Theme Paper

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Theme: Collaborative Leadership for Environment Protection and Climate Change: Strategy for Creative Solutions

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For many stakeholders of contemporary companies the number one longer-term issue, and an increasingly urgent one, is protecting the environment and climate change. Globally, business and other human activities continue to pollute the environment and concentrations of C02 and other long-lived greenhouse gases continue to increase (UNEP, 2019). While many business leaders focus on continuing along an unsustainable "business as usual" path of growth and development, discontent with elites is growing (Stern, 2019). Young people in various countries around the world who are worried about the consequences that will bite in their lifetimes have been called "the climate generation" or "generation change" for "rising up to save its future" and protest at the lack of commitment to transformative change (Maynard, 2019). The likely cost of inaction in a range of inter-related areas is escalating (UNEP, 2019).

Global Nature of Environment Crisis

Flows of polluted air and water cross national boundaries and the consequences of global warming, reduced biodiversity and many degraded eco-systems do not recognise them. An understanding of interconnectedness and the history of our planet and the many thousands of years for which the consequences of our current activities such as the burning of fossil fuels may last, suggests hundreds of thousands of future generations may pay a price for our inaction (Crane, 2018). Lord Stern (2015) has asked: Why are we waiting? Are our priorities, board practices and governance arrangements, and the functional and departmental structures of our organisations acting as barriers to the rapid adoption of the mix of multidisciplinary actions needed to address the challenges we face and seize related opportunities?

Most, if not all, areas of corporate operation are either already or may soon be affected by climate change. Boards need to take responsibility. Because of the scale of both challenges and opportunities, increasingly collective action, collaborative leadership and creative strategies are required. In areas and locations where urgent action is needed, does lengthy discussion of the costs and benefits of cooperation, and whether to take the initiative or wait need to be replaced by a sense of urgency and the imperatives of crisis management?

Are many directors unaware of wider public concerns? If they share them, what is holding them back? Are they overly cautious, uncertain of how to address a combination of inter-related issues, or afraid of the downside risks of taking the initiative while discounting the possible benefits of being a first mover? Are boards overlooking the human, social and environmental consequences of current approaches to growth and development (Raworth, 2017)? Do more boards need to adopt alternative approaches, or could they address certain undesirable consequences by redefining corporate purpose, excellence, quality, performance, productivity and success, for example in terms of reducing environmental and resource footprints and addressing climate change?

Environmental Governance for Global Challenges

The scale of environmental damage from emissions that pollute drinking water to the plastic found in the world's oceans, and the accelerating destruction of eco-systems, is alarming to many stakeholders. As already alluded to, younger people seem particularly concerned with business conduct, with one survey of

millennials believing that impacts upon society and the environment should be a top priority (Verschoor, 2018). Millennials also prefer to work for companies they perceive as more socially responsible (McGlone, 2011). Perceived inaction may alienate this group upon whom the future of businesses will increasingly depend.

Directors should be alert to stakeholder concerns and their interests should be taken into account when board decisions are made. Are new governance arrangements required in situations in which speed is of the essence, green growth solutions have to be quickly developed and scaled up, incremental change will not be sufficient and transformational leadership is needed? Where a mix of policies and actions are required that cross functional and organizational boundaries, who needs to be involved and how can their formulation and implementation be governed and differences of opinion between parties addressed?

At a national level, policy instruments and governance may also need to be reviewed and a more systematic and comprehensive approach to both a top-down and bottom-up assessment of policy effectiveness adopted (UNEP, 2019). Increasingly stakeholders may expect environmental and climate change issues to feature more prominently in corporate mission statements, priorities, objectives and strategies, and be reflected in business, excellence and operating models and risk management, investment and other practices. Boards require listening leaders who are aware of stakeholder concerns (Coulson-Thomas, 2014).

Conflicts between generations and different family members have long been a feature of the governance and management of family businesses (Levinson, 1971). Might these be exacerbated by differing views on the possible and likely consequences of the exponentially increasing costs to future generations of slow and inadequate responses to the challenges of climate change? Debates in some boardrooms of family and other companies are prolonged by the difficulty of obtaining independent, objective and multi-disciplinary advice and assessing the impact of a mix of environmental and other policies. Evaluation can require expert opinion and a mixture of quantitative and qualitative approaches (UNEP, 2019).

UN Sustainable Development Goals (SDGs)

In the international arena, the United Nations (2015) SDGs represent a useful starting point for the discussion of collaborative action involving leaders of both private and public sector organisations, as they embrace both environmental challenges and requirements for social transformation. They might be the key to formulating shared objectives, rebuilding trust and aligning business, regulatory and intervention strategies. Although both social and technical innovation may be needed to address SDGs, bottom-up and local approaches are occurring and encouraged by the UN Environment Programme (UNEP, 2019). For some directors accepting wider responsibilities and stepping up to the challenges involved may require a change of perspective. For boards it may necessitate away days for fundamental reviews of assumptions and the role a company could play in the development of collective solutions.

A former President of Ireland has described the impacts of climate change as fundamentally unfair (Robinson, 2018). Some people are affected much more than others through no fault of their own and some of those who are least influential are at greatest risk. Lord Stern (2019) believes that the pursuit of a zero-carbon economy will generate strong and inclusive growth that can result in a more acceptable climate and assist the delivery of SDGs. Are sector strategies required? For progress towards their achievement to be better monitored, do SDGs need to be grouped and a more concise and quantitative set of targets agreed (UNEP, 2019)?

Accepting wider and collective responsibilities may require a review of corporate investment models and decision making practices. Are social and environmental as well as financial costs recognised? Are business strategies aligned with environmental and other dimensions of SDGs? There may be externalities to assess and internalise, whether the costs of natural and man-made disasters or the benefits of eco-innovation.

Reviews of corporate purpose and business models in the light of wider considerations and the interests of a broader range of stakeholders over a longer time horizon could involve a shift of emphasis from materialistic growth and its quantitative indicators to experiential, sustainable and more inclusive growth and to the quality of life and issues such as food security. Are boards ready for this? Are they using applications of decision and performance support to increase awareness and help employees, customers, supply chain partners and others understand the consequences of different options and make more sustainable choices (Coulson-Thomas, 2012a & b, 2013)?

Climate Resilient Smart Cities and Innovative Solutions

The rapid urbanisation that has occurred in many parts of the global and the associated sprawl, congestion, waste and pollution that has resulted mean that the transformation of cities and conurbations has become the key to improving the quality of life for large numbers of people. The development of climate resilient and water-sensitive smart cities represents a prime arena for public-private collaboration in the development of new models of sustainable urbanisation and collective action to improve air quality, transportation and working and living environments. Are companies and their strategies contributing enough to improved air and water quality, pollution and waste reduction, climate mitigation and sustainable urbanization? When a variety of agencies and public and private organisations come together peer pressure can encourage collective agreement (UNEP, 2019).

There are many opportunities for innovation in fields as varied as electric and driverless vehicles and geo-engineering, and for companies to contribute to India's strategy to meet its voluntary obligations under the Paris Agreement (2015). Should companies as well as architects and planners be more proactive in using satellite and other technologies and data on environmental trends to influence the design and construction of the built, operating and living environment (Jackson, 2018)? Would this help them and communities to better cope with the impact of global warming? Increasingly, boards need to understand the particular challenges of coping with innovation related to disruptive technologies (Yu and Hang, 2010).

In relation to the built environment, and particularly cities and the mega-cities emerging in different parts of the world, are the approaches adopted by planners and developers too incremental and overly focused upon adaptation and mitigation of the impacts of climate change, rather than the more imaginative design and creation of new approaches to urban living and new models of cities (Dobraszczyk, 2019)? An equivalent question could be asked about patterns of living and sustainable land management in rural areas and whether there are alternatives to the current use of this finite resource and the urban-rural divide (UNEP, 2019).

Sustainable Energy Supply Options

Smart meters and their hoped for impact are a feature of some smart cities. For both urban and rural areas greater energy efficiency and a more sustainable supply of affordable and eco-sensitive energy that reduces emissions contributing to global warming could help to both improve the quality of life and tackle climate change. For companies, the transition to clean energy, more efficient devices, energy diversification and continuing innovation should result in greater security of supply and greater cost-effectiveness. They also create additional opportunities for existing and new players to participate in the energy sector. Is there scope for more experience sharing across cities and greater involvement in international alliances?

Power generation with fossil fuels is a major contributor to global warming. Progress in energy efficiency and transition to low-carbon energy sources is continuing, but is still not sufficient to achieve Paris Agreement (2015) targets (UNEP, 2019). While the major sources of CO_2 and other greenhouse gas emissions may be known and potential solutions identified, do more companies need to understand obstacles and barriers to adoption and implementation and find ways of overcoming them, either by individual or collective action? For example, there are availability, perception, cost and infrastructure issues that those seeking to produce and market electric vehicles need to address (Bennett et al, 2016).

Should boards pay more attention to life-time costs when decisions are taken? For example, do clean energy transition strategies embrace the disposal and/or recycling of solar panels? The decommissioning of nuclear power stations and the cost of treating and storing nuclear waste illustrate the consequences of turning a blind eye to future costs that are difficult to estimate. Ignoring them can impose an unwelcome burden on future generations, as is the case with the disposal of thousands of offshore oil and gas platforms (Rowe, 2019). Are more eco-sensitive and cost-effective sustainable energy and power infrastructure options and solutions available? Could more be done to encourage energy efficiency and diversification?

Pollution Prevention and Waste Management

Environmental pollution is a major source of danger to human health and that of the planet, while the disposal and discharge of waste also has a negative impact on eco-systems and our health (UNEP, 2019). It is in city and urban areas that the challenges of pollution, sanitation and sewerage and solid waste disposal are often most acute. Integrated and more sustainable sanitation, sewerage and solid waste management solutions are sought. Coping with hazardous and e-waste, mitigating noise, vibration and air pollution, recycling and generating energy from waste also represent significant areas of opportunity. How will boards respond?

Are enough directors in their executive suite offices focused on the flows of sewage beneath their buildings and mountains of accumulating waste? In relation to India, perhaps nothing better illustrates the gulf that can exist between the rhetoric of expressions of concern and the reality of what happens on the ground than the flows of raw sewage and industrial effluents into the waters of the Ganges and the enigma and paradox of the most sacred being among the most polluted (Sen, 2019). Once again, integrated solutions are required. In addition to environmental benefits these could help to restore trust and build the better brand reputation that is associated with higher than average financial performance (Dowling, 2006).

Given the extent to which the oceans offer opportunities ranging from inshore fish farming to offshore deep ocean mining, should more boards be looking out to sea? Fish already provide over 3 billion people with over 20% of their dietary protein and a higher proportion in some areas of food insecurity (UNEP, 2019). Reducing the flow of oil, chemical, plastic and other pollutants into rivers and the oceans can both improve the quality of life and open up new leisure opportunities for urban and coastal communities. It can also represent a cause that engages stakeholders. Early adoption of environmentally friendly activities and offerings by some can exert a social influence upon others to follow their lead (Axsen et al, 2013).

Water Crisis Management

Water represents another arena of opportunity. Fresh and usable water supplies in relation to growing demand are a serious problem in various parts of the world (Gleick, 2014). Many fresh water eco-systems are also degrading. Water has been particularly significant for the history and development of India and surrounding countries (Amrith, 2018). The Puranas advise conduct to prevent atmospheric and water pollution (Renugadevi, 2012). The various impacts of climate change, whether upon meltwater flows into rivers or monsoons, also have consequences for large numbers of people many of whom are in coastal areas and vulnerable to cyclones and storm surges. Imaginative, affordable and urgent mitigation is required.

The per-capita availability of fresh water is decreasing with population growth and it also mobilizes and amplifies risks to human health and the environment caused by human activity (UNEP, 2019). In many areas there is a growing shortage of water and much of what exists is polluted. This is a problem that is being exacerbated by climate change. It is particularly acute in some urban areas such as Bengaluru, while in rural areas it is driving some farmers to suicide. Competitive struggles to obtain and control supplies of oil have led to greed, rivalry and conflict (Auzanneau, 2018). How much more likely is it that wars over access to water will occur? Will more businesses actively contribute to tackling aspects of the water management crisis before it is too late to prevent the spilling of blood as well as effluents?

There are opportunities for individuals and organizations and the agricultural, industrial and domestic sectors to use water more efficiently by reducing waste and increasing recycling and reuse. Sustainable development can be a source of competitive advantage (Pop et al, 2018). Are companies undertaking sustainability and opportunity audits? Government, regulatory and collaborative action involving the industrial, construction and other sectors could be the key to increasing water supply by interlinking rivers, replenishing water tables, desalinating sea water and improving fresh water eco-systems. Who or what could be the catalyst to bring together potential public and private sector collaborators?

Green Growth and Market Solutions

There are many opportunities for green growth and market solutions to the challenges overviewed above. Lord Stern (2019) believes the policies required to unlock a new, sustainable and inclusive model of growth can be identified and the finance and technology required to make a rapid start is available. Will green banking and further innovation fill any remaining gaps? What is holding us back from more imaginative and determined action? Within boards, is there the will and leadership to respond to growing public concerns with corporate and collaborative action? Might fiscal incentives and statutory intervention help?

Individuals, large and small companies, the Government, regulators and a variety of public bodies all have their part to play. How their efforts are coordinated at local, national and international levels can be the key to success, but how many companies can contribute the programme management and other skills required? In one survey undertaken for the UN Global Compact, almost all CEOs of global companies felt that sustainability should be considered when thinking about corporate strategy and operations (Perrott, 2014).

Boards can be critical in recognizing concerns, initiating debates and engaging stakeholders. They can provide leadership by prioritizing and main-streaming environmental, sustainability and climate change concerns and by adopting and implementing green growth business models, strategies and policies. Companies could aspire to leadership within sectors such as green banking, insurance, energy, design, construction, education and infrastructure. How many will do so? How many directors and boards will provide the leadership required? How can environment protection be embedded into corporate strategy and their DNA?

In relation to achieving aspects of certain SDGs further innovation is needed (UNEP, 2019). The developments required to more confidently address such environmental issues and climate change will not occur simply because boards wish for them. Sustained innovation by larger companies can occur, but it can be a challenge for directors and senior management in view of the need to carefully balance different requirements and run existing businesses as well as create new ones (Pisano, 2019). What should the role of boards be in kick-starting action to develop, test and scale up alternative approaches and models? How could they better engage with scientific expertise and innovators? How can MSMEs, entrepreneurs and regulators help in developing green market solutions? In some areas, is it already too late for start-up entrepreneurial businesses to achieve the scale needed for a global impact? How can MSMEs and large companies work together to address this conundrum?

Collaborative Responses

Appropriate collaboration can be effective. International action has been successful in tackling problems caused by ozone-depleting substances and certain chemicals, but in many areas more needs to be done (UNEP, 2019). Governments, utilities and infrastructure providers can have an important role to play in coping with the macro effects of lots of individual decisions, for example in providing incentives for the recharging of electrical vehicle batteries to occur at times that can be accommodated by available power supplies. Will they be able to work together? Will any public intervention be flexible, thought through and affordable to those affected? Will boards be able to inspire the creativity, enable the innovation and support the entrepreneurship that is required (Coulson-Thomas, 2017a & b)?

Consistency and the avoidance of conflicting priorities, policies and interests are important. New business models can impact upon sustainability, but when innovation and changes are considered other considerations may impact upon environmental benefits (Schaltegger et al, 2012). For certain companies there may be a paradox in that corporate processes designed to ensure that activities and conduct are responsible and ethical might actually inhibit innovation that would benefit the environment (Baucus, 2008). Do some boards need to devote more effort to ensuring that environmental and other objectives are aligned, resulting initiatives are not in conflict and reward and promotion policies do not encourage different behaviours?

Boards need to ensure that obstacles to progress are identified and intended steps are taken. Sometimes so many barriers may be found that companies might face a challenge in determining which to address first (Berkeley et al, 2018). Tackling sufficient of a combination of them to achieve progress may require a flexible programme plan that coordinates the contributions of a number of departments, working parties and projects. How should boards ensure companies have access to the creative, scientific and entrepreneurial skills needed to participate in networks of relationships and collective action?

Organisations that act responsibly may find it easier to attract and retain the people they require to implement their environment and other strategies. Other things being equal and when looking for employment, graduates are more likely to want to join companies that are environmentally conscious (Hanson-Rasmussen et al, 2014). Companies that focus upon sustainability also have a lower staff turnover (Pop et al, 2018).

There may be multiple pathways to achieving the required environmental improvements within SDGs and the use of different model-based scenarios may help in their identification (UNEP, 2019). Will boards commit the effort required to develop them? Evidence suggests that there may be more synergies than trade-offs, which suggests the prospect of a virtuous spiral of increasing financial, lifestyle and other benefits for those that make the effort (Stern, 2019, UNEP, 2019). The exercise of environmental leadership may be with the grain of ESG investor and other stakeholder opinions and simultaneously achieve multiple objectives. It might also rebuild reputation, trust and inter-generational rapport and ensure a better future.

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Further Information

The 2019 World Congress on Environment Management and Climate Change is organised by India's Institute of Directors (http://www.iodglobal.com/). Further information on the convention can be obtained from: https://iodglobal.com/21st-wcem-2019.html

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