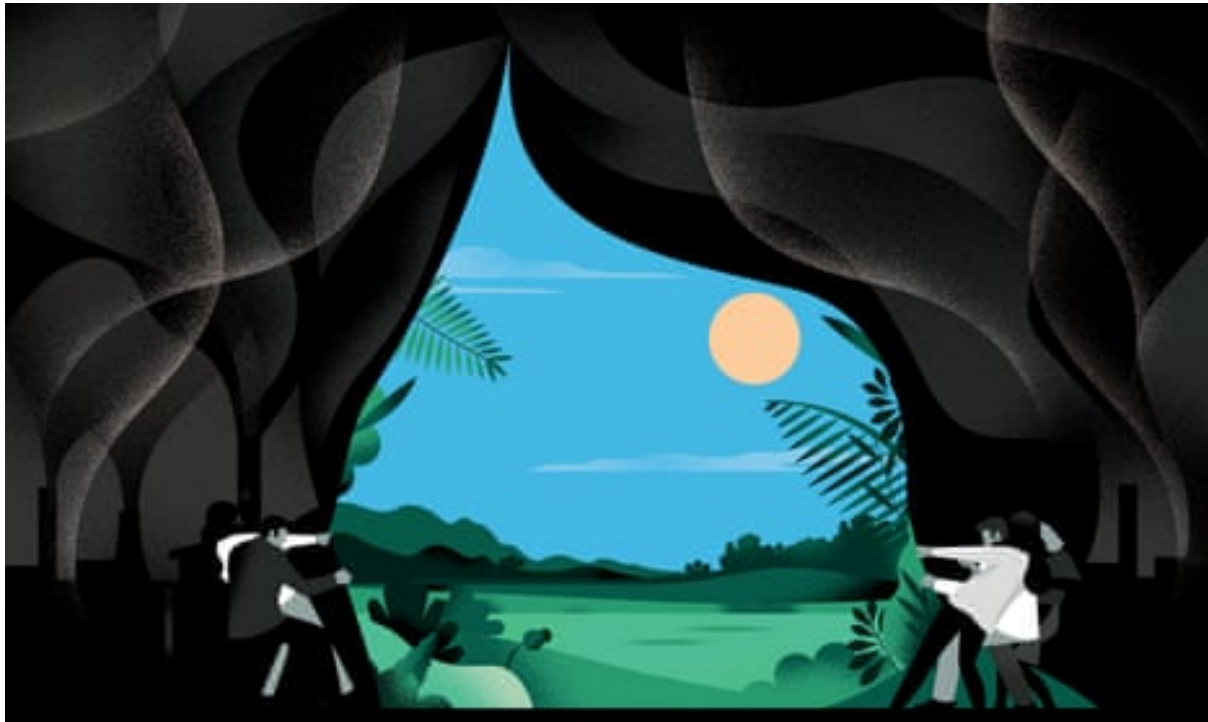


# Hope amid climate chaos: ‘We are in a race between Armageddon and awesome’

Renewables, decarbonisation, activism, cooperation ... The challenge is immense, but the situation is far from hopeless



Bernice Lee, an expert on climate politics at Chatham House, says: “Good results at a global level are built on strong domestic, local and regional action.” Illustration: Nathalie Lees

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Every one of us will love someone who is still alive in 2100, says climate campaigner Ayisha Siddiq. That loved one will either face a world in climate chaos or a clean, green utopia, depending on what we do today.

It’s a powerful reason for action, providing hope that the will for transformative change can be found. But are there more tangible reasons for optimism in fighting the climate emergency? The challenge is undoubtedly immense: carbon

emissions have yet to start falling and must plummet by half by 2030 to avoid the worst outcomes.

Yet the situation is far from hopeless. From the exponential growth of green solutions to the power of protest, experts say there is a clear path to limiting the damage. The question is how fast we can travel along it.

“We have everything we need in terms of technology and, in terms of the actual physics, we know what we need to do,” says Solitaire Townsend, co-founder of change agency **Futerra**. “The vast majority of solutions have a really significant benefit to our health and wellbeing, income and standard of living around the world. We are in a race between Armageddon and awesome.”

The shining light of climate hope is the exponential growth of ever-cheaper renewable energy, which now delivers **75% of all new power** – coal has plummeted to just 4%. An important recent **study found that a swift transition** to clean energy would save trillions of dollars, even without accounting for the enormous damage continued fossil use would cause. Even climate deniers should be on board with that, **says study author Prof Doyne Farmer** at the University of Oxford.

Electric vehicle sales are also rising exponentially. Sales in China **doubled year-on-year in August**, to more than 500,000. Both of these green technologies have passed tipping points in many places – they are now simply so good and cheap that a runaway takeover is inevitable.

Such positive tipping points are crucial, says Prof Tim Lenton at the University of Exeter: “We need to go more than five times faster than we are at decarbonising the global economy. So finding and triggering positive tipping points is a way to create the necessary acceleration of change.” Pushing important sectors more quickly towards tipping points is the aim of a little-reported but potentially very powerful initiative launched at the UN climate summit in Glasgow in 2021 – **the Breakthrough Agenda**, supported by 45 nations including the US, China, India and the EU.

“We’ve got to change massive chunks of the global economy and do that really fast,” says Simon Sharpe, director of economics for the UN’s climate champions. “It’s obvious you’ll manage that better if countries work together and they are

focusing on making clean technologies and sustainable solutions the most affordable, accessible and attractive option.”

For example, he says, a global tipping point for electric vehicles could arrive years earlier if the biggest markets coordinate the date when all new car sales must be zero emission. Similar efforts could also clean up the vital but high emission sectors of steel and cement.

Bernice Lee, an expert on climate politics at Chatham House, says: “Good results at a global level are built on strong domestic, local and regional action and, that being the case, there are reasons for some optimism.” The “big four” of the **US, China, India** and **the EU** are all taking action, she says.

Furthermore, the increasing number of **climate-driven extreme weather disasters** hitting the world now, such as vast floods in Pakistan, is an important catalyst for change. “It’s quite clear that climate impacts will do a fair amount of lifting as an incentive,” Lee says.

The energy bills crisis in Europe caused by the war in Ukraine has emboldened fossil fuel interests to push for new oil and gas exploitation. But senior figures say the **war will ultimately boost climate action**, not block it. “The case for a global energy transition is more solid now than before the invasion,” says Christiana Figueres, formerly the UN’s top climate official. “Once we are on the other side of the current Russian blackmail, no one will want to be [held] hostage again.” Norway’s prime minister **Jonas Gahr Støre** says: “The war is pushing significant speed-up of the installation of solar, offshore wind, hydrogen, and the rest of it.”

Geopolitics is also the key to an issue now at the heart of the climate challenge: climate finance. The nations of the global south, which did not cause global heating, want funding for cutting emissions, adapting to inevitable impacts and recovering from damage wrought by supercharged extreme weather.

The issue could dominate the next UN climate summit in Egypt in November.

“What needs to happen at COP27 is for finance facilities for loss and damage and for adaptation to be established,” says Siddiq, a campaigner with Fridays For Future Pakistan. “It is central to the whole thing.”

For years, major nations like the US have blocked such funding, fearing unlimited liability. But there is movement, with Denmark this month becoming the **first national government to commit loss and damage funds**. There is also movement in funding green energy transformations in specific countries, with **European nations providing \$8.5bn to South Africa**.

New **ideas for raising the required money** are coming forward too, from the **\$500bn in IMF finance** proposed by Mia Mottley, the prime minister of Barbados, to a **global tax on fossil fuels** put forward by the most vulnerable countries.

UN secretary general Antonio Guterres backs the latter idea, particularly targeting the colossal profits being reaped by the oil and gas industry at the moment. “The fossil fuel industry is feasting on subsidies and windfall profits, while household budgets shrink and our planet burns,” **he said last week**. “I call on all developed economies to tax the windfall profits.”

Guterres has become extraordinarily blunt: “The fossil fuel industry is killing us.” Another leader speaking out **against fossil fuels is Pope Francis**. Such attacks provide hope by eroding the legitimacy of the powerful sector, which has continually worked to block climate action.

Perhaps the most powerful voice for action has been that of youth activists, whose future is at stake. Lee says they represent our conscience: “They do a very important job in helping hold politicians to account for the future.”

Siddiqi says: “We do have the power at our disposal. We have the ability to change popular opinion and culture – we have done it.”

Pressure for action is also building from consumers in the commercial sphere, according to Townsend, demanding change from the big companies and advertisers that are so expert in shaping what we buy and how we live.

“Online searches for plant-based diets have had a 90% increase over the last year,” she notes. “It’s one of the biggest Google search jumps.”

Another bright spot in climate action, often overlooked, is the global **progress on reducing HFC coolants**, which are powerful greenhouse gases as well as destroyers of the ozone layer. This action alone could reduce global heating by

0.5C. A global pledge to **slash methane**, another powerful greenhouse gas, has been made by world leaders, as has **one to halt deforestation**, though previous efforts to protect forests have delivered little.

It will **never be too late to act**. However high global temperature rises, every tenth of a degree that is avoided means someone somewhere suffers less. “We need to knuckle down as much as we can to prevent every 0.1C rise,” **says Prof Bill McGuire**, at University College London.

Youth activist Siddiqi says: “We need to make sure that [our loved ones alive in 2100] have access to all the beauty of the world that we had access to and that we leave behind a better world. We need to be good ancestors. That’s the thing that keeps me going.”