PATHSTONE IMPACT

Sustainable Investing Highlights

February 2019

Climate Risk Hits Investors

- **California's largest utility headed for bankruptcy**

  In January PG&E, California's largest utility, announced it would file for bankruptcy after dry conditions resulted in forest fires that engulfed the state. A Wall Street Journal article noted that the change to the company's financial health happened suddenly, with shares dropping to a level not seen since 1972. The company's extensive liabilities were related to both their need to provide power to those living in forested areas prone to fire, as well as a state law that makes them liable if their equipment starts a fire, even if they are not negligent. In a prescient remark at an investor conference a year ago, the company's then-CEO (now former-CEO) Geisha Williams stated "[t]his policy isn't affordable, and it isn't sustainable."[1]

  PG&E's potential liabilities were estimated at over $30 billion in a Bloomberg analysis. In the article, Dan Reicher of the Steyer-Taylor Center for Energy Policy and Finance at Stanford University noted that climate change magnifies the intensity of potent natural events companies are facing.[2] While politicians debate whether or not climate change is "real", the price drop in the company's stock and bonds delivered a very real and substantial economic hit to the company's investors.

Climate Risk – Adaptation and Blind Spots

- An article in the December issue of Nature's Climate Change summarized how 1,600 companies are handling physical climate risks to their businesses. ***Three primary approaches were identified for adapting*** – 76% employed soft adaptation (through planning and training); 47% used hard adaptation (technology and built structures); and 3% employed ecosystem-based adaptation (sustainable management, conservation and restoration of ecosystems). ***The analysis outlined five key blind spots***: underestimating the magnitude and costs of physical risks; not realizing the risks extend "beyond the fence-line" to suppliers and customers; unaware that protection of ecosystems may help buffer against future risks; preoccupation with costs of adaptation without regard to costs of inaction; and, lack of awareness of the nonlinear nature of climate risk.[3]

ESG Investing Trends

- **BlackRock CEO envisions all investors will be ESG investors**

  "I do believe that demand for ESG is going to transform all investing" – BlackRock CEO Larry Fink

  BlackRock CEO Larry Fink recently shared his view at a recent New York Times Dealbook Conference that investors will increasingly adopt and integrate Environmental, Social and Governance (ESG) criteria into their investment processes over the next five years.[4] As the head of the world's largest investment firm, Fink has been pushing corporate CEOs to recognize their companies must have a responsibility to serve a social purpose, while delivering profits that benefit shareholders. For a contrasting point of view one can turn to Holman W. Jenkins, Jr. of the Wall Street Journal's editorial board, who had earlier shared his opinion that Fink may believe he is "storing up indulgences" through his talk of ESG, but his actions will do little to immunize the company if the tide of public opinion turns against BlackRock.[5]

- **Investors increasingly embracing sustainable investing, urging action on climate**

  As institutional investors pressure regulators to take action on climate change, there is evidence that private equity investors are increasingly incorporating Sustainability / Impact or ESG criteria into their firms. According to a recent survey of 72 institutional investment firms by Bright Harbor, more than two-thirds of the firms have a dedicated team member in this space, and more than four-fifths incorporate some form of Sustainability / Impact / ESG language into their investment policy statement.[6]

  Transparency may help prevent the "tragedy of the horizon", as Mark Carney of the Bank of England described in a speech a few years ago: *"The right information allows sceptics and evangelists alike to back their convictions with their capital. It will reveal how the valuations of companies that produce and use fossil fuels might change over time."*[7]

UN SDG 6 – Clean Water and Sanitation

- **Water.org changes its approach**

  Pathstone hosted a Water Conference for clients in 2015 that featured a nonprofit that has captured actor Matt Damon's philanthropic focus - Water.org. In an article in Forbes Entrepreneurs, the organization's CEO Gary White described how the organization is shifting its strategy to work through established microfinance companies. The nonprofit's efforts have delivered clean water and sanitation to more than one million people in India, Indonesia, Cambodia and the Philippines during the first 20 years of their work, and they expect their new model accelerate the impact to benefit the same amount of people every three months. Their new approach shifts from drilling wells and installing toilets, to financing those services and products. A pilot program has had a high repayment rate, and helped 320,000 access clean water and improved sanitation. Benefits align with both gender and income inequality SDGs (sustainable development goals) as well: about 99% of those receiving loans are women, and about 77% earn less than $4 per day.[8]

- **Severe water stress in Southern Africa**

  Chilufya Chileshe of the organization WaterAid outlined the stark need for clean water in a recent interview with news service Deutsche Welle. Chileshe noted that 60% of the world's population are living with water stress, and these numbers are expected to grow. Chileshe describes how Southern Africa is being impacted by climate change, migration to cities, the increasing industrial pollution, and competition for water from agriculture, all of which are placing greater strain on limited resources. In addition, she points to recent water crises in Cape Town and Maputo, cholera outbreaks, and plague in Madagascar as stark reminders of the need for clean water and sanitation. From a gender lens perspective, Chileshe points out that women and girls often suffer the greatest hardship, since they are the caregivers and need to walk ever farther in search of clean water.[9]

The Myth of Cheap Coal

- **In many cases, renewables are cheaper than coal**

  Carbon Tracker issued their "Powering Down Coal" report in November, revealing that 42% of the existing global operating fleet of coal plants were unprofitable in 2018, and 72% are forecast to be unprofitable by the year 2040. Their analysis of 6,685 coal plants assumes no additional climate or air pollution policies are put in place, and assumes fuel costs will fall over 10% between 2018 and 2040.

  Their conclusion, which they describe as "the myth of cheap coal": it is now cheaper to build a new renewable energy plant than to simply keep operating 35% of the coal plants that are operating at this time. This number jumps to 96% if you the analysis is taken out to the year 2030.[10] Long term energy investors will certainly want to ponder these numbers.

Are Lenders Missing a Turning Point?

- As renewables gain ground, many traditional lenders are apparently stuck in the mud. In their "Banking on Climate Change 2018" report, the Rainforest Action Network provided a Fossil Fuel Finance Report Card, giving many lenders a failing grade. The report notes that a number of major banks continue to fund "extreme fossil fuels", a term they apply to tar sands, Arctic, ultra-deepwater oil, LNG export, coal mining and coal power. On the positive side, they note that BNP Paribas had the best grades on average. The report lists following companies as the worst five lenders to extreme fossil fuels: China Construction Bank, Royal Bank of Canada, JP Morgan Chase, Industrial and Commercial Bank of China, and Bank of China.[11]

ESG Ratings

- **Data concerns regarding ESG Ratings, and evolving approaches**

  In a perfect world all investment opportunities would be rated in an unbiased and comprehensive manner. In reality, ESG ratings combine quantitative and qualitative assessments that are confined and constrained.

  At Pathstone, our ESG scoring helps clients understand how their portfolio holdings compare to widely used benchmarks along ESG dimensions. We recognize these processes are not perfect, and will strive to continually update our approach to incorporate the best methods, relevant issues, and current knowledge.

  Quality of data is impacted by companies' transparency, regulatory requirements for reporting, timeliness, and integrity along the food chain. Portfolio managers often cite three factors: a lack of relevant quantitative ESG information, a lack of comparability across firms, and an overall lack of quality and integrity.[12]

  An emerging markets equity team at Morgan Stanley recently noted that flaws of ESG data in emerging markets investments include lack of coverage, lack of standardization, and lack of transparency. The article in Fortune magazine also outlined how, in the absence of a quick fix, the investment firm BlackRock is turning to "big data sources" to better inform its sustainable investing perspective.[13]

  Fixed income managers, such as Breckinridge Capital Advisors, are increasingly integrating ESG data into their analyses, adding a perspective on risk not captured within traditional financial reports.[14] Fixed income manager Neuberger Berman encouraged credit rating agencies to apply ESG criteria in a methodical and transparent manner, disclose issuers that provide insufficient responses, and highlight systematic ESG risks.[15]

  ESG rating providers are constantly tweaking and revising their information. Morningstar and Sustainalytics recently introduced Carbon Risk Ratings to provide "a holistic view" of carbon risk, by focusing on the unmanaged carbon risks in a company's operations, products and services.[16] In addition, Sustainalytics is transitioning its core ESG rating framework to a new ESG Risk perspective.[17]

Notable New Reports, and an Ad

- **Fourth National Climate Assessment**

  Damage is intensifying across the country. In a major report from the heads of U.S. government agencies, climate change is seen as presenting growing challenges to human health and safety, quality of life, and the rate of economic growth.[18]

- **IPCC – 2018 Special Report on Impacts of 1.5 Degree Celsius Global Warming**

  The 2018 IPCC Special Report highlights the impacts of global warming. Human activities have likely already caused 1 Degree Celsius of global warming above pre-industrial levels, and at the current rate we are headed to a 1.5 Degree warming scenario between the years 2030 and 2052 (stated with ***high confidence***). Climate impact is expected to be much more severe with a 2 Degree Celsius rise than it will be with a rise of 1.5 Degree Celsius, since the impact of the warming worsens in a nonlinear fashion. Dramatic action is needed to avoid a rise of 2 Degrees Celsius.[19]

- **Climate Accountability Scorecard**

  The Union of Concerned Scientists published its analysis of eight major fossil fuel companies in their Climate Accountability Scorecard. They found that the companies are largely continuing their disinformation campaigns, and largely ignore a need to transition to a low carbon economy.[20]

- **Calls for a Revenue Neutral Carbon Tax**

  As members of the Climate Leadership Council, energy companies ExxonMobil, Shell, Total and BP have joined forces with The Nature Conservancy and Michael Bloomberg to call for "a consensus climate solution that bridges partisan divides, strengthens our economy and protects our shared environment," as outlined in a recent advertisement in the Wall Street Journal.[21]

Citations

1. Russell Gold. "PG&E: The First Climate-Change Bankruptcy, Probably Not the Last." Wall Street Journal. January 18, 2019. Accessed January 28, 2019. https://www.wsj.com/articles/pg-e-wildfires-and-the-first-climate-change-bankruptcy-11547820006?redirect=amp.

2. Brian Eckhouse and Eric Roston. "PG&E May Be the Business World's Biggest Climate-Change Casualty Yet." Bloomberg. January 15, 2019. Accessed January 28, 2019. https://www.bloomberg.com/news/articles/2019-01-15/pg-e-may-be-business-world-s-biggest-climate-change-casualty-yet.

3. Allie Goldstein, Will R. Turner, Jillian Gladstone, and David G. Hole. "The Private Sector's Climate Change Risk and Adaptation Blind Spots." Nature Climate Change. December 10, 2018. Accessed January 28, 2019. https://www.nature.com/articles/s41558-018-0340-5.

4. Richard Feloni. "BlackRock CEO Larry Fink Says within the next 5 Years All Investors Will Measure a Company's Impact on Society, Government, and the Environment to Determine Its worth." Business Insider. November 1, 2018. Accessed January 28, 2019. https://www.businessinsider.com/blackrock-larry-fink-investors-esg-metrics-2018-11.

5. Holman W. Jenkins, Jr. "CEOs and Politics Are a Bad Mix." WSJ Opinion. March 6, 2018. Accessed January 28, 2019. https://www.wsj.com/articles/ceos-and-politics-are-a-bad-mix-1520381248.

6. "Global Limited Partner Sustainable Investing Report 2018." Accessed January 28, 2019. http://www.brightharboradvisors.com/store_editor/file/2018 BHA Global Limited Partner Sustainable Investing Report_3.pdf.

7. Mark Carney. "Breaking the Tragedy of the Horizon – Climate Change and Financial Stability." Bank of England. September 29, 2015. Accessed January 28, 2019. https://www.bankofengland.co.uk/-/media/boe/files/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability.pdf?la=en&hash=7C67E785651862457D99511147C7424FF5EA0C1A.

8. Thorpe, Devin. "Matt Damon's Water Charity Takes Impact Investing Plunge." Forbes Entrepreneurs. December 19, 2018. Accessed January 28, 2019. https://www.forbes.com/sites/devinthorpe/2018/12/19/matt-damons-water-charity-takes-impact-investing-plunge/#6af720b84296.

9. Holly Young. "WaterAid: 'Southern Africa under Severe Water Stress'." DW. November 8, 2018. Accessed January 28, 2019. https://www.dw.com/en/wateraid-southern-africa-under-severe-water-stress/a-46208929.

10. "Powering down Coal: Navigating the Economic and Financial Risks in the Last Years of Coal Power." Carbon Tracker. November 30, 2018. Accessed January 28, 2019. https://www.carbontracker.org/reports/coal-portal/?mc_cid=7b048d57c8&mc_eid=8ec3952eac.

11. "Banking On Climate Change: Fossil Fuel Finance Report Card 2018." Rainforest Action Network (RAN). Accessed January 28, 2019. https://www.ran.org/bankingonclimatechange2018/.

12. "ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) SURVEY." CFA Institute. 2017. Accessed January 28, 2019. https://www.cfainstitute.org/-/media/documents/survey/esg-survey-report-2017.ashx.

13. Erika Fry. "Does Impact Investing Have A Data Problem?" Fortune. November 8, 2018. Accessed January 28, 2019. http://fortune.com/2018/11/08/does-impact-investing-have-a-data-problem/.

14. "Experts In ESG Integration." Breckinridge. Accessed January 28, 2019. https://www.breckinridge.com/investments/approach/esg-integration/.

15. Jonathan Bailey, Steve Flaherty, Chris Kocinski, and Kaan Nazli."Rating the Raters on ESG." Neuberger Berman Insights. December 19, 2017. Accessed January 28, 2019. https://www.nb.com/pages/public/global/insights/rating-the-raters-on-esg.aspx.

16. Lee, Jan. "Sustainalytics, Morningstar Release New Tools for ESG-Minded Investors." Triple Pundit. May 17, 2018. Accessed January 28, 2019. https://www.triplepundit.com/story/2018/sustainalytics-morningstar-release-new-tools-esg-minded-investors/12271.

17. "ESG Ratings & Research." Sustainalytics. Accessed January 28, 2019. https://www.sustainalytics.com/esg-ratings/.

18. "U.S. Global Change Research Progam, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II." Accessed January 28, 2019. https://nca2018.globalchange.gov/.

19. "IPCC, 2018: Summary for Policymakers. Special Report - Global Warming of 1.5 Degrees Celsius." Intergovernmental Panel on Climate Change (IPCC). Accessed January 28, 2019. https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/.

20. "The Climate Accountability Scorecard (2018)." Union of Concerned Scientists. 2018. Accessed January 28, 2019. https://www.ucsusa.org/climate-accountability-scorecard-2018#.XE9P_VVKhpi.

21. "Ad in Wall Street Journal: The Consensus Climate Solution." Climate Leadership Council. June 20, 2017. Accessed January 28, 2019. https://www.clcouncil.org/wp-content/uploads/2017/06/Climate_Leadership_Council_WSJ_Ad.pdf.

Disclosures

The information provided in this commentary is intended to be educational in nature and not advice relative to any investment or portfolio offered through Pathstone. The views expressed in this commentary reflect the opinion of the author based on data available as of the date this commentary was written and is subject to change without notice. This commentary is not a complete analysis of any sector, industry or security. Individual investors should consult with their financial advisor before implementing changes in their portfolio based on opinions expressed. The information provided in this commentary is not a solicitation for the investment management services of Pathstone. The graphs and tables included herein have been provided by commercial databases and, while we believe the information to be reliable, we assume no responsibility for any error or omission. The recipients of this communication assume all risks in relying on the information set forth herein. Past performance of any investment, industry, asset class or investment strategy is no guarantee of future performance.