

Business action

The case for sustainable management strategies is strengthened by the threats climate change poses to the private sector — companies face up to the challenge.

Natural resources are, and will always be, essential to the lives of people around the world. The intensive use of those resources, in many regions and on different timescales, as a result of socio-economic development, has contributed to increased living standards. However, the consequences of overusing resources are now threatening our desire for progress and development. Experts, governments, civil society and businesses have become aware of the magnitude of the crisis and the impending risks to the continuation of our good lives — a process that led to the formalization of the concept of sustainable development. The most widely accepted definition, introduced in 1987 by the Brundtland Commission of the United Nations, describes sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (<http://go.nature.com/aGXVCS>). Since then, sustainability has climbed the agenda of decision makers at local, national and international levels.

Meanwhile, the danger posed by climate change to the future of our societies led to the establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988 by the World Meteorological Organization and the United Nations Environment Program, in recognition of the need to assess climate change and its impacts and to formulate response strategies. Some of these must be ‘adaptation strategies’, as scientists warn that the changes occurring to the atmosphere are largely irreversible and we will need to cope with the consequences. Since the first IPCC assessment report in 1990, the idea of planning to alleviate the adverse impacts of climate change made its way into the literature, and lately, into policy planning.

Sustainable development and adaptation to climate change are intertwined issues — they both deal with the dynamic relationships between society and the natural environment. They cry for solutions as much as for conceptualizations. The solutions they seek often involve improved management and planning practices to make our

communities thrive within the boundaries of nature. They require new indicators to guide policy makers and can only succeed if a variety of stakeholders participate in the solution-seeking process. Indeed, in its recently released fifth assessment report, the IPCC recognized the role of climate adaptation strategies to achieve sustainable development (<http://go.nature.com/cTWirY>). Sustainability and climate adaptation have connected and action-oriented agendas and therefore cannot do without the participation of the private sector. Businesses are traditionally innovators and are mostly concerned with finding practical solutions. They are increasingly stepping forward as key players to identify new sustainable strategies for the benefit of their own operations as well as society. To give an example, many companies are particularly concerned about water availability and recognize that it represents one of the biggest risks to staying in the market and prospering in the immediate future, as reported by the World Business Council for Sustainable Development — an organization of companies that galvanizes the global business community to create a sustainable future for business, society and the environment (<http://go.nature.com/vtYscN>). Companies continue to be profit-making entities but they are now aware that contributing to societal well-being paves the way to a more promising business future. They are eager to encourage collaboration and are interested in telling their sustainability stories and making their experiences salient to their competitors as well as to other decision-making bodies and society at large.

It is for all these reasons that we at *Nature Climate Change* believe it important to highlight the views and work of the businesses contributing to the broad sustainable development agenda, as illustrated this month, for the first time, by a collection of business leaders’ opinions in our Focus ‘Water risks in the private sector’.

Sustainably managing water resources in the face of population growth and, at

the same time, coping with the impacts of extreme weather exacerbates the challenges faced by water companies as well as agribusinesses. Peter Simpson tells us about his vision of the water services of the future, the need to increase end-users’ awareness of their role in the water cycle and about the importance of designing new water governance frameworks (page 311). Yet, no matter the commitment of self-motivated private actors, water expert Arjen Hoekstra emphasizes the fundamental role of the government to address current and future water risks (page 318). New water-use regulation is necessary, and this must be based on robust metrics. New metrics will certainly be welcomed by businesses within the food chain, such as retailers. They need to understand the water-use synergies and trade-offs along the entire food supply chain, which is expanding globally. Companies relying on global chains are more exposed to extreme events, such as droughts, and their consequences for food production, as highlighted by Paul Kelly (page 314). Finally, understanding the potential for local-level synergies allows big companies to implement integrated and customized solutions that address more than one single issue. Andy Wales tells us about the development of a local supply chain in India to grow malting barley and manufacture beer that simultaneously generates water and energy savings while increasing the income of local farmers (page 316).

The private sector stories in this Focus are the result of big collaboration efforts facilitated by the Cambridge Institute for Sustainability Leadership (CISL), University of Cambridge, UK (www.cisl.cam.ac.uk) — an initiative that brings representatives of the private sector together to understand the challenges and opportunities for businesses embarking on sustainable practices. It is through platforms like CISL that companies seeking new business strategies for coping with limited natural resources and the impacts of climate change can gain novel and useful insights into the issues at stake, identify potential partners and contribute to the welfare of communities. □