

Our perspective on: Stranded assets

Every trainee accountant is taught about the twin concepts of ‘matching’ and ‘prudence’. The two provide the foundations upon which many aspects of financial reporting are built. It is the matching concept that is behind many of the assets that firms record on their balance sheets. For example, a new printing press will enable a newspaper firm to produce many thousands of daily papers. But, without the matching concept, it would record a significant loss in the first year of operation as it paid for the press, only to then record a number of more profitable periods as the press was put to use. Capitalising the printing press on the firm’s balance sheet, and depreciating it every time it is used, matches the historical cost of purchasing the printing press with the benefit of using it.

Prudence, however, makes sure that the value of the assets on the balance sheet is fair and not over-stated. So, if the newspaper decides to move to a digital-only publication the printing press would become redundant and its only value to the firm would come from either selling or scrapping it. Prudence requires that the value of the asset on the firm’s balance sheet is reduced to this net realisable value.

It is when an asset suffers an unanticipated or premature devaluation or write-off that it is often referred to as becoming ‘stranded’. It is as if the tide of industry change shifts and leaves the asset no longer relevant and stranded above the economic water line. The value that it was expected to provide to the business, and the reason why it was capitalised on the balance sheet in the first instance, is no longer there. Prudence requires that this is recognised and the value of the asset is written down as a charge against shareholder equity.

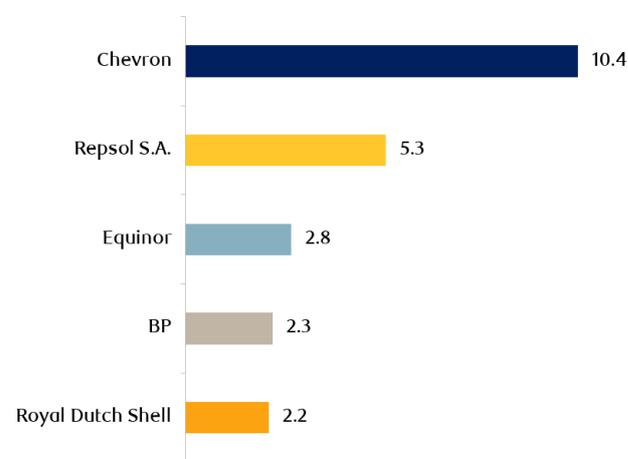
The stranding of assets can occur for many reasons, such as innovation, technological disruption, or shifting consumer demands. The path of economic history is strewn with industrial change as competition has stimulated innovation; innovation that has discovered new, more productive ways of doing things and created entirely new industries. This change has been the engine of economic growth and has created a lot of wealth for society as a whole. But it has also destroyed a lot of capital, and stranded many assets along the way, as new ideas failed and old, successful ideas became stale in a process that the economist Schumpeter termed ‘creative destruction’.

Regrettably, many investors may already have had first-hand experience of stranded assets. Today, the term has become synonymous with the fossil fuel industry, and large oil and gas reserves in particular. These reserves are especially contentious because, from an accounting perspective, they are regarded as

‘assets’ since they are considered to have a positive future value to the asset-owner. But from an environmental perspective they are regarded as liabilities as their utilisation will add to the stock of carbon circulating in the Earth’s atmosphere. Marrying the two seemingly contradictory points of view might appear impossible but the ‘stranded assets’ concept may provide a way in which these two distanced perspectives can be brought closer together.

By doing this, the concept encourages investors to consider whether the reserves that feature as assets on many energy companies’ balance sheets are prudently valued if the price of oil falls, or if these businesses are forced to leave the reserves in the ground. Writing down the reserves will catalyse a loss for investors in the industry, providing them with an incentive to weigh the issue carefully.

Exhibit 1: Oil & gas majors 2019 impairment charges (USDbn)



Source: Bloomberg. Data as at April, 2020. The securities identified are presented for discussion purposes only and should not be considered a recommendation to buy or sell any security or other financial instrument.

This was considered as almost purely hypothetical until fairly recently, but no longer. It is currently one of the most notable challenges faced by the oil industry and investors have already witnessed very significant write-downs from a number of the industry’s most prominent businesses, as shown by the chart above. We believe that the recent surge in stranded oil and gas assets is a consequence of two principal dynamics: changes in supply and changes in demand – both of which have an impact upon price and, hence, the appropriate carrying value of the reserves.

When any market is functioning efficiently, it is the interaction between supply and demand that determines the clearing price. If the quantities demanded by customers aren't particularly sensitive to price – what the economists term 'price inelastic' – then small changes in supply can have a profound impact on price. Major oil producers used this to their advantage in the 1970s, establishing the OPEC cartel that restricted supply and put more value into its members' coffers. However, higher prices also incentivise others to find and exploit new prospects. A number of high-cost, and in some cases quite geologically difficult, projects became economic. More recently OPEC's production discipline is showing signs of breaking down, unblocking lower-cost supplies to the market. This has reduced the clearing price of oil and challenged the viability of some of those higher-cost, difficult projects. The change in supply has lowered the market price and 'stranded' those now uneconomic assets and reserves, challenging the long-term sustainability of many oil and gas businesses. As a result, balance sheets across the industry are at risk, and stranded asset write-downs have commenced.

The demand for fossil fuels is also beginning to change. The demand for hydrocarbons is 'derived demand', meaning that the value lies not in their innate qualities but in what they can provide after processing: heat, light and transport. This leaves them vulnerable to substitution from alternatives that can provide those important attributes more efficiently. Renewable energy, such as wind and solar, can be cheaper and more efficient today than some traditional fossil fuel projects and may provide customers with a viable alternative. This is leading to a tangible reduction in demand for fossil fuels, lowering the price and putting further pressure on high-cost hydrocarbon assets and reserves.

Accelerating these changes is public policy, which is seeking to address and constrain the negative environmental externality of burning fossil fuels which adds to greenhouse gases in the Earth's atmosphere. These policies are impacting both supply and demand through measures like denying planning permission for new coal mines, restricting prospecting licences, or subsidising

renewable alternatives such as electric cars.¹ Carbon taxes are one such tool that raises the price of fossil fuels and so limits the quantity demanded.

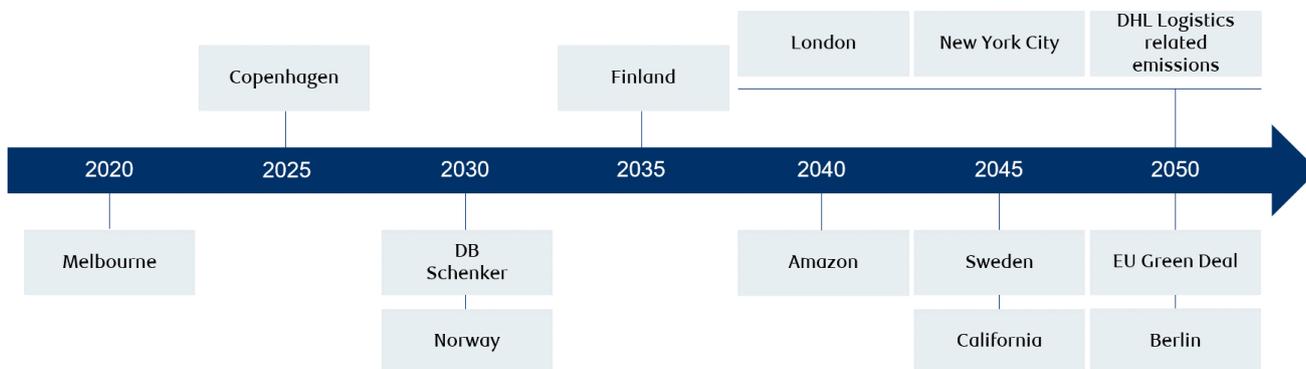
The 2015 Paris Climate Agreement and its 195 signatories exemplifies how protecting the environment and addressing climate change have emerged as globally significant issues for public policy, raising the risk of high carbon-emitting businesses becoming stranded as the global economy moves towards its lower-carbon targets.

Exhibit 2: Crude oil prices (US\$) - 70 year historical chart



Source: Macrotrends.net. Data as at April, 2020.

Exhibit 3: Carbon neutrality targets



Source: Neste. Data as at April, 2020. The securities identified are presented for discussion purposes only and should not be considered a recommendation to buy or sell any security or other financial instrument.

¹<http://envlaw.com.au/gloucester-resources-case/> is one such example.

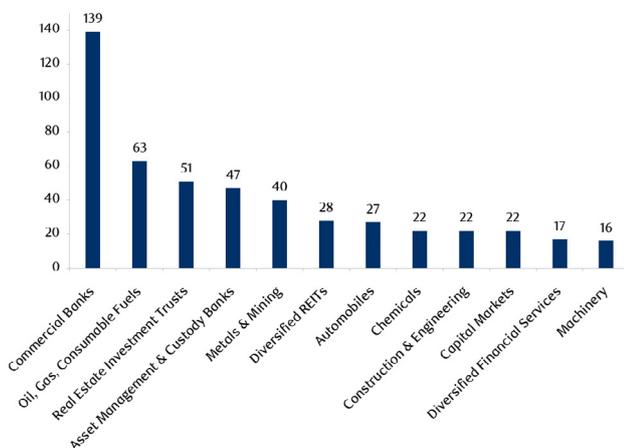
The transition from fossil fuels to renewable energy is increasingly gaining attention from investors, businesses and governments, all attracted to the new opportunities it creates. For example, Texas, the largest oil and gas producing state in the U.S., accounts for more than 25% of total U.S. wind electricity generation. Oil and gas producers Royal Dutch Shell and Total, meanwhile, have each committed to redeploying US\$2 billion annually of fossil fuel earnings to fund the development of renewable technologies.^{2/3}

For investors there is a real debate about whether there is more value to be gained by engaging with fossil fuel companies, by encouraging them to focus on lower carbon-emitting forms of energy like natural gas, and supporting them in their transition to renewables, or whether it is better to make a clear unambiguous signal to capital markets by excluding such businesses from one's portfolio. There are pros and cons to both approaches but the motivation to avoid the financial loss from assets becoming stranded is relevant to both and therefore aligns return-seeking investors with broader environmental goals.

The long-term sustainability of a business is often defined by the manner in which it responds to risks, be it stranded assets or otherwise. Sometimes risks can be disruptive enough that management is forced to redefine the business's purpose and undertake transformative change to maintain relevance. We have already seen examples where traditional energy companies have harnessed the threat of stranded assets to effect sustainable transformation, creating healthy contingent assets and significant shareholder value in the process.

Of course, stranded assets should not only be associated with the energy industry; any industry faces the risk of stranded assets should the business environment change. For example, the shift from traditional big-box department stores to e-commerce platforms has caused significant asset stranding which is becoming apparent in their landlords' market values being at significant discounts to their tangible book values.

Exhibit 4: Number of MSCI ACWI* constituents with price/ tangible book value (P/TBV) less than 1 by industry



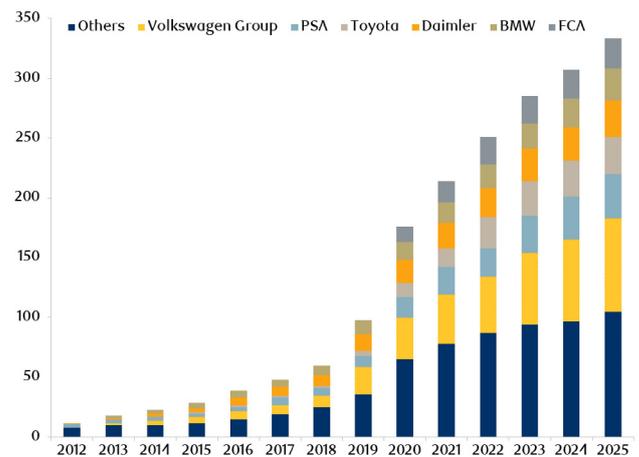
Source: Bloomberg. Data as at April, 2020.
ACWI - All Country World Index

²Bloomberg. Data as at September, 2019.

³The securities identified are presented for discussion purposes only and should not be considered a recommendation to buy or sell any security or other financial instrument.

Another example is the auto industry which, like the energy industry, is being impacted by the substitution of fossil fuel-dependent technology with cleaner alternatives. Accelerating demand for electric vehicles – due to policy changes, battery technology advancements, and shifting consumer behaviour – raises the risk of stranded assets for internal combustion engine vehicle manufacturers. The impact on companies' competitive dynamics and the knock-on effects to human capital, corporate culture, and the communities these businesses operate in, could be considerable.

Exhibit 5: Number of electric vehicle (EV) models available from automobile makers



Source: CLSA. Data as at April 2020. The securities identified are presented for discussion purposes only and should not be considered a recommendation to buy or sell any security or other financial instrument.

Although the stranded asset concept is relevant across different industries, it is very much anchored on assets - and tangible assets in particular. However, long-term investors will recognise that in the same way that investing in a physical asset provides a benefit to the business over an extended period, there are other forms of spending that also provide long-term benefits, for example research and development, staff training or brand-building activities. Yet the prudence concept demands that since such 'assets' are hard to value, any spending on them ought to be expensed.

Investors who take a broader view of a firm's sources of capital, not just considering financial capital but also other sources, such as human, reputational and natural, would recognise that there is value to such spending. Indeed, they might nevertheless intuitively treat it as asset-building, even if those assets are intangible, or what we might call contingent assets. Such an approach provides the investor with a more holistic view of all the assets a firm has at its disposal, both tangible and intangible.

Such investors would also have to be alert to the fact that intangible or contingent assets also run the risk of becoming stranded. Exiting a business, or closing a factory or branch, may

not just mean writing down the fixtures and fittings, but also recognising the potential negative impact on labour, reputation and community relations. Responsible managers will be aware of this and put in place mitigation strategies, such as offering employee relocation, and working with local planning groups to repurpose vacant sites.

Such considerations would arguably be made more explicit if the accounting focused more on the 'matching' concept and less on 'prudence'. But because of the tangible nature of many assets and the cognitive ease by which they can be conceptualised and valued through conventional accounting practices, investors often focus solely on these very same tangible assets when performing financial analysis and they ignore intangible contingent assets.

Consequently, to avoid the risk of stranded assets - of whatever type - it is critical that investors develop a deep understanding of a business's long-term value by going beyond traditional financial analysis to analyse a business's extra-financial factors,

such as: corporate culture, employee engagement, research and development, and environmental stewardship.

In summary, stranded assets are not unique to a particular industry, nor are they a new phenomenon. Stranded assets are part of an industry's natural life cycle. Great businesses with strong competitive dynamics should be able to overcome the risk of stranded assets through innovation or transformation. Those businesses that are able to withstand the threat of stranded assets will possess healthy extra-financial factors and will thus create contingent assets, which will positively contribute to long-term sustainability and value creation. By encouraging responsible business practices, and proactively working alongside company management to manage the risk of stranded assets, we believe active, engaged investors can achieve a positive impact and generate strong long-term returns on behalf of clients.

ABOUT THE AUTHORS

Jeremy Richardson

Senior Portfolio Manager, RBC Global Equity

RBC Global Asset Management (U.K.) Limited

Jeremy is a Senior Portfolio Manager and is the Consumer Specialist on the Global Equity team. Jeremy joined RBC Global Asset Management with the team in early 2014 after having spent more than seven years with them at First State in the same capacity. Previous experience includes roles at Credit Suisse Asset Management and Schroders Investment Management

Jeremy holds a BA (Hons) in Economics from the University of Exeter. He is also a qualified accountant, having trained at Price Waterhouse in London.



Beecher Rusin

Institutional Portfolio Manager

PH&N Institutional

CIM (2018); BBA (2013), Capilano University. Beecher is an institutional portfolio manager at PH&N Institutional who specializes in multi-asset mandates, with a particular emphasis on global equities. He works on all aspects of portfolio management, investment solution development, and client servicing on behalf of institutional clients, consultants, and family offices. Beecher joined PH&N Institutional in 2013 after completing his Bachelor of Business Administration at Capilano University.



This document is provided by RBC Global Asset Management (RBC GAM) for informational purposes only and may not be reproduced, distributed or published without the written consent of RBC GAM or its affiliated entities listed herein. This document does not constitute an offer or a solicitation to buy or to sell any security, product or service in any jurisdiction. This document is not available for distribution to people in jurisdictions where such distribution would be prohibited.

RBC GAM is the asset management division of Royal Bank of Canada (RBC) which includes RBC Global Asset Management Inc., RBC Global Asset Management (U.S.) Inc., RBC Global Asset Management (UK) Limited, RBC Global Asset Management (Asia) Limited, and BlueBay Asset Management LLP, which are separate, but affiliated subsidiaries of RBC. PH&N Institutional is the institutional business division of RBC Global Asset Management Inc.

In Canada, this document is provided by RBC Global Asset Management Inc. (including PH&N Institutional) which is regulated by each provincial and territorial securities commission with which it is registered. In the United States, this document is provided by RBC Global Asset Management (U.S.) Inc., a federally registered investment adviser. In Europe this document is provided by RBC Global Asset Management (UK) Limited, which is authorised and regulated by the UK Financial Conduct Authority. In Asia, this document is provided by RBC Global Asset Management (Asia) Limited, which is registered with the Securities and Futures Commission (SFC) in Hong Kong.

This document has not been reviewed by, and is not registered with any securities or other regulatory authority, and may, where appropriate, be distributed by the above-listed entities in their respective jurisdictions. Additional information about RBC GAM may be found at www.rbcgam.com.

This document is not intended to provide legal, accounting, tax, investment, financial or other advice and such information should not be relied upon for providing such advice. RBC GAM takes reasonable steps to provide up-to-date, accurate and reliable information, and believes the information to be so when printed. RBC GAM reserves the right at any time and without notice to change, amend or cease publication of the information.

Any investment and economic outlook information contained in this document has been compiled by RBC GAM from various sources. Information obtained from third parties is believed to be reliable, but no representation or warranty, express or implied, is made by RBC GAM, its affiliates or any other person as to its accuracy, completeness or correctness. RBC GAM and its affiliates assume no responsibility for any errors or omissions.

Past performance is not indicative of future results. With all investments there is a risk of loss of all or a portion of the amount invested. Where return estimates are shown, these are provided for illustrative purposes only and should not be construed as a prediction of returns; actual returns may be higher or lower than those shown and may vary substantially, especially over shorter time periods. It is not possible to invest directly in an index.

Some of the statements contained in this document may be considered forward-looking statements which provide current expectations or forecasts of future results or events. Forward-looking statements are not guarantees of future performance or events and involve risks and uncertainties. Do not place undue reliance on these statements because actual results or events may differ materially from those described in such forward-looking statements as a result of various factors. Before making any investment decisions, we encourage you to consider all relevant factors carefully.

® / TM Trademark(s) of Royal Bank of Canada. Used under licence.

© RBC Global Asset Management Inc., 2019

Publication date: (28.05.2020) GUK/20/152/MAY21/A

