

# The materiality and morality of Net Zero should go hand in hand

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In recent times, one of the better books I read is *The Material World* by Ed Conway, the economics editor of Sky Broadcasting. It is a world that we have not even been aware of, let alone cross its path. It is unseen for us although the materials that lie behind many of the stuff we use or places we inhabit are all too real. Ed Conway takes us along in his often-breathtaking journey to the remotest corners of the earth, or below it, for us to understand the energy that we expend in getting these materials out of the earth, beating them and cajoling and melting them into shape and then finally getting them inside our smart devices. Conway writes, "There is no way of mass producing either wind turbines or silicon substrates of solar panels without the use of fossil fuels....On the basis of one calculation, we will need to mine more copper in the next 22 years than we have in the entirety of the past 5,000 years of human history."

In the process, he forces us to contemplate many questions that we have conveniently chosen to ignore. Not only that, but we have also created a justification in our heads for our hostility to such questions by positing tackling climate change and global warming as moral imperatives. Morality brooks no trade-offs. It is as it should be. But, dealing with climate change is an economic imperative.

The service that Ed Conway does to the discerning among his readers is to force them to confront and challenge the implicit choices that some policymakers are making on others' behalf on the matter of global warming. Real people have to contend with trade-offs based on their wallets. For example, does it make sense to scrap old vehicles to buy new vehicles to comply with Britain's Ultra-low emission zones mandates since the manufacture of such cars would involve so much energy? To find out how much, read Conway's tome. Climate evangelists avoid such questions. They either assume away the problem or pretend that it does not exist. Ed Conway forces them to think more in economic terms than in theological terms about climate change and energy transition.

According to him, no energy transition has been achieved as quickly as is being contemplated in 'Net Zero' by 2050 and previous transitions took centuries to happen. There is no "precedent for successive generations of humanity consciously sacrificing some of their livelihoods for a future they will never experience themselves." Quite so. The grasping of that reality is behind the recent decisions by the British government with respect to the timing of the phasing out of diesel and petrol cars and installation of new gas boilers. It was merely

following in the footsteps of the German government, which had to significantly water down its rules on the effective ban on all new gas and oil boilers, that had originally proposed new systems to be powered by a minimum of 65% renewable energy by January 2024.

As Gideon Rachman reluctantly recognised ([tinyurl.com/2p9kyj73](https://tinyurl.com/2p9kyj73)), public support for Net Zero policies dropped precipitously in Britain when it involved an increase in household bills. Many put the cost of living as a more important priority than Net Zero. This was repeated in surveys in much of Europe. In 2018, a Yellow Vest movement protester in France is said to have remarked that while climate apostles talked about the end of the world, they were worried about the end of the week.

Second, the difficulty with such seemingly laudable aims to reduce carbon footprints is that the environmental costs that renewable energy usage or generation entail are not counted properly, if at all. How does one dispose-off wind turbine blades and solar panels, for instance? In March 2022, an article in Bloomberg eloquently captured the story ([tinyurl.com/4e8banht](https://tinyurl.com/4e8banht)) of the transition to Net Zero in Jeju Island in South Korea and the unanticipated challenges it threw up. It remains an essential read for policymakers across the world. Transitioning to Net Zero was supposed to be a breeze in Jeju island since it ticked many of the boxes that made such a transition achievable. If only it were so. In February 2023, Bloomberg had another big story ([tinyurl.com/3uc3rud4](https://tinyurl.com/3uc3rud4)) on the damage caused to the Amazon River Basin because of the metals being extracted to manufacture, ahem, climate-friendly electric vehicles. More recently, there are concerns about the damage to biodiversity in Indonesia due to Nickel extraction.

Third, such an unthinking approach extends to the belief that private capital would stump up the vast sums of money required for energy transition and combating climate change out of its innate goodness and public spirit. Ed Conway provides real examples of private greed trumping other public considerations, including respect for the very nature that climate policies supposedly aim at.

Fourth, the overwhelming dominance of one country either in steel or copper production or in many of the ingredients that go to make the silicon chip makes such weaponisation not only feasible but also a tempting proposition in a fraught world of which we were served a very brutal reminder on 7 October. Geopolitical risk appears likely to be with us all the way through to the year of Net Zero by 2050.

Economists who understand that policymaking is about trade-offs will be familiar with these arguments. But those who believe in corner solutions are not or cannot. Or, maybe they believe that the cost of the pursuit of corner solutions could be passed on to the voiceless around the world, advanced or developing.

If it is incorrect to ignore costs, the refusal to recognise trade-offs is incomprehensible. Equally, it is immoral to tell people that they cannot aspire to a life of minimum dignity because others have to maintain their way of life. While patently undemocratic, it is also a sign of intellectual desperation to use fear as the only tool of persuasion as was done in the case of the pandemic. It is not too late to get real about climate change and find ways to deal with it optimally, keeping in mind other equally important priorities of the billions who do not have a seat at the high tables.

As Abraham Lincoln said once, "Public sentiment is everything. With it, nothing can fail; against it, nothing can succeed."

These are the author's personal views.