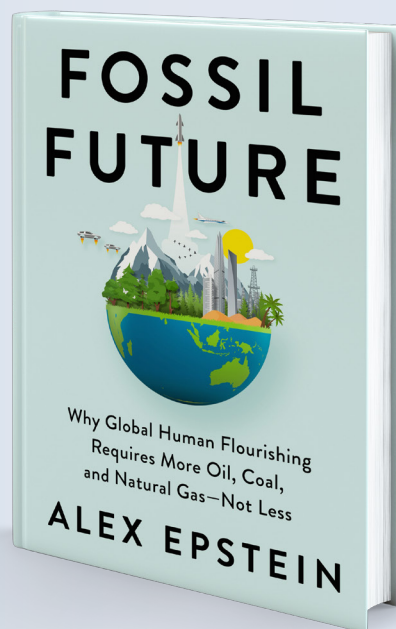


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Fossil Future

Why Global Human Flourishing Requires More Oil, Coal, and Natural Gas - Not Less

By Alex Epstein

Alex Epstein is an American author, and commentator who advocates for the expansion of fossil fuels. He is the founder and president of the Center for Industrial Progress, a for-profit organization in San Diego, California. He is the author of *The Moral Case for Fossil Fuels* (2014), and *Fossil Future* (2022), in which he argues for the expanded use of fossil fuels like coal, oil, and natural gas

The Future of Energy As We Know It

A significant portion of those who engage in public discourse regarding fossil fuels promote the idea that fossil fuels and greenhouse gases are producing a climate that will become ever more inconducive to human flourishing. According to Alex Epstein in his book, *Fossil Future: Why Global Human Flourishing Requires More Oil, Coal, and Natural Gas - Not Less*, this is because those who society has deemed as experts are operating on an anti-impact framework when it comes to the environment rather than on a human flourishing framework. In his book, Epstein posits that while human activity is generating more carbon emissions and that these carbon emissions are affecting the environment, the risks are not as great as those proposed by those who he calls the designated experts. In fact, he says that the positive effects of technology outweigh any negative consequences stemming from human development. He encourages his reader to try to confront the assumptions in climate change conversations and argue that a cost/benefit analysis is the most effective and instructive way to approach the topic.

Epstein begins his discussion by exploring the role experts can and should play in shaping our opinions. He notes that people should take note when a majority of experts claim something to be true. After all, in our “modern, specialized society, we need to rely on experts.” This does not, however, mean that experts have not been wrong in the past or may not be wrong in the present or in the future. The question then becomes one of figuring out how to use experts responsibly. Part of this, Epstein claims, is distinguishing between what experts in a field are saying and what the people who report on those experts are saying. Most people do not have direct access to experts and rather have access to those who synthesize expert information and disseminate it. Errors can and do occur in this process.

Epstein then moves into a discussion about an evaluator’s standard of evaluation, and this becomes the basis for much of his argument. He claims that many designated experts are not relying on a model where human flourishing is considered the highest good. Rather, he says, they are basing their conclusions off the assumption that an unimpacted world is the highest ideal. He calls this the anti-impact model. He says that people operating on the anti-impact model often have a view that the Earth is a delicate nurturer that, lacking human intervention, can provide a delicate balance that is nurturing to life. Epstein

does not believe in this model, and he supports his stance by showing that storms, drought, predators, and any other number of harmful potentialities exist in nature and harm human flourishing if left unchecked. He then goes on to claim that the advances made using fossil fuels have made the world incredibly more livable for humanity.

Epstein rejects the anti-impact model, and he believes we instead should be focusing on a human-flourishing model. Under this model, many changes may be considered beneficial even if they greatly impact the world. In fact, some changes may even be beneficial if they have negative impacts on humanity and the world if those impacts are either less negative than the positive benefits or if humanity can use fossil fuel derived energy to overcome those harmful effects. According to this standard, Epstein proposes that instead of focusing on climate change, it is more prudent to focus on climate danger.

Also underlying Epstein's ideas are three key facts he provides:

Fossil fuels are cost effective.

“Cost-effective energy is essential to human flourishing.”

Billions of people around the world suffer for lack of this energy.

He claims that two ways that fossil fuels aid human flourishing is by amplifying and expanding human capabilities. In short, machines allow people to produce far more than they ever could without machines, and machines allow people to do types of things they never could do without machines. As an example of the latter, he describes incubators that are capable of creating the perfect environment for a premature baby.

A major problem Epstein sees with the ideas generated by those on an anti-impact framework is the catastrophizing of side-effects. Part of the problem with accurately assessing climate change is that it is all based on predictions. It is difficult to tell whether a future prediction will come to be, but it is much easier to examine whether past predictions played out. Epstein goes on to show that many claims were made in the past about catastrophic side effects that would come to pass and yet never did.

Epstein goes on to explain that as CO₂ emissions have increased, the death rate caused by climate disasters has actually decreased substantially to the point where “the average person is fifty times less likely to die of a climate-related cause than they were in the 1920s.” This reduction is due to our improved ability to protect ourselves. This is largely the product of fossil-fuel energized machines and what they can produce. Another way Epstein proposes that designated experts are catastrophizing or looking only at worst case scenarios is in regards to the availability of fossil fuels. Instead of running out like has been predicted, as “fossil fuel use and other resource use increased, which “should have” led to an even faster decline of resources - especially fossil fuels themselves,” availability has in fact increased. Part of this is because of resource mastery or the idea that human beings develop ever better ways “of transforming unusable raw materials into usable resources.” Through all of this, Epstein maintains that

the problem is not mainly with the researchers but with those who society has designated to be the experts.

In Epstein's argument, the use of fossil fuels has had many more beneficial effects than negative ones on humanity. His claim is that the planet was largely unlivable before the advent of fossil fuel powered machines and it has become far more livable. For this reason, it is important to increase fossil fuel-provided energy to those billions in the world who still lack it so that they, too, can reap the benefits. To determine livability, Epstein looks at how nourishing, safe, and opportunity-filled the world is. Life expectancies have gone dramatically up. When a person has to spend all of their time meeting their basic needs, there is no time for innovation. With machines, human beings can rely on them to do a lot of the work necessary for survival and the people can then focus on other goals conducive to flourishing. The degree to which people can use machine labor is dependent upon the price of that labor. That is why cost-effectiveness, which fossil fuels provide, is so important.

Human flourishing is more possible with machines because of improved shelter, sanitation, and medical care. In regards to sanitation, Epstein refers to claims that fossil fuels make the world dirtier. In fact, he makes the claim that fossil fuels take an unnaturally dirty environment and make it clean enough for humans to thrive in. In terms of medical care, he references the Covid-19 pandemic and how quickly the world was able to mobilize scientific resources in order to come up with vaccines. Finally, he discusses fossil fuels' impact on human flourishing in terms of how people spend their productive time, how easily they are able to procure nourishment and protection, and how fulfilling their leisure time is.

A key benefit Epstein finds in the use of fossil fuels is their ability to counteract any negative consequences. If stronger storms occur, so will stronger shelters and better warning systems. If significant warming does occur, so does the ability of people to cool their environments with air conditioning. In terms of pollution, he believes negative side effects like those that occur in China can be mitigated. Crucial to Epstein is the idea that we do not always need to eliminate a side effect if we can instead reduce or eliminate the negative consequences of it to humanity.

The need for energy in the future will rise. Billions of people still lack the energy they need in order to thrive. When they acquire this energy, energy use will rise. Energy use, he claims, will also increase as people use new types of machines. We already use machines for much manual labor, but machine use will increase in terms of what mental labor it can do and will be asked to do. Part of this will occur with machine learning. He sees the need and opportunity for machine mental labor to be almost limitless. Energy efficiency, therefore, is key as demand for energy skyrockets. It is important when looking at alternatives to consider not just the energy needs of today but those of tomorrow as well.

Epstein then explores what makes fossil fuels so desired, what their “secret sauce” is. Much of their desirability comes from the attributes of coal, oil, and natural gas. For one, the energy is available in its naturally stored form making it much more



... forcing the unempowered world to receive their power from solar and wind is to be indifferent to their suffering.”

reliable. It is also cheaper because we do not need to pay for storage. Second, it is highly concentrated. It is energy dense. Finally, it is abundant. On top of all of this, fossil fuels benefit from the generations of people who have worked on innovation in this area. He believes that if this continues, even more people will be able to become empowered.

Epstein believes that nuclear energy is the most likely possible alternative to fossil fuels. This is resisted by many, however, who work on the anti-impact framework. He writes about the current emphasis on wind and solar energy, but he claims that in order to have these take over fossil fuels by 2050, is “about as far-fetched as you can get.” He says that the claims that this energy is cheap do not take into account the government subsidies that support these industries. Not only do solar and wind suffer because they are intermittent sources of electricity, but they are also quite dilute, meaning that it will take a large amount of space to harness them. He believes that forcing the unempowered world to receive their power from solar and wind is to be indifferent to their suffering. He then goes on to discuss using biomass to replace fossil fuels. While biomass does have some of the positive attributes that fossil fuels have such as storage and concentration, it is not scalable. There is simply not enough farmland to grow new biomass. Hydroelectric energy is another source that Epstein states is unscalable. Geothermal energy is not currently cost effective in most places. Epstein believes that nuclear energy is the most promising alternative but is frustrated by the anti-impact framework’s refusal to see it as such. He does not believe that most such people oppose it on the grounds of safety; rather he believes they oppose it because it impacts the environment, especially as it must be stored. Regardless, Epstein believes nuclear is still decades away from being a top global energy source.

Epstein devotes the third part of his book to discussing climate side effects. He sees our environment as being diverse, dangerous, and dynamic. By diverse he means that the effects of any man made climate change will not be the same everywhere. Our climate has always been dangerous and dynamic far before the use of fossil fuels for energy. Our climate is not inherently stable. It is dynamic and changing throughout history. Fossil fuels allow us to overcome changing temperatures, increased wildfires, and master storms and floods. Even rising sea levels can be overcome or adapted to as shown by the rising number of people who choose to live below sea level.

Epstein does not believe that rising CO2 levels will lead to an unlivable planet as CO2 has been higher deep in our history, and life continued to exist. In short, he says that we are currently near historic lows in terms of both CO2 and temperature. Not to mention the fact that he says that most climate warming actually happens in cooler areas rather than in those closest to

the equator. He goes on to say that “There is no direct correlation between temperature and CO2.” He says that there likely may be natural warming occurring concurrently with man-made warming. He believes that when looking at side-effects, we need to ensure that they are both harmful and preventable, and he believes that CO2 emissions are neither.

Epstein believes freedom is a key component in the empowered world’s ability to become so, and he fears restrictions on this freedom could stop others from flourishing as well. Human flourishing requires freedom to trade, freedom to compete, and freedom of property rights. Government-control of land limits this freedom. Policies regarding development also stymie energy growth. Epstein believes people should be protected from abuses of energy but not necessarily from natural side effects of energy use. To consider a side effect endangerment and thus in need of regulation, he believes the side effect must be both significantly harmful and preventable.

In his book, Epstein takes on what he calls the designated experts of today who claim that fossil fuel use has to be eliminated. Most of these experts give the date of 2050 for this elimination of carbon emissions. Epstein believes that these people place a non-impacted world over the flourishing of human beings. He analyzes the assumptions that underlie their beliefs and then goes on to question the claims they make and the opportunities they eschew. By the end of his book, Epstein has laid out his case that the truly moral way to move forward is to actually expand rather than restrict the use of fossil fuels.