
Climate Change 101 for Landmen and Lawyers: Uninhabitable Earth or False Alarm? (Part 1)

Gray Reed's Energy, Land & Law Newsletter

February 8, 2021

"A cry for survival comes from the planet itself . . ."

—President Joseph R. Biden, Inaugural Address, January 20, 2021

Joe Biden's inauguration as President of the United States promises to bring the issue of climate change to the fore in the United States like never before. There is likely no issue on the horizon more likely to affect the careers of landmen and the lawyers who support them than climate change. While opinions vary, there are increasingly few people in denial over the fact of man-made climate change. The real debate is over how best and how quick to mitigate its effect.

Three best-selling books published during the past two years have set the framework for that debate. The first of these, *The Uninhabitable Earth: Life After Warming*, was published by journalist David Wallace-Wells in 2019 and makes the case that the world is at a tipping point, with about three decades left before a chain of climate related events could inexorably lead to the extinction of the human race. Wallace-Wells places most of the blame for the crisis on the fossil fuels industry. His book became a *New York Times* best seller.

Michael Shellenberger, partially in rebuttal, in 2020 published *Apocalypse Never: Why Environmental Alarmism Hurts Us All*. This was followed by another book in 2020, *False Alarm: How Climate Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet*, by Bjorn Lomborg. Both authors offer measuredly different perspectives of the climate debate than that of Wallace-Wells. Both of their books also became best sellers.

None of these three authors are climate scientists. Wallace-Wells graduated from Brown University with a history major. Shellenberger was a Peace and Global Studies major at Earlham College. Lomborg holds a PhD in Political Science from the University of Copenhagen. All three authors, however, cite numerous scientific studies in support of their arguments. Not surprisingly, critics accuse all three authors of "cherry picking" scientific facts to support their positions. Some of these same critics arguably commit the same offense. More on this later.

Neither Shellenberger nor Lomborg are climate change deniers. Lomborg relies heavily on economic data, while Shellenberger approaches the subject from an "environmental humanism" perspective. Though Shellenberger's book was the more enjoyable read, I have

selected Lomborg's book for review because of what I believe to be the cogency of his arguments (and its shorter length). But before turning to Lomborg's book, an overview of the basics of climate change and a summary of key points in Wallace-Wells's *Uninhabitable Earth* are offered.

CLIMATE CHANGE 101

In 2006, Al Gore published the book, *An Inconvenient Truth*, with an accompanying documentary, which raised international awareness of global warming and earned Gore a Nobel Peace Prize the following year. Gore's book begins by asking, what is greenhouse gas? Greenhouse gases are those gases in the atmosphere that hold in heat, such as carbon dioxide, methane, and nitrous oxide. They maintained an average temperature on earth of around 59 degrees Fahrenheit (°F) through most of the 20th century. Without them average temperatures on earth would drop to around 0°F.

Of all the greenhouse gases, carbon dioxide (CO₂) gets top billing because it accounts for about 80% of all greenhouse emissions. The largest contributor to CO₂ from human activities is the burning of fossil fuels for transport, heating, cooking, and power. The total concentration of CO₂ in the atmosphere today is about 400 parts per million (ppm). This compares to about 280 ppm at the dawn of the Industrial Revolution around the year 1750, and has led, most scientists say, to an increase in average temperatures of the earth to slightly higher than 1 degree Celsius (°C), or a little over 1.8°F, since the Industrial Revolution began. The conversion factor is 1°C for every 1.8°F, which is convenient since that is approximately where the postindustrial temperature rise was at the time of Gore's book.

According to *An Inconvenient Truth*, mankind's burning of fossil fuels has been largely responsible for increases in global temperatures due to releases of greenhouse gases. Gore forecasted that the world had about ten years (or until 2016) to drastically cut carbon emissions or imminent disasters would come to pass. 2016 was also the expected tipping point for longer-term global catastrophes, such as massive flooding due to melting of the polar ice caps, increasing drought, wildfires, hurricanes, and the extinction of polar bears and other species. Gore featured a picture of polar bears on the cover of his book. The decline in polar bear populations became emblematic of the international problem of global warming.

In response to concern about global warming, many nations of the earth, including the US, have entered into three major international agreements on climate change to date. The first and second of these predated Gore's book, being made in Rio de Janeiro, Brazil, in 1992 and in Kyoto, Japan, in 1997. These were followed in December 2015 by the Paris Agreement. The stated goal of the Paris Agreement was to limit further global warming to

2°C (3.6°F) over preindustrial temperatures, compared to the 1°C (1.8°F) that global temperatures had risen to around the time of the accord.

The most expansive commitments to reduce carbon emissions made under the Paris Agreement were originally those by the United States, the European Union, China, and Mexico. Together those commitments made up roughly 80% of total promised carbon reductions. Though the US Congress never ratified the Paris Agreement, President Obama committed the US by executive order and set the goal of reducing greenhouse emissions in the US by 2025 to a range around 26% to 28% below what US greenhouse emissions were in 2005, the effective date of the Paris Agreement.

China, the world's largest emitter of greenhouse gases both then and now (the US is second), signed the Paris Agreement but did not commit to reduce CO₂ emissions until 2030, and then on a less significant scale than the US. The most significant carbon reductions the Chinese committed to were deferred to 2060 and beyond.

Russia, the world's fourth largest emitter, had signed the Paris Accord originally but delayed ratifying it until 2019, after intense international pressure. This was despite Vladimir Putin's history of mocking climate change, once quipping that it would save Russians money on fur coats. The Russians, however, added the proviso they receive credit for emissions reductions back to 1990, instead of 2005, which was the baseline for all other Paris signatories. 1990 was before the collapse of the Soviet Union with its emissions-intensive heavy industry. This enabled the Russians to credit themselves with 25% emission reductions in meeting their Paris Agreement commitments without taking any actual further action.

Donald Trump was elected President of the US in 2016. In 2017, he withdrew the US from the Paris Agreement, though complete withdrawal would not occur until after his hoped-for re-election in 2020. Trump's hope was not realized, and President Biden, on his first day in office in January 2021, recommitted the US to the Paris Agreement. Even before Trump took office in 2016, the US was one of the few countries in the world meeting its CO₂ reduction commitments under the Paris Agreement. This was because the US, like Russia, benefited from having its commitments made retroactive, though with the US no special proviso was needed. The effective date of the 2015 Paris Agreement, year 2005, was about the time that the "Shale Revolution" took off in the US with its accompanying increases in domestic natural gas production. This had led many US utility companies to switch from coal to natural gas as a power source, since natural gas emits 50% to 60% less CO₂ when combusted in power plants than coal. It is ironic that this was largely due to fracking, something that is opposed in most "blue" US states and by many environmentalists worldwide.

2016 has come and gone, and Gore's 2006 predictions that the world had ten years before climate change would cause imminent disasters did not come to pass. This did not stop Gore from making a serial documentary in 2017 called *An Inconvenient Sequel: Truth to Power* with similar claims but with extended timing for the disasters to come.

"IT IS WORSE, MUCH WORSE, THAN YOU THINK."

In 2019, two years after Gore's sequel and four years after the Paris Agreement had been signed, Wallace-Wells published *Uninhabitable Earth*, continuing the alarm over climate change raised by Gore. In *Uninhabitable Earth*, Wallace-Wells includes terrifying forecasts of wildfires, hurricanes, flooding, drought, climate refugees, food shortages, and disease that, unless abated, will make the 21st century what he calls the "century of Hell." Wallace-Wells asserts that global temperatures had risen since publication of Gore's 2006 book to about 1.1°C (or about 1.98°F) over where temperatures were at the outset of the Industrial Revolution. He further asserts that about 85% of all carbon emissions since the Industrial Revolution have occurred since World War II. If unabated, says Wallace-Wells, continued usage of fossil fuels will cause global temperatures to rise by 4.5°C (8.1°F) by the end of the century. Like Gore before him, Wallace-Wells asserts that the world has a deadline, about three decades, at most, to completely de-carbonize before truly devastating climate horrors begin, possibly leading to mankind's extinction.

At a 2°C rise in temperature, Wallace-Wells predicts that the polar ice sheets will begin to collapse, major cities in the equatorial band of the earth will become unlivable, and flooding will inundate coastal cities worldwide. At 3°C, much of the world will be in permanent drought. And as 4°C of warming is approached toward the end of the 21st century, there will be global flooding, famine, refugees, and disease on a scale the likes of which the world has never seen. This will collapse the world economy and usher in worldwide political anarchy. "Our grandchildren will curse us," a reviewer of his book said. All of this, according to Wallace-Wells, will be irreversible. He says, "You might hope to simply reverse climate change; you can't. It will outrun us all."

In fairness to Wallace-Wells, buried throughout his book are qualifiers to the effect that the extreme picture he paints is unlikely to happen. (For example, he states, "[Because] the devastating effects of warming will soon become too extreme to ignore, or deny, . . . it is unlikely that climate change will render the planet truly uninhabitable.") But the book became an international best seller and a clarion call for environmentalists. Millions of people the world over accept Wallace-Wells's conclusions, and Gore's before him, as mainstream environmental orthodoxy. We hear this from the media, from politicians, from Hollywood celebrities, from a teenager in Sweden, from Prince Charles, from the Sierra Club, and from a host of other environmental lobbyists and activists. We are told it is the "consensus" of experts and to offer skepticism is to reject science. To the extreme proponents of this view, the costs of curing the problem have become irrelevant.

Shellenberger quotes Congresswoman Alexandria Ocasio-Cortez in a 2019 interview, “The world is going to end in twelve years if we don’t address climate change, and your biggest issue is how we are going to pay for it?”

This barrage from the media, politicians, activists, and others has resulted in near hysteria over climate change among millions the world over. A 2019 poll found that almost half of the world’s population believes climate change will likely end the human race. Shellenberger quotes teenage Swedish climate activist Greta Thunberg on the subject in 2019, “I don’t want you to be hopeful, I want you to panic.”

“FIRST WE NEED TO CALM DOWN.”

Into this maelstrom of climate hysteria entered the publication of Shellenberger’s and Lomborg’s books in 2020. They both make the point that climate hysteria has itself become destructive. Tens of millions of children, says Lomborg, have become terrified, depressed, and unduly pessimistic about their futures. Many prospective parents are questioning whether to bring children into the world because of fear over climate change.

The fundamental issue, says Lomborg, is not the existence of man-made climate change, that is a given. The issue is the pace of response. This leads to the central thesis of Lomborg’s book—that environmental alarmism is crowding out rational analysis in the climate debate. Environmental alarmism hastens bad decisions, says Lomborg, and is leading the world to unnecessarily waste trillions of dollars that might otherwise be available to assist the most vulnerable of the seven billion people living on the planet—the three billion people living in poverty.

We have many tools to fight climate change, says Lomborg, that are not given enough credence. These include innovation, adaptation, a worldwide carbon tax, and increasing prosperity. Continued growing prosperity is essential, says Lomborg, so nations can afford to expend more resources arresting climate change without bankrupting their economies. History has shown that richer countries are better equipped and more resilient than poorer countries in dealing with challenges, whether climate related or not.

Focusing on single solutions, such as wind or solar, and going too fast, leading to irrational decisions, can be more destructive and dangerous to the mass of humanity, says Lomborg, than not going fast enough. According to Lomborg, one of the great ironies of climate change activism is that the same proponents who are adamantly opposed to global economic inequality are seemingly blind to the fact that the costs of most climate policies fall disproportionately upon the poor. “We have it in our power to make a better world,” says Lomborg, “but first we need to calm down.”

Next time, Part II of V: EXTREME WEATHER OR EXTREME EXAGGERATION?

