

Decarbonising economies is like denuclearising weaponry—essential for survival



Humanity has been here before, facing what appeared to be an imminent end (figure).¹ The rise in nuclear weapons was rapid, from the first two used on Aug 6 and Aug 9, 1945, through to 10 000 held by 1960, almost 40 000 in 1970, and peaking at over 60 000 in the mid-1980s. At the time, it did not feel like a peak; it felt as if we were all going to die.²

In the 1930s, a few people knew that nuclear weapons would be potentially cataclysmic. By the 1960s, there was a well-established anti-nuclear weapon peace movement, but the protestors were treated as fools by the media. By the 1980s, it was becoming clear that nuclear war was mass annihilation and could not be avoided by threats of mutually assured destruction. Disarmament began in earnest.

The climate emergency has a similar trajectory,³ but without that most imminent of threats. People's reaction to both is similar: ignorance, acceptance, revulsion, and rejection, but only generation by generation. People tend to stick with what they believed as teenagers. Today's teenagers know that the climate emergency is real, just as the teenagers who put flowers in the barrels of guns in the 1960s knew what their parents did not.

In the 1970s, hardly anyone knew that greenhouse gases would be potentially cataclysmic.³ By the 2000s, there was a well-established climate emergency movement, but the protestors were treated as fools by many.⁴ By 2019, it became clear that if left unabated, global heating would be disastrous and could not be avoided by the market foreseeing our assured destruction.⁵ Decarbonisation began in earnest, while millions marched to proclaim that this was not enough. Then, in 2020, the COVID-19 pandemic provided many people who have not experienced such turmoil before with an insight into what happens when normal life is up-ended.

No-one who is sane would choose or welcome in any way the shock of the 2020 pandemic emergency, but it has caused a much more rapid economic and consumption slowdown than would otherwise have ever been possible. The virus initially reduced CO₂ emissions from China by a quarter, before they began to plummet worldwide,⁶ and the small number of human beings alive who can afford to fly internationally have

been forced to dramatically reduce their international air flights.⁷ The pandemic has also illustrated how rapid and unified global action to protect health is possible when there is a political will.

A global demographic and economic slowdown had begun long before the virus hit. In a post-pandemic world, it would be unforgivable to simply return to business as usual. An acceleration of the slowdown that was already occurring before the pandemic began is humanity's hope and should be our aim.⁸

Shifting to a longer timescale, since life began on Earth, there have been five major mass extinction events.⁹ Six out of seven of all the planet's species died 450 million years ago due to global cooling. Three-quarters were wiped out 370 million years ago, again due to climate change, and 250 million years ago, after another rapid climate change of 5°C warming, 24 of every 25 species became extinct. Some 200 million years ago, the climate changed again, and four of every five species on Earth were wiped out. The last of the great five mass extinctions occurred around 65 million years ago, when an asteroid that was 6–9 miles wide hit Earth, and three out of four of all species became extinct. Today, we are just a few decades into the sixth and most rapid of all mass extinctions. Humanity has had a worse and faster effect on the biodiversity of the planet than a huge asteroid.

The good news is that if you take extinction as the disappearance in sexual species of the very last breeding

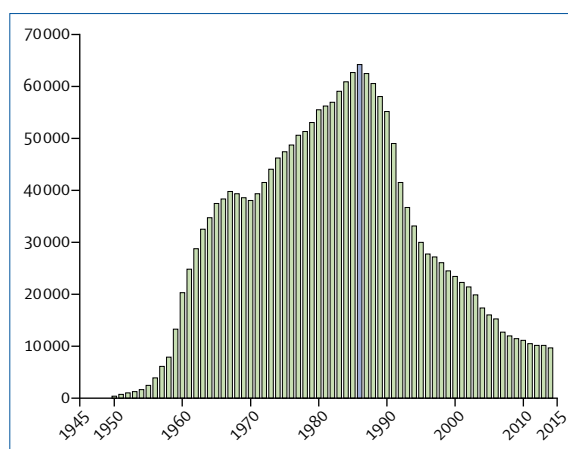


Figure: The rise and fall in nuclear weapons held worldwide, 1945–2015
Reproduced from Dorling.¹

pair, then extinction is quite hard to achieve, although by no means impossible. The bad news is that this is not really the kind of extinction that matters for the wider environment. What matters most is the extinction of function: a species no longer having the numbers to fully play its part in the web of connections.¹⁰

The planet can be saved—if we care enough to do so. Today, as Matthew Taylor and Jessica Murray observed, “...there is no way to completely shield young people from the reality of the climate crisis, and that would be counterproductive even if it were possible. Rather, parents should talk to their children about their concerns and help them feel empowered to take action”,¹¹ just as a few of their parents and grandparents did before them to avert nuclear catastrophe. The emerging lessons from the COVID-19 pandemic give us an opportunity profoundly to re-evaluate our humanity, including a far more careful consideration of those yet to be born. Our future remains in our hands.

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