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ENERGY COMMENTS

TOWARDS A CARBON-NEUTRAL 2050

APRIL 2021

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Towards A Carbon-Neutral 2050

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The Paris Agreement, negotiated in 2015 and ratified by circa 190 countries, establishes the long-term aim to mitigate the threat of climate change by "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels." It is expected that greenhouse gas emissions will be reduced to zero within the century. The implementation is based on nationally determined contributions (NDCs). NDCs are intended to be progressively updated every five years and 2020 marks the first update period (for detailed tracking on updated NDCs visit the Climate Action Tracker).

The need for enhanced urgency in mitigating climate-related risks is highlighted by the UN Intergovernmental Panel on Climate Change (IPCC) 2018 Report on global warming. The report updates the state of scientific knowledge on climate change based on an examination of over 6000 peer-reviewed publications and expounds on the stark difference between holding the increase to 1.5°C as opposed to 2°C above pre-industrial levels. The European Union, shortly after the IPCC's Special Report, stated its intentions to achieve net-zero greenhouse gas emissions by 2050. The document outlining the EU's aim for a prosperous, modern, competitive and climate neutral economy references the IPCC's warning that without the enhancement of climate action, the global average temperature could hit 2°C shortly after 2060 given the +1°C above pre-industrial current level and a 0.2°C per decade growth rate.

In 2019, the United Kingdom became the first developed country to cement in law its net zero greenhouse gas emissions target by 2050. Country-level commitment to a net-zero economy represents a major transformation. The UK's Committee on Climate Change (2019) estimates that the emissions target will cost circa 1% to 2% of GDP annually. The Chancellor of the Exchequer, at the time, warned on the delicate balancing act of value, jobs and government spending. To date, over 70 countries have heeded the call for stronger emission targeting and have committed to net-zero emissions by 2050 (IISD, 2019).

Japan and South Korea are two of the more recent countries to announce a 2050 carbon-neutral pledge. China has pledged to reduce emissions to nearly zero by 2060. The outcome of the 2020 US Presidential Election is also suggestive of enhanced action.

The increasingly ambitious country targets have triggered revised company level action. Companies face climate-change-related risks due to shifting regulation, technology and demand. Stranded assets are a front-burner issue and 2020 has underscored this reality.

The GHG Protocol is the most widely used standard by private and public sector organisations to; identify, measure and report emissions—sub-divided into Scope 1, Scope 2 and Scope 3. Emissions produced directly from owned or controlled sources are grouped into Scope 1 while Scope 2 represents indirect emissions from the generation of purchased energy. Scope 3 accounts for all other indirect emissions from activities across a company's value chain such as procured goods or services and business travel. Several companies have progressed beyond targeting Scope 1 and 2 emissions. Uncertainty over the pace of the transition has led some companies to monitor changes in regulation instead of progressively re-orienting for a carbon-neutral world by 2050.

Microsoft and Apple are amongst the companies most active on climate risk management. The companies have revealed targets inclusive of Scope 1 to 3 emissions. Microsoft has further announced a 2050 carbon-negative target to account for the company's history of emissions. Scope 3 emissions are the most difficult to measure and the largest source; over 80% of lifecycle emissions for oil and gas companies (WWF, 2019).

Many companies in the Oil and Gas sector remain strapped to targets related to Scope 1 and 2 emissions. There has been a slow and tentative march towards the inclusion of Scope 3. In June 2020, Carbon Tracker analysed and ranked the emission targets of several oil companies. BP placed amongst the top three sample companies. The company's strategy towards a 2050 net-zero-target is inclusive of Scope 3 emissions. The third quarter announcement entails a lower expectation for oil price, a pause to exploration activities in new countries, a targeted decline in production and annual multi-billion-dollar investments to position the company as one of the largest renewable-power businesses. Eni, Shell, Total and other European based oil companies appear to be more aligned to the climate agenda than US based companies due in part to the varying regulatory pressure (the gap is expected to narrow under a Biden led US government).

The niche to mainstream leap of sustainable investing presents an uphill battle for companies' that display poor emissions targeting. Investors will continue to demand a more climate friendly approach. Companies leading the preparation for a carbon-neutral world on the back of enhanced country-level emission targets, carbon pricing policies and the risk of stranded assets will reap the magnified sustainable investing flows in the primary and secondary markets.

Main takeaways:

- Governments are enhancing climate action, evidenced by their updated Nationally Determined Contributions, to achieve the Paris Agreement goals.

- The Carbon Neutral 2050 target of many countries has triggered company-level action. Most companies, especially in the Oil and Gas sector, remain strapped to Scope 1 and 2 emissions targets.

- Companies are increasingly incorporating climate-change-related risks and altering their business model to benefit from sustainable investment flows.