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We Are Not All in This Together

THE CLIMATE CRISIS is evidence of an incredible governance failure. The year 2025 marks three decades of global climate negotiations. The first annual Conference of the Parties (COP)—where government delegates negotiate international climate rules—was a small affair held in Berlin. Roughly nine hundred delegates attended, along with a smattering of climate-focused nongovernmental organizations (NGOs). Two decades later, when the landmark Paris Agreement was signed in 2015, there were more than seventeen thousand state negotiators and eight thousand nonstate actors in attendance. By 2023, the number of government delegates attending the negotiations ballooned to almost forty-four thousand people, with some eighty-five thousand attendees in total.[1]

It is therefore not an exaggeration to say that millions of working hours have been devoted to multilateral climate cooperation. And yet the climate crisis continues to accelerate. June 2024 was the twelfth consecutive month with global average temperatures 1.5 degrees Celsius above pre–industrial era levels.[2] That figure will likely be higher by the time you read this sentence. Countries closer to the poles are even warmer. Canada, where I live, is now twice as warm as the global average.

The alarm bells are growing louder, and the climate disasters deadlier and more frequent. But efforts to take action as prescribed by the Paris Agreement, the 2016 international treaty that set the goal of limiting warming to 1.5° Celsius, continue at a plodding pace. Roughly three-quarters of all nations have made individual pledges to reach "net zero" emissions by midcentury.[3] Yet all the evidence indicates that we are set to blow through the Paris temperature target—or may have done so already.[4]

Using the lens of existential politics, this book explains why global climate governance—which includes the UN Framework Convention on Climate

Change (UNFCCC), the Paris Agreement, and a host of voluntary efforts—is failing. It also explains why global climate governance will continue to fail unless we shift our understanding of the nature of climate politics.

Existential politics offers a different way to think about climate change—as a political contest between different kinds of asset owners.[5] Climate policy to curb emissions and phase out fossil fuels will lead to trillions of dollars in stranded assets, creating clear winners and losers.[6] Those with large endowments of fossil assets will be the losers. Owners of green assets will be the winners—as well as the basis of a decarbonized economy. But so far, green asset owners are few in number and weak compared to fossil asset owners. 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. The ensuing conflicts are the stuff of existential politics.

But to date, governments have failed to confront these realities. Instead, they have been almost obsessively focused on emissions—measuring, reporting, and buying and selling them. This technocratic approach has yielded some reductions, but not nearly enough to avoid the worst effects of climate change. Worse still, not only has measuring emissions created the illusion that we are all in this together, but it encourages us to believe we are actually tackling the climate crisis—when all the evidence indicates the opposite. Global climate governance isn't working because it is overly focused on the wrong problem.

This book takes a different view of climate change—as a problem of assets, not tons of greenhouse gas emissions. I show that global policies to manage emissions are both failing to promote the energy transition and providing political cover for maintaining the status quo. Using global financial institutions as the central tools for climate governance can meet the twin challenges of constraining the power of fossil asset owners and expanding the number of green asset owners.

Climate change is about loss and transformation. This period of intensifying climate crisis is a deeply unsettling time, steeped in fear of certain change with uncertain distribution. But with a reorientation around existential politics, governments can make meaningful progress on decarbonization.

A Simple Model of Climate Politics

To understand how asset revaluation shapes global climate politics, I conceptualize a simple world with three groups of asset owners: fossil, green, and vulnerable. Firms and governments are the primary asset owners in this model. These collective actors with organized interests are the engine of politics. Of course, individuals can own assets too, but unless they are organized into a group (a union, stockholders, pension owners), they do not have a collective set of preferences or interests. Asset owners' interests are driven primarily, but not exclusively by material concerns, though these interests may change over time as technology advances[7] or ideologies shift.[8]

First are *fossil asset owners*. Fossil assets are currently the engines of the global economy. They exacerbate climate change and, barring major transformations, their owners will lose out from the energy transition. Fossil asset owners include fossil fuel and petrochemical companies, utilities, and heavy manufacturers, among others. Of course, at some level all asset owners hold some fossil assets, since fossil fuels continue to be the lifeblood of our world. Some fossil assets are highly specific—that is, they cannot be replaced, either due to a lack of technological substitutes or prohibitively high costs. But others are potentially "decarbonizable": technological development and diffusion have reached a point where fossil assets can be converted to green assets, given the right incentives.[9] Targeting decarbonizable assets is a critical political leverage point in existential politics.

Fossil asset owners' primary interest is, unsurprisingly, maintaining the status quo, either through outright obstruction on climate policy or by slowing the pace of the energy transition through strategies such as hedging or greenwashing. Indeed, some fossil asset owners, like fossil fuel companies, already have a long and well-established record of doing so. We now know that "Exxon knew" decades ago about the effects of greenhouse gas (GHG) emissions on the climate.[10] And while climate denialism is no longer mainstream, there is ample evidence of the fossil fuel industry and other fossil asset owners seeking to slow the pace of decarbonization through lobbying,[11] self-regulation,[12] and greenwashing.[13]

Even at its current middling pace, climate policy is already devaluing fossil assets. Energy companies are selling off their most carbon-intensive holdings,[14] pensions are divesting from fossil fuels,[15] and some banks now require decarbonization plans to "derisk" their lending portfolios.[16] And some fossil

asset owners are coming to terms with the revaluation already underway and beginning to transition to clean technologies. The auto industry is an excellent example. With a relatively mature technology—battery-powered electric vehicles (BEVs)—many major auto manufacturers have ramped up their production. But this choice is far from universal. Automakers such as Fiat and Ford are lagging behind peer firms in their BEV production.[17] Others, like Toyota, continue to bank on hybrid vehicles, despite broader trends toward full electrification.[18]

But of course, not all industries have developed to the point where decarbonizing is technologically feasible. For instance, there is currently no way to electrify aviation. Sustainable aviation fuel (fuel derived from biomass) can reduce, but not eliminate, GHG emissions. These fossil asset owners are more likely to organize and obstruct decarbonization efforts. Thus, the aviation industry's strategy has been to focus on massive offsetting efforts. In 2016, governments created an international agreement to regulate aviation emissions. In the short term, most reductions are expected to come from offsetting. But as I explain in chapter 4, offsetting is a hugely problematic policy, the benefits of which have been systematically and grossly overestimated.[19]

In other industries, technologies are available, but not scalable. The fossil fuel and electricity industries have pinned their hopes on carbon capture and storage (CCS). However, except for storage at the site of combustion, such as in power plants, this technology is not yet economically viable.[20] Some research suggests that even in this limited application, CCS has logged many more failures than successes.[21]

Second are *vulnerable asset owners*. 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.

Wildfires and floods have decimated communities around the globe, creating huge financial losses and, more importantly, displacing former residents. The International Organization for Migration estimates that there will be over 200 million climate migrants by midcentury.[22] Currently, climate migrants have no legal status under international law, and there are limited plans for dealing with massive flows of people. Whole nations will be erased by sea-level rise, and some are already making relocation plans.[23] Australia recently signed an agreement with Tuvalu, agreeing to accept climate migrants as the tiny island nation shrinks.[24]

The radical uncertainty surrounding climate change is also posing existential threats to the insurance industry.[25] A recent study estimates that extreme weather events linked to climate change created economic losses of US$2.86 *trillion* in the last two decades, or an average $143 billion per year—roughly the annual GDP of Morocco.[26] In Canada, insurance claims around disasters like fires and floods are up more than 400 percent over the last fifteen years.[27] In 2022, there were CAD$3.4 billion in catastrophic insurable losses.[28] In the United States, state-level insurance plans are facing the twin pressures of low premiums and increased payouts. These programs are insurers of last resort, often offering protection to homeowners in fire- or flood-prone areas who cannot get private insurance. Some programs are facing the real threat of insolvency.[29]

Vulnerable owners are also fighting for their survival—but through aggressive mitigation and adaptation policies. It is not surprising that Tuvalu is part of a bloc of small island nations that have long been a loud voice at the climate negotiations, calling for more ambitious policy as a last-ditch effort to avoid the sea-level rise that will submerge them entirely. Funding for adaption as well as compensation for "loss and damage" are both key political issues for vulnerable asset owners. In the best-case scenario, they can implement measures to enhance resilience in the face of climate change; in the worst-case scenario, they can be compensated for irreversible economic and non-economic damage. Yet, in general, vulnerable asset owners are less powerful and not as well organized and therefore face hurdles in effectively pressuring governments to act.

Third are *green asset owners*. They will be the basis of the decarbonized economy. Green asset owners are those involved in the extraction and production of critical minerals, the production of bulk materials in renewable technologies (for example, steel, cement, and aluminum), and the manufacturing of renewable and green technologies (for example, solar panels, wind turbines, heat pumps, and batteries.) Green asset owners also include infrastructure owners, such as electric utilities, which will benefit from expanded electricity grids, charging stations, and retrofitted buildings. With respect to infrastructure, governments are also green asset owners. Thus far, green asset owners are fewer in number and decidedly less powerful than fossil asset owners—a key problem that I discuss later.

The creation of green assets will necessitate huge amounts of labor—to manufacture, assemble, install, and maintain new green technologies. The number of jobs in the renewable energy industry almost doubled between 2012 and 2022 and now sits at approximately fourteen million.[30] Currently,

China leads the world in renewable energy employment, representing 41 percent of total jobs globally.[31] While existential politics focuses primarily on asset owners, the demand for labor can be an opportunity to create a broad base for support on climate action, involving both the transitioning of fossil asset labor and the addition of new green asset labor.[32]

Like all models, this model of asset owners simplifies reality in order to make generalizations; in the real world, all three categories are more complex.[33] Most owners hold a mix of assets, and therefore their interests fall on a spectrum. Their position is determined by the relative proportion of each set of assets as well as the economic and technological ease with which they can substitute assets. I discuss the challenges of messy boundaries between categories in further detail below and also in chapter 2.

Asset Revaluation Drives Existential Politics

Both climate change and climate policy will generate existential politics: the increasingly contentious political battles over which assets, professions, cultures, and nation-states will survive. Of course, all politics is distributional: it is about who gets what, when, and how. Existential politics magnifies these struggles; indeed, it is distributional politics on steroids.[34]

In distributional politics, actors may win or lose things of greater or lesser value. Increased energy taxes or new technology standards will raise costs for energy producers and consumers and could make exports less competitive. Such policies can negatively affect fossil asset owners' bottom line.

Existential politics is a subset of run-of-the-mill distributional politics, which involves: "(1) something of central importance to a given actor being at stake and (2) the prospect of its total elimination."[35] In contrast to distributional politics, substitutes are unevenly unavailable. This means the destruction or complete devaluation of assets, which effectively determines whose way of life gets to survive.

Full decarbonization will mean an end to fossil fuel extraction, a complete devaluation of oil and gas reserves, and the phasing out of all fossil fuel–based technologies.[36] Unless governments and firms involved in these activities develop an equally profitable carbon-free business model—assuming the technology is available to do so—their assets will lose all value. One study estimates there will be over $1 trillion in stranded assets under a midrange scenario, consistent with 3.5 degrees Celsius of median warming in the twenty-first century.[37] Thus far, no major fossil asset owners—either governments or

firms—have publicly committed to a phaseout of fossil fuels, despite the fact that many have simultaneously pledged to go net zero in the coming decades—balancing emissions with removals.[38]

Fossil asset owners can respond to asset revaluation in different ways. In addition to obstructing climate policy, they can greenwash—devoting resources to looking climate-friendly rather than actually behaving that way. They can hedge—investing in both green and fossil assets without fundamentally changing their business model.[39] They can divest—selling off their dirtiest assets to new fossil asset owners. Or, if the technology is available *and there are sufficient incentives to do so*, they can convert their fossil assets into green ones.

The only two strategies relevant for existential politics are obstruction and conversion. Obstructionism is why we have failed to make progress on the climate crisis—despite more than three decades of diplomacy and international rulemaking. Conversion will turn fossil asset owners into green asset owners, changing both their emissions profile and their interests in decarbonization.[40]

How Existential Politics Explains Climate Failures

Existential politics helps explain the persistent failures of global climate governance. There has been a mismatch in strategies by governments and fossil asset owners.[41] Some fossil asset owners have seen the existential threat of climate regulation from the earliest days of the climate regime. Their playbook has therefore *always* been obstructionism.[42] Governments, facing the difficult task of overcoming this obstructionism, have diligently ignored it, until recently. Instead, they have remained stubbornly focused on emissions. In particular, global climate policy has been almost singularly fixated on measuring, reporting, and trading tons of GHG emissions—which I refer to as "managing tons." Since managing tons resolutely ignores the underlying conflicts created by asset revaluation, it cannot, by definition, achieve the rapid emissions reductions that addressing the climate crisis requires.

Obstructionists Are the Driving Force in the Global Climate Regime

"Political will," which will allow governments to enact the ambitious decarbonization measures the climate crisis requires, is often invoked as the elusive missing piece in climate policy. Many factors contribute to a lack of political

will, but the political power of fossil asset owners is the elephant in the room. They are extremely well resourced and well organized.[43] The fossil fuel industry's decades-long efforts to undermine the science of climate change is testimony to their early understanding of existential politics.[44] They quickly recognized that real efforts to combat climate change would mean the end of their industry.

But the fossil fuel industry is not the only bad guy. Electric utilities have also tried to slow the pace of the energy transition. As momentum around US renewable energy laws increased, "electric utilities realized these laws could . . . threaten their assets," and they organized to "block, weaken or rollback climate policies,"[45] with a particular focus on rooftop solar.

The animal agriculture industry, which is responsible for an estimated 14.5 percent of global emissions, has also lobbied actively against US climate policy.[46] Meat and dairy production emit vast quantities of methane and contribute to land use conversion. Consistent with the existential politics framework, they are sending lobbyists to the COP negotiations in increasing numbers.[47] Even the auto industry, a potentially "convertible" sector, has fought against fuel efficiency standards,[48] and some manufacturers continue to insist on a future for internal combustion engine vehicles, despite the fact that more than twenty countries have announced plans to phase out their sale in the coming decades.[49]

Obstructionism is not limited to the United States. For instance, South Africa is largely coal-powered. Eighty-three percent of the country's total emissions and 70 percent of its electricity are derived from coal.[50] There are strong links between policymakers and the coal industry, and as such, domestic policy continues to underwrite the coal industry in several ways.[51] Both supply and production have grown since 2000,[52] and coal remains untaxed when used for transport, heating, or process purposes. The carbon tax remains low (around $10 per ton)[53] and contains many exemptions.[54] Australia has a similar story; the coal lobby has been instrumental in slowing decarbonization efforts.[55]

Unfortunately for the climate, vulnerable and green asset owners have nowhere near the same power over climate politics. Some vulnerable asset owners are fighting rearguard actions, such as suing fossil asset owners for climate damages. In a landmark case in the Netherlands, several environmental NGOs sued Royal Dutch Shell to force it to reduce its emissions. The Dutch court ruled in favor of the NGOs, requiring Shell to reduce emissions by at least 45 percent from 2019 levels by the end of 2030.[56] In 2024, Shell appealed the decision—a strategy that is textbook obstructionism—and won the appeal.[57]

Similarly, a handful of California towns have sued fossil fuel companies for the effects of sea-level rise on their homes.[58] And Indonesian nationals are suing the construction company Holcim for climate change–related damages and a drastic reduction in their emissions.[59] In the best-case scenario for climate ambition, these defensive actions can help reduce the material power of fossil asset owners through damages awarded. But they are also piecemeal, slow, and resource-intensive. Most importantly, these actions will have little effect on fossil asset owners' incentives to decarbonize.

Vulnerable asset owners are heterogenous—geographically dispersed, with a variety of interests. Many of them, unsurprisingly, require governmental support for adaptive measures so that they can protect their assets from the worsening effects of climate change. Yet the politics of adaptation is fundamentally different from mitigation; it is reactive and highly uneven.[60] With the exception of a few powerful industries—notably agriculture and insurance—vulnerable asset owners cannot be expected to counter the power of fossil asset owners.

Green asset owners are similarly limited in their influence. Trade associations representing fossil asset owners are typically opposed to climate policies, and they are outspending renewable trade associations by a factor of fourteen to one.[61] Yet it is estimated that the renewables industry could generate up to twenty-four million jobs and increase global GDP by 1.1 percent ($1.3 trillion) by 2030 if governments continue to invest in the energy transition.[62]

In sum, *obstructionism is the key driver of climate politics*. For some fossil asset owners, asset revaluation threatens complete extinction in the face of stringent climate policy; the luckier ones will be able to rebalance their holdings and retool their growth strategies. Green asset owners could serve as a counterweight to fossil asset owners' obstructionism—*if governments invest in their expansion*. But as I elaborate later, these investments will not be made through the UNFCCC. Rather, building a decarbonized economy will require turning our collective focus to the rules of international trade and finance institutions.

Managing Tons: The False Hope of Cooperating with Obstructionists

Existential politics lays bare the reasons that fossil asset owners will obstruct progress on decarbonization to maintain the value of their assets. Yet governments doggedly insist upon cooperation with these same obstructionists through the UNFCCC and the Paris Agreement. Thus, there is a profound

mismatch between current approaches and political reality, based in the false hope that multilateral cooperation on emissions reductions can adequately address the climate crisis.

This false hope has consistently taken a particular form. Instead of viewing climate change as a problem of existential politics, governments have fixated on "managing tons." Carbon pricing, carbon offsets (also referred to as "carbon credits"), and net zero policy pledges are all signature policies of the climate regime and prime examples of this technocratic management approach.

Managing tons assumes that measurement and commodification of emissions will lead to climate solutions. This approach is consistent with many other contemporary approaches to global governance that emphasize process over outcomes and governance by indicators.[63] However, this mechanistic mode of governance buries politics in numbers. Policy becomes technical, focused on processes of measurement, reporting, and evaluation.[64]

I am not the first to observe the obsessive focus on emissions in climate policy. Geographer Eric Swyndegouw describes CO_2 as having become "the 'thing' around which our environmental dreams, aspirations, contestations as well as policies crystallize." He describes a "fetishist disavowal of the multiple and complex relations" that drive climate change, resulting in "reductionism to this singular socio-chemical component (CO_2)."[65] Similarly, Larry Lohmann has noted that the highly technical nature of carbon markets effectively suppresses "public discussion [and] is precisely the opposite of the wide-ranging grassroots debate and political mobilization that the climate crisis calls for."[66]

Managing tons is a maladaptive political coping mechanism that has grown out of the constraints of multilateralism. The climate regime requires consensus for decision-making. Since any government can (at least in principle) exercise veto power, decisions often represent the lowest common denominator—the preferences of the least ambitious nation or nations.[67]

Because cooperation is the goal, governments are forced to focus on areas of agreement to make progress. This means that they naturally downplay their differences—the distribution of winners and losers that asset revaluation creates. Areas of agreement are consistently the policies that manage tons.

Managing tons is maladaptive because it allows the climate regime to hobble along, fastidiously ignoring the fundamental conflicts that asset revaluation creates. Instead, it displaces these political conflicts onto technical debates about measurement and commodification. Although this is undoubtedly a practical strategy for promoting cooperation, managing tons has had a limited

effect on emissions reductions. It allows obstructionists to redirect efforts toward counting emissions rather than reducing them.

Existential politics explains why managing tons cannot produce the transformations needed to decarbonize the economy. The power asymmetries between fossil and green asset owners effectively enable fossil asset owners to capture policies that manage tons—carbon pricing, carbon offsets, and net zero. However, such capture can be difficult to detect because of the technical complexity (and therefore opacity) of these policies and the veneer of legitimacy imbued by multilateral cooperation. The incredible difficulty of measuring many types of emissions provides ample opportunities for gaming and greenwashing, as I show in chapters 3, 4, and 5.

Managing tons favors fossil asset owners. It also fails to acknowledge the fundamentally conflictual relationship among asset owners, instead insisting that those who stand to lose the most from decarbonization will be proactive contributors to the process. This approach creates a specific form of regulatory capture in which everyone agrees to implement highly technical policies that are often difficult to understand fully and therefore easily subject to gaming and manipulation.

Global Climate Governance Should Focus on Assets, Not Tons

Existential politics dictates a very different path for the global climate regime than managing tons: multilateral action that lessens the power asymmetry between fossil and green asset owners. Policies that manage tons are shrouded in the technical complexities of GHG measurement, offer intangible and often far-off benefits, and are too easily twisted to serve the interests of fossil asset owners. Moreover, concentrating on tons often marginally increases efficiency in a fundamentally fossil-fuel based system. This incremental approach is unlikely to lead to complete decarbonization, which requires wholesale transformations of economic, social, and technological systems.[68] The reality is that we must stop burning fossil fuels.

Ironically, global climate policy has stagnated because governments are too focused on global climate policy. To get to the root of the climate crisis, states should turn to global rules that reorient the flow of capital in the global economy. Reducing the supply of fossil fuels should follow. This approach can constrain the power of fossil asset owners *and* build green assets, thus expanding

political support for decarbonizing the economy. *Existential politics indicates that global economic institutions, rather than the UNFCCC, must be the central locus for global climate policy.*

Economic institutions respond directly to the material struggles that existential politics creates. Current trade and finance rules protect fossil asset owners and make it more difficult for governments to invest in green asset owners. These rules cement—and potentially widen—the power asymmetry between these two groups of asset owners, tipping the balance further in favor of obstructionism.

Reform of international economic institutions could help shrink this gap by constraining the material wealth of fossil asset owners and allowing domestic governments the legal leeway to invest in green asset owners. (Because of the diversity of vulnerable owners, they are unlikely to serve as a counterweight to fossil asset owners at the international level, as I discuss further in chapter 2.) Specifically, tax and finance institutions can constrain fossil asset owners by reducing their wealth and political influence. And trade institutions can facilitate the creation of green assets, funneling investments toward the goods, services, and labor needed to build and maintain green assets. One set of reforms promotes the decline of fossil fuels; the other promulgates low-carbon alternatives.[69]

Tax reform can be powerful climate policy.[70] The globalization of the financial industry has made it much easier for corporations to avoid taxation by moving profits offshore to tax havens.[71] Offshoring not only exacerbates wealth inequality (a key cause of climate change) but also builds the wealth of global corporations that contribute to climate change, both directly and indirectly. Directly, companies that offshore are linked to tropical deforestation.[72] Indirectly, corporate offshoring increases wealth inequality, which contributes to climate change.[73] Fossil asset owners, such as oil and gas companies, are also active in the offshoring game.[74] Raising corporate minimum taxes—a process that is already underway via the Organization for Economic Cooperation and Development (OECD)—can help rein in the power of fossil assets.

Curtailing investment protections for fossil asset owners is another important way in which concentrating on assets can accelerate decarbonization. Since 1980, states have signed over 2,600 international investment treaties.[75] Conflicts over the agreements are adjudicated through the Investor-State Dispute Settlement (ISDS) system—the arbitration provisions found in almost all investment treaties. ISDS provisions allow foreign investors to sue states for compensation if domestic regulations impede their investments. For

example, the UK oil and gas firm Rockhopper Exploration sued the Italian government for losses when the latter banned offshore oil and gas drilling within twelve nautical miles of the coast. Rockhopper had previously been granted concessions to extract oil from the Ombrina Mare oil field, but the subsequent ban rendered this no longer possible. The ISDS ruled in favor of Rockhopper, awarding €184 million in damages.[76] Similarly, the Canadian government sought $15 billion in compensation when the United States canceled the Keystone XL Pipeline.[77] The pipeline was a flashpoint in North American climate politics, provoking vocal public opposition because the project would have added as much as 110 million tons of CO_2 emissions annually.[78] The case was dismissed in July 2024.

Worse still, protections afforded by the ISDS have resulted in massive payouts to fossil asset owners, and to the fossil fuel industry in particular. Just a handful of lawsuits brought by oil and gas majors have resulted in state payouts of over *$67 trillion* since 2013.[79] Such payouts embolden firms faced with asset revaluation, reinforce their power through wealth accumulation, and may dissuade states from implementing aggressive climate policy for fear of legal reprisals from firms whose investments are protected by the ISDS.[80]

Finally, the turn toward green industrial policy—the strategies governments employ to expand climate-friendly economic activities—shows that existential politics is germane to understanding global climate governance. The recent passage of the US Inflation Reduction Act and the European Green Deal illustrates the political popularity of domestic investments in green assets even in countries, like the United States, that have lagged behind on climate policy.

Green industrial policy is, in many ways, the opposite of managing tons. It delivers near-term benefits to interest groups and consumers alike. For example, the 2022 US CHIPS and Science Act provided $53 billion to incentivize domestic chip manufacturing.[81] The US Inflation Reduction Act has delivered almost $500 billion in climate-related investments since its passage in 2022.[82] The European Green Deal, which aims to make Europe net zero by 2050, is funded by half a trillion euros from the EU budget (and another half-trillion euros from co-financing and other private sources).[83]

There is a growing political impulse to source green assets domestically, creating the twin benefits of increased domestic economic investments and green jobs (with the associated political advantages) and greater self-sufficiency. As Europe and North America struggle with fractious relationships with China,[84] both benefits play well in domestic politics.

But the inextricable relationship between the economic and political challenges of decarbonization makes for a complex balancing act among three competing priorities. First, countries must cooperate to massively ramp up production of green assets. Second, there is an urgent need to create more winners—and therefore supporters—of climate policy. Coalitions of green asset owners and labor are needed to destabilize the entrenched power of fossil asset owners. However, such action can quickly shade into protectionism, which will increase costs and ultimately slow the energy transition. Yet even if it shades into protectionism, green industrial policy can create lasting political benefits. Finally, the demand for green assets is so enormous and urgent that duplicative efforts across nations will be necessary, though they may undercut efficiency. The new frontier and fundamental challenge of climate policy going forward will be to manage the trade-offs between efficiency losses and domestic investments in green assets.[85]

The Scope of the Book

This book proposes an expansive new framework for understanding global climate politics. It explains how international institutions *beyond* the UNFCCC and the Paris Agreement can create the conditions for rapid decarbonization. However, we cannot understand the potential role of these institutions without seeing how domestic politics constrains and is constrained by global institutions. A deep dive into national-level interest group politics is beyond the scope of this book. Instead, I use the model of asset revaluation to make some basic assumptions about the balance of fossil and green asset owners domestically, across nation-states, though some specificity at the national level is necessarily sacrificed.

Importantly, I don't take on the critical problem of petro-states, which are the largest fossil asset owners in the world. Many petro-states have nationalized their oil industries, which are generally less transparent to publics and scholars. And importantly, in these countries the logic of building constituencies is often more complex.

The focus is on assets as the basis for the preferences of asset owners and, to a lesser extent, of labor. This choice is deliberate. Climate change has become an increasingly polarizing issue, and people's attitudes about it are deeply rooted in their political beliefs. Polarization is a tough nut to crack. The model of existential politics seeks to supersede these cleavages through structural

changes to the economy. Change the rules first, and the choices available to intransigent groups—voters, fossil asset owners, labor—will follow.

I have made a deliberate decision to think about decarbonization as a political-economic challenge rather than one of justice. I am deeply sympathetic to arguments that climate solutions are intrinsically linked to broader issues about inequality and systems of oppression like colonization and debt. Other scholars have written elegantly and thoughtfully about these relationships.[86]

The "radical pragmatist" solutions set forth in chapters 6 and 7 acknowledge the limitations of my own thinking. The urgency of the climate crisis demands profound changes to the global economy at an incredibly rapid pace. While equity, justice, and decolonization must be part of a politically stable and environmentally sustainable planet, creating a new global order premised on these principles is not likely to come about in the short window of time we are now facing. There are certainly those who argue that a just transition cannot occur in the absence of fundamentally reconfiguring the distribution of wealth and power across and within nations. I acknowledge the importance of these discussions, but do not address them directly in this book.

The Structure of the Book

The book has three main parts. In chapter 2, I present a stylized model of the world with the three sets of asset owners—fossil, green, and vulnerable. It expands upon previous work with my colleagues Jeff Colgan and Thomas Hale by adding the critical group of green asset owners.[87] The chapter explains why managing tons has become the prevailing approach to global climate governance and discusses the different strategies that fossil asset owners adopt. Finally, it explains why focusing on assets makes for better politics as well as better policy.

Chapters 3 through 5 discuss the pernicious politics of managing tons. I argue that managing tons deliberately takes the politics out of climate policy and thus is doomed to remain in the realm of incremental improvements—creating emissions reductions without true decarbonization. While incrementalism might be appropriate for some problems, the logic does not hold for climate change. I provide evidence from three policies that manage tons to demonstrate the deeply problematic nature of this approach. I also show that these policies do little to create green assets.

Chapter 3 provides an analysis and critique of the ur-policy of managing tons: carbon pricing. Once considered the "only game in town" for climate

policy, carbon pricing has since been downgraded to "one tool in the toolbox" to address climate change. But the evidence on emissions reductions does not match the rhetoric—or the political costs. To date, carbon pricing has been shown to be an immensely controversial policy in some places, with very limited effects on emissions. Even the European Union, which has the oldest and largest emissions trading system and arguably the most technical capacity to create and administer a carbon market, has achieved only somewhere between 1 and 2 percent reductions per year.[88] Put simply, in many cases, carbon pricing is a political third rail that doesn't produce emissions reductions commensurate with the backlash it generates.

Chapter 4 makes the case for why it's time to get rid of all nonpermanent offsets. After studying offsets for almost two decades, I have seen their profound impact on the logic and politics of global climate governance. Offsets (or carbon credits) were the political linchpin of the Kyoto Protocol that allowed countries from the global North and South to forge an agreement based on the transfer of wealth via offset markets.[89] Private authority has also flourished with the growth of offset markets. Since the late 1990s, nonstate actors, primarily NGOs, have created their own "voluntary" market that makes carbon credits available to those actors who want to offset their emissions but are not subject to regulation requiring them to do so.[90] These self-regulated voluntary markets are rife with quality and integrity issues. Chapter 4 provides a primer on the technical aspects of offset project design and implementation and explains why voluntary markets are especially problematic: they are structurally incapable of solving the quality issues through self-regulation, and their use in compliance markets is growing.

Chapter 5 unpacks the newest organizing principle in climate governance: net zero emissions. Net zero is enshrined in the Paris Agreement, which calls for achieving "a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century."[91] Net zero is yet another version of managing tons, one in which actors remain fixated on measuring and reporting their emissions. Over 88 percent of emissions are now covered by a net zero pledge.[92] But the real meaning of these pledges depends highly on the details of the individual pledge. I detail the history of net zero, what currently constitutes best practice, and how current pledges from governments and corporations stack up.

Chapters 6 and 7 are the "solution" chapters in which I offer new strategies for global climate governance informed by existential politics: regulating assets in the global economy rather than tons of greenhouse gases in the

atmosphere. I call this approach "radical pragmatism." It is radical in the sense that it challenges some of the policies of the neoliberal international economic order. But it is pragmatic in its acknowledgment that this economic order is not going to be replaced anytime soon. Thus, the challenge is to understand both the policies and the politics that can help accelerate decarbonization. Chapter 6 tackles the difficult question of how to constrain the power of fossil asset owners; chapter 7 offers principles to guide governments in their investments in green asset owners.

Chapter 6 considers how international taxation and investment protections can be reformed to constrain the wealth and power of fossil asset owners. Global tax rules—which are already being reformed—can recoup some of the private profits offshored in tax havens, help fund government investments in green asset owners, and reduce the material power of fossil asset owners. International investment treaties currently protect fossil asset owners, especially the fossil fuel industry, which has reaped enormous monetary rewards from governments through international arbitration. Rolling back these protections is critical for changing fossil asset owners' calculus on the potential profitability of new investments. Best of all, these reforms are already underway (albeit in different ways), so the task is to ensure that robust rules are backed by powerful nations and that fossil asset owners do not succeed in weakening them.

Chapter 7 examines the current missing piece in existential politics: green asset owners. It considers how to grow their number, breadth, and power through the global trade regime. This process is currently unfolding through major green industrial policy initiatives, including the US Inflation Reduction Act (which is currently being rolled back by President Trump) and the European Green Deal. There are clear political incentives to engage in green protectionism that directs investments domestically to develop green assets. Given the urgent need to decarbonize the economy, however, governments must leverage all the efficiency advantages that free trade creates. Chapter 7 provides principles to guide states in making policies that navigate these tradeoffs. I explain why policies like the European Union's carbon border adjustment mechanism (CBAM) and the US-EU green steel deal are trending toward protectionism in the name of creating green assets.

Industrial policy is the new frontier of global climate politics—since it directly addresses the fossil asset owner obstructionism as well as the dearth of green asset owners. Unlike policies that manage tons, industrial policy delivers immediate and direct material benefits to build new interest groups of green asset owners.

The final chapter draws out the implications of existential politics for the future of global climate politics. International institutions are sticky; thus, it is unlikely that the UNFCCC and the Paris Agreement are going anywhere. However, we should adjust our expectations for what these institutions can do. They should continue to be a locus of reporting, transparency, and information exchange rather than the forum for creating climate policy. Existential politics dictates that decarbonization will come from transformation of economic structures and incentives, not measuring tons of emissions. To this end, I offer some "harm reduction" measures to mitigate the negative impacts of these policies in the short term.

The unending stream of bad climate news can be overwhelming. Existential politics provides a new perspective on a seemingly insoluble problem. To date, we have been obsessed with measuring emissions, to the detriment of efforts to reduce them. Instead of managing tons, governments need to invest in green assets. Not only will support for green asset owners provide the much-needed technology and infrastructure for a decarbonized economy, but it will create the political support for rapid and ambitious climate action. A focus on assets rather than tons is the best way to manage the climate crisis.

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