

# Time for action

Climate change is accelerating, and businesses need to act now if they are to achieve a just transition to the new reality

..... BY ALYSSA GILBERT

**E**ven with committed actions to reduce greenhouse gas emissions, climate change will have an impact on a wide range of social and natural systems, including the global economy and businesses. These impacts are the result of the physical effects of climate change translating into real-world problems for people and businesses.

It would be difficult to avoid the topic of climate change risk these days. Just before the coronavirus hit, public interest in the UK was at an all-time high, and recent polls have indicated that despite a renewed prioritisation of the economy and health brought about by COVID-19, environmental issues are still extremely important to many.

## Commitments

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This public concern is reflected in recent international positions. In 2019, the UK was the first to commit to a target of reducing its greenhouse gas emissions to net zero by 2050. Now, China, Japan and South Korea all recently announced targets to reduce their emissions of greenhouse gases to net zero – where the amount of greenhouse gas produced is the same as the amount



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removed from the atmosphere. This is expected to happen in 2060 for China and 2050 for Japan and South Korea. The former vice-president Joe Biden, the US president-elect, has made climate change a significant part of his election platform, and it is now one of the four central areas of his transition plans. Global businesses are also putting long-term climate change goals in place, and making strategic decisions based on the urgency of this challenge including actors in the oil and gas sector, such as Ørsted and BP.

These commitments to reduce greenhouse gas emissions reflect a growing understanding that the impacts of climate change will simply become unmanageable if we continue to emit greenhouse gases at our current rate. We need to make those reductions sharply and immediately. Human activity has already caused a global average temperature

increase of 1.1C since pre-industrial times, and this temperature increase is, in part, responsible for recent heatwaves, wildfires and more intense tropical storms, and the attendant human impact.

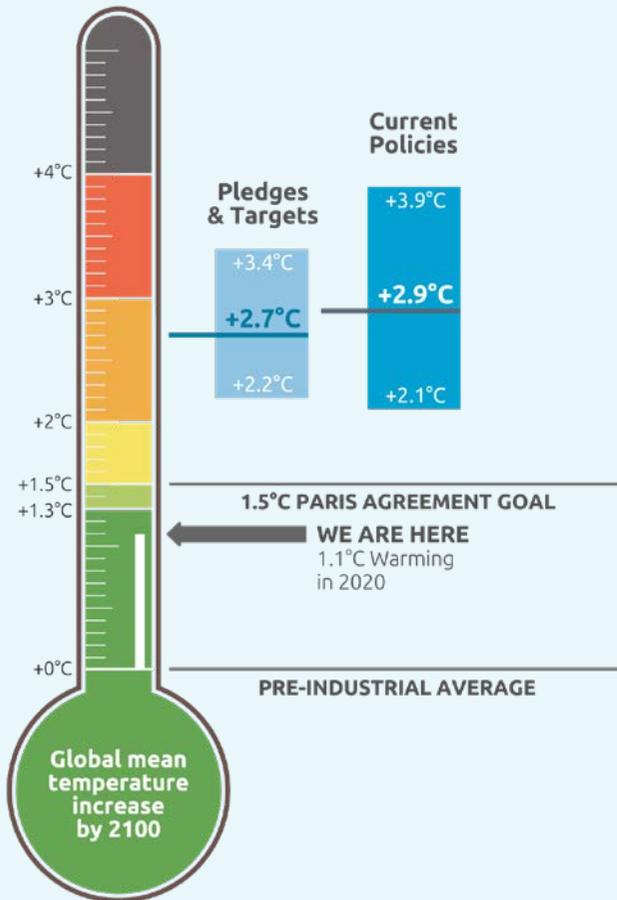
However, while recent increased commitments are welcome and will help reduce the scale of future damage, our current trajectory already means that we will have to face some inevitable impacts of climate change.

### What are these risks?

The initial physical risks include increased average temperatures around the globe. Based on current policies, we are on track for a 2.9C average global temperature rise (see *Climate action tracker*). Do not be misled though. This figure reflects an average temperature increase.

“ Major cities including London will face increased risk of flooding – tidal, river and flash flooding – and significant heatwaves

## CLIMATE ACTION TRACKER



Source: Climateactiontracker.org – global update

– tidal, river and flash flooding – and significant heatwaves. If global temperatures do rise by 2C above the pre-industrial average (and we are already at 1.1C), a summer like the exceptionally hot summer of 2018 could be expected one in every two years. In built-up areas, heatwaves can be up to 10C hotter than the surrounding countryside due to the urban heat island effect – heat concentrating in cities due to the density of concrete and buildings.

The effects of climate change in other parts of the world can be disruptive to food supply chains, for example, leading to shortages and price rises in some cases. All of these impacts are felt more acutely by people with lower incomes, who are more vulnerable, and less resilient. The effects on these communities can lead to worse health outcomes and greater economic impacts (sometimes in relative terms, and sometimes in total economic terms).

Changes to precipitation patterns are a cause for concern too, even in countries perceived as quite wet, with drought and water shortages more likely in regions like southeast England. Water companies in the UK are already working towards more efficient water use to help manage this risk. Water shortages also have the potential to impact other sectors, such as the power sector, which relies on water for cooling, as well as the agricultural sector. Globally, these changes will affect different communities in different ways and have the potential to exacerbate existing inequalities, potentially triggering human migration, social instability and conflict in some parts of the world under a perfect storm of factors.

### Business impact

But what does this collection of impacts, which are so varied around the world, and across populations, mean for businesses? These changes bring both opportunities and risks. The risks for businesses can be broken down into three types: physical risks, transition risks and liability risks.

First, physical risks relate to the direct impacts on your sector caused by the changing climate. These include those described earlier – increased temperatures, changed

## “ Businesses that are flexible and nimble may find it easier to navigate the transition to a net-zero, climate-resilient future

Global warming will often be felt unevenly across different areas, for example, exacerbating extreme heat in areas that are already very hot. Warmer temperatures allow the air to hold more moisture and alter precipitation patterns which, on average, make wet areas wetter and dry areas dryer. In addition, the increased heat in the ocean system, and related ice and glacier melt, are causing sea levels to rise.

The physically changing environment leads to consequences for people – droughts, floods, crop

failures and so on. The severity of these impacts relates strongly not only to the scale and direction of the changes but also to the local context, both physical and human, such as the exposure and existing vulnerabilities of the people and entities being affected.

Estimates of the impacts of climate change on cities and urban centres, where the majority of the world’s population already live, are significant (see C40 *The future we don’t want*). Major cities including London will face increased risk of flooding

precipitation patterns and intensity and, in some cases frequency or duration of extreme weather events. To understand these better for your business, you need to take a close look at your assets, investments, operations, supply chains, staff and their exposure and vulnerability to these impacts. You need to interrogate your plans for the future and ensure that they take these

impacts into account sufficiently.

Second, transition risks relate to the challenges and opportunities that climate change policies might bring to your business. The net-zero greenhouse gas targets mentioned at the start of this article may open up new areas for growth, or signal areas that may no longer be profitable for you in the future. Businesses that are flexible and nimble may find it

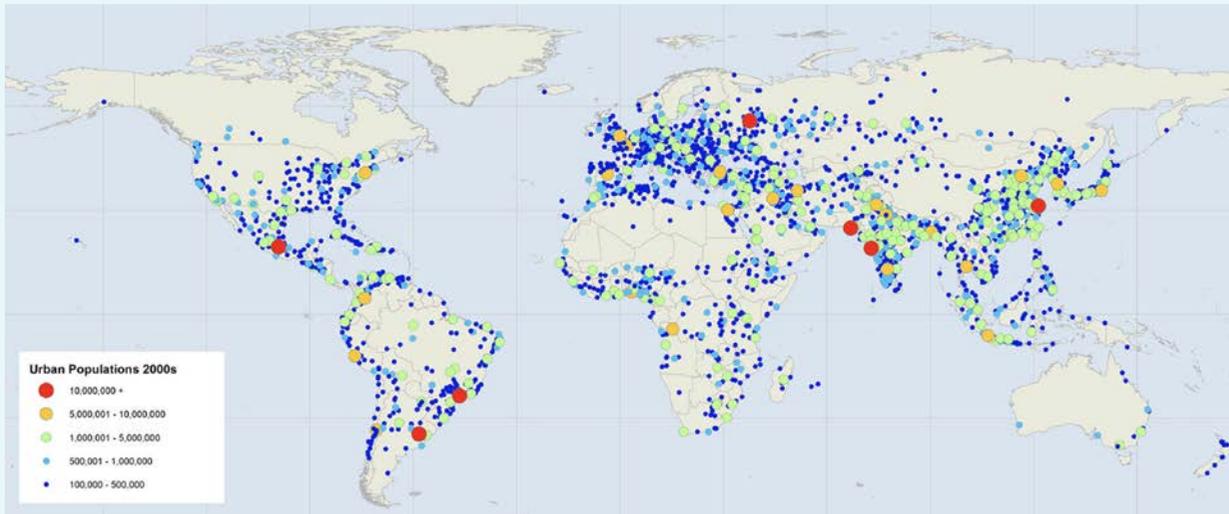
easier to navigate the transition to a net-zero, climate-resilient future.

Finally, liability risks relate to the risk of litigation in the future if entities ignore the volume of evidence available on climate change and make poor decisions that have a negative impact for people. Cases of climate change related litigation are growing (see *LSE global trends in litigation database* <https://bit.ly/37mPdZv>).

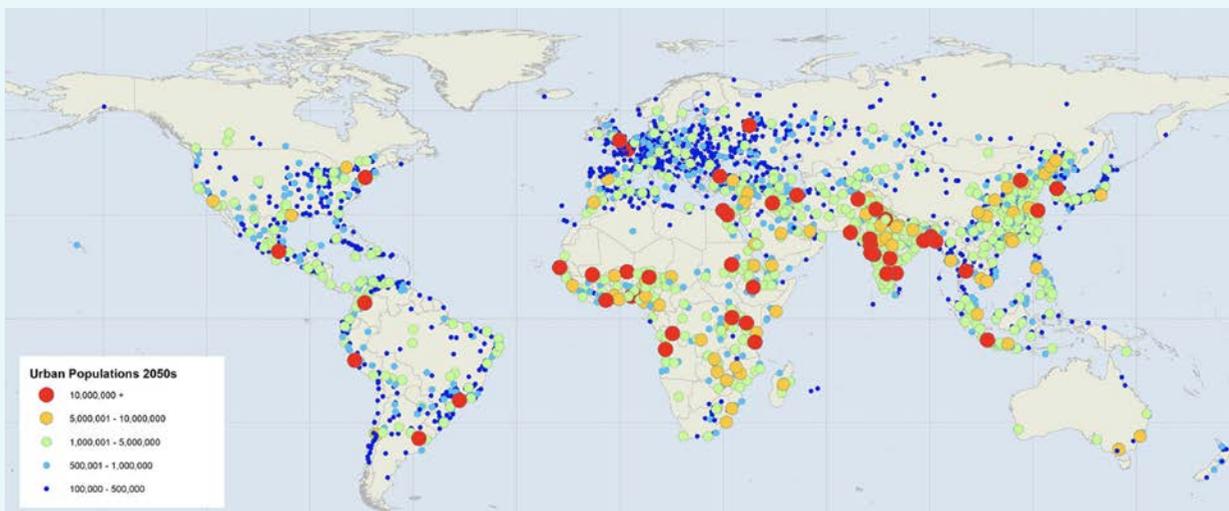
## C40 THE FUTURE WE DON'T WANT

The maps show global cities with populations 100,000 and greater in the 2000's and estimated urban populations in the 2050's. The growth of cities means that ever more people will live in urban areas that are at risk from climate impacts such as heat extremes, water availability, food security, sea level rise and energy disruptions by the 2050's. *Find out more at <https://bit.ly/37mPdZv>*

### Urban populations 2000's



### Urban populations 2050's



Source: UCCRN Technical report – C40 The future we don't want: how climate change could impact the world's greatest cities

ly/3fS1zg4), and this could be a cause for concern for some businesses.

## Achieving a just transition

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Overall, the gains in tackling climate change are positive for society. However, making changes to reduce greenhouse gas emissions and to adapt to the inevitable impacts of climate change described above will not be good for every individual or business. It is important for both individuals and corporations to acknowledge the fact that there will be winners and losers as we move to a zero-carbon, climate-resilient world.

As we move to reduce greenhouse gas emissions, many new industries will grow and flourish, such as renewable power, hydrogen technologies, improved efficiency technologies and investments in nature-based solutions such as restoring mangroves (which protect coastal communities, provide employment and absorb carbon dioxide). However, at the same time other industries and technologies are being phased out, such as coal, the internal combustion engine and eventually, oil and gas. These sectors, and their related supply chains and communities, support thousands of jobs, and they are the bedrock of the economy in some countries.

Considering how to create new skills for people in affected sectors and communities, and how to make sure these people have access to a range of high-quality jobs, for example, as we make these changes, is known as the just transition.

This concept of a just transition also relates to the way in which a country chooses to invest in a net-zero economy. Policies to reduce greenhouse gas emissions will impact some people differently, even becoming regressive by costing the poor more than the wealthy. For example, taxes on polluting diesel and petrol fuels may unduly impact people in rural areas without access to public transport options, or blanket high taxes on flying may prevent equitable and fair access to international travel.

Similarly, policies that try to protect people from the effects of climate change such as flood, or coastal defences, will impact



**Above:** Changes to precipitation patterns are a cause for concern, even in countries perceived as quite wet.



## There will be winners and losers as we move to a zero-carbon, climate-resilient world

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some people more than others. This could, for example, affect insurance premiums, or restrict the areas where people can build houses. While these measures are important risk management actions, the costs of these activities need to be distributed fairly.

## Risk management

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By taking a long-term, risk management approach internationally, nationally and within businesses, we are reducing the greater costs – both privately and at a societal level – that would arise from having to manage more significant impacts later, in a warmer world. Similarly, being prepared avoids a purely reactive response. Being prepared makes sense – think about our recent experience with the COVID-19 pandemic. However, the balance of costs and savings in the short, medium and long term will look different in every business



## TOP TIPS FOR RISK MANAGERS

- 1 Get comfortable with the topic, do some research or attend a short training session with the many experts providing advice on climate change risk.
- 2 Identify your internal allies: figure out who can work with you on these issues at board and executive level.
- 3 Scope out the climate change risks for your business, across the physical, transition and liability risks. You may want external help to get started, working with trade bodies or with expert consultancies.
- 4 Find ways to integrate this risk assessment into your existing processes, including monitoring and reviewing approaches.
- 5 Don't forget your stakeholders – communicate with key external partners too, be they shareholders, customers or your supply chain, so that you can work together on any commitments.



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context. Managers need to be able to separate winning strategies from others and consider what approaches are appropriate for those businesses and communities that might be left behind.

Climate change should be a risk that business executives consider alongside their usual planning cycles, applying the same analysis as you might in the case of other unknowns, and embedding considerations into periodic decision-making processes. Businesses may wish to appoint a climate change expert to the board, or as part of an executive committee, or include a consideration of climate change explicitly into risk assessment protocols. These approaches can help build a more informed assessment of climate change risks into a business at all levels.

There are layers of uncertainty that affect an assessment of what climate change means for any business strategy and operations. There are uncertainties about

how much global greenhouse gas emissions will rise and, in turn, there are further uncertainties about the precise warming these emissions will cause and then a further layer of uncertainty about the precise physical impacts that will result. Here, of course, research and scientific data can help us reduce and navigate those uncertainties.

However, there are further difficulties in assessing exposures and vulnerabilities of those affected. Furthermore, assessments of transition risk rely on predictions about the policies that governments will commit to and implement, and so the risks associated with the transition also have some unknowns. These transition risks can be dependent on key factors, such as the recent US election, but will also depend on more gradual trends such as human behaviour change related to climate change – for example, less meat consumption, the uptake of electric vehicles and so on.

But understanding risk, and managing these uncertainties, are the core skill set and unique expertise of the risk management profession. Risk managers should make it their business to categorise, understand and create pragmatic and rational approaches to decisions in the face of the climate change challenge. There are a growing number of sources of information that seek to help with these risk assessments, but the most important tool of all is the skilled risk manager themselves. 

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