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Confronting the Evils of Extraction: Keeping Climate Ethics Engaged

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Abstract

The two fundamental contentions of this article are that grave evil is systematically being done and that the perpetrators have great entrenched political power based in their carbon wealth that can be overcome only by broad coalitions of politically active individuals. Since the evil consists of threats to the preconditions of civilized society, all humans have both strong self-interest and an unconditional duty to resist it and defend our way of life. This makes the broad coalitions that are necessary also possible. Since the perpetrators are politically powerful, resisting the threats they pose requires challenging their power and undermining their wealth. No firm can be allowed any longer simply to proceed to make climate change worse because it fits their established business model. Climate ethics has so far focused mainly on questions of justice and fairness - the ethics of cooperation. We need also to develop an ethics of confrontation, beginning with a lucid understanding of the supreme moral importance of what is at stake in this political struggle over whether the extractive business-as-usual can be permitted to continue on its own terms and, since it cannot, over how it can best be eliminated fast enough, We will see some basis in both political economy and recent experience to believe that, for example, concerted political action by broad political coalitions can overcome opposition and mobilize public institutions. But a much fuller ethically-infused and empirically-based strategy is needed for the great political battle of our time.

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Introduction: Politically Grounded Ethics

Alternative, non-carbon energy, especially renewable energy, and most especially solar energy, is thriving, heavily thanks to early subsidies in the 20th century by the governments of Denmark and Germany and now massive investment in the 21st century by China (International Energy Agency 2025; Tooze 2026; Wamsted and Feaster 2026). Meanwhile the earth's climate is rapidly becoming more volatile and more threatening to the earth's living things, including humans. The problem, as is increasingly widely appreciated, is that we can add as much non-carbon energy as we like but, unless it substitutes for - replaces - carbon energy rather than merely adding on to it, the ever-growing combustion of carbon-based energy will continue to undermine the climate as before (Peters et al. 2020). The supply of fossil fuels must be diminished at least as fast as the supply of alternative fuels is enhanced. Instead, more fossil

fuel is in fact burned every year [except in 2020 during the worst of the pandemic] (Energy Institute 2026; Global Carbon Project 2025; International Energy Agency 2025a), and so climate change not only worsens but accelerates, with temperatures rising unexpectedly faster in the most recent decades (Dance and Noll 2024; World Meteorology Organization 2026). The authoritative annual update of scientific data judges that "continued emissions at current levels would cause human-induced global warming to reach 1.5 °C around the year 2030" (Forster 2026: 3910). Any illusion that somehow "the market" would automatically shrink the supply of fossil fuel because the supply of alternative fuels grew was long ago decisively dashed by the industry's aggressive push to expand extraction.

The academic field of climate ethics, like renewable energy, is also thriving in that its literature is becoming more extensive and more sophisticated. Climate ethics, like many sub-fields of philosophy, is intrinsically interesting and, I think, intrinsically valuable. But some of it, including my own work, has been intended to be practical ethics in the sense of providing useful guidance to non-philosophers as well as philosophers about what people ought to be doing, in this case, about the deteriorating climate. To have such practical value (beyond any intrinsic intellectual interest) philosophical analyses must rest on an accurate and relevant understanding of what the primary challenges are that need to be met.

Of course, what is the challenge that needs to be met is itself a heavily ethical question because it depends on what matters, and how much. How to protect or promote what matters most depends, in turn, on how things actually work in reality. In particular, it depends on identifying the main threats to what matters and gauging both the empirical and moral seriousness of those threats. If one is correct about what matters, but wrong about the nature of the worst threats to it, any guidance one offers may be useless, or even counter-productive, because off the mark.

This is why practical ethics is so challenging: it needs to be empirically well-grounded as well as conceptually well-argued. Doing practical ethics well depends on accurately understanding ethics, but also much besides.[1] In this article I will try to illustrate how at the present moment insightful practical climate ethics must incorporate perceptive political analysis because the ethically critical threats to the climate are fundamentally political but carefully disguised. Limiting climate change, which is to this day worsening without limit, requires radical change in how every nation on earth sources its energy. These changes will require political action, that is, some people now without power must gain it and some now with power must lose it.

Limiting Supply as well as Demand

Suppose I would like to lease the empty shop around the corner and sell cocaine and heroin to the teenagers as they walk past on their way home from school. That is not going to happen. Roughly speaking, society will not allow such a business activity to be conducted insofar as it is capable of stopping it. Even free societies that value a wide range of liberties do not permit people to sell addictive dangerous drugs to young people. Such a society may tolerate a wide range of practices, some predominantly harmful, but limits exist. This is sometimes described vaguely by saying that a business needs a 'social license' in order to operate. Especially harmful enterprises can be denied a 'social license' by general agreement and accordingly denied the various legal permits that would constitute the license, which makes the issuance of licenses an exercise of power and specifically political.

The most destructive business activity on the planet today is the extraction and marketing for combustion of the fossil fuels whose emissions are progressively undermining the Holocene climate, in the process killing millions of people annually through routine air pollution

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[1]Early philosophy of science was written by some philosophers with an only superficial knowledge of any particular science, but no philosopher of science could now get away with similarly vague pontifications about 'scientific laws'.

(especially particulate matter from coal-burning), heat waves, fires, floods, disruption of food-growing, spread of infectious diseases, and many other well-documented unnatural phenomena. Serious arguments are being made that those most responsible for these deaths are legally guilty of murder (Arkush and Braman 2024) or a proposed offense of 'postericide' (risking extinction) (McKinnon forthcoming). Yet executives of fossil fuel companies are still generally treated at present as if they are more upstanding citizens than, say, drug-dealers, arms-smugglers, and others implicated in widespread human deaths, and they are allowed to accumulate fabulous amounts of wealth and to exercise extreme political power. Their enterprises for extraction and marketing are not only allowed a 'social license' to operate but lavished by governments with subsidies at public expense, including a variety of gigantic tax breaks, to make them more profitable than they would have been if ordinary market processes had ever been allowed to operate within the energy regime (Black, Liu, and Parry 2023; Black, Parry, and Vernon-Lin 2023). There are historical explanations for this intense political embrace of purveyors of fossil fuels because there was a time, before climate change was widely understood, and before alternative energy became cheaper than fossil fuel, when it seemed socially valuable to encourage fossil fuel production. Sadly, this obsolete and deeply counter-productive political practice of coddling fossil fuel firms and shielding them from troublesome market forces is still entrenched, even though the defensible reasons for the political favouritism for fossil fuels are ancient history.

It should be seen to be bizarre that members of human societies are taxed by their own governments in order literally to provide financial support for the combustion of fossil fuels and thereby the disruption of physical necessities for the stability of their own society, such as favourable weather conditions for productive agriculture, and, in many cases, to subsidize their own individual deaths from, for example, air-pollution-caused lung and heart diseases and

increasingly extreme heat waves. It is long past time gradually but decisively to end all the extraction of fossil fuels, except a fraction needed for uses in which they prove genuinely irreplaceable, as rapidly as humanly possible and to revoke the 'social license' of those who engage in increasingly damaging and utterly superfluous extraction. Why exactly?

The Practical Rationale for Focus on Extraction

First, why focus on the extraction of fossil fuels as distinguished from the emissions from the combustion of fossil fuels? First comes the economic reality of the relevant incentive structures. The fact that carbon extraction is not declining at all as alternative energy is rapidly increasing suggests the need for a change in strategy by defenders of the climate to a serious emphasis on measures directly to restrict supply, in addition to the so far patchy measures to restrict demand (like trading in carbon permits). We need to make it profitable for far fewer enterprises to extract and sell fossil fuel so that those executives whose greed prevents them from ceasing extraction out of care for the climate or for fellow humans will be deprived by declining profits of their financial motivation for continuing to supply the resources to undermine the climate. Fossil fuels need to stop being the exceptionally reliable source of wealth they have been in the past and still are for now (Green and Denniss 2018).

Obviously direct reductions in the extraction of supply would not be necessary for reducing emissions if demand-side measures were effective in dampening demand. Many, including me, have always assumed that the tactical key was to 'price' fossil fuel for sale appropriately - say, in accord with some sensible calculation of a 'social cost of carbon', i.e. an economic measure of the damage likely done by its combustion (Kelleher 2019) - by means of carbon taxes or carbon permit trading. This increase in price was supposed to suppress demand, and the reduction in demand was supposed to make it less profitable to extract fossil fuels, gradually leading to a reduction in extraction and finally in emissions. This indirect (reduce the profitability of supply

by reducing demand) approach has not happened and shows little sign of happening to any significant degree. Why exactly it is not happening is a long story that I cannot pursue here; it certainly includes the fact that this strategy has rarely been seriously implemented - and is now being widely abandoned in the gold rush to dominate AI by constructing fossil-fuel powered data centers that "already devour more electricity globally than all but 10 countries," an amount expected to double within four years (Clark 2026a; Ovide 2026; Tabuchi 2026) - and the fact that the historically greatest emitter is currently pursuing the opposite strategy - "drill, baby, drill" - along with others - like Russia and the Middle East petro-states including Saudi Arabia, United Arab Emirates, and Qatar - who have always kept drilling. In any case, demand and emissions have missed a beat only during the worst of the pandemic in 2020 and have come roaring back since, amidst continuing mostly empty talk about 'pricing carbon'. This plainly does not show that suppressing demand could not work, and reduction in demand still ought also to be implemented aggressively. But, whatever the reasons, nothing remotely approximating the necessary amount of reductions in demand is in fact happening now.

First, reductions in supply would directly reduce emissions by eliminating part of their source, but this so far has also not been seriously tried. A reduced supply of carbon fuel for combustion would be one effective tool to force a reduction in emissions. Neglecting this tool by not only maintaining but expanding supply through the extraction business-as-usual (henceforth, EBAU) weakens the arsenal for the protection of the climate by failing to use one potentially powerful weapon. But this is only one relatively small dimension of the failure constituted by EBAU.

Second, turning the spotlight on to extraction and the importance of restricting supply, as well as restricting emissions from combustion, is not simply a wise strategic addition on an economic basis, but also a moral requirement. Explaining why is the burden of this article. Business-as-usual in fossil fuels must - morally must - be disrupted before it irretrievably undermines the

climate more severely than it already has. To understand fully why reduction in supply is vital, it is necessary to appreciate why carbon extraction itself - and the financial arrangements it requires - are now the profound threat to humanity and the great evil that they have become. This requires understanding the depth and breadth of the harms that EBAU is now doing by grasping the under-appreciated full range of the kinds of damage it causes. Much climate ethics tacitly underestimates both the ruthlessness of the entrenched opponents of climate action in the extraction business and the variety and severity of the harms they are inflicting.

The Moral Issue: The Harms of Extraction

The incumbent global fossil fuel regime is responsible for a crescendo of (1) moral failure to make positive efforts of its own, (2) morally significant physical damage directly inflicted, and (3) morally indefensible obstruction of positive efforts by others. Before we explore the physical damage done by the extraction of fossil fuels and the unforgivable political obstruction carried out by those whose wealth is based on fossil fuels, we can note in passing two important respects in which persisting extraction also constitutes an unsurprisingly total moral failure to join the rest of humanity in meeting the great challenge of our time: imposing an outside limit on the worst that climate change can become (Shue 2021).

Failures to make positive efforts. First, continuing - in fact, vigorously expanding - extraction fails even to step onto the beginning of one straight path to the necessary elimination of emissions: eliminating their sources. Sharp reductions in extraction - in the supply of fossil fuel made available for combustion - would at some point be sufficient for sharp reductions in emissions. No one can burn fossil fuel that has not been delivered to them for purchase after extraction, refinement, and transport. Reductions in supply plainly must be progressive, not instant, and should not get ahead of capacity to substitute alternative energy for vital needs - as distinguished from the wild demands of the stampede of data centres (Aczel 2026; Cavendish

2026; Craig 2026; Halper 2026) - but, as we will see next, maintenance of the usual supply of fossil fuels competes directly for funds with potential increases in alternative energy. For now the main point is simply that the failure by the fossil fuel regime to even start to reduce extraction is a failure to contribute at all to humanity's race to impose a limit on the extent of climate change.

Second, and at least as important, the gigantic investments now routinely being made year after year in infrastructure for expanding extraction constitute equally gigantic opportunity costs for alternative energy. Consider, for example, the fabulously expensive deep-sea drilling rigs - average cost each: $650,000,000 (English 2020) - being multiplied off Guyana by ExxonMobil, as well as the East Africa Crude Oil Pipeline (Hook 2022) being laid by TotalEnergies [France] and China National Offshore Oil Corporation from near Lake Albert in Uganda through the basin

of Lake Victoria and across 200 rivers to the Indian Ocean in Tanzania that will - amazingly - be heated to 45° to 50° C for its entire 1443-kilometer length to enable the unusually thick oil to flow smoothly (Heede 2022: 19). The banks and investment funds who continue to underwrite such gargantuan fossil-fuel extraction with hundreds of billions of dollars annually could easily instead be injecting additional momentum into alternative energy with these same funds (Rainforest Action Network, et al. 2026; Shue 2024). Humanity is in a desperate race to provide sufficient non-carbon energy for the activities that individuals will in fact not give up, before the cumulative atmospheric accumulation of carbon dioxide drives the climate beyond additional tipping points for more severe change in the conditions to which humans are adapted. Failure to make investments in alternative energy soon enough and in large enough amounts is raising the probability of failure to avoid these critical tipping points and meanwhile is certainly leading to deterioration in the climate of somewhat less extreme kinds that could have been avoided.

Physical harms. Beyond the above two failures to contribute positively to humanity's efforts to rein in climate change lie direct damage brought about by persisting extraction. Quite apart from the climate destruction indirectly caused by the combustion of the products of extraction, the actual damage done by the extraction itself, including the mining of coal on a monumental scale with monster machinery that can decapitate mountains, has to a considerable degree come to be accepted as normal, even inevitable, but is massive and violent nevertheless (Lakhani 2025). And that is when everything works as planned. The possibility of additional disasters from offshore drilling, like the 2010 BP Deepwater Horizon oil spill in the Gulf of Mexico, and disasters from seaborne transport, like the 1989 *Exxon Valdez* oil spill in the Prince William Sound (Coll 2012), constantly lurk in the background. But in fact the everyday reality is that, for example, thanks to Shell, "an *Exxon Valdez*-worth of oil has spilled in the [Niger] Delta every year for about fifty years," creating "the most oil-ravaged place on the planet" (Amnesty International 2025: 129 - 130; Klein 2014: 305). And the fracking that has made the U.S. the world's largest extractor of oil routinely produces leaks of methane gas, despoils thousands of acres of land, and pollutes hundreds of thousands of gallons of scarce water (Maddow 2019). This U.S.-developed, environmentally destructive practice has spread pollution of air, land, and water around the world through, for example, the 'mega-project' in the Vaca Muerta in Argentina (Rodriguez 2024).

Most states in the U.S., and a number of other countries, have laws requiring oil and gas companies at least to seal exhausted wells properly so that, for example, they do not continue indefinitely to spew methane into the atmosphere - a legal requirement called the asset retirement obligation [ARO] (Schuwerk and Rogers 2020; Davidson, Gonese, and Dai 2025). The standard practice of all major companies, however, is to ignore the ARO, which is expensive to fulfil - especially expensive in the case of deep fracked wells [as much as $1 million per well] -

and simply to abandon the wells once they are no longer a source of profit. This industry-wide practice of abandonment of wells is the most extreme imaginable case of the externalization of environmental costs onto society at large - externalization in direct violation of law imposing ARO - and desperate plans are in development in the U.S. to seal abandoned wells at public expense (Raimi, Nerurkar, and Bordoff 2020), partly on the grounds that this will provide jobs to workers left unemployed as the oil and gas industry shrinks. Of course the extraction of materials needed for renewable energy, like lithium and cobalt, will also be physically destructive until properly regulated, and effective regulation ought to be put in place immediately so that it is built into the new non-carbon energy regime. But it can be made, on the whole, far less destructive and polluting (McKibben 2025: 124 - 132) than extracting fossil fuels.

Obstruction of the positive efforts of others. Worst of all, fossil fuel interests and the governments that support them are aggressively engaged in obstructing climate action attempted by others. First, governments serving fossil fuel interests systematically practice perverse diplomacy employed to resist international agreements that would reduce demand for fossil fuels and are supported by most other governments. Because the dominant firms in the carbon energy regime practice a "grubby, greedy, grasping, dog-eat-dog version of extractive capitalism" (Shue 2021: 130), their approach to international diplomacy that threatens their interests to any degree is to give no quarter. During 2025, for instance, fossil fuel interests made a major contribution, working with governments like the American and the Saudi, to tragically blocking two important international initiatives that were the fruit of years of careful negotiation and would have reduced the market for fossil fuels. A carbon emissions levy on global shipping negotiated under the auspices of the International Maritime Organization was prevented from becoming legally binding by bullying tactics, including personal threats against individual negotiators from poor

African countries made by the Trump Administration delegation. One veteran negotiator observed: “It’s like dealing with the mob” (Foster, Mooney, and Wiggins 2025; Sengupta 2025). And the sixth round of negotiations on a treaty to deal with the devastating reality that most plastic is not in fact recycled, and cannot foreseeably be recycled, by confronting the root cause and limiting the now-exponential growth in the production of plastic collapsed in Geneva after relentless opposition by Saudi Arabia, Iran, Kuwait, Russia, United States, and China on behalf of their petrochemical industries. As a result, one way forward now being considered by advocates of plastic production limits is to exclude “dedicated obstructionists” like these governments from the next round of negotiations and make a treaty among what amounts to an extensive coalition of the willing, which includes over one hundred countries (McVeigh and Bryce 2025; Speed 2025), since it is urgent to take some effective action against the galloping global plastic plague. More recently, the budget of the IPCC has been blocked (Mooney 2026).

Second, the most severe form of obstruction of the efforts of everyone else who is trying to limit climate change is a highly general one involving proven fossil fuel reserves overhanging global financial markets that unfortunately takes a bit of explanation because philosophers have so far mostly ignored it. The larger the proven reserves of fossil fuels, the stronger the temptation for characteristically short-sighted politicians not to face up to the financial difficulties in moving away from carbon energy, thereby allowing EBAU still to expand indefinitely. So this is an especially effective form of political obstruction.

Years ago scientists calculated that most of the coal, oil, and methane gas that had already at that time been established as proven reserves, ready for extraction, could not be extracted and used for combustion without causing severe climate change [unless their emissions were abated by some as yet unproven and unscaled technology] (McGlade and Ekins 2015; Welsby et al. 2021). The alternative to burning all this fossil fuel in the proven reserves is often described as leaving

it ‘stranded’ (Allen and Coffin 2022; Carbon Tracker 2011). This means that whatever wealth might have been created by extracting this fossil fuel and selling it for combustion would be lost. So what would most significantly be literally ‘stranded’ is all the money that had already been borrowed by the fossil fuel companies from banks and investment funds to pay for the exploration that identified the reserves and for the extraction and transportation infrastructure (e.g., heated pipelines and deep-sea drilling rigs) built to exploit the reserves. In the simplest terms, the money for the exploration process and the extraction infrastructure has been handed over by the banks and other financial institutions (like private equity firms) to the fossil fuel companies, who have spent it on preparations for extraction. That money cannot be repaid by selling the fossil fuel for combustion if the political decision is ever made to protect the climate by prohibiting the combustion, because that decision to prevent combustion would deprive the reserves of their worth. The reserves have no market value if they cannot be sold, and the fuels mostly cannot be sold if they cannot be burned.[2] So how would the banks recover their investments if the fossil fuels in the reserves were actually not sold to be burned?

‘Stranded assets’ are a clear theoretical danger, but of course no assets have in fact been stranded because the fossil fuel companies keep marketing their products.[3] As long as the proven reserves continue to be extracted and sold by some business, no debt becomes stranded. The essence of EBAU is precisely the perpetuation of this cycle of taking out loans, extraction, sales, and repayment of the loans, as always. This obviously also continues the undermining of the climate, but one can readily comprehend why a firm committed only to its own benefit – what

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[2]Significant portions of the reserves can be used instead to make plastics, which is why fossil fuel companies often are also petrochemical companies and are vigorously engaged in grossly misleading propaganda about the alleged adequacy of recycling of plastic.

[3]Or, in a small number of cases, divesting the reserves and enabling some other firm to extract and sell the fuels for combustion, which makes the original company’s climate record look better for the purpose of their own public relations, but does nothing to protect the planet.

has been called ‘fiduciary exclusivity’ (Shue 2024: 436) - will insist on selling the reserves that it has already discovered and for which, at great expense, it has already constructed the deep-sea drilling platforms, pipelines, or other infrastructure needed for extraction. This business cycle severely undermines the climate, of course. But it clears the existing loans off that firm’s books and returns that money to the bank.

What is astounding if one is giving any thought at all to the climate is that the most consistent aspect of EBAU is, once the old loans for exploration and extraction have been covered, new loans are once again taken out to plunge into fresh exploration for yet more reserves and to construct yet more infrastructure to extract them. The yet-to-be discovered reserves will become yet more fossil fuels that can predictably be used for unabated combustion only by undermining `the climate still more seriously and that ought to be stranded, but most likely will not be. Is the fossil-fuel dog mindlessly chasing its own tail, or is there some coherent, if devious, scheme here?

Traditionally one of the prime criteria used by potential investors to assess the value of a fossil fuel company was whether its exploration (and any other acquisitions) could find at least enough additional reserves each year to replace the reserves that it was already selling that year: while selling as much as possible, a financially solid firm should conserve its level of reserves and thus keep its underlying wealth from declining - ‘always replace the reserves! investors are watching!’. This long-established practice of maintaining the level of the carbon reserves, carefully tracked by stock analysts, is, however, viciously destructive in a world in which the most urgent task is to cease carbon emissions in order to stop wrecking the climate.[4] Why do the firms keep repeating the same cycle in order to satisfy the same old financial standard in spite

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[4]This tendency to expand reserves may be weakening somewhat under the pressure of climate action (Benham 2026; Benham and Prince 2025), but the pressure must be vastly increased.

of the threat to the climate that they are thereby endlessly magnifying? I want to explore two possible rationales, one that is relatively innocent, although completely misguided, and one that is profoundly ominous.

Eliminate Extraction or Eliminate Emissions?

"It's the emissions, Stupid!" a defender of the incumbent energy regime might insist, "your focus on extraction is misguided." We would have no reason to bemoan the persistence of EBAU, the defender could suggest, if additional extraction stopped making net additions of emissions (Hyman 2024; Smyth 2026). The solution is not to have less EBAU but to have more (and perhaps better policed) offsetting, carbon capture and storage [CCS], and carbon dioxide removal [CDR] - ideally, CDR equal to additional emissions. If all emissions from EBAU could be verifiably offset, captured, or removed, then EBAU would no longer produce the injection of additional emissions into the atmosphere that allegedly leads to all the harms. In what might be this spirit, ExxonMobil, for example, "is building the world's largest CCS business on the US Gulf Coast", and "global investment in CCS rose to $6.6bn last year from $4.1bn in 2024, while the number of plants operating commercially rose by a third to 77, with a further 44 under construction" (Smyth 2026). Any such suggestion by a defender of EBAU, first, ignores much of the problem and, second, proposes a fantastical solution to the part it does not ignore.

First, it is simply not in fact the case that all the damage done by EBAU results from the emissions produced by combustion subsequent to extraction. As already shown in the previous section, harm occurs with or without combustion of the fuels, including the opportunity costs of failure to invest the same funds in alternative energy instead, the physical damage from extraction itself, and the predatory diplomacy in defence of the energy status quo. Nevertheless, it is of course the emissions from combustion that wreak the fundamental damage of driving climate change. And even after all inessential extraction and combustion ceased, significant

amounts of the past and now-still-expanding emissions would need to be removed from the atmosphere and oceans in order to reverse [to some degree] the so-called 'overshoot' produced by not having ended extraction far sooner: "global and regional climate change and associated risks after an overshoot are different from a world that avoids it" (Schleussner 2024). So while we ought not to focus on emissions instead of extraction itself, we certainly need to deal with the resulting emissions, as the objector insists. The objector proposes, however, that the dominant carbon regime could offer the best methods to deal with the emissions from its own products. This is mistaken.

The methods assumed, for now, are CCS and CDR. CDR extracts out of the atmosphere CO_2 that is already in the atmosphere, while CCS captures some CO_2 before it enters the atmosphere. Consider CCS. Carbon capture is, strictly speaking, a form of reduction in carbon emissions (Edwards 2026: 21) because it prevents some fraction of a stream of CO_2 from entering the atmosphere along with the remainder of the stream that is not captured. The very most efficient forms of CCS capture around 80% of the CO_2 generated - most are far less efficient yet - so any process employing CCS is making net additions to the atmospheric concentration of CO_2 driving climate change, that is, making climate change worse. CCS makes the damage to the climate less severe than it would have been if the same activity had been conducted without CCS, but CCS is always employed in an activity that produces a net worsening of the climate (Bryan, De Souza, and Bernard 2025; Clark 2026). Such activities plainly ought to be absolutely minimized.

CDR is a more complex matter (Caldecott and Johnstone 2024: Gelles 2026: Shue 2018). All climate scientists agree that a ton of CO_2 not emitted is better for the climate than a ton of CO_2 removed (Johnstone, et al. 2025), because the CO_2 removed will have been driving a worsening of the climate for however long it was in the atmosphere before being removed. Less damage would have been done to the climate if that CO_2 had never been emitted: if there had been an

earlier reduction in emissions rather than a later removal of emissions. Emission reductions deserve absolute priority over emission removals, all else equal. So far, by contrast, total global emissions are continuing to increase every year [except 2020, during the worst of the Covid pandemic] (Forster 2026).

Obviously, therefore, and sadly, far too much CO_2 has already been emitted, and, worse, is continuing routinely to be emitted, for the climate to stabilize at a level of disturbance that is not seriously threatening to some substantial proportion of humanity, unless major amounts of the CO_2 already emitted and the amounts fated by inadequate future mitigation still to be emitted are removed from the atmosphere (Edwards 2026; Schleussner 2024). Hence the need for CDR as well as for sharp and immediate reductions in emissions. There is no denying the evident absurdity of the fact that while elements of humanity are routinely injecting vast amounts of CO_2 into the planet's atmosphere, others are straining to develop technology to remove it. But here we are. It is not inconceivable, perhaps, that while some people dirty the clothes, others launder them, and everyone is happily employed.

The objector to my condemnation of EBAU suggests that rather than promptly ending EBAU, the fossil fuel regime itself could deal with the emissions, which indeed are the main - but not the only - problem. How could this work? First, the challenge facing CDR expands progressively from insufficient reductions in emissions. The poorer the mitigation of emissions is, the more extensive the removal must be if climate change is not to continue to become progressively worse. So if EBAU were to continue, it would need promptly to offset all its continuing emissions with CDR (or some other unknown technology). Otherwise, it too would, like CCS, at best merely make climate change worse than it is now more slowly. In other words, EBAU would need to reach net zero emissions, mobilizing however much CDR that required. A perfected form of CCS that was more than 80% efficient would be handy as well. This would

have to be a sort of simultaneous emission and emission removal combination - the dirtying of the clothes could not get ahead of the laundering.

Second, the past emissions and the future emissions that will not in fact be avoided would still need to be dealt with. There would, then, overall need to be some combination of CDR and CCS adequate to make ongoing EBAU net zero very soon, plus additional CDR adequate to extract the vast amounts of the emissions already in the atmosphere independently of the ongoing EBAU.

This is utterly fantastical, for two reasons, each of which is independently sufficient to refute it. First, as is overwhelmingly clear from *The State of Carbon Dioxide Removal*, 3rd Edition 2026 (Edwards 2026), none of the technologies for CDR have anywhere near the capacity to carry out remotely this much carbon removal, or possibly could have that much capacity any time soon. Humanity will be lucky if the capacity can be developed promptly to remove the past and the already unavoidable future emissions (Temple 2021). The 2026 Edition of the CDR Report maintains that novel forms of CDR would have to expand at "highly ambitious rates" close to the same [amazing] rate at which solar power expanded in order to keep temperatures somewhere near the Paris agreement limit (Edwards 2026: 13 - 14), which is otherwise expected to be surpassed around 2030 (Forster 2026). To add to that the challenge of keeping up with indefinitely ongoing emissions generated by EBAU that refuses to ease off would be genuinely preposterous - indeed, collectively suicidal because simply impossible to do with any foreseeable technology (Lamb and Reynolds 2025).

Second, CDR and CCS both need geological storage capacity into which to sequester the CO_2 actually removed or captured. At best, humanity will reach net zero emissions only after an 'overshoot' of the total accumulation of CO_2 compatible with any reasonable temperature limit, with the overshoot beginning to expand after 2030 (Forster 2026). The atmospheric

accumulation of carbon dioxide existing at the time net zero is reached will continue to wreak havoc until it is sharply reduced (Fankhauser 2022). In order to bring the temperature back down to a level that is not seriously threatening to large portions of humanity, aggressive CDR will need to be mobilized for years after the level of net zero emissions has been reached. For this purpose, adequate amounts of geological storage capacity will need still to be available after 'overshoot'.

Geological storage capacity is much less extensive than widely claimed (Edwards 2026: 249; Gidden, et al. 2025). Secure storage capacity is, therefore, a precious scarce resource. It would be irresponsible for secure storage capacity to have already been used up in earlier years merely so that EBAU could persist undisturbed for longer before finally being eliminated. In fact, it would be an outrageous instance of intergenerational injustice for future generations to be prevented from conducting a vital procedure (reducing temperature 'overshoot') by the fact that earlier generations had consumed the scarce resource needed for the procedure (geological storage capacity) in order to satisfy some mindless preference of that earlier group of wealthy people not to give up their entrenched way of making money: EBAU. This line of defence of EBAU - possibly morally innocent, but empirically utterly quixotic - fails.

Eliminate Climate Action?

A second possible reason for EBAU's undiminished pursuit of additional reserves is much more ominous. It could be intended to accomplish, or at least welcomed as accomplishing, exactly what it is in fact accomplishing: making it progressively more difficult politically ever to eliminate the fossil fuel regime by keeping the regime and its largest constituent firms 'too big to fail'. In other words, causing political paralysis for climate action could be precisely part of the strategy of the fossil fuel firms. Besides aiming to keep investors happy with undiminished reserves, the firms may be aiming to confront politicians with a challenge that they will want to

evade: the challenge of tackling firms too big to fail without possibly de-stabilizing the global financial system. As long as not allowing fossil fuel reserves to be sold for their original purpose of unabated combustion would require writing off vast sums of money loaned or underwritten by the world's biggest banks and investment firms, the global financial system would need somehow to endure a major - and possibly unprecedented - transitional shock in which a very great deal of wealth was intentionally sacrificed. This positions the incumbent carbon regime to attempt the kind of extortion rightly condemned by Steve Gardiner (Gardiner and Weisbach 2016: 87 - 99).

The nearest historical analogy may be the abolition of regimes of slavery, when the slave-owners were forced to surrender the property that had constituted their wealth, sometimes with compensation and sometimes - notably, after the U.S. Civil War - not (Lawlor and Wood 2025). Who would ultimately bear the cost of the destruction of carbon wealth? Politically powerful banks which would not recover their loans? Politically powerful fossil fuel firms whose market value would plummet? Investors in oil and gas firms, including huge pension funds, who would lose their shirts? Ordinary tax-payers, as in the global recession of 2007 - 2008, when governments used public funds to rescue, not the home-buyers who could not afford their mortgages, but the financial institutions deemed 'too big to fail' which had recklessly gambled on the risky mortgages (Tett 2010)? How many politicians are likely to step forward and take on responsibility for launching this monumental and tricky transition?

Courageous and far-sighted political leadership is required to acknowledge, confront, and respond to these questions. Fossil fuel interests appear to be counting on current politicians instead being unwilling to face up to the challenge, lulled by soothing waves of greenwash - for example, the first rationale that CDR and CCS will solve all problems - and by campaign contributions from the fossil fuel regime.

Unfortunately, the too-big-to-fail phenomenon within any one country has major international anchors. The world's largest oil and gas firms, ranked by proven reserves in 2019, for example, were all state-controlled - their policies are the policies of their governments: National Iranian Oil, PDVSA (Venezuela), Saudi Aramco, Abu Dhabi National Oil, Gazprom (Russia), Kuwait Petroleum, NNNC-Nigeria, Sonatrach (Algeria), PetroChina (Grasso 2022: 20). Next in size of reserves came the investor-owned firms BP and ExxonMobil, followed by Rosneft (Russia) and Lukoil (Russia, but pursued by Americans). The utter dependence of these (and a number of other) governments on revenue from their fossil fuel firms adds enormously to the inertia of the incumbent global energy regime, and what I characterized in "The Moral Issue: The Harms of Extraction" as 'perverse diplomacy' is merely one aspect of the foot-dragging by state owners of fossil fuel enterprises against action to slow climate change. Space is not available here, however, to pursue the international politics.

Why fundamentally is obstructing the efforts of decent people to protect the climate from being further undermined by the combustion of fossil fuels quite such a morally serious matter as I am claiming here? Why is this specific environmental insult a harm of unique seriousness? The following justification for this judgement of seriousness contains two elements: the moral importance of what is being undermined and the fact that EBAU is, intentionally or unintentionally, actively obstructing efforts to protect it from being undermined. We can look at these two intertwined reasons in order.

Climate Obstructionism as Moral Evil

Human civilization has physical preconditions, like adequate supplies of food, clothing, shelter, clean water and clean air, as well as at least minimal provisions for security, so that individual human lives are not consumed by drudgery and/or by unrelenting struggles with other people over insufficient supplies of essentials. Specifying precisely and positively what these varying

preconditions are in specific geographical locations around the earth at particular times is certainly beyond what is feasible here. Negatively, the conditions can be invoked summarily by noting that they are whatever it takes in a given place at a given time in order for lives not to become generally 'nasty, brutish, and short'.

Recent scientific reasoning suggests that there are no particular grounds for now to fear human extinction resulting solely from climate change (Dennis 2026; Niiler 2026). On this side of human physical extinction, however, lie miserable conditions in which human beings as physically defined continue to exist and reproduce, but their lives and their relations with each other are not genuinely human or civilized. For example, perhaps because of persistent extreme scarcities of basics like food, water, and shelter, individual humans must treat other individual humans, apart from immediate loved ones, as at best competitors, if not enemies, in a desperate struggle to survive. We see this in current regional situations of mass starvation and in historical cases of much less severe climate change than we now face (Davis 2017; Parker 2017). Mark Lynas has recently portrayed it graphically in the form of the nuclear winter following nuclear weapon use (Lynas 2025).

Crucially, trust and cooperation are not psychologically possible within extreme scarcity and so true society is impossible. Promises cannot function, since others cannot in fact be relied upon to do anything other than guard their own short-term self-interest, lest they and their loved ones otherwise perish. Even long-term self-interest is difficult to take seriously in the absence of stable institutions, which would have depended on the missing cooperation and trust. No institutions to provide for the welfare of the weak or vulnerable - not to mention future generations - could function. People could not believe that individuals generally have duties to each other. Competition for necessities would be unconstrained. I will refer to this nightmare as the absence of the preconditions for human society.

Such conditions would confront the survivors of various global catastrophes, such as nuclear war or utterly runaway climate change feeding upon itself cumulatively through sequential positive feedbacks, the latter of which at present we have no specific reason to fear. In earlier work on climate change, I have claimed: "If any human duty is unconditional, it is the duty to preserve the fundamental conditions, including the physical preconditions, of human society by avoiding dangerous threats to those conditions" (citation omitted for blind review). If there are such things as moral imperatives or ethical duties, they must include a requirement not to undermine the preconditions for human society. Why?

Because the preconditions for human society are preconditions for morality, because morality is possible only within society, not within desperate struggles for survival amidst insufficient supplies of necessities. Morality and civilization are mutually dependent - evidently co-constitutive. A morality that did not require the preservation of the conditions for its own functioning would be absurd as well as evolutionarily doomed.

It is not, of course, that the survival of humans is of incomparable value. Many other things, including other species whose extinctions are indeed increasingly being caused by humans, are of great value. It is simply that if humans are to survive as humans, who are capable, among other things, of valuing and protecting other species (despite how abysmally this is currently being done), they must not allow themselves to be dragged into conditions so desperate for lack of food, water, and other physical necessities that over the long run only the brutish, ruthless, cruel, and utterly self-centred could survive. Perhaps someday empathy, kindness, and even trust and generosity would evolve back into these then-inhumane beings, and civilized society would return. Perhaps not. What else could possibly be important enough to justify seriously risking the creation of conditions so stringent and extreme that at least for some generations - and perhaps indefinitely - decent people in at least some regions of the planet would be guaranteed to

lose in a struggle for survival? Certainly not lengthening the period during which the global EBAU holds off the advance of the alternative fuels that must sooner or later supplant it.

The second element of the justification for the judgement that the global regime of EBAU is engaged in a great evil and should be phased out as rapidly as possible is that EBAU is actively obstructing humanity's efforts to limit climate change, while actively contributing to the worsening of climate change, not merely not contributing to efforts to limit climate change.

The fundamental point above about potential stranded assets was that the last thing any responsible organization should be doing is expanding the quantity of fossil fuel reserves by spending more money exploring for and preparing to extract more coal, oil, or methane gas in addition to the extensive proven reserves that were years ago already far too extensive to burn and have continued to expand ever since. Whether or not intentionally, extraction-as-usual in fact pits the stability of the global financial system against the stability of the global climate system in a deepening downward spiral. EBAU basically dares any politician to try to limit climate change: whose wealth are you going to propose to destroy? Whatever the motives of the executives in charge - pure greed indifferent to externalized effects; boundless but groundless faith in CCS, CDR, or other unproven and underfinanced technologies; or intentional creation of the severest possible dilemma blocking any political transition away from the dominant regime of carbon energy - the actual effect of EBAU by fossil fuel firms and the financial firms that enable it is obstruction: obstruction of humanity's attempts to limit the carbon economy's damage to the planetary climate. This is sabotage against the public interest (Amnesty International 2025).

The entrenched fossil fuel interests are, therefore, not simply failing to contribute to a solution of the problem of climate change, or even simply diverting scarce resources away from solutions - they are making the implementation of any solution more threatening to the global financial

system and thereby much more difficult politically to execute. It is naive in the extreme to think that facile pledges of 'net zero 2050' by executives of carbon firms will ever be respected in any manner or time-frame that would make any positive difference, because that would require breaking out of the established business cycle and allowing the reserves to shrink, which no significant firm, state-owned or investor-owned, is doing. In sum, those in control within the global fossil fuel regime are not simply not helping with climate change - they are strengthening the obstacles in the way of everyone who is trying to help - blocking the path to safety. These firms have thereby chosen to become enemies of humanity, and the rest of us ought - prudentially ought and morally ought - to treat them accordingly. EBAU must be stopped so that climate change can be limited while there is still time to prevent additional avoidable climate havoc. The full extent of the evil of - intentionally or unintentionally - placing obstacles in the way of efforts to preserve the climate cries out for unblinking attention and unbending resistance. Humans ought to preserve and nurture the characteristics that make the human species worthwhile and worthy of continuing. This seems to be an unconditional duty. This duty requires protecting a social and physical context in which admirable human features like cooperation and trust can flourish. Uncontrolled climate change would threaten this situation by disrupting its physical underpinnings. So humans ought to preserve those underpinnings by limiting the climate change that threatens them. Nothing matters more than preventing this risk from growing indefinitely - without limit. Fossil fuel firms engaged in EBAU are flagrantly failing to cooperate in the performance of this shared bedrock responsibility. First, it is their business model that feeds the climatic threat to the physical preconditions of human society - duty violated. Second, they are doing nothing significant to reduce the threat (although they pretend they are with pledges of "net zero 2050" in order to evade pressure to change now) - duty flouted. Third, and worst of all, EBAU is blocking the efforts of others to exercise this

shared unconditional responsibility - duty assaulted (Carrington 2025; ClientEarth 2023; Depledge, De Pryck, and Roberts 2023). The creation of the threat to these physical preconditions by clinging to the unreconstructed destructive business model, plus the failure to contribute to the creation of alternatives, plus the active thwarting of the efforts of others to perform their own shared responsibilities toward what matters most is, therefore, a great evil. EBAU is inexcusable. It should be denied 'social license' and brought to an end. EBAU is threatening to undermine our human way of life, and it is past time for us to defend ourselves against this deceptively imposed risk by counter-attacking vigorously.

The supreme test of right action to save the climate with regard to energy policy, therefore, is: does a practice undermine EBAU or support the maintenance of EBAU? If a proposed practice is compatible with the flourishing of EBAU, it is a failure as an effort to protect the planet from the effects of continuing carbon emissions. If, on the other hand, it weakens EBAU, then it is a step in the right direction of actually ending non-essential carbon emissions. We can call this the compatibility test: if a practice is compatible with prosperous EBAU, it is a failure as climate protection.

Offsetting - "carbon credits" - is a central, egregious instance of a widely accepted but counter-productive tactic (Green 2025: 63 - 77) that fails the compatibility test. Much supposed offsetting has been fraudulent (Greenfield 2023). But even non-fraudulent offsetting that does not consist of permanent removal of carbon dioxide, such as that allowed by the new Science Based Targets Initiative [SBTi] rule permitting data centres to use electricity from fossil fuels while purchasing renewable energy certificates (Green 2025: 86; Mundy 2026), simply complements EBAU and allows it to flourish undisturbed . The new SBTi rule is a complete cheat: the carbon-powered data centres will be adding outrageous quantities of emissions to the atmospheric concentration, making climate change sharply worse (Bryan and Johnston 2026;

Clark 2026a). Offsets mask EBAU and shelter it from disturbance by genuine de-carbonization requirements.

How Can Right Action Be Motivated?

The obvious institution to close the existing option of extraction-with-no-regard-for-the-consequences is the state. All kinds of firms - not fossil fuel firms only - externalize environmental costs whenever possible, and they certainly do not usually volunteer to take on remedial costs they can avoid or to cease activities that are profitable for them but harmful to others. That enforcement of the internalization of environmental costs is one of the minimal functions of the state is widely agreed upon by economists of almost every stripe, and it is difficult to see why a society would grant legitimacy to a state that refuses to attempt to guarantee this fundamental protection that no other institution is in a position to provide (Sagoff 2008).

Consequently, action within the domestic politics of many nations to reverse outrageous current national policies is clearly desperately needed. Such domestic change is urgent, especially in the home countries of the largest extractors of fossil fuels, but these governments tend to be the most complicit and resistant. Driving them into action will require the support of far more individuals than those who are primarily morally motivated. So, a final observation about the complexity of motivation may be useful to bear in mind by those working within one of the many states that now have governments that are failing in their duty to limit damage to the climate by failing to phase out extraction as well as failing to reduce and/or remove emissions. Perhaps it is morally best when individuals and organizations do the right thing for the right reasons, but it is nevertheless often morally better for them to do the right thing for the wrong reasons than for them to do the wrong thing, especially when ‘the right thing’ is supremely important, like the defense of the physical preconditions of human society. And while doing the

right thing sometimes requires sacrificing one's own interest, because right and interest clash in some cases, the universe is fortunately not such an inhospitable place to morality that doing the right thing will not often also serve one's own interest. Climate change is a strong instance of the coincidence of right action and self-interested action for everyone except those whose wealth depends directly on continuing to extract fossil fuels and those who have sold out politically to them. Preserving the physical preconditions of civilized society is both morally right, because it protects the very possibility of the practice of morality by protecting civilized society, and in the interest of the vast majority of humanity, because life in civilized society is incomparably more satisfying than life that is nasty, brutish, and short. We have, then, every reason to hope that powerful political coalitions to pressure recalcitrant states into doing their fundamental job of compelling firms to internalize the environmental costs of their operations can be built in the case of climate between the mainly morally motivated and the mainly self-interestedly motivated (except those whose self-interest is tied directly to marketing fossil fuels). In the case of fossil fuel firms, internalizing their vast environmental costs would make them utterly uncompetitive: they are inflicting great harm while peddling an increasingly superfluous - not to mention: dangerous - product.

If we view the situation as a crude dichotomy, practical ethics potentially has dual audiences and needs separate but complementary messages for each of the two: for those who strongly care about humanity and the effects on it of the deteriorating climate, the clarification of moral reasons for action; and for those who do not especially care (but are not heavily invested in fossil fuels), the clarification of self-interested incentives that support the same actions as the moral reasons. And of course, apart from the saints at one extreme and the scoundrels at the other, practically everyone's motivation is some mixture of moral and self-interested considerations. What we have are not two groups of people - a dichotomy of the moral and the self-interested -

but diverse motives within each of us, more than one of which can - and often must - be stirred at the same time to inspire the most energetic action.

The intellectual challenges for practical ethics, then, are not only to formulate correct moral arguments but also to construct, or find, accurate political-economic arguments that are supportive or complementary, and to join with those in other disciplines and occupations to weave the two together into a compelling case. Such converging rationales can be the glue for political coalitions among those who want the same result partly - even primarily - for different reasons, which is the form that effective political action almost always takes. Effective political movements are rarely crusades of the morally like-minded, so the role of practical ethics is not solely to keep hammering on the moral considerations.

I want to illustrate the reality of climate action through coalition politics - "different motives, one goal" - with one recent theoretical proposal and one recent historical case. In *Existential Politics: Why Global Climate Institutions Are Failing and How to Fix Them* Jessica F. Green offers an intentionally simplified but valuable fresh model of the political struggle over climate: "Existential politics offers a different way to think about climate change - as a political contest between different kinds of asset owners. Climate policy to curb emissions and phase out fossil fuels will lead to trillions of dollars in stranded assets, creating clear winners and losers. Those with large endowments of fossil assets will be the losers. Owners of green assets will be the winners .... For decades, the losers have been running the show, obstructing climate policy to preserve the value of their assets. The revaluation of assets - through both climate change and climate policy - creates existential politics. In the most extreme cases, people will lose their lives and places will be wiped off the map. Assets will become worthless and firms and industries will collapse. These are the highest possible stakes.... To understand how asset revaluation shapes global climate politics, I conceptualize a simple world with three groups of

asset owners: fossil, green, and vulnerable.... Fossil asset owners include fossil fuel and petrochemical companies, utilities, and heavy manufacturers, among others.... The effects of climate change are creating tremendous losses - of lives, homes, regions, industries, and eventually, perhaps, entire nations. Vulnerable asset owners are those who will lose as climate change intensifies. They include home- and landowners in low-lying areas, the insurance industry, and farmers and fisherfolk, among many others.... Green asset owners are those involved in the extraction and production of critical minerals, the production of bulk materials in renewable technologies ... and the manufacturing of renewable and green technologies ...." (Green 2025:4 - 7].

Green's explanatory model of politics does not try to incorporate, in addition to self-interest concerning owned assets, moral motivations, which she leaves aside while explicitly acknowledging their importance in reality (Green 2025:17 and 27 - 28). Obviously, however, many of those she treats as 'vulnerable asset owners' will in fact have justified moral demands for protection and reparations, and considerable numbers of 'green asset owners' will be motivated to protect the climate as well as to promote their own assets. Although the ultimate losers, the fossil asset owners, are politically dominant now, the other two interest groups, the green asset owners and the vulnerable asset owners, have good reasons to form promising coalitions designed to limit climate change and to drive down the value of the fossil assets. This is an existential struggle, and "we are not all in this together" (Green 2025: 3). Green offers valuable specific suggestions about political actions to protect the climate by undermining the wealth and power of the fossil asset owners, most notably, national domestic implementation of the revolutionary Global Minimum Corporate Tax [OECD Model Rules] (Green 2025: 101 - 108) and political attack on the Investor-State Dispute Settlement system that makes it absurdly difficult now for states to escape onerous treaties with fossil fuel firms (Green 2025: 108 - 112)

and demonstrates beyond all doubt that the fossil asset owners have no intention of cooperating willingly with climate action.

An inspiring recent concrete instance of coalition was the spontaneous social movement in Virginia and West Virginia between 2014 and 2020 that killed the Atlantic Coast Pipeline that would have transported fracked gas from the Marcellus Shale - "the largest 'methane bomb' in the world" (Carrington 2023) - through the George Washington National Forest and across the Shenandoah Valley, the Appalachian Trail, and the Blue Ridge Mountains into eastern North Carolina. This gripping political story is vividly told in Jonathan Mingle's *Gaslight* (Mingle 2024). An extremely diverse coalition gradually formed among farmers who neither knew nor cared about climate change but were furious at the use of eminent domain by Dominion Energy to seize rights-of-way for the pipeline through their farmland; dedicated activists working against climate change; people who, without any focus on the climate as such, love particular threatened mountains, rivers, and valleys - like the Cowpasture River Preservation Association - and did not want to see them mindlessly torn and polluted by sloppy construction; electricity consumers who could see that their rates would rise to pay for infrastructure that was not actually necessary; people of color who realized that a major pumping station for the pressure in the pipeline, which would become a source of local air pollution, just happened to be planned near Union Hill, Virginia, a town founded after the Civil War by freed slaves and still majority minority, in a classic bit of environmental injustice; and various others who shared few positive goals but strongly shared the goal of preventing a socially pointless and environmentally destructive pipeline. When lobbyists for Dominion Energy expected local zoning boards to show them their traditional favouritism, they were shocked to find hearing rooms packed full of angry local residents demanding that regulations be enforced. The Southern Environmental Law Center [SELC] repeatedly sued the pipeline company on behalf of various pipeline opponents,

sometimes winning and sometimes - including at the Supreme Court, in a truly bizarre ruling - losing. But as SELC's legal battles continued at multiple levels, the months went by, and the projected construction costs rose, until finally the superfluous and poorly planned pipeline was abandoned. Other battles against other gas and oil pipelines have of course been lost; and others, such as the Keystone XL Pipeline, won. The point is that with smart and dedicated leadership, groups of citizens willing to work together in spite of other differences can sometimes win against rich and powerful fossil fuel and utility firms acting against the public interest.

Strategies quite different from the kinds of political action that have been the focus here may also be promising, including a wide range of types of legal action. Milieudefensie [Friends of the Earth Netherlands] has brought a lawsuit intended to stop extraction by Shell (Bryan 2026). Since the emissions from the intended uses of the products fossil fuel firms are marketing are causing weather phenomena that are killing humans by the millions, it seems perfectly reasonable, as already mentioned, to bring criminal charges of some type of homicide for these deaths (Arkush and Braman 2024), and at least one civil case for wrongful death is now before a court (Gelles 2025). Individual states are passing what are being called 'superfund laws' requiring firms to clean up messes they have caused (Zraick 2026). To maintain EBAU fossil fuel firms, pushing the boundaries of the outrageous, are meanwhile lobbying for federal legislation to give them legal immunity from liability in the US like that misguidedly granted to gun manufacturers (Gelles and Zraick 2026; Jones 2026). To obstruction this would add calculated evasion of responsibility. We cannot, however, examine additional battles and strategies here.

One caution about tactics may, however, be in order. One ought not to assume that because what is at stake - the physical preconditions of civilized society - is of virtually unlimited

importance, what can be done to defend against those who threaten it can similarly be almost unlimited. What could be disproportionate to the defence of such an important value? But the decisive issue here is not proportionality. Tactical choices must weigh tactical considerations as well as moral ones. While it is certainly not the case that if a tactic is likely to work in support of a good end, it is justified, it is the case that a tactic is justified only if it is likely to work. There are at least two reasons why extreme measures are unlikely to succeed in this case.[5]

The first reason for this caution is that because the sources of the threats that need to be opposed are powerful, entrenched, and generally accorded undue respect, political opposition by less powerful people needs to consist of broad - ideally, mass - coalitions, like the one that stopped the Atlantic Coast Pipeline. Rightly or wrongly, many people are uncomfortable with extreme tactics in general and are especially unlikely to participate in coalitions with such tactics working against what are widely thought to be legitimate and socially licensed institutions like giant oil and gas companies, utilities, and their enabling major banks. I take this simply to be an unfortunate sociological fact that is part of the problem. Other things equal, the more extreme the tactics, the smaller the coalition is likely to be, in my judgement. This was evident in, for example, the backlash against Extinction Rebellion in the UK a few years ago. One needs to cause maximum difficulties for one's adversaries while expanding one's political movement to as many allies as possible. Extreme tactics will be self-defeating.

The second reason is that it is foolish to choose a battleground that strongly favours one's opponents. Since those with carbon wealth are politically entrenched, they can call upon the violence at the command of the state to defend themselves. To attempt to use violence against them would be, as the saying goes, to join in a gun-fight with a knife - one will most likely lose.

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[5]For more thorough analysis of the ethics of alternative tactics, see the article by X in this special issue.

This is an argument that has been made by many, from Gandhi to Martin Luther King Jr. Extrication from any evil situation like ours needs to be at least somewhat gradual. In spite of the seriousness of the dangers humanity faces, some patience is necessary to avoid counter-productive tactics. Instead, it is readily possible that positive social tipping points can gradually be built up (Lenton 2025).

Conclusion

The two fundamental contentions of this article are that grave evil is systematically being done and that the perpetrators have great entrenched political power based in their carbon wealth that can be overcome only by broad coalitions of politically active individuals. Since the evil consists of threats to the preconditions of civilized society, all humans have both strong self-interest and an unconditional duty to resist it and defend our way of life. This makes the broad coalitions that are necessary also possible. Since the perpetrators are politically powerful, resisting the threats they pose requires challenging their power and undermining their wealth. No firm can be allowed any longer simply to proceed to make climate change worse because it fits their established business model.

The bulk of the work so far in climate ethics, including almost all my own, has focused on questions of justice and fairness, like how the burdens of limiting climate change ought to be shared across individuals, nations, and generations. These remain critical issues, and good work is being done on them. Nevertheless, it is important to notice that these discussions belong mostly within what can be described as the ethics of cooperation: on what terms should those trying to limit climate change relate to each other and work together?

Some of the most politically powerful institutions in human society, however, are not only not cooperating with efforts to limit climate change, but doggedly and viciously opposing them through denial, delay, deception (including richly financed green-washing and gas-lighting),

diversion, and the exertion of raw political power. It would be folly to plan action as if these powerful destructive forces are not relentlessly attacking the efforts by the cooperative forces to control climate disruption by controlling now-unlimited extraction. We need guidance on how to relate to our enemies as well as to our friends.

We need, then, also to develop an ethics of confrontation, beginning with a lucid understanding of the supreme moral importance of what is at stake in this political struggle over whether the extractive business-as-usual can be permitted to continue on its own terms and, since it cannot, over how it can best be eliminated fast enough, while we also stop new emissions and remove old ones. We have seen some basis in both political economy and recent experience to believe that, for example, concerted political action by broad political coalitions can overcome opposition and mobilize public institutions. But a much fuller ethically-infused and empirically-based strategy is needed for the great political battle of our time. words: 11,300

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