

Credo

“Atmospheric Recovery Litigation: Making the Fossil Fuel Companies Pay for Cleaning Up the Atmosphere”²

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Atmospheric Recovery Litigation is an approach that aims to make fossil fuel companies pay for cleaning up the atmosphere of excess carbon. These companies, which have profited enormously from developing and marketing the fuels causing greenhouse gas pollution, have yet to pay a dime for cleaning up the mess they created. It is often said that the common law should respond to the felt necessities of the times. This moment of climate emergency requires us to match law with ecological reality and take corrective carbon cleanup action before the climate system passes tipping points that would send our world into irrevocable heating.

Let’s begin by reflecting on the position we occupy in all of human history. It is as if we live in a minute-glass slipping between two worlds—the world we inherited that supported human survival with a stable climate system and a world looming ahead, in which the climate system becomes so disrupted as to cause an uninhabitable planet. Even in our position between these two worlds, we witness devastating catastrophes and chaos from the carbon pollution already in the atmosphere: Arctic snow turning green from massive algae, hurricanes pummeling communities, floods ripping through neighborhoods, wildfires trapping families in their homes, drought parching vast farming regions, and sea level rise washing away coastal settlements. Scientists warn that if we continue on this path, we will destroy the life systems on Earth that are crucial to our survival and our children’s survival. At this pivotal moment in time, we have to ask what our planet needs

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The concept paper, “A Meta-Strategy for Atmospheric Recovery: Filing Suits against the Carbon Majors, Forcing the Managed Decline of Fossil Fuels, and Funding Climate Restoration through Soil-based Carbon Sequestration,” by Mary Christina Wood, can be found at https://www.oregonlegislature.gov/helm/workgroup_materials/WG%201%20-%20Atmospheric%20Recovery%20Concept%20Paper%20PDF%2011.11.17.pdf.

to recover climate stability.

Scientists emphasize that we must decrease the carbon dioxide in the atmosphere to below 350 parts per million (ppm). That level represents the upper safe limit. But we have now soared beyond 415 parts per million, higher than any point in the past 800,000 years, and the number keeps rising.³

Scientists call for an urgent two-part response. First, we need to decarbonize our society as rapidly as possible, achieving a 45 percent emissions reduction by 2030 and zero emissions by at least 2050—and the sooner the safer.⁴

But decarbonization alone is not enough at this point. Because we have already exceeded the safety zone, the surplus carbon in the atmosphere is already wreaking havoc with our climate system. So the other necessary measure is cleaning up the existing excess atmospheric carbon disrupting the climate system. We have to accomplish a “drawdown” of this carbon and sequester it safely in soils and vegetation. In essence, we have to clean up the sky.

Scientists point to four natural methods available to achieve this drawdown recovery effort. All of them use the natural power of soil to stimulate plant growth in order to absorb carbon dioxide and store it over predictable time frames. Methods include reforestation; wetlands and mangrove restoration; regenerative agriculture, also called carbon farming; and regenerative grazing. Through natural methods like replanting trees and adopting organic and no-till farming practices, the soil itself can be a major engine for jump-starting the cleanup of the atmosphere. These methods are widely known as “natural climate solutions.”⁵

But to catalyze this global effort, we need a legal strategy, simply because no one is in charge—not the legislative branch, and not the executive branch. When the other two branches fail, there’s only one branch remaining, and that is the judicial branch. Courts are the constitutional guardians of the fundamental rights held by citizens, and courts can be called upon to compel action in the other two branches of government. The legal strategy on both sides of the climate imperative—decarbonization and drawdown—turns to the courts to motivate action. Atmospheric Trust Litigation (ATL), described below, aims to force sovereigns to take action to slash emissions. The other strategy, Atmospheric Recovery Litigation (ARL), has not yet commenced, but is designed to gain atmospheric natural resource damages from fossil fuel companies to fund drawdown efforts.

Atmospheric Trust Litigation

On the decarbonization side, there is mind-blowing urgency and very little time left to act. In June 2017, the former UN climate chief announced to the world that we have only until year 2020 to push down our emissions curve irrevocably, or we will not be able to attain the goals of even the Paris Climate Agreement. The economic plunge from lockdowns across the globe in 2020 in response to COVID-19 resulted in an astonishing 8 percent projected decline in emissions for that turn-point year.⁶

Although not nearly enough to recover the climate system—full and swift decarbonization is necessary—this unexpected calamity has, amid profound tragedy and loss, kept the window from closing on any hope of climate recovery and spurred the renewable energy sector as fossil fuel companies face unprecedented financial uncertainty.

The legal strategy designed to force governments to decarbonize is called Atmospheric Trust Litigation. Initiated in 2015, this campaign has gained significant momentum over the past few years. The strategy is based on the public trust principle, which is an ancient doctrine with roots dating back to Roman times. The principle deems crucial natural resources imperative for survival, like air and water, as held in a perpetual public trust, an “earth endowment,” so to speak, to be protected and maintained for the enduring benefit of citizens today and tomorrow, and for those distant generations who will need those resources no less than we do today. As a trustee of the resources, government is charged with a fiduciary duty to protect the natural wealth for present and future generations. The citizen beneficiaries can enforce this duty in court.

The public trust principle is well established throughout this country, as well as in many countries around the world. In May 2011, the Atmospheric Trust Litigation campaign was launched to enforce this duty of protection toward the atmosphere and climate system, both of which unquestionably are crucial to our collective survival. This campaign was brought in the wake of wholesale statutory failure to address the growing climate crisis. Administrative petitions or lawsuits were filed on behalf of youth in every state in the United States, asserting that governmental public trustees of the atmosphere, waters, and other crucial resources hold the duty to prevent substantial impairment of the climate system. These legal actions seek enforceable science-based plans of carbon emission reduction. In other words, the campaign positions the courts to supervise the other branches of government to do their job as trustees.

This historic campaign was spearheaded by Our Children’s Trust (OCT), a nonprofit organization based in Eugene, Oregon, with partners around the world. Since those cases were filed, similar cases have been brought by attorneys working in other countries. A Netherlands case gained notable success in 2019 when the highest court ordered the Dutch government to accomplish a 25 percent emissions reduction within a year’s time.⁷

In the United States, attorneys filed a landmark case in 2015 against the federal government on behalf of twenty-one youth plaintiffs who were suffering disparate effects of climate disruption. The complaint filed with the District Court of Oregon chronicles the history of US energy policy, alleging that Congress and presidential administrations promoted fossil fuel dominance for decades despite growing warnings by scientists as to the extraordinary—and ultimately existential—danger to Americans and communities worldwide. The complaint alleges that by pursuing such fossil fuel policy, defendants have acted with “deliberate indifference to the peril they knowingly created.”⁸

The case is *Juliana v. United States*, called by many the “biggest case on the planet,” because it challenges literally the entire fossil fuel policy of the United States and names multiple federal agencies as defendants. It advances two claims. One asserts that the government has violated a constitutional duty owed to citizens under the federal public trust principle to protect our crucial resources and climate system. The second set of claims asserts the government violated the Due Process Clause of the US Constitution by pursuing a fossil fuel policy that would threaten rights to life, liberty, and property. This case asks the court to order the federal government to prepare an enforceable science-based climate recovery plan addressing both decarbonization and drawdown.

On November 10, 2016, the twenty-one youth plaintiffs gained a sweeping victory when the Federal District Court of Oregon handed down an opinion affirming both the public trust and due process claims and denying the government’s and industry intervenors’ motions to dismiss the case.⁹ Judge Ann Aiken wrote, “I have no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society.” As to the public trust, she found that it was an attribute of sovereignty that imposed a duty on the federal government to protect public trust resources. This duty, she held, could not be legislated away: it both predates the US Constitution and is enforced by it. A trial was set for late October 2018. It was the much anticipated “Trial of the Century,” because it would

be the first time the federal fossil fuel policy would meet climate science in court.¹⁰

The Trump Administration launched a barrage of procedural motions to thwart the trial and finally gained an early appeal to the Ninth Circuit.¹¹

All three judges on the appellate panel agreed that the federal government knowingly caused the climate crisis over decades of promoting fossil fuels. Describing the present situation as the “Eve of Destruction” (quoting a 1960s song by Barry McGuire)—and frankly admitting the climate system is “approaching the point of no return”—a two-judge majority nevertheless astonishingly concluded that the courts can do nothing about the administration’s dangerous fossil fuel policy. These two judges (Hon. Andrew Hurwitz and Hon. Mary Murguia) urged the youth to seek climate recovery from the legislative and executive branches—the very branches that caused the crisis in the first place. The dissent vigorously disagreed, saying the courts have a fundamental responsibility to protect the constitutional rights of the youth plaintiffs and also to prevent the administration from bringing the nation to its demise. Judge Josephine Staton wrote, “It is as if an asteroid were barreling toward Earth and the government decided to shut down our only defenses. [T]he government bluntly insists that it has the absolute and unreviewable power to destroy the Nation. My colleagues throw up their hands.” Pointing out that courts in the past have provided complex remedies for violations of civil rights, as in the desegregation case *Brown v. Board of Education*, she said courts are obligated to marshal their remedial powers in face of this threat to the nation’s very existence. The *Juliana* plaintiffs, not giving up, sought further review of their case by an *en banc* eleven-member panel of the Ninth Circuit, and their request is still pending as of publication.

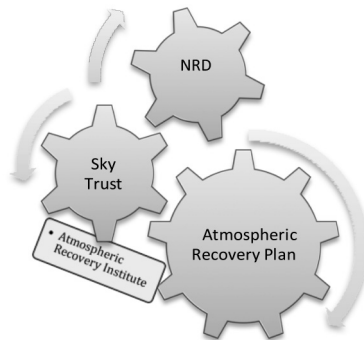
Meanwhile, Our Children’s Trust and partner organizations continue to file more Atmospheric Trust Litigation state cases, including one recently filed in Florida, and cases in other countries, including India. The hope of youth plaintiffs in *Juliana* is that victories such as the recent one in The Netherlands will start a green judicial domino effect around the globe, prompting judges in the United States and in other countries to step up and force the other branches of government to slash carbon before they push the climate system past a point of no return that the courts now recognize is upon us.

To summarize Atmospheric Trust Litigation, this is a global legal strategy in full swing to force governments to decarbonize their jurisdictions

according to a pace set by the best available science. These lawsuits are brought on behalf of youth against their government trustees. But there is another side of the climate imperative, which is to clean up the excess carbon already existing in the atmosphere. The legal strategy calibrated toward the need for drawdown is called Atmospheric Recovery Litigation, described below.

Atmospheric Recovery Litigation

Atmospheric Recovery Litigation envisions lawsuits by government trustees against the major fossil fuel companies to finance essentially a global carbon cleanup of the sky. As explained, scientists envision catalyzing atmospheric cleanup through natural soil-based methods. But there’s one big problem: no one has taken charge of leading such a drawdown effort. There are many scattered, localized efforts around the world, but there is no concerted strategy for deploying these methods at the scale and pace needed. When the legislative and executive branches fail to act to protect our survival resources, a dangerous vacuum of leadership emerges. Legal strategies must turn to the third branch—the courts—to hold polluters responsible and catalyze necessary initiatives. The Atmospheric Recovery strategy can be depicted as three gears moving in conjunction with one another.



The Atmospheric Recovery Plan

The first and biggest gear is an Atmospheric Recovery Plan. Tremendous science shows the capabilities of soil-based drawdown in different ecosystems using different methods. But there is virtually no framework that takes

those ideas, creates project parameters and financing mechanisms, and unifies them into a global undertaking. The sky cleanup requires tangible plans to bridge the gulf between science-based potential and action on the ground.

Because ecosystems vary so widely and localities face different opportunities and impediments, the optimal scale of planning is the regional one. A multidisciplinary convergence planning process can draw together natural scientists with expertise in soils, carbon cycles, and biotic mechanisms to identify hotspots of drawdown potential and delineate techniques to capture carbon. Putting social scientists and rural economists in the mix, planning teams can price out carbon farming, carbon ranching, wetlands restoration and reforestation initiatives, and identify funding opportunities as well as incentives to capture a multitude of co-benefits.¹² Local benefits from drawdown projects may include enhanced wildlife habitat, water source protection, increased food production, expanded recreational opportunities, and local jobs.

The atmospheric recovery plan announces to a region its capacity to engage in this worldwide effort and reap both payments and valuable co-benefits. It creates a tangible pathway that funders, policymakers, and land managers can then implement. But it is crucial to note that this planning effort should not entertain “offsets,” which are arrangements that allow polluters to continue polluting if they purchase an increment of conservation or drawdowns somewhere else. Compliance offsets are fundamentally problematic, because they basically legalize ongoing pollution. Because the world must phase out fossil fuel pollution entirely and fully decarbonize, soil-based drawdown must aim toward cleanup of the legacy carbon that already exists in the atmosphere.

Liability to Finance Sky Cleanup

The second gear addresses financing this Atmospheric Recovery Plan. It presents a legal strategy to hold fossil fuel corporations accountable for funding the atmospheric cleanup necessitated by their fuel products' pollution. This legal strategy borrows the very same logic that is used every time there is an oil spill in the ocean. After the BP Deepwater Horizon catastrophe, there was no question that British Petroleum would have to pay for the cleanup of the oil. The same is true for any other spill. Government trustees sue the responsible corporation and gain natural resource damages to finance the cleanup. The Atmospheric Recovery Litigation approach takes

this well-established process and applies it to the sky, envisioning a lawsuit against the fossil fuel industry to fund regional Atmospheric Recovery plans. This legal gear invokes liability rather than regulation to spur action.

Who are the government trustees positioned to bring suit against the fossil fuel corporations to finance cleanup of the atmosphere? The atmosphere is held in trust among sovereign trustees across the world, and in theory any co-trustee can initiate a lawsuit holding corporations accountable for cleanup. Federal agencies, states and counties, tribes, and foreign nations are all sovereigns positioned to bring suit. The likely defendants in this litigation have been identified by a breakthrough study completed a few years ago by Rick Heede of the Climate Accountability Institute. The study traced the carbon emissions from the beginning of the Industrial Revolution and found that nearly two-thirds can be attributed to about ninety corporations, most of which still operate. These large fossil fuel companies have come to be called the Carbon Majors.

The claims in Atmospheric Recovery Litigation differ from the claims that could be used to force cleanup of oil spills in marine waters. Statutes expressly provide for those claims, but there is no statute covering cleanup of carbon-dioxide pollution because Congress and state legislatures have not acted to impose liability. Sovereign plaintiffs must therefore rely on common law claims deriving from the law of torts (nuisance, public nuisance, trespass) and the public trust principle. Recall that the *Juliana* court and several others have affirmed the sovereign's public trust duty to protect the climate system. Increasingly, states are drawing on their public trust authority to sue polluters outside of statutory law for water pollution, with several pending lawsuits against Monsanto Corporation for cleanup of PCB pollution in waters and soils. Case law arising from this and other areas is building a useful foundation for analogous litigation against carbon polluters.

The atmospheric recovery cases anticipated by this chapter fundamentally differ from the litigation already brought by sovereign entities against fossil fuel corporations for climate damages. Several cities and counties in California, New York, Washington, Colorado, and elsewhere have sued Carbon Majors for adaptation costs, seeking to fund seawalls, infrastructure repair, relocation expenses, and other adaptation needs. Although these suits may seem similar to atmospheric recovery suits in that they sue the same parties and rely on common law (not statutory) claims, there is a big distinction between the two areas. Adaptation suits do not seek to solve the

problem of climate change. Instead they seek to pay for the harm already caused. Atmospheric recovery suits seek to actually solve the problem of climate disruption by funding drawdown to remove excess carbon and restore climate equilibrium. This effort recognizes that there is simply not enough money in the world to even begin paying for all of the damage unleashed across the planet by the fossil fuel industry. These damages, likely incalculable and growing exponentially, include loss of life and property, economic losses, relocation expenses, infrastructure damage, and secondary natural resource damages. Building seawalls and repairing roads will not do anything to fix our global climate system, although it will surely drain the profits of the fossil fuel companies. An environmental justice concern emerges from this reality. As cities and states line up to sue the fossil fuel companies for their adaptation damages, the ones who get to the front of the line are most likely to be compensated, while the disadvantaged communities that are not positioned to sue lose out. Until we fix the cause of the problem, the death toll from climate instability will continue to mount. We need to fund, first and foremost, Atmospheric Recovery, in order to treat the underlying pollution syndrome that is causing all of these other damages. The third gear of this framework is a “Sky Trust” that provides the institutional mechanism to accomplish funded regional drawdown.

The Sky Trust

The third gear in this framework is the Sky Trust. The monetary awards gained from atmospheric recovery lawsuits against the Carbon Majors would be placed in a court-supervised administrative body or trust, in essence a Sky Trust, which would finance, manage, and oversee the region’s drawdown projects. An appropriate model obtains from the Volkswagen litigation and settlement, where the parties set up a court-supervised trust to administer funding for projects to draw down nitrogen oxide, a pollutant that was released as a result of the faulty Volkswagen devices.

The Sky Trust will carry out two corresponding roles: (1) receive and fiscally manage Natural Resource Damage monetary awards from court judgments, dispersing such money into qualifying drawdown projects; and (2) administratively implement the projects to carry out the region’s Atmospheric Recovery Plan. The landscape subject to this remedial drawdown may transcend multiple jurisdictions (and therefore be large-scale) if states, counties, and/or tribes partner together to bring suits as co-trustees.

The Trust will solicit project proposals from qualified entities across the

jurisdiction(s) bringing the lawsuit and will select projects that meet the criteria established in the Atmospheric Recovery Plan. The Trust must enter into contractual relationships with project proponents to carry out their projects and monitor and report the results—a necessary step to ensure accountability, effectiveness, and permanency. Another entity, an Atmospheric Recovery Institute, could maintain a database of projects, scientific literature, protocols, and other resources pertinent to the region as well as provide a carbon accounting that aggregates soil carbon sequestration data. It is possible to envision multiple simultaneous atmospheric recovery efforts on a regional level taking hold across the United States and in other parts of the world.

In sum, we know this much as we confront the global climate emergency: the level of our ambition must match the scale of the problem. In face of the vacuum left by the executive and legislative branches, a practical legal strategy must seemingly turn to the courts to spur necessary action. In support of the children's atmospheric trust lawsuits, Dr. James Hanson, formerly the chief climate scientist of the United States, wrote, "[Judicial relief] may be the best, the last, and at this late stage the only real chance to preserve a habitable planet for young people and future generations."¹³ While judicial relief alone cannot carry out this monumental effort, it may be able to catalyze it.