Fossil Future: A Powerful, Must-Read Defense of Fossil Fuels

By Keith Lockitch <u>New Ideal</u>, the journal of the Ayn Rand Institute, May 27, 2022 © 2022 Ayn Rand Institute

Men, it has been well said, think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one.

The view that climate change will be a world-ending catastrophe dominates today's culture.

The fear and anxiety people feel about this issue has reached such a fever pitch that it was viewed as unremarkable in 2019 when figures such as Alexandria Ocasio-Cortez and Greta Thunberg said with a straight face that the world will end by 2030 if we don't stop using fossil fuels.

This apocalyptic perspective is driving policy decisions with far-reaching consequences. Energy is fundamental to our modern existence, and more than 80 percent of it comes from burning fossil fuels. We rely on them for everything that keeps us alive and flourishing. The lack of affordable, reliable energy is a major reason that billions around the world persist in poverty. Yet, the prevailing view today is that policies aimed at ending our use of fossil fuels are necessary to prevent Armageddon.

Four recent books challenging this apocalyptic narrative, therefore, are a welcome addition to the debate over climate and energy. Each in its own way urges us to think about these issues in a more sober, objective way — and to discuss them rationally, without judgments clouded by panic and hysteria.

Three of these books were published within the last two years: *False Alarm* by Bjorn Lomborg, *Apocalypse Never* by Michael Shellenberger, and *Unsettled* by Steven Koonin. A fourth book, *Fossil Future* by Alex Epstein, just recently came out on May 24, 2022.

Though the literature on climate and energy is vast and growing, these four books are worth singling out for consideration. Targeted at a general, popular

[—] Charles Mackay, Extraordinary Popular Delusions and the Madness of Crowds, Preface (1852).

audience, each of them takes a distinctive approach to the subject — and seeing them in relation to each other brings out their individual virtues.

Each book offers valuable insights that make it worth reading, but in my judgment one of them in particular, Epstein's *Fossil Future*, stands out as being especially important.

Epstein is a former fellow of the Ayn Rand Institute with whom I worked closely for many years. I thought his first book, *The Moral Case for Fossil Fuels*, was an impressive, airtight defense of our continued use of fossil fuel energy. But *Fossil Future*, which supersedes *Moral Case*, is on a whole other level. It's an astonishingly powerful work in the originality and persuasiveness of its arguments.

A narrative built on lies and half-truths

One theme common to all these books is that a key driver of climate alarmism is the failure to consider the full context. Too much of what we hear about climate and energy is distorted by half-truths, by the absence of relevant information, by facts presented out of context.

Consider the following statement from climate activist Bill McKibben. In trying to illustrate the speed at which our carbon emissions are warming the planet, McKibben writes: "The extra heat we trap near the planet every day is equivalent to the heat from four hundred thousand bombs the size of the one that was dropped on Hiroshima."¹

That certainly sounds terrifying! Climate change is like four hundred thousand nuclear bombs going off every day?! But McKibben's statement is completely misleading because there's no context provided to put it into perspective. Does his number — which is basically accurate — amount to a lot of energy or a little when we're talking about the entire planet?

To put this into perspective, consider the energy the earth absorbs every day from *sunlight*. That turns out to be equal to 476 *million* Hiroshima-size bombs, nearly *1,200 times* the warming McKibben is trying to scare us about. Yet nobody views sunshine as being like a nuclear apocalypse. His statement is a dishonest mathematical sleight-of-hand. It's terrifying only because we're not used to thinking on the scale of the entire surface area of the earth.²

This is one brief example, but deceptive half-truths like this are all over the reporting and commentary on climate change. One of the key virtues of the books we're exploring is that all four of the authors view it as morally unacceptable to distort the truth and mislead people in this way.

Shellenberger, for instance, who has spent decades as an environmental activist, explains that he wrote *Apocalypse Never* because "the conversation about climate change and the environment, has, in the last few years, spiraled out of control."

I also care about getting the facts and science right. I believe environmental scientists, journalists, and activists have an obligation to describe environmental problems honestly and accurately, even if they fear doing so will reduce their news value or salience with the public.³

Similarly, Koonin, an accomplished physics professor and prominent science policy leader, condemns the unfortunately all-too-common phenomenon of scientists who think "there's no harm in a bit of misinformation if it helps 'save the planet." His view, by contrast, is that scientists have an "overriding ethical obligation" to "bring objective science to the discussion."⁴

And Lomborg, a professor and public intellectual who has been a leading voice on climate policy since the publication of his 2001 bestseller *The Skeptical Environmentalist*, finds it "morally reprehensible" that we're "scaring kids and adults witless" even though "the science shows us that fears of a climate apocalypse are unfounded."⁵

On the premise of honestly presenting the full context, each book critically examines the standard narrative that the devastating impacts of climate change are already here.

As Koonin summarizes it: "Humans have already broken the earth's climate. Temperatures are rising, sea level is surging, ice is disappearing, and heat waves, storms, droughts, floods, and wildfires are an ever-worsening scourge on the world."⁶ He, and the other authors, explore various versions of these myriad claims, and point out the ways in which they are, in one form or another, wild exaggerations or distortions of the truth.

Are storms really getting worse?

Take storms, for instance. Every time a hurricane makes landfall, headlines scream that climate change is making storms stronger, more destructive, more deadly — and we're already seeing the effects. But what does the data actually show?

Shellenberger quotes from the work of Roger Pielke, Jr., one of the leading experts on climate change and natural disasters, who reports: "There is scant evidence to indicate that hurricanes, floods, tornadoes or drought have become more frequent or intense in the US or globally."⁷ The official reports, such as those produced by the UN's Intergovernmental Panel on Climate Change (IPCC) or the US government's National Climate Assessment (NCA), reach the same conclusion, as reported by all four of our authors. Epstein, for instance, quotes the most recent IPCC report as finding: "There is low confidence in most reported long-term (multidecadal to centennial) trends in [hurricane] frequency- or intensity-based metrics . . ."⁸

Significantly, the death toll from storms has gone down precipitously over the last several decades, and in the developed world has declined even more dramatically. What Epstein emphasizes is that we are safer from storms than we have ever been before in human history because of industrial development powered by fossil fuel energy. We are safer because "we use fossil-fueled machine labor to build sturdy, resilient structures."

Early warning systems also depend on fossil-fueled machines such as rockets bringing satellites into space, observation airplanes, and highpowered computers.

And we use fossil-fueled machines to evacuate at-risk areas if necessary, as well as to transport relief into storm-stricken areas.⁹

The real lesson we should be drawing, he argues, is that fossil fuels have made it possible for us to master the climate and reduce our risk from natural disasters enormously.

The one data point one could use to try to justify sounding the alarm is that economic losses from hurricane damage have increased considerably over the last century. Shellenberger, again quoting Pielke, describes "the climbing, inflation-adjusted cost of hurricanes in the United States rising from near-zero in 1900 to more than \$130 billion in 2005, when Hurricane Katrina hit New Orleans."¹⁰

But even this is not the full story. While it's true that hurricane damage costs have increased significantly, that's not because climate change is altering the nature of storms. Rather, it's a result of the "massive development of America's coastlines."¹¹ As Lomborg explains:

While the US population since 1900 has more than quadrupled, coastal populations have increased far more. The population of all the coastal counties from Texas to Virginia on the Gulf of Mexico and Atlantic has increased sixteenfold in the same period. The coastal population of Florida has increased a phenomenal sixty-seven times. . . . From Texas to Maine, the number of housing units within 31 miles of the coast

increased from 4.4 million in 1940 to 26.6 million in 2000. Correcting for the increase in housing units, the story of worsening damage changes substantially.¹²

What does "correcting for the increase in housing units" mean? Researchers have calculated the damage costs that would have been incurred if the storms that struck over the past century had landed on coastlines with *today's* population and structures. Shellenberger reports that when Pielke and his colleagues calculate this so-called *normalized* hurricane damage they find "no trend of rising costs."¹³

This supports the conclusion that coastal development, not worsening storms, is almost entirely responsible for the increased damage costs. So, the story of climate change causing increasingly destructive hurricanes is, at best, a half-truth.

At worst, though, that story is a distraction that diverts our attention away from real factors that needlessly increase our risk from storms. For instance, Epstein observes: "Storm damage is also increased by irrational policies that force taxpayers to effectively provide storm insurance for those who choose to live in storm-prone areas."¹⁴

These and other government policies that distort price signals and subsidize risk are, arguably, much more important factors in the severity of hurricane damage.¹⁵ But this is never something we hear in the standard reporting and commentary on climate change.

Disconnect between the data and alarmism

Which raises the question: Why don't we hear such things? Why is there, as Koonin puts it, such a "chasm between what is presented as settled when it comes to climate and what the science actually tells us"?¹⁶

To answer that question, we must consider the processes by which scientific knowledge is developed and disseminated. All four of our authors touch on this issue on some level, though some only superficially. Koonin, the one professional scientist among them, offers an illuminating observation when he suggests that:

Most of the disconnect comes from the long game of telephone that starts with the research literature and runs through the assessment reports to the summaries of the assessment reports and on to the media coverage. There are abundant opportunities to get things wrong — both accidentally and on purpose — as the information goes through filter after filter to be packaged for various audiences.¹⁷

This is insightful as far as it goes, but there's much more to say on this issue — and the most comprehensive analysis can be found in Epstein's *Fossil Future*.

Much of the first chapter of *Fossil Future* is devoted to a discussion of what Epstein calls "the knowledge system."

Whenever we hear about what the "experts" think, we need to keep in mind that most of us have no direct access to what most expert researchers in a field think. We are being *told* what experts think through a *system* of institutions and people. . . .¹⁸

Epstein explains the various functions performed by the knowledge system: from original research to the synthesis of that research into comprehensive reports, to the dissemination of the reported results to the culture at large and the evaluation of their implications.

Examining each of these functions in detail — including some of the key people and prominent institutions that perform them on issues related to climate and energy — Epstein clarifies just what are (in Koonin's phrasing) some of the "filters" that give rise to the "abundant opportunities to get things wrong."

In my view, this is a deeply insightful analysis that helps us avoid the false alternative offered by our increasingly tribalistic culture: the "climate denier's" outright dismissal of expert knowledge versus the blind parroting of the alarmist narrative in the name of supposedly "following the science."

Instead, what Epstein provides is a nuanced framework for how to think about expert knowledge, and how to identify when "the system we rely on to tell us what experts think is significantly distorting what actual experts think."¹⁹

A vivid illustration of just how bad these distortions get can be found by looking more closely at the claim that the world will supposedly end by 2030.

Apocalypse now?

Shellenberger tells part of this story in *Apocalypse Never*.²⁰ He reports on the comment by Alexandria Ocasio-Cortez during an interview in early 2019 that "The world is going to end in twelve years if we don't address climate change..."²¹ He similarly quotes teenage climate activist Greta Thunberg:

Around the year 2030, 10 years 252 days and 10 hours away from now, we will be in a position where we set off an irreversible chain reaction beyond human control, that will most likely lead to the end of our civilisation as we know it.²²

That's an oddly specific timeframe for the end of civilization. Where did it come from?

A few months before these comments were made, news stories appeared with headlines like this one from the *Washington Post*: "The World Has Just Over a Decade to Get Climate Change Under Control, U.N. Scientists Say."²³

Notice that this is, as Epstein stresses, an example of us being *told* what the scientists supposedly say. The *Post* was reporting on a 2018 "special report" from the UN's IPCC that studied the question of limiting global warming to 1.5° C (2.7°F) above pre-industrial levels.²⁴ The tone of the *Post* article — and similar ones in the *New York Times* and other major outlets — was one of crisis, with a definite implication that urgent actions must be taken over the coming decade to avoid devastating consequences.

But, as Shellenberger observes, these stories were a mischaracterization of the report:

What the IPCC had actually written in its 2018 report and press release was that in order to have a good chance of limiting warming to 1.5 degrees Celsius from preindustrial times, carbon emissions needed to decline 45 percent by 2030. The IPCC did not say the world would end, nor that civilization would collapse, if temperatures rose above 1.5 degrees Celsius.²⁵

He quotes Gavin Schmidt, a NASA climate scientist who, despite being firmly in the "climate alarmist" camp, viewed the "end of world" claims as a distortion: "All the time-limited frames are bullshit. Nothing special happens when the 'carbon budget' runs out or we pass whatever temperature target you care about"²⁶

So, the notion that the IPCC report was giving some sort of scientific basis for scheduling Armageddon is absurd. But the distortion is worse even than this. More of the story comes out in Lomborg's *False Alarm*:

In fact, what had happened was that at the Paris climate change conference three years earlier, leaders from around the world had declared that they wanted to achieve the target of keeping temperature rises below $2.7^{\circ}F.\ldots$ They did so at the urging of campaigners who wanted to

demonstrate their willpower and ambition, and not because the world's scientists had come together to declare this arbitrary cut off point crucial.

Having already declared in 2015 that the goal was to restrict temperature rises to less than 2.7°F, world leaders *then* asked the UN's climate scientists to find out what it would actually take to achieve this incredibly ambitious target. The scientists' response became the 2018 report. .

Simply put, politicians asked them what it would take to do the almost impossible, and the scientists responded that this would require almost impossible policies. Yet, the report was presented in the media as evidence that we need to make urgent extreme carbon emissions reductions.²⁷

So, this whole chain of events was set off by an arbitrary temperature goal set by climate activists and politicians, which then became the guiding framework for a supposedly scientific study, whose conclusions were then transformed into the widely repeated notion that if we don't immediately take "rapid, far-reaching and unprecedented changes in all aspects of society"²⁸ we face the end of the world by 2030.

It "takes a village" to pretend we face the End of Days based on nothing.

Why is our "knowledge system" so broken?

With Epstein's framework, we can view all four books, in essence, as detailed explorations of all the various ways our "knowledge system" goes wrong on the issues of climate and energy.

But *why* does that happen? Why is it that the complex network of people and institutions that study and disseminate information about these subjects produces such drastically false and dishonest conclusions?

This is another question to which the answer offered by Epstein's *Fossil Future* stands out above the other books in its depth and insightfulness.

The other three books all attempt, in one form or another, to explain, as Lomborg puts it: "Why do we get climate change so wrong?" — or, in Koonin's words "Who broke 'The Science' and why?"

But their answers, for the most part, lay the blame superficially on some form of "self-interest" on the part of the varied elements within the knowledge system. Consider Lomborg's argument:

There are strong incentives to tell the scariest possible story about climate change. Media gets more clicks and views with frightening stories. Campaigners get attention and funding. Researchers who position themselves as addressing apocalyptic threats get outsized attention, more recognition for their universities, and more future funding opportunities. Politicians who emphasize the scary scenarios get to promise to save us, and in the process gain the authority to distribute significant resources to fix the problem.²⁹

While there's some truth to this explanation, in the end it doesn't get us very far. How did all of these incentives line up in the first place? Why is it climate change and not some other "scary story" that captures the public's attention so strongly, such that the media and "campaigners" and researchers and politicians can all "selfishly" cash in on it? And why is fear a greater motivator than, say, inspiration or idealism? This doesn't really explain why "selling Armaged-don is," as Lomborg puts it, "really useful to all these groups."

Koonin discusses the same issue at greater length, and offers the additional observation that for many people "climate change' has become a cause and a mission — to save the world from destruction by humans."³⁰ So it's not *just* about news sites trying to attract clicks, politicians attracting voters, or activists and scientists trying to attract funds. They're also moved by a social cause.

But, again, why did *this* cause become *the* cause that the whole world is committed to? Why does the mission of "saving the world" translate into promoting climate alarmism?

Ultimately, Koonin, like Lomborg, ends up laying the blame on some form of self-interest: "Overwrought portrayals of a 'climate crisis' serve the interests of diverse players, including environmental activists, the media, politicians, scientists, and scientific institutions."³¹

Of these three authors, Shellenberger gives the deepest analysis — one that's more informed by history and philosophy than the other two (see especially his final two chapters: Ch. 11, "The Denial of Power," and Ch. 12, "False Gods for Lost Souls.")

However, he too devotes effort to the argument that irrational positions on climate are partly rationalizations for "self-interested" corruption and hypocrisy. In a chapter titled "All About the Green," Shellenberger relates sordid stories of corrupt politicians and activists with financial conflicts of interest that seem partly to explain their climate and energy policies. He does a valuable service in calling out the evils of some very prominent figures. But in the end, we're still left wanting in terms of understanding why our whole knowledge system is so corrupted when it comes to climate and energy.

By contrast, what Epstein argues in *Fossil Future* is that the corruption, ultimately, is philosophical in nature. The root of climate alarmism is not some misplaced self-interested "incentives," but the values and moral standards that people bring to bear when they think about these issues.

A corrupt moral framework

The dominant moral standard, Epstein argues, that shapes and informs people's views on environmental issues is what he calls the "anti-impact framework."³² This is a perspective that views all human impacts on nature as something negative, destructive, evil.

Think of the widespread idea of an "environmental footprint." This is meant to be a measure of the total impact that a person's activities have on the environment. And the implication is that the larger your "footprint," the more you are contributing to "destroying the planet."³³

It's this anti-impact standard, Epstein argues, that leads people to evaluate our use of fossil fuels and their contribution to global warming as inherently terrible things.

Epstein points out that although we hear endlessly about the supposedly catastrophic consequences of fossil fuels and climate change, we never hear a thing about any possible positive benefits. Yet, he notes, it's implausible on the face of it that a warmer planet with a higher concentration of atmospheric carbon dioxide — i.e., plant food! — would have no benefits at all for mankind. And it's not like we just use fossil fuels for no good reason. Fossil fuel energy is so ubiquitous because it provides us with unique, indispensable, lifesaving benefits. But these benefits are almost never acknowledged or discussed.

Why are these crucial pieces of context — and the whole idea of looking at both costs and benefits, which is standard practice for any important issue — dropped entirely by our knowledge system when it comes to climate and energy?

The basic explanation, in Epstein's view, is that "eliminating human impact, not advancing human flourishing, is the primary moral goal driving our knowledge system in the realm of energy."³⁴

Epstein gives a powerful illustration of the anti-impact standard at work — and its consequent ignoring of benefits — when he discusses the subject of climate-related deaths.

Since the pre-industrial era, human activity has increased atmospheric carbon dioxide by 50 percent and the earth has warmed by about $1^{\circ}C$ (1.8°F). Under the influence of the anti-impact framework, people generally assume that this must already be spelling death for mankind.

Yet, if you look at the data that tracks climate-related deaths over time — i.e., deaths due to drought, floods, wildfires, storms, and temperature extremes — what you find is exactly the opposite: Climate-related deaths have gone down dramatically over the last century — by as much as 98 percent!³⁵

The dataset that captures this result shows that drought and flood have historically been the two biggest killers — but that deaths from both have declined precipitously over the last century.³⁶

Drought is now barely a concern in the developed world, where fossil fuel powered irrigation systems mitigate its effects, and where fossil fuel powered transportation networks can rapidly move food supplies when necessary.³⁷

And the risk of death from floods, even after such devastating storms as 2005's Hurricane Katrina, is also massively reduced in the developed world due to "advanced early warning systems and a functioning communications infrastructure, modern vehicles and paved roads to facilitate evacuation and transport relief supplies, sturdier homes and structures and advanced flood control systems, etc."³⁸

Our use of fossil fuels, Epstein argues, has brought about such massive improvements in the human environment we've built for ourselves that we are more resilient against climate-related risks than ever before in all human history.

It's shocking that this fact is basically never mentioned in all the reporting and commentary on climate and energy.³⁹ Writes Epstein, "not only does our knowledge system ignore the massive, life-or-death benefits of fossil fuels, but it has a track record of being 180 degrees wrong about the supposedly catastrophic side-effect of climate danger — which has dramatically decreased.⁴⁰

The anti-impact framework is a massive distorting mechanism that blinds the prominent figures in our knowledge system — from researchers and policy

analysts to public intellectuals and journalists — to relevant facts that have critical implications for climate and energy policy.

Note that while most people are influenced by the anti-impact framework, they are not necessarily aware of that influence explicitly. People rarely identify consciously the moral premises that shape their ideas, choices, and actions. And the anti-impact standard is rarely identified or acknowledged openly by the voices that express our knowledge system's dominant perspective. Epstein explains:

If this goal and its anti-human nature were routinely made explicit, it would not be adopted by most people.

But it is adopted to a significant degree by most people and certainly by our knowledge system in the disguised form of vague, seemingly prohuman terms like "going green," "minimizing environmental impact," "protecting the environment," and "saving the planet."

These terms seem to imply actions that do not eliminate all types of human impacts, but rather only *unnecessary*, *human-harming impacts*, such as unnecessary pollution or destruction of natural beauty.

But in practice they absolutely do mean eliminating all types of human impacts — including the vast majority of human impacts that are beneficial to human flourishing. 41

"Human flourishing" as a moral goal

As an alternative to the anti-impact framework, Epstein offers a standard that he calls the "human flourishing framework." This is a perspective that places primary value on human life — and on the achievement of human lives that are long, secure, fulfilling, and happy.

The fundamental principle of the human flourishing framework is that advancing human flourishing should be our primary moral goal and therefore our standard of evaluation...

Advancing human flourishing is a long-term and wide-ranging goal. It doesn't just mean thinking about the next year; it means thinking generations ahead. And it doesn't mean indifference to a safe, healthy, beautiful environment; it means placing high value on those. On the goal of advancing human flourishing, the anti-human goal of eliminating human impact is immoral. While we want to eliminate certain anti-human impacts, our overall attitude toward impacting the rest of nature is positive, because massive impact, done intelligently and productively, is essential to our survival and flourishing. 42

Here, the influence of Ayn Rand's philosophy, Objectivism, on Epstein's thinking is most apparent (though it's evident throughout *Fossil Future*). "The standard of value of the Objectivist ethics," writes Rand, "the standard by which one judges what is good or evil — is *man's life*, or: that which is required for man's survival *qua* man."⁴³ Epstein's human flourishing framework — and the arguments in *Fossil Future* that he develops based on this framework can be seen as an application of the Objectivist ethics to the question of how to evaluate mankind's use of fossil fuels and their impact on our climate.⁴⁴ And the idea that human life — not unimpacted nature — should be our operative moral standard is an expression of the supreme value that Objectivism places on each and every unique, irreplaceable, individual human being.

The stark difference between the anti-impact framework and Epstein's human flourishing framework gets to the heart of explaining the distortions we see in discussions of climate and energy, in my view.

If the standard driving our evaluations is the idea that any human impact on nature is necessarily destructive and dangerous, it makes sense that we never hear about the enormous benefits of fossil fuels. By that standard there *are no benefits* — only an ever-increasing impact.

But if our standard is the requirements of human life, then it becomes critical to give an honest, objective accounting of both the costs and the enormous benefits of fossil fuel energy, which Epstein does in great detail.

On the anti-impact standard, it makes sense that impacts of climate change are always assumed to be disastrous regardless of, and often in defiance of, the evidence. By that standard, the very fact that they are *impacts* is *already the disaster*.

But if the standard is human flourishing, then it becomes critical to look objectively at *all the facts* relevant to judging our risks from climate disaster including the enormous, unprecedented power that fossil fuels give us to master the climate and render it harmless to human beings.

In my reading of their arguments, it seems evident to me that all three of the other authors we're discussing — Lomborg, Koonin, and Shellenberger — are at least implicitly on the human flourishing premise. (Indeed, Shellenberger comes the closest to identifying this explicitly as a moral standard.)

Their works are all suffused with a pro-human perspective that suggests they all place a primary value on human life — and that what's motivating them to stand courageously against the whole weight of our culture is the conviction that the alarmist position on climate and energy is profoundly anti-human. Their implicit human flourishing standard is part of the reason they get so many of the issues right and have so many important values to offer to the climate and energy conversation.

But the explicit identification of the opposite moral standards operative in this debate is critically important. It's all too easy for people to fall under the sway of corrupt philosophical ideas that they would reject if they considered them consciously. As Ayn Rand once explained:

When opposite basic principles are clearly and openly defined, it works to the advantage of the rational side; when they are *not* clearly defined, but are hidden or evaded, it works to the advantage of the irrational side.

In order to win, the rational side of any controversy requires that its goals be understood; it has nothing to hide, since reality is its ally. The irrational side has to deceive, to confuse, to evade, to hide its goals. Fog, murk, and blindness are not the tools of reason; they are the only tools of irrationality.⁴⁵

This is why *Fossil Future* stands out among this collection of important and valuable books as being especially original, forceful, and persuasive.

The whole structure of Epstein's argument is radically different from the other three books. They each begin by focusing their efforts on refuting the alarmist perspective on climate change. The alternative perspective they each have to offer comes later and, in some respects, almost seems like an afterthought.

Epstein, by contrast, argues right out of the gate for a positive ideal: a future of unlimited human flourishing made possible, in part, by expanding our use of fossil fuels.

In this book I'm going to try to persuade you of something that may seem crazy to you — something that definitely used to seem crazy to me.

I'm going to try to persuade you that if you want to make the world a better place, one of the best things you can do is fight for *more fossil fuel use* — more burning of oil, coal, and natural gas.

While we are almost universally told that more fossil fuel use will destroy the world, I am going to make the case that more fossil fuel use will actually make the world a far better place, a place where billions more people will have the opportunity to *flourish*, including: to pull themselves out of poverty, to have a chance to pursue their dreams, and — this will likely seem craziest of all — to experience *higher environmental quality* and *less danger from climate*.⁴⁶

Notice his use of the term "better." "Better" is an evaluative concept that implies a moral standard. Right from the start of his book, Epstein is already indicating explicitly that what he means by "better" is: more supportive of human flourishing.

This difference even shows up in the subtitles of each of the various books. The subtitle of Lomborg's *False Alarm* is "How Climate Change Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet." For Koonin's *Unsettled*, it's "What Climate Science Tells Us, What It Doesn't, and Why It Matters." And for Shellenberger's *Apocalypse Never*, it's "Why Environmental Alarmism Hurts Us All."

By contrast, the positive focus of *Fossil Future* is signaled immediately by its subtitle: "Why Global Human Flourishing Requires More Oil, Coal, and Natural Gas—Not Less."

Conclusion

This article began with an epigraph by Charles Mackay, the author of *Extraordinary Popular Delusions and the Madness of Crowds* — a work that explores the phenomenon of social contagion and mass hysteria. A longer version of the quotation reads:

We find that whole communities suddenly fix their minds upon one object, and go mad in its pursuit; that millions of people become simultaneously impressed with one delusion, and run after it. . . . Men, it has been well said, think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one.⁴⁷

The dominant attitude towards climate change that we see in today's culture is, arguably, an example of exactly this kind of mass delusion and madness.

In order for people to "recover their senses slowly" they need to resist the herd mentality driving climate hysteria. They need to think their way, individually, out of the delusions and hysterical claims about climate and energy that we're saturated with every day. They need to have the courage and the independence to consider radical new arguments, no matter how unconventional.

The books by Lomborg, Koonin, and Shellenberger can all help with this. I don't endorse every last one of their various claims and arguments, but I highly recommend all of them as worth reading. They each bring a unique approach to the subject and have their own valuable insights to offer.

But Alex Epstein's Fossil Future is in a category of its own.

It argues, carefully and painstakingly but with luminous clarity, for a fundamental rethinking of everything we think we know about fossil fuels and climate change.

Anyone who thinks they've heard all the arguments on these issues must think again. As someone who has been writing and thinking about energy, climate, and environmentalism for almost two decades, I was inspired by the originality, the clarity, and the persuasive forcefulness of Epstein's argument.

If *Fossil Future* gets a fair hearing, it has the potential to be a true gamechanger — to fundamentally shift the debate on climate and energy away from the suicidal, anti-human, climate-alarmist path the world is currently on, and towards a rational, pro-human perspective.

Anyone who cares about humanity's future owes it to himself to read this profoundly important book, to engage deeply with its reasoning, and to recommend it to everyone they know.

¹ Bill McKibben, "How Extreme Weather Is Shrinking the Planet," *New Yorker*, November 16, 2018

https://www.newyorker.com/magazine/2018/11/26/how-extreme-weather-is-shrinking-theplanet

² Steven E. Koonin gives a version of this same example on page 204 of *Unsettled: What Climate Science Tells Us, What It Doesn't, and Why It Matters* (Dallas, TX: BenBella Books, 2021).

³ Michael Shellenberger, *Apocalypse Never: Why Environmental Alarmism Hurts Us All* (New York: HarperCollins, 2020), xiii.

⁴ Koonin, Unsettled, 7–10.

⁵ Bjorn Lomborg, False Alarm: How Climate Change Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet (New York: Basic Books, 2021), 6; I wrote about the cultural reaction to Lomborg's book The Skeptical Environmentalist when it first appeared nearly two decades ago. See Keith Lockitch, "Fighting the Hydra: The Futile Battle of the Skeptical Environmentalist," Intellectual Activist 16 (December 2002): 6.

⁶ Koonin, Unsettled, 1.

⁷ Shellenberger, *Apocalypse Never*, 14.

⁸ Alex Epstein, *Fossil Future: Why Global Human Flourishing Requires More Oil, Coal, and Natural Gas — Not Less* (New York: Portfolio/Penguin, 2022), 15.

¹⁰ Shellenberger, Apocalypse Never, 14.

¹¹ Shellenberger, Apocalypse Never, 14.

¹³ Shellenberger, *Apocalypse Never*, 14.

¹⁴ Epstein, Fossil Future, 279.

¹⁵ Keith Lockitch, "Climate Vulnerability and the Indispensable Value of Industrial Capitalism," *Energy & Environment* 20 (2009) <u>https://newideal.aynrand.org/industrial-capitalism-</u> protects-us-from-climate-related-risks/

¹⁶ Koonin, Unsettled, 183.

¹⁷ Koonin, Unsettled, 2.

¹⁸ Epstein, *Fossil Future*, 9.

¹⁹ Epstein, *Fossil Future*, 9.

²⁰ Shellenberger *Apocalypse Never*, 1–4.

²¹ William Cummings, "'The world is going to end in 12 years if we don't address climate change,' Ocasio-Cortez says," *USA Today*, January 22, 2019. <u>https://www.usato-day.com/story/news/politics/2019/01/22/ocasio-cortez-climate-change-alarm/2642481002/</u>

²² Greta Thunberg, 'You did not act in time': Greta Thunberg's full speech to MPs," *Guardian*, April 23, 2019.

https://www.theguardian.com/environment/2019/apr/23/greta-thunberg-full-speech-to-mpsyou-did-not-act-in-time

²³ Chris Mooney and Brady Dennis, "The world has just over a decade to get climate change under control, U.N. scientists say," *Washington Post*, October 7, 2018.

https://www.washingtonpost.com/energy-environment/2018/10/08/world-has-only-years-getclimate-change-under-control-un-scientists-say/

 24 Intergovernmental Panel on Climate Change, "Global Warming of 1.5 $^{\rm o}{\rm C}$ "

https://www.ipcc.ch/sr15/

²⁵ Shellenberger *Apocalypse Never*, p. 4.

²⁶ Andrew Freedman, "Climate scientists refute 12-year deadline to curb global warming," Axios, January 22, 2019.

https://www.axios.com/2019/01/22/climate-change-scientists-comment-ocasio-cortez-12-year-deadline

²⁷ Lomborg, False Alarm, 24–25.

²⁸ Intergovernmental Panel on Climate Change, "IPCC Press Release: Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments," October 8, 2018.

https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/pr_181008_P48_spm_en.pdf

²⁹ Lomborg, *False Alarm*, 19.

³⁰ Koonin, Unsettled, 187.

³¹ Koonin, Unsettled, 12.

³² Epstein, *Fossil Future*, Ch. 3.

³³ Keith Lockitch, "No 'Footprint,' No Life," January 9, 2009. <u>https://ari.aynrand.org/is-sues/science-and-industrialization/environmental-issues/no-footprint-no-life/</u>

³⁴ Epstein, *Fossil Future*, p. 80.

³⁵ Epstein, *Fossil Future*, p. 47.

³⁶ See, for example, Our World in Data, "Decadal Average: Death Rates from Natural Disasters, World." <u>https://ourworldindata.org/grapher/decadal-average-death-rates-from-naturaldisasters?country=~OWID_WRL</u>

³⁷ Epstein, Fossil Future, 266–69.

⁹ Epstein, *Fossil Future*, 278.

¹² Lomborg, *False Alarm*, 70–71.

³⁸ Keith Lockitch, "Industrial Capitalism Protects Us from Climate-Related Risks," *New Ideal*, March 17, 2021.

<u>https://newideal.aynrand.org/industrial-capitalism-protects-us-from-climate-related-risks/</u> ³⁹ All four of the books discussed here mention this data in one form or another, but Epstein underscores its significance in a way the others don't.

⁴⁰ Epstein, *Fossil Future*, 48.

⁴¹ Epstein, *Fossil Future*, 80.

⁴² Epstein, Fossil Future, 97.

⁴³ Ayn Rand, "The Objectivist Ethics," *The Virtue of Selfishness: A New Concept of Egoism* (New York: Signet, 1964 Centennial edition), 23.

⁴⁴ Indeed, Epstein notes in his acknowledgements that he worked closely on his book with ARI senior fellow and chief philosophy officer Onkar Ghate — a thinker well known to readers of *New Ideal*:

Onkar is a brilliant philosopher who, when we worked together at the Ayn Rand Institute, helped shape my thinking on energy and its relationship to our environment. When I decided to write a new book on fossil fuels, aspiring to a far higher level of clarity, I hoped that I could bring on Onkar as a consulting philosopher. Fortunately, he agreed, and the result was better than I could have expected. Every idea and chapter in this book is better because of his extensive guidance and feedback for two years.

Epstein, Fossil Future, 431.

⁴⁵ Ayn Rand, "The Anatomy of Compromise," *Capitalism: The Unknown Ideal* (New York: Signet, 1967 Centennial edition), 148–49.

⁴⁶ Epstein, *Fossil Future*, 3.

⁴⁷ Charles Mackay, *Extraordinary Popular Delusions and the Madness of Crowds*, Preface (1852).