

# Climate Change is Not the End of the World

by [Adam Selene](#) (September 2020)



*Windmill at Dangast*, Erich Heckel, 1909

Climate change politics took an apocalyptic turn in 2018 when Greta Thunberg in Sweden began her school strike for climate

and [Extinction Rebellion](#) in London staged a ghoulish protest.

School climate strikes and Extinction Rebellion pageant protests spread across the Western world in 2019. Thunberg was invited to address the UN climate summit in New York and was named by *Time* its person of the year. Thunberg says climate change is the greatest and most complex challenge we have ever faced. She wants us to panic.

Extinction Rebellion wants government to tell the truth by “declaring a climate and ecological emergency,” to act now to “halt biodiversity loss and reduce greenhouse gas emissions to net zero by 2025,” and to go beyond politics by “creating and being led by the decisions of a Citizens Assembly on climate and ecological justice.”

US congresswoman Alexandria Ocasio-Cortez co-sponsored in 2019 a Green New Deal package in the House of Representatives. It is a 10-year package to comprehensively transform the United States, its health, employment and housing, its energy and transport systems, its infrastructure, buildings, and agriculture. It would commit the United States to 100 per cent renewable power.

Thunberg, Extinction Rebellion, Ocasio-Cortez and their fellow travellers demand nothing short of a revolution to avoid a climate apocalypse. But serious challenges are now being mounted to the alarmist dogma.

Michael Shellenberger is a Californian environmentalist, who happened to be in London in 2019 during the fortnight of Extinction Rebellion demonstrations. He was bothered by the movement’s “heavy focus on death” and set out to write the book that became *Apocalypse Never: Why Environmental Alarmism Hurts Us All*, distancing his eco-modernism from environmental alarmism.

“Anyone who believes climate change could kill billions of people and cause civilizations to collapse might be

surprised to discover that none of the Intergovernmental Panel on Climate Change reports contain a single apocalyptic scenario.”

Danish economist Bjorn Lomborg, president of the Copenhagen Consensus Centre and author of the 2001 best-seller *The Skeptical Environmentalist*, is also concerned that:

“ . . . we’re scaring kids and adults witless, which is not just factually wrong but morally reprehensible. If we don’t stop, the current, false climate alarm . . . [we’re] likely to leave the world much worse off than it could be.”

He sets out his argument in his new book, *False Alarm: How Climate Change Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet*.

Michael Shellenberger is a veteran environmentalist and in 2003 co-developed the ‘New Apollo’ clean technology plan. It was adopted in large measure in 2007 by the then-presidential candidate Barack Obama and backed by him as President with some \$150 billion. But it became increasingly clear to Shellenberger that:

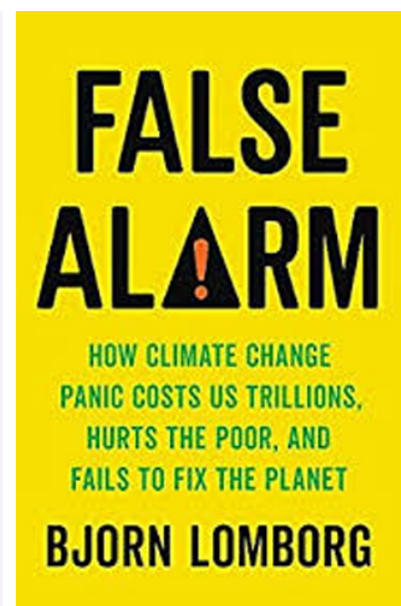
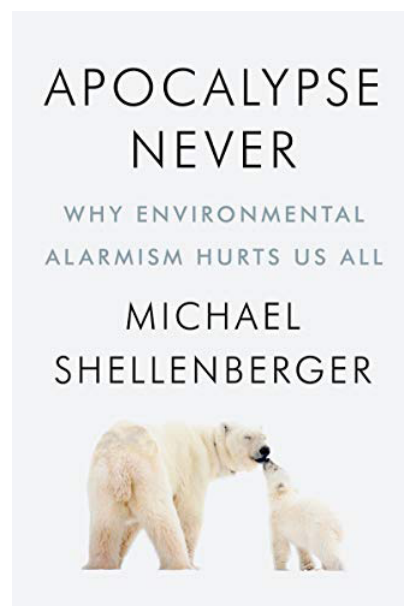
“In the end, there is no amount of technological innovation that can solve the fundamental problem with renewables. Solar and wind make electricity more expensive for two reasons: they are unreliable, thus requiring 100 percent back up, and energy-dilute, thus requiring extensive land, transmission lines, and mining. In other words, the trouble with renewables isn’t fundamentally technical—it’s natural.”

Like some other environmentalists including James Lovelock and James Hanson, Shellenberger came to see nuclear power as essential to reducing carbon dioxide emissions. In recent years, he’s been a prominent nuclear energy advocate, but is adamant he’s not a lobbyist for the industry and accepts no funding from “energy companies or energy

interests.”

Shellenberger devotes about the first 100 pages of *Apocalypse Never* to debunking many of the articles of faith that are mobilised to give substance to the idea that we are in the midst of an apocalyptic environmental catastrophe. This part of the book has a lot in common with Lomborg’s *The Skeptical Environmentalist* and the recent bestseller *Factfulness: Ten Reasons We’re Wrong About the World—and Why Things Are Better Than You Think* by Hans Rosling and his two daughters.

Shellenberger personalises the story with vignettes drawn from his eco-journalistic experiences. Bernadette is a subsistence farmer in the Congo. She’s livid that baboons and other animals come out of the Virunga National Park created to protect



habitat and raid her sweet potato crops. Nearby, Goma, a city of 2 million, relies for energy on charcoal produced from the Congo forests. They need hydro-electric power, gas for cooking, and fertiliser and machinery to raise agricultural productivity, but can’t afford it. Proposed projects are blocked by international environmentalists and no longer supported by donors such as the World Bank. “As climate change emerged as an elite concern in the 1990s, efforts within developed nations to cut off financing for cheap energy, industrial agriculture, and modern infrastructure to poor and developed nations grew stronger.” Continued poverty and use of the forest for charcoal are the result.

Suparti is a 25-year old Indonesian from a small

village, who escaped the rural poverty of her family to work in a Barbie factory in the city, and then in a chocolate factory. She has a flat, electricity, a TV, a motor-scooter, and cooks with gas food purchased from a shop. She has a standard of living that far exceeds what would have been hers had she stayed on the farm in her home village.

Shellenberger's style is lively and accessible, yet factual and well documented with over 100 pages of endnotes. The stories of Bernadette and Suparti, and other anecdotes from his many travels, provide tangible human interest and illustrate the daily challenges of life in the energy-poor world.

Shellenberger's claim that natural disasters are not getting worse has been used to discredit him. He bases his argument on the definition from the Intergovernmental Panel on Climate Change that a disaster includes widespread adverse impacts on people and property, and that over the last 100 years death and normalised property damage from natural disasters have been falling. He contrasts this with possible increases in extreme weather events, which may or may not be a disaster. For example, nobody cares much about hurricanes in Antarctica. Nick O'Malley of the *Sydney Morning Herald* pushed hard on this point in his 8th of July interview with Shellenberger, claiming his use of the term 'natural disaster' was not ordinary usage, so his disasters-are-not-getting-worse claim is misleading. But Shellenberger has support from the Oxford English Dictionary, which defines 'natural disaster' as "a sudden accident or a natural catastrophe that causes great damage or loss of life." Perhaps the key point is that more extreme weather events may not cause worse disasters, because high-energy, industrial societies have lots of ways to better protect themselves.

Shellenberger then considers nuclear energy and the inherent problems with renewables in some detail. Despite the high-profile accidents at Three Mile Island, Chernobyl and

Fukushima, Shellenberger argues that, "It's not that nuclear energy never kills. It's that its death toll is vanishingly small." Shellenberger demolishes the idea that renewables alone are the answer. The critical issues are unreliability and low power density. Large-scale storage is impossibly expensive (even if batteries do get incrementally better and cheaper), and low power density means lots of land and other resources are needed to generate power at scale, which also means lots of end-of-life waste. Wind power kills birds, bats, and insects, and its large-scale towers across the landscape now almost universally generate community resistance. Shellenberger accuses those who advocate for a renewables-only energy system of "destroying the environment to save it." Shellenberger concludes that, "Only nuclear, not solar and wind . . . can affordably create the hydrogen gas and electricity that will provide services . . . currently provided by fossil fuels."

But what of Big Oil and Gas companies advertising and advocating for renewables? While some of this is probably just greenwash, Shellenberger argues the oil and gas companies have a common cause interest in renewables. "The big oil and gas companies know perfectly well that batteries can't back up the grid. The places integrating large amounts of solar and wind . . . are relying more and more on natural gas plants..."

Shellenberger spends a couple of chapters demonstrating these common cause interests in anti-nuclear, pro-renewables advocacy and policies between oil and gas interests, environmental groups, and senior Democrats, particularly in California. While some may seek to discredit this as a paranoid conspiracy theory of a shell for the nuclear industry, Shellenberger documents the relationships in considerable detail, and unlike conspiracy theorists, has a credible common cause interest to underpin his claim.

Shellenberger has a crack at celebrities like Prince Harry and Meghan Markle "flaunting their high-energy

lifestyles” while “moralising for low-energy lives,” hypocrisy he says upsets many climate activists, including Greta Thunberg. Shellenberger, however, explains the inevitability of the hypocrisy. “The reason even the most sincere greens consume large quantities of energy is simple: living in wealthy nations and doing the things people in wealthy nations do, from driving and flying to eating and living in a home, requires significant quantities of energy.” Shellenberger decries the effect this moralising is having on the world’s poor. The UN developed the notion of ‘sustainable development,’ including that poor nations could grow rich without using much energy and can ‘leapfrog’ fossil fuels and go directly from burning wood and dung to using renewables, which is described as, “avoiding the mistakes made in the industrialised world.” The World Bank and other donors are increasingly following this ‘sustainable development’ model. But, as a former World Bank economist told Shellenberger, “not a single country in the world has become developed through that route.”

In the final part of the book, Shellenberger ponders why environmental advocates have been so successful in their anti-development agenda. He looks to the legacy of Thomas Malthus and his myriad of fellow travellers since his 1798 treatise *An Essay on the Principle of Population*, which inspired Thomas Carlyle to call economics the dismal science. Traditionally, Marxists have been hostile to Malthusian thinking, because it apparently condemns the poor as a matter of natural law. But, says Shellenberger, Malthusianism switched sides after WWII and became “a left-wing political movement in the form of environmentalism.” Paul Erlich with his *Population Bomb* and The Club of Rome with its “Limits to Growth” are heirs to this Malthusianism. Shellenberger notices a pattern going back to Malthus himself, who opposed contraception, and present-day environmentalists who oppose nuclear power: “Malthusians raise the alarm about resource or environmental problems and then attack the obvious technical

solutions.”

Shellenberger discusses the semi-political character of the Intergovernmental Panel on Climate Change and the incentive towards alarmism created by authors seeking inclusion in the *Summary for Policy Makers* and the attention of a media headline, the influx of opportunists and exaggerators, and the character assassinations of dissenters, who often just want to respectfully report the science. Nevertheless, Shellenberger regards as basically sound the underlying detailed analyses, using them extensively in his book.

Shellenberger argues that contemporary environmentalism has become a secular religion, but one that replays old archetypes. Instead of human problems stemming from a failure to adapt to God, they now stem from a failure to adapt ourselves to nature. Apocalyptic scientists are cast in the role of priests, interpreting to us the demands not of God, but of nature. Shellenberger believes “secular people are attracted to apocalyptic environmentalism because it meets some of the same psychological and spiritual needs as Judeo-Christianity and other religions.” It provides purpose—to save the world—a story in which they can be heroes and find meaning, all the while “retaining the illusion . . . that they are people of science and reason, not superstition and fancy.” It’s not that Shellenberger has a problem with religions. But the “trouble with the new environmental religion is that it has become increasingly apocalyptic, destructive, and self-defeating.”

Of those like Extinction Rebellion, who seem to have a morbid fetish for death and the climate apocalypse, Shellenberger says, “If the climate apocalypse is a kind of subconscious fantasy for people who dislike civilisation, it might help explain why the people who are the most alarmist . . . are also the most opposed to the technologies capable of addressing them, from fertilizer and flood control to natural



gas and nuclear power.”

However, Shellenberger doesn't connect apocalyptic environmentalism with the anti-capitalist movements and thinkers of the past, i.e., Marxists, nor with the more recent post-colonial, anti-Enlightenment scholarship and activism that has become so prominent. They all seek to destroy, or at least revolutionise, liberal, capitalist, industrial societies. He therefore seems a bit naïve about the scope and scale of the movements attacking the foundations of our civilisation.

Nevertheless, Shellenberger rejects the anti-capitalist, post-modern, apocalyptic will to destroy and revolutionise. Instead, he promotes an “environmental humanism” in which “we must ground ourselves first in our commitment to the transcendent moral purpose of universal human flourishing and environmental progress, and then in rationality.”

“Environmental humanism will eventually triumph over apocalyptic environmentalism . . . because the vast majority of people in the world want both prosperity and nature, not nature without prosperity.”

Shellenberger offers hope that we can tackle the challenges of climate change without sacrificing living standards if only we can come to terms with nuclear energy, the twentieth century's promethean gift.

Danish economist Bjorn Lomborg is also concerned about the apocalyptic alarmism of contemporary environmentalism and the bad policy responses we are urged to adopt. “The science shows us that fears of a climate apocalypse are unfounded. Global warming is real, but it is not the end of the world.” Lomborg also says much of the climate alarmism “can be explained by this one fact: the stories assume that while the climate will change, nothing else will.” For example, the

alarmism about sea-level rise presumes people won't build defences. The alarmism about heat waves presumes people won't use air-conditioners. This is unrealistic to say the least.

Lomborg's new book, *False Alarm*, is a full-length treatment of the arguments against current climate policies that he has been making for some time. He says climate policies are failing badly and we need to rethink. "This singular obsession with climate change means we are now going from wasting billions of dollars on ineffective policies to wasting trillions." He's scathing about the Paris Agreement, saying the pledges won't affect the temperature in 2100 very much even if countries do meet them, it will cost "at least \$1 trillion annually by 2030," and branding it "by far the most expensive pact in history." He finds that "every dollar the Paris Agreement costs will avoid just 11¢ worth of long-term climate damage. That isn't sensible."

Like his earlier book, and like Shellenberger and Rosling, Lomborg spends some time in his new book explaining that across many measures things are getting better, not worse, though problems do remain. His key point, which he spends most of the rest of the book fleshing out, is that, as noted by the Intergovernmental Panel on Climate Change in 2014, "for most economic sectors, the impact of climate change will be small relative to the impacts of other drivers."

Lomborg is a utilitarian rationalist, who unsentimentally applies cost benefit analysis at a global level to examine policy options. Unlike Shellenberger, who delves into a range of technologies and psycho-spiritual issues, Lomborg's focus is macro-economic, with Gross Domestic Product per person the key measure. Acknowledging it's not a perfect measure, he argues it's the best overall prosperity indicator we have.

A key concept is to look not just at the cost of climate change, but to also consider the cost of climate

change policy. That is, the cost of, for example, a carbon tax, or subsidies for renewables, etc. He finds the current approaches deliver too little (i.e., don't lower the temperature much) and cost a bomb. His main tools are several UN economic scenarios to 2100, Nobel economics prize winner William Nordhaus's estimates of the economic impacts of climate change, and his Dynamic Integrated Climate-Economic model. Lomborg argues that a global carbon tax is the least-cost approach, or failing that, a comprehensive set of national carbon taxes. Other approaches (such as renewable energy mandates) are possible but will increase policy costs. He finds "the optimal point is if we keep temperature rises to 6.3°F" (3.5°C), which could be achieved "with a global carbon tax in 2020 of \$36 per ton of carbon dioxide, increasing to \$270 per ton by the end of the century." He doesn't consider the 2°C goal of the Paris Agreement, let alone the 1.5°C goal pushed by advocates, describing it as "likely impossible to reach . . . with realistic technologies."

"When politicians and campaigners talk about extremely drastic climate policies, they don't acknowledge, and perhaps don't even realise, that those policies have a cost to society vastly greater than the costs of the damage they are trying to avoid."

What's his solution? Lomborg says we need an effective carbon tax, increasing over time, to curb the growth of emissions and spur innovation, such as energy efficiency, lower-emission ways of doing things, and alternative consumption choices. He says, "renewable energy sources like solar and wind cost \$141 billion annually in subsidies globally, and matter little in the global energy supply," concluding that the green revolution hasn't happened yet because "without breakthrough innovations, it remains enormously expensive." So, we need to spend more, much more, on energy research and development. Lomborg is not prescriptive about where the money should be invested, but

mentions as obvious areas energy storage, nuclear energy and capturing carbon dioxide from the air.

Lomborg says we need to invest in effective adaptation to climate change, because temperature rise is going to happen and even the most radical policies will only slow it a bit. He argues we should research geoengineering, such as injecting sulphur-based aerosols into the stratosphere, as a possible backup plan, particularly if those people who worry about 'tipping points' prove to be right, because it's the only way to halt warming quickly. And, Lomborg says, prosperity is a good climate policy, because richer people are better able to adapt and deal with almost everything. He's in favour of developing countries continuing to use fossil fuels to develop and get richer, even though this will increase emissions.

Lomborg says it is silly to say the poor people in Africa will be hurt by climate change so we must reduce our emissions. Why not help them more directly to develop and get richer? Similarly, it's silly to say that Bangladeshis will be flooded by sea level rise, so we must reduce emissions to save them. Why not help more directly by building better defences? Essentially, Lomborg argues these more direct approaches are quicker, more effective, and cheaper than reducing emissions, which takes a long time, doesn't affect the phenomena that much, and is expensive, particularly as it sacrifices economic growth.

In all the UN scenarios to 2100 that Lomborg assesses, and taking account of the associated damage from climate change, average global wealth will be higher, much higher, than today. The scenario that makes people the richest, climate change damage costs included, is one called "fossil-fuelled development." In this scenario, even though emissions are higher and damage from climate change costs more, the increase in GDP is so much higher that it's much better overall. About 72 per cent better than the scenario called "sustainable development," with global GDP per person in 2100

at \$182,000 instead of \$106,000.

Finally, if the goal of climate change policy is to make the world a better place, Lomborg suggests we should turn the question around. If the goal is to make the world a better place, is climate change policy the best way to do it? Or, are there other things we could do that would deliver much more bang for the buck? Lomborg looks at the UN's sustainable development goals and considers the kinds of things that would be best. Climate change policy is not the top of the list. Things like freer trade, avoiding early childhood malnutrition, fighting tuberculosis, improving access to contraception, improving literacy, education, and health care, and improving credit availability to poor developing world farmers. Like Shellenberger, Lomborg is very critical that a quarter of the world's development aid is now being 'diverted' into climate change projects.

Some will find Lomborg's relentless utilitarianism emotionally unsatisfying, even spiritually alienating. But it's good that he's made his hard-headed argument at some length and in some detail, and he does have a big-picture point: that "fixating on scary stories about climate change leads us to make very poor decisions."

Both Shellenberger and Lomborg emphasise the capacity of prosperous peoples to adapt to climate change. And both point to a confluence of interests between companies, environmental groups, the media and politicians that could constitute an 'eco-industrial complex' whose interests are served by the apocalyptic narrative and renewables-only solutions. Both present significant critiques of the narrative that climate change is the world's biggest and most urgent problem, and that tackling it requires revolutionary change focussed on renewables. Shellenberger looks to nuclear energy as the key technology for limiting emissions and supporting prosperity, ponders the emotional and spiritual attractions of apocalyptic environmentalism, and argues for his eco-humanist

alternative. Lomborg's utilitarian calculus is that climate change damage, though real, is modest when compared with the cost of other problems and of curtailing economic growth through drastic climate change policies. He hopes that "when the screaming stops will we finally be able to identify the most effective ways to both address global warming and actually help people with their real-world problems."

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Adam Selene has a PhD in Systems Engineering.

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