

# edie Live explores sustainability megatrends



## PART 1 - CLIMATE CHANGE

Kicking off edie's new series of thought-leadership articles on the global impact of megatrends, the Climate Group's corporate partnerships director *Mike Peirce* explores how climate change is radically changing the way we do business.



Mike Peirce is corporate partnerships director at The Climate Group. He joined The Climate Group in 2017 to lead its portfolio of activity with business, including its programs on renewable energy (RE100), energy productivity (EP100), electric vehicles (EV100) and LED lighting.

2016 was the hottest year on record and the third consecutive record-breaking year of temperatures. Of the 17 hottest years ever recorded, 16 have now occurred since 2000, and scientists expect this pattern to continue.

Already, global warming is causing extreme weather events like floods, droughts, storms and heatwaves to occur four to five times more often than they were pre-industrial revolution. Meanwhile, global water demand is set to reach a crisis point within the next few years, with the UN predicting a 40% shortfall in potable water by 2030, exacerbated by droughts and rainfall patterns that are becoming more erratic with climate change.

Encouragingly, positive action is being taken: the Paris Agreement signed at the end of 2015 saw governments agree to take the steps needed to limit global warming to an average of two degrees above pre-industrial levels, and to pursue efforts to limit it to 1.5 degrees.

But for many, the consequences of these mitigated global warming levels will still be stark: a 1.5-degree increase in the temperature of the planet could see as many as 291 million people living on land that will eventually become submerged in water due to sea level rise.

At two degrees, parts of southwest Asia, including well-populated regions of the Persian Gulf and Yemen, may become uninhabitable without permanent air conditioning.

The pattern of climate change varies significantly by region of course and, whilst the number and scale of extreme weather events continues to rise across the globe, the impacts are often local.

The implications for any business are therefore highly dependent on the nature and location of its operations and supply chains, and the perspective of regulators, customers and consumers in its key markets. ▶



Whether it is severe flooding or drought impacting a firm's direct operations, or resource-scarcity issues impacting the supply chain, the effects of climate change can be hard to anticipate and manage for any organisation, no matter its size, industry or location. This complexity and uncertainty is part of the reason that investors now have to work hard to understand the short and longer-term impact of climate change on sectors, markets or asset classes.

## The business response

At the most basic level, business executives are increasingly aware that climate change presents a fundamental threat to the wider economic system in which their organisations can thrive. Many companies have also generated strong evidence of the implications for their commercial performance – from the access to and cost of resources, to the resilience of their plant to flooding, and the expectation of a changing regulatory environment.

We can take just one example – the consumer goods sector – to see leading companies remarking on the vulnerability of their sector to climate change. In the annual report of The Climate Group's 'RE100' renewable energy campaign, Nestlé's head of environmental sustainability Pascal Greverath stated: "Climate change is a huge risk to the long-term supply of safe, high quality ingredients for Nestlé's products as crop yields fall and production areas shift." Unilever's chief supply chain officer Marc Engel added: "The consumer goods sector is vulnerable to climate change; the increasing likelihood of extreme weather events such as floods and droughts poses a threat to our supply chains and operations."

An increasing number of companies are taking a leadership stance in response to issues of significant climate impact which also represent real commercial risks and opportunities. Many are working to source 100% renewable energy to power their operations, and are encouraging their suppliers to act, too. "Going 100% renewable will deliver on our consumer promise to deliver brands that are responsibly produced in a world of finite resources," said Unilever's Engel.

Nestlé's Greverath added: "We are determined to play our part in taking climate action by purchasing renewable energy. It's essential for the long-term survival of our business; not just a short-term payback."

Other sustainability leaders are making commitments to improve their energy productivity in order to maximize the

economic benefit from every unit of energy they consume. In the US alone, companies doubling energy productivity by 2030 will save \$327bn a year in energy costs, add 1.3 million jobs and reduce CO2 emissions by 33% below 2005 levels. Globally, fossil fuel bills could be slashed by more than €2trn and more than six million jobs could be created by 2020.

These two key opportunities of renewable energy and energy productivity tally with those identified by the Business Commission for Sustainable Development as presenting the greatest potential economic value in the transition to a sustainable economy. The Commission's 2017 report, Better Business, Better World, identifies \$12trn of market opportunities across four economic systems: food and agriculture, cities, energy and materials, and health and well-being. Within this total, mobility systems represent the greatest potential value at over \$2trn in 2030, with energy efficiency opportunities of \$1.3trn identified, and clean energy of \$1.2trn.

## What can YOU do?

The sustainability professional can make a significant contribution in this context – if the path is not always simple to navigate amidst competing organisational priorities. You can use your access to knowledge and networks within and beyond your organisation to generate a set of shorter-term tactics – 'quick wins' – alongside developing a compelling narrative of longer-term change for the organisation. **A few key other steps are likely to include:-**

- Getting on top of what the data means for your company – identifying and assessing the most significant implications of climate change across operations and markets.
- Scoping practical areas where your company can feasibly and realistically make a step-change in its performance and climate impact.
- Communicating the scale of commercial opportunity and risk in language that works for executives in your company.
- Supporting these executives by connecting them to companies that are already taking action; and joining corporate initiatives that are focused on peer learning and sharing best practice.

There is a critical role that a few leading businesses – from many different sectors – can play in helping to reshape the wider energy system. In this way, the sustainability professional can extend their impact beyond the immediate limits of the company, and make a real contribution to driving climate action at scale. ■

## Sustainability megatrends at edie Live 2017

This new series of thought-leadership pieces will provide an overview of the environmental and social impacts of the world's megatrends; exploring how they are helping to shape the low-carbon, resource-efficient business of the future.

The series will culminate with a high-level discussion focused on megatrends at the Strategy and Innovation conference on day 2 of edie Live at the NEC Birmingham, 24 May 2017. From climate change and resource scarcity to socio-economics and technology as an enabler, this half day addresses the top level trends that answer the question 'Why act and what happens if we don't?' [Find out more about edie Live 2017 and get your free two-day pass here.](#)

From dangerous levels of pollution to unpredictable rain patterns and drought, the impacts of climate change are already being felt, but solutions are available

**edieLIVE**  
Energy/Sustainability/  
Resource Efficiency  
23-24 May 2017 / NEC Birmingham

