it has garnered a lot of publicity of the kind that makes investors nervous. And if they are nervous, they are less likely to invest in fossil fuel projects – or at the very least to demand a higher risk premium for that investment.

“About 50-60 per cent of the FTSE 100 is high-carbon companies,” says Mr Caldecott, “and then there's all the bonds related to high-carbon assets. There's a huge amount of value at risk in the system.”

A growing amount of data are also revealing hitherto ignored risks. China's thirst for power, most of it from coal, appears unstoppable. But if there is one thing that Beijing is more worried about than economic growth, it is running out of water. Yet, according to Bloomberg New Energy Finance, 85 per cent of China's power-generation capacity is in the water-stressed north of the country. Coal mining and coal-fired generation accounted for around 15 per cent of all freshwater withdrawals across the country, the research firm added. It would cost \$20bn to retrofit the industry with more water-efficient technology.

“The era of water abundance in China is over, and competition for resource access between business, agriculture and urban centres is starting to bite,” says Maxime Serrano Bardisa, water analyst at the research firm.

The vast majority of investors “do not get it”, says Mr Caldecott, “because they are incentivised not to get it. Valuations tend to be very short term and investors tend to exit very quickly. There is a huge amount of evidence that the market is not pricing in these risks.”

Many companies have taken note, however. Walmart plans to increase its renewable energy use sixfold by 2020, a move it says will save \$1bn a year. Unilever recently announced it had saved 1m tonnes of CO2 since 2008; 133 of its manufacturing sites send no non-hazardous waste to landfill; and it sources more than one-third of agricultural inputs from sustainable sources.

“Climate change, water scarcity, unsustainable farming practices and rising populations all threaten agricul-

tural supplies and food security,” says Marc Engel, the company’s chief procurement officer. “Half of the raw materials Unilever buys are from the farming and forestry industries, so ensuring a secure supply of these materials is a major business issue. However, sustainable sourcing is not only about managing business risks, it also presents an opportunity for growth, allowing brands to stand out in the marketplace”.

A few investors are starting to take action, too. **As You Sow** and the Unitarian Universalist Association recently filed shareholder resolutions with US coal companies Consol Energy and Alpha Natural Resources, asking them to say how they will address global concerns about fossil fuels and their contribution to climate change.

The four-year, £1m Smith School project aims to provide an evidence base and demonstrate that such risks are material for all investors, says Mr Caldecott.

Many in the investment world think that they insulate themselves from risks because they have a short-term perspective. “Some of the risks we are looking at are long term, but at some point long-term risks become immediate. The music stops at some point and you do not know when, so the danger of getting caught out is high,” concludes Mr Caldecott.