

Addressing climate change risk is the new reality

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As countries and companies cope with how to make the transition to a low-carbon economy, climate change is increasingly looked upon as a potential risk both in terms of likelihood and impact¹. From small startups to large corporations, failure to manage this risk proactively can translate into extensive financial and reputational harm - in some cases, lost revenue or even obsolescence.

In 2015, through the landmark Paris Agreement, countries pledged to limit the rise in average global temperatures this century to “well below” 2°C above pre-industrial levels and to pursue efforts to limit the increase even further, to 1.5°C². To further strengthen the path towards climate change mitigation and adaptation, in 2017, the Task Force on Climate-Related Financial Disclosures (TCFD) developed a framework for corporates to voluntarily disclose the financial impact of their climate risks.³ The framework has been backed by more than 100 companies, holding more than US\$11 trillion of assets⁴.

How climate change affects an organisation’s value chain

From the perspective of a corporate, two-forms of impacts exist - ‘first-order’ impacts and ‘second-order’ impacts. First-order impacts are direct hazards from climate change that can be measured in physical terms (mm of rain, temperature rise, sea level rise, acres of land burned and so on) and those which have the potential to affect specific regions or locations. Second-order impacts are those which affect the economic, human and ecosystems beyond the boundary of the organisation. These may include changes in the availability of natural resources, agricultural productivity, migration, economic indicators such as GDP and employment. Unlike physical risks, these are harder to predict and difficult to mitigate through traditional risk management approaches⁵.

A corporation is vulnerable to both transitional (policy, legal, technology, market, reputation) and physical (acute and chronic) risks pertaining to climate change. The impact of these risks goes well beyond the exposure of its facilities. It includes supply chains, distribution networks, customers and markets. Furthermore, a corporation’s resilience to physical climate impacts depends on its risk management and business plans, as well its governance mechanism towards adapting to climate risks.

Fast-tracking climate action

Between now and 2030, over US\$ 90 trillion is anticipated to be spent on infrastructure development⁶. These expenditures can make cities, energy, agriculture and other sectors sustainable, or they can add

¹ “Global Risks Report”, World Economic Forum, January 2018

² “Internal Carbon Pricing Primer”, WRI, March 2018

³ “Final report: Recommendations of the Task Force on Climate-related Financial Disclosures”, TCFD, June 2017

⁴ “Climate change is the new big risk for business”, Imperial College Business School, Oct 2017

⁵ “Advancing TCFD Guidance on Physical Climate Risks and opportunities”, EBRD, May 2018

⁶ “Why 2018 is the year for business to step up climate action”, World Economic Forum, Jan 2018

more carbon and drive global temperatures even higher. The time is set for corporates and industries to transform their role in creating a more sustainable world. Companies that prioritize clean technology and investing in low-carbon infrastructure are future-proofing their growth by factoring in long-term risk and positioning themselves as the winners of the low-carbon transition.

Alongside government action, corporates are also essential partners to achieve climate targets. In a forward-looking move, more than 2,600 commitments have been registered by corporations and investors, ranging from 100% renewables to emission reductions under the 'NAZCA' (Non-State Actor Zone for Climate Action) global platform established by the UNFCCC⁷. Through the 'We Mean Business' coalition's 'Take Action' campaign, 650 companies with a market cap of over US\$ 15 trillion have committed to taking bold climate action. From a strategic aspect, over 350 companies have defined targets under the 'Science based targets initiative' including brands such as Mahindra & Mahindra, PepsiCo, Nestle, HP, and Walmart amongst others⁸.

Pursuing and achieving these goals are also yielding benefits to these organisations. In 2016 alone, nearly US\$3.7 billion worth savings was accrued through 80,000 emission reduction projects implemented by around 190 companies⁹. Corporations also decreased around 155 million metric tons of CO₂ through various operational eco-efficiency projects, which is equivalent to shutting down 45 coal power plants for a year.

The path forward for corporates

For a corporate, the impact of climate change depends on where the company operates and what impacts may affect relevant locations and to some extent, depend on the company's activities. For instance, organisations whose production processes consume high volume of water, may be sensitive to drought and reduction of availability of water in the region. Similarly, companies with high energy consumption or significant use of labour may face challenges as average temperature rise can affect both energy costs and labour productivity. Industry located in coastal area are vulnerable to flooding and climate-related disaster, such as hurricane. A result-oriented approach are being adopted increasingly by organisations to address climate risk and seize the underlying the opportunities.

Climate risk and opportunity assessment



Climate disclosure



Together with the government, corporates have an inimitable opportunity to shape the national climate programme, thereby guiding businesses to invest with more confidence in the low-carbon transitional strategy. Companies should voice out loud, between now and the next UN climate summit to build the

⁷ Same as 5

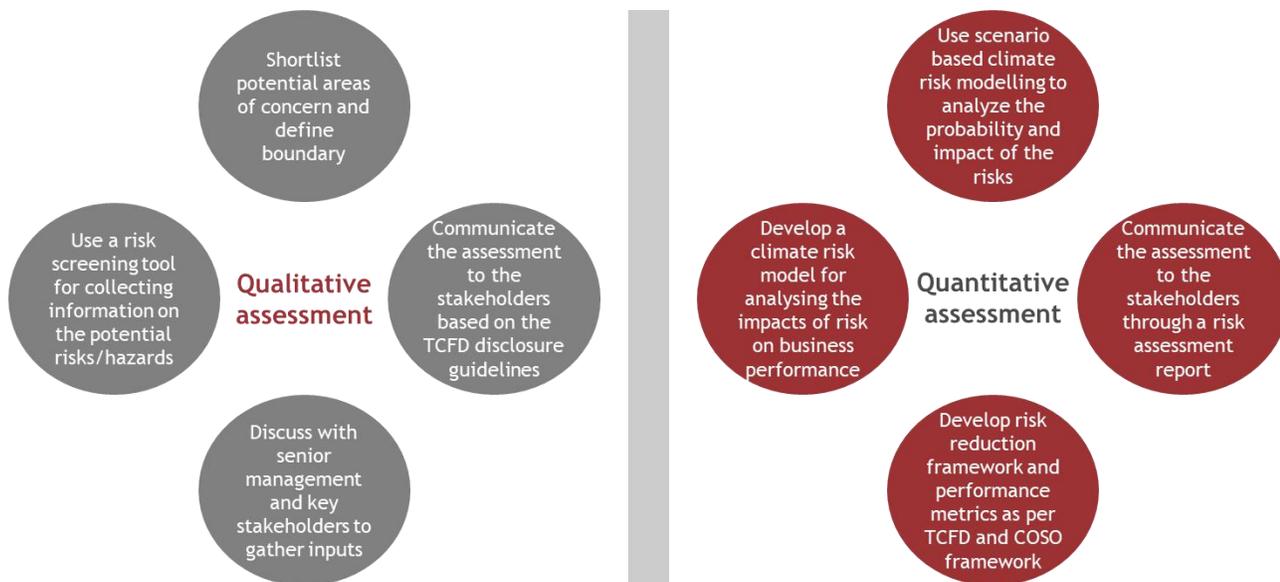
⁸ Same as 5

⁹ "Power Forward 3.0", WWF, Ceres, CDP, April 2017

business case that climate risk and financial risk are unavoidably linked, just as climate action and prosperity must go hand in hand. Businesses can also align their corporate goals relevant to the countries' climate goals, as suggested by the UN Global Compact (UNGC) and World Resources Institute (WRI) in the Global Action Playbook 2018. By explaining how reducing emissions provide economic and social benefits, corporates can trigger actionable government policies and targets.

The ideal approach to be adopted by corporates

As the risks are evolving and emerging, corporates should leverage existing resources, guidance frameworks, tools and methodologies to prepare themselves for the future. Although large organisations have started redefining the business strategies to meet the 2°C and 4°C scenarios, other organisations could adopt the following approach:



Such an approach could lead corporates to understand what is the most relevant and pertinent risk for the organisation's success and failure. The assessment can also bring innovation and the application of technology to prepare the organisation for a 'climate-constrained' world of tomorrow - especially the more vulnerable sectors, such as agro-based or natural-resource based industries.

Despite the uncertainty revolving around the forecasting of risks and future emissions, now is the right time for companies to get ahead to reap the benefits. In addition, the mounting pressure from shareholders, institutional investors and governments would certainly drive forward the demand for greater transparency and risk management of climate risks. For corporates who are reluctant to adapt, the climate-risk will only get prominent.