

ISSUE FOCUS CLIMATE GEOPOLITICS

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CLIMATE CHANGE IS NOT LIKE OTHER ISSUES.

The UN Security Council has recognized it as a “threat multiplier.” In January 2019, the UN World Meteorological Organization (WMO) was invited to brief the Security Council on climate risks. “Climate change has a multitude of security impacts,” Professor Pavel Kabat, Chief Scientist at the WMO, told the meeting: “Rolling back the gains in nutrition and access to food; heightening the risk of wildfires and exacerbating air quality challenges; increasing the potential for water conflict;

leading to more internal displacement and migration,” he said. “It is increasingly regarded as a national security threat.” • In November 2019, Brunswick hosted a briefing at Chatham House in London to explore the climate crisis through a geopolitical lens: What happens when the Russian tundras melt and Russia becomes the most fertile country on the planet, in a food-stressed world? What happens when the disappearance of the Himalayan glaciers and collapse of the river systems destabilizes the region, particularly India and Pakistan?

Or what happens when repeated powerful storms and sea-level rises combine to cause devastation and make homes uninsurable on the US East Coast?

And what new opportunities emerge when the balance of power globally is no longer determined by who happens to be sitting on the most oil, coal or gas, but by how efficiently countries can generate, store and distribute renewable energy? What happens to global trade when the major driver of new market growth is demand for low-carbon products and services?

What we are looking at here is re-drawing the political map—with significant strategic implications for businesses: Climate change can be regarded as a “critical issue multiplier” that cuts across business functions, and across sectors. Already, businesses are counting the cost of climate-related supply chain disruptions, and anticipating a tougher regulatory landscape on carbon.

The Brunswick Social Value Review will begin each edition with an in-depth focus on a global issue. We will explore different perspectives, asking what it means for business and what business leadership looks like. We begin with Climate Geopolitics.

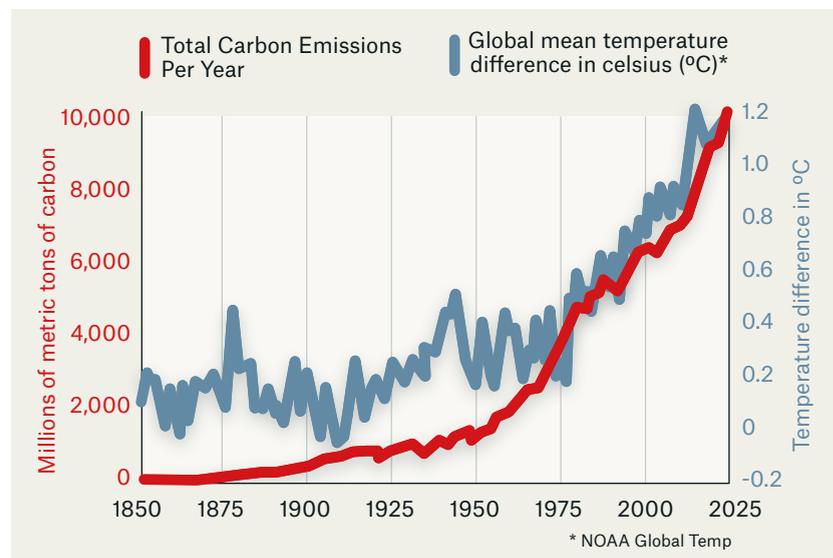
The climate crisis is complex and intersects with political, social, economic and demographic factors. As Rosemary DiCarlo, the UN’s political affairs chief, told the meeting of the UN Security Council in 2018: “The risks associated with climate-related disasters do not represent a scenario of some distant future. They are already a reality for millions of people around the globe—and they are not going away.”

Brunswick’s JON MILLER looks at the climate science and potential impacts.

THE DATA

CARBON EMISSIONS & SURFACE TEMPERATURES

Both continue to climb—and show no signs of abating.



FOOD INSECURITY

The UN’s Food and Agricultural Organization warns: “For decades, the number of hungry people had been declining—this isn’t true anymore.”

CURRENT SITUATION: 26.4% of the world’s population faces moderate or severe food insecurity—about 2 billion people.

FUTURE PREDICTION: Population rising to 9 billion people food production must increase by 70%

WATER INSECURITY

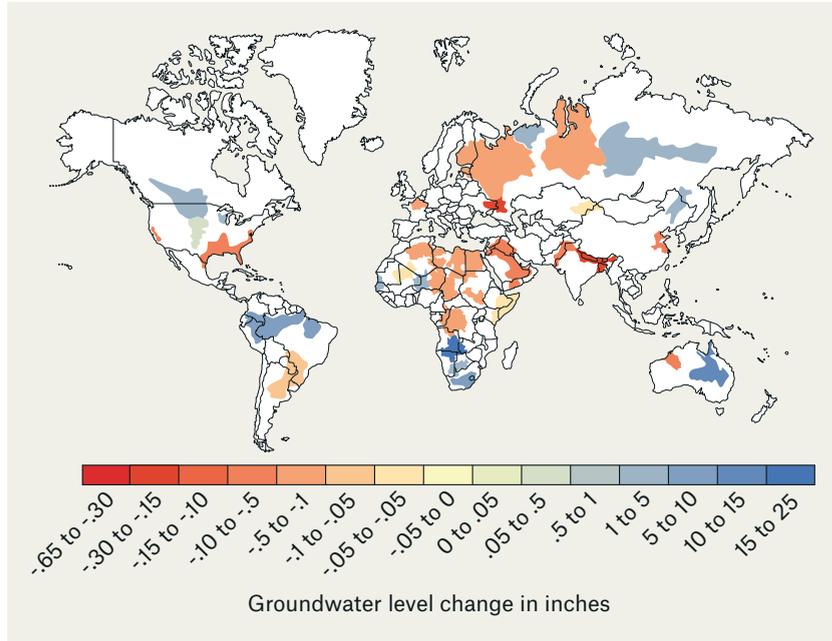
A third of the world's biggest groundwater systems are already in distress.

They might be the most easily imaginable consequences of a warmer planet: drier land and less water. According to UN Water, by 2030 as many as 700 million people worldwide could be displaced by "intense" water scarcity, and by 2040 one in four children under the age of 18 will be living in areas "of extremely high water stress."

The effects on public health and national

economies could be devastating, and could inspire mass migration or armed conflict. Such projections are unsettling, yet today's situation is more dire than many realize.

Every continent has areas of water scarcity, and more than 2 billion people today live in countries experiencing high water stress. Nearly half of the world's population already live in potentially water-scarce areas, according to UN Water.



MASS EXTINCTION

Based on an assessment of 100,000 species by the International Union for the Conservation of Nature.

27 PERCENT OF SPECIES ARE THREATENED WITH EXTINCTION

30 PERCENT SHARKS & RAYS

33
PERCENT REEF CORALS

25
PERCENT MAMMALS

41
PERCENT AMPHIBIANS

34
PERCENT CONIFERS

27
PERCENT CRUSTACEANS

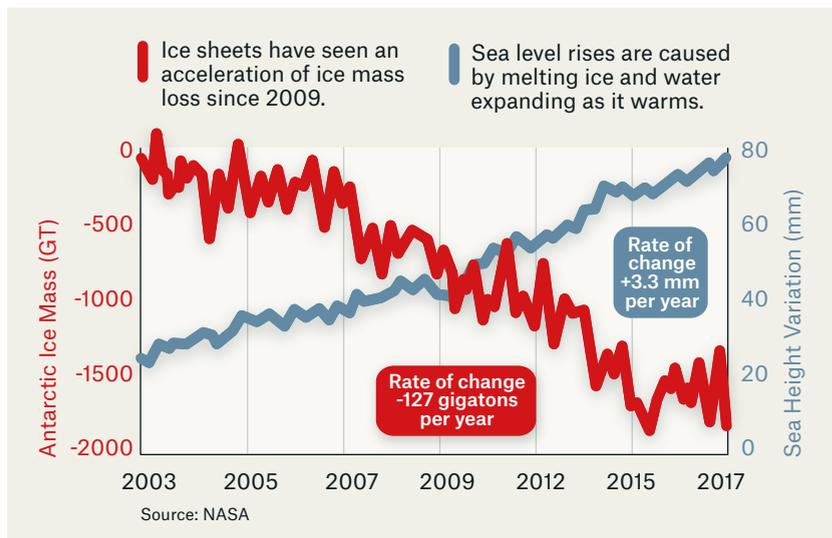
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PERCENT BIRDS

ANTARCTIC ICE MASS & RISING SEAS

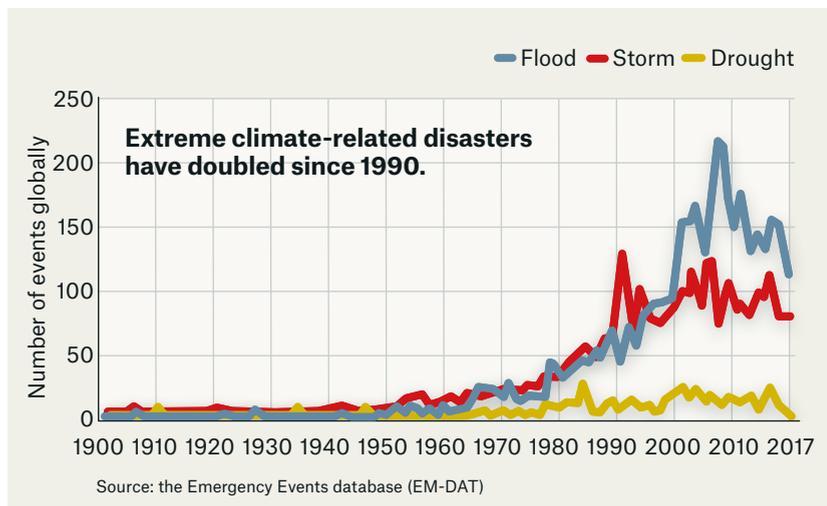
As the world's largest ice sheets in Greenland and Antarctica melt, sea levels rise.

The red line at right shows a steady decline in the Antarctic Ice Mass, one of Earth's two polar ice caps and the largest mass of ice on the planet. The blue line shows the consistent rise in global sea levels. In 2018, according to the National Oceanic and Atmospheric Administration, global

sea levels had risen 3.2 inches (81 mm) above the 1993 average. As oceans warm and ice sheets continue to melt, sea levels will continue to rise. This spells problems for those who live on or near coastlines—which, according to the UN, constitutes about 40 percent of the world's population.



CHARTS: PETER HOEY



CLIMATE-RELATED DISASTERS

A climate crisis disaster happens, on average, every week, says the UN.

One estimate places the cumulative price tag of those frequent disasters at \$520 billion annually. The steep economic costs are mirrored by severe humanitarian ones. The Centre for Research on the Epidemiology of Disasters found that, in 2018,

extreme weather drove almost 29 million people to need emergency assistance or humanitarian aid. Climate scientists predict that, as the planet continues to warm, extreme weather events will become more common and destructive.

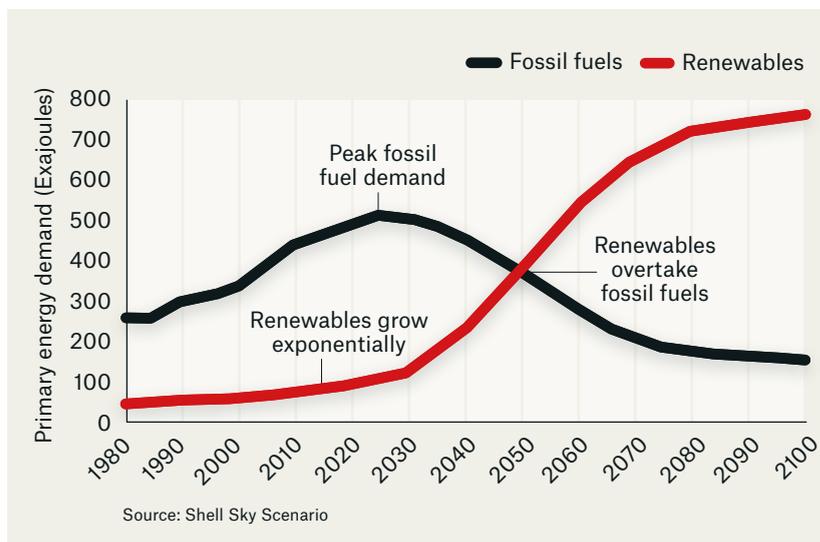
The past 4 years have been the **hottest on record**, as have 20 of the past 22 years.

ENERGY TRANSITION

Renewables are set to penetrate the global energy system more quickly than any fuel in history, according to BP.

Meanwhile, Shell projects that demand for renewables is set to exceed demand for fossil fuels within a generation. However, growing populations and emerging economies will combine to see fossil fuel usage continue to climb until about 2025, gradually

tapering off over the following decades. In a controversial move, the European Investment Bank announced it would stop funding fossil-fuel projects. Their rationale was that such projects were bound to become obsolete, and thereby, poor investments.



Renewable energy is the fastest-growing source of energy, contributing half of the growth in global energy supplies and becoming the largest source of power by 2040.