# NOTES

## Keeping Offsets Honest

JONATHAN GERSTELL*

ABSTRACT

*The promise of carbon offsets is that we can fight climate change without having to make painful sacrifices. But carbon offsets are broken. Billions of dollars are spent annually to achieve emissions reductions that have been repeatedly shown to be wildly exaggerated if not outright fictitious. Meanwhile, rich countries continue to emit billions of tons of $CO_2$ and other greenhouse gases into the atmosphere every year. Government regulation is urgently needed but will not, on its own, suffice to adequately police the carbon offset market.*

*This Note is the first scholarly analysis to consider how citizen-led litigation can and must play a role in holding the buyers, sellers, and brokers of carbon offsets accountable. The Note surveys a variety of laws that may be implicated in offset litigation—from state and federal environmental laws, to unfair competition and securities regulation, to contract law. Previous scholarship has examined problems in the administrative regulation of offsets. Such regulation is indeed needed, but private citizens have a powerful and necessary role to play too. Citizen oversight is critically needed because we have no hope of meeting the challenge of climate change without getting carbon offsets right.*

TABLE OF CONTENTS



* J.D., Georgetown University Law Center, 2023. The author thanks Professor William W. Buzbee for helping him develop the ideas behind this Note and for providing feedback, and the students of the Fall 2022 Georgetown Law Environmental Research Workshop for their insightful comments on earlier drafts. The author also thanks all the editors and staff members on the *Georgetown Environmental Law Review* for their outstanding work in preparing this Note for publication. Finally, the author thanks Elisabeth for her unending support. 

## I. INTRODUCTION

In 2008, a project co-funded by the Clinton Foundation and the Cambodian government came up with a novel idea to protect the forests of Cambodia. The project would sell carbon offsets—credits representing the reduction or prevention of greenhouse gas emissions—to such prominent corporations as Virgin Airlines. The money from these offsets would then fund efforts to prevent deforestation. It seemed like a win-win—companies could claim credit for reducing their carbon footprints, and Cambodian trees would receive needed protection. Ultimately, the project sold 48,000 offset credits. But the promise did not match reality. By 2017, just nine years after the project's launch, the amount of forested land in the protected area had declined by almost half. In one protected area that was previously 90% forested, no forest remained at all.[1]

* * * *

California operates a cap-and-trade system to reduce the state's greenhouse gas emissions. Under this program, polluters can stay below their state-set emissions cap by offsetting some of their emissions through purchasing credits from forestry projects. To ensure that these credits reduce emissions in the long term, 10–20% of the credits go toward a "buffer pool" of extra land that is conserved as a kind of insurance against forest loss. This buffer pool was supposed to protect against tree loss from the next 100 years of wildfires. But by the summer of 2022, 95% of the land set aside to protect against wildfires had burned down.[2]

* * * *

In 2007, a lumber company purchased a large tract of woodland in Tennessee. The company then sold an easement, which prohibited it from harvesting timber on the property, to the Tennessee state government. A few years later, the

1. Lisa Song & Paula Moura, *An Even More Inconvenient Truth: Why Carbon Credits for Forest Preservation May Be Worse Than Nothing*, PROPUBLICA (May 22, 2019), https://perma.cc/U55S-XN8D.

2. Camilla Hodgson, *Wildfires Destroy Almost All Forest Carbon Offsets in 100-Year Reserve, Study Says*, FINANCIAL TIMES (Aug. 5, 2022), https://perma.cc/83WN-LXEZ.

company profited off the same land again by selling 20,000 carbon offset credits to the Chevron Corporation. The oil giant was thus able to claim an emissions reduction worth 20,000 metric tons of carbon dioxide even though the trees that the company was purportedly paying to protect could not have been cut down regardless. Chevron's claimed emissions reductions were thus "fictitious."[3]

* * * *

These are a few examples of carbon offsets going wrong. They are far from alone.

A carbon offset is a credit representing a reduction or avoidance in greenhouse gas (GHG) emissions, used to "offset" the emissions from some other activity.[4] For instance, an individual can easily go online to purchase offsets for their airline emissions, theoretically allowing them to travel guilt-free.[5] Offsets often involve paying to preserve woodlands from deforestation, on the theory that trees are natural "carbon sinks" that absorb carbon dioxide ($CO_2$) from the atmosphere.[6] Offsets hold out the promise of creating a net-zero emissions world without the need for painful sacrifices—one in which all new GHG emissions will be counterbalanced by reductions in emissions elsewhere.

An increasing number of governments and corporations have pledged to reach net-zero carbon emissions. More than 140 countries have announced net-zero targets, including the three largest polluters—China, the United States, and the European Union.[7] So have a fifth of the world's 2,000 largest companies, with collective revenue totaling nearly $14 trillion.[8] This list includes oil companies BP[9] and Shell.[10] Offsets form an integral part of many of these net-zero plans.[11] To achieve a net-zero world and avoid the most calamitous impacts of climate change, offsets need to work.

---

3. Ben Elgin, *This Timber Company Sold Millions of Dollars of Useless Carbon Offsets*, BLOOMBERG (Mar. 17, 2022), https://perma.cc/HY8Z-CWB5.

4. JONATHAN L. RAMSEUR, CONG. RSCH. SERV., A BRIEF COMPARISON OF TWO CLIMATE CHANGE MITIGATION APPROACHES: CAP-AND-TRADE AND CARBON TAX (OR FEE) (2021), https://perma.cc/57SX-Y37T. For a more thorough definition, *see* Part II.A *infra*.

5. *See Flight Carbon Offset*, TERRAPASS, https://perma.cc/5HD9-CRCP (last visited Feb. 5, 2023). The pop superstar Taylor Swift has recently attracted some controversy for using carbon offsets to counteract the impact of her private jet travel. Lola Mendez, *Taylor Swift Claims She Offsets Her Travel Carbon Footprint – How Does That Work?*, BBC (Feb. 3, 2024), https://www.bbc.com/travel/article/20240213-taylor-swift-private-jet-flight-travel-carbon-footprint.

6. Tori Timmons, *All I Want for Christmas is a Carbon Sink*, 72 HASTINGS L.J. 1347, 1369 (2021).

7. *For a Livable Climate: Net-zero Commitments Must Be Backed by Credible Action*, UNITED NATIONS, https://perma.cc/W898-TRJ6 (last visited Feb. 5, 2023).

8. Disha Shetty, *A Fifth Of World's Largest Companies Committed To Net Zero Target*, FORBES (Mar. 24, 2021, 9:30 AM), https://perma.cc/PR2U-HHTP.

9. *Getting to Net Zero: Climate Advocacy in the US*, BP, https://perma.cc/AN2F-6SJ9 (last visited Feb. 5, 2023).

10. *Our Climate Target*, SHELL, https://perma.cc/M8KK-GD7H (last visited Feb. 5, 2023).

11. For instance, Shell plans to spend $450 million on carbon offsets in the coming years. Alex Lawson & Patrick Greenfield, *Shell to Spend $450M on Carbon Offsetting as Fears Grow that Offsets May Be Worthless*, THE GUARDIAN (Jan. 19, 2023, 6:09 AM), https://perma.cc/5YD6-D4Z2.

But carbon offsets are broken. An October 2022 report by the Center for American Progress surveyed research on carbon offsets and came to sobering conclusions.[12] The offset market is "riddled with fraud."[13] In many cases, forestry-based offsets are burning down or getting logged.[14] In others, companies are buying offsets from tracts of forests that were never going to be cut down anyway.[15] Independent researchers frequently find that offset projects achieve vastly lower GHG reductions than they purport to; one study found that 85% of offsets in a market established by the Kyoto Protocol were unlikely to be effective.[16] And in January 2023, a report found that 94% of offsets certified by Verra, a D.C.-based organization that is the world's largest carbon offset certifier, were "likely to be 'phantom credits' [that] do not represent genuine carbon reductions."[17]

A bad offset is worse than merely useless. An offset that does not reflect a real reduction or avoidance in GHG emissions is functionally a license to pollute.[18] For example, imagine a corporation seeking to reduce its net GHG emissions by 50%. Suppose further that it would be technically feasible, but expensive, to achieve that goal by reducing its gross emissions by 50%. If the corporation instead chooses to reach that emissions reduction by purchasing carbon offsets, and those offsets turn out to be shams or at best ineffective, then the offsets might have prevented an emissions reduction that would have otherwise occurred.

Bad offsets can also be harmful when they mislead the public into thinking a company is more environmentally friendly than it really is, a phenomenon known as greenwashing.[19] A company might announce that it will reach net-zero emissions, and quietly achieve all or most of those purported emissions reductions through ineffective carbon offsets. The company then gets the benefit of appearing eco-friendly without meaningfully helping the environment. Even worse, the company might dampen public enthusiasm for climate regulation by creating a false impression that the private sector has the problem under control.[20]

Problems notwithstanding, carbon offsets are not going anywhere. For one, they are now a big business, with millions of offsets traded on the world's largest commodity market.[21] For another, some amount of carbon offsets is likely

12. Alex Fredman & Todd Phillips, *The CFTC Should Raise Standards and Mitigate Fraud in the Carbon Offsets Market*, CTR. FOR AM. PROGRESS (Oct. 7, 2022), https://perma.cc/UY2Q-PQJD.

13. *Id.* (quoting GREEN FINANCE OBSERVATORY, IS SCALING UP VOLUNTARY CARBON OFFSET MARKETS REALLY WHAT THE CLIMATE NEEDS? 1 (2021), https://perma.cc/XT66-4ECA).

14. *Id.*

15. *Id.*

16. *Id.* (citing MARTIN CAMES ET AL., HOW ADDITIONAL IS THE CLEAN DEVELOPMENT MECHANISM? (2016) (available at https://perma.cc/6J94-HNLU)).

17. Patrick Greenfield, *Revealed: More Than 90% of Rainforest Carbon Offsets by Biggest Certifier Are Worthless, Analysis Shows*, THE GUARDIAN (Jan. 18, 2023, 9:00 AM), https://perma.cc/HZ4M-E8YK.

18. Fredman & Phillips, *supra* note 12.

19. *See* Amanda Shanor & Sarah E. Light, *Greenwashing and the First Amendment*, 122 COLUM. L. REV. 2033, 2037 (2022).

20. *Id.* at 2039; Fredman & Phillips, *supra* note 12.

21. *See infra* Part IV.C.

necessary if the world is to have any realistic hope of preventing the most catastrophic consequences of climate change. Although technology has made huge strides in making it possible to decarbonize large swathes of our society, some activities will likely be impossible to make carbon free.[22] Carbon offsets might also serve as a short-term bridge in situations where decarbonization is possible, but a company or government will need a number of years to get there.[23] Finally, they may provide powerful financial incentives to reduce the deforestation of critically important habitats such as the Amazon rainforest.[24] A recent report suggested that the carbon offset market may need to expand by a factor of fifty if the world is to achieve net-zero emissions by 2050.[25] This would correspond to about 7.6 gigatons of GHG emissions being offset over the next several decades.[26] To put this number in perspective, the sum total of all U.S. emissions in 2021 from every sector of the economy was around six gigatons.[27]

Given the importance of offsets to solving climate change and the alleged pervasiveness of fraud in the industry, it would be forgivable to assume that a government agency is policing the market. Unfortunately, there is precious little regulation of offsets at either the state or federal level. At the federal level, the closest thing to carbon offset regulation is a set of nonbinding and badly outdated guidelines published by the Federal Trade Commission called the Green Guides.[28] There are no international standards or even universally agreed-upon best practices. Private sector verifiers are often hopelessly conflicted, given that they both profit off the sale of offset projects and verify the efficacy of those projects.[29]

In an attempt to close the offset regulatory gap, members of Congress have begun pushing for reforms to strengthen offset regulation.[30] In addition, the Federal Trade Commission has begun the process of revising its Green Guides,[31] and the Securities and Exchange Commission and Commodity Futures Trading Commission are also exploring regulating carbon offsets.[32] These developments

---

22. *See infra* Part II.A.

23. *See* HENRY LEE & ABIGAIL MEYER, HARV. KENNEDY SCH. BELFER CTR. FOR SCI. & INT'L AFF., POLICY BRIEF: THE FUTURE OF CARBON OFFSET MARKETS 2 (2020), https://perma.cc/DEN6-KDKD.

24. Relentless logging of the Amazon rainforest has led to fears that the entire ecosystem may be heading toward a "tipping point" where large swaths of the rainforest will become unsustainable and rapidly convert to drylands, with unknowable but potentially calamitous consequences for the climate. *See* Terrence McCoy, *How the Forest Dies*, WASHINGTON POST (Nov. 18, 2022, 12:26 PM), https://perma.cc/3HRY-AWFK.

25. Catherine Clifford, *Bank of America: Carbon Offset Market May Need to Grow Fiftyfold to Meet 2050 Net-Zero Emissions Goals*, CNBC (Sep. 27, 2021, 12:48 PM), https://perma.cc/5T3X-DLEE.

26. *Id.*

27. EPA, *Sources of Greenhouse Gas Emissions* (Aug. 5, 2022), https://perma.cc/RRK4-N83J.

28. *See infra* Part IV.A.

29. *See infra* Part II.D.

30. Letter from Reps. Jared Huffman, Kathy Castor, & Raul Grijalva to Gene L. Dodaro, Comptroller General of the United States (Aug. 30, 2022), https://perma.cc/5MEQ-YF32.

31. *See* Regulatory Review Schedule, 87 Fed. Reg. 47947 (Aug. 5, 2022).

32. *See infra* Parts IV.B–C.

are promising, but congressional action can be slow, while executive action can be limited, reversible at the start of the next administration, or tied up for years in the courts.

The bad news is we do not have time to wait for regulators to act. The good news is that existing state and federal laws provide options for citizens to keep offsets honest. From consumer safety to securities markets to environmental protection, we rely on *both* extensive government regulation *and* private, plaintiff-led litigation to uphold the rule of law and foster a prosperous, healthy society. The carbon offset world will be no different.

Extensive scholarship already exists, addressing the challenge of designing a regulatory framework that would ensure carbon offsets are effective.[33] Some of the key takeaways from this scholarship are discussed in Part II. Government regulation is urgently needed to establish standards and enforcement mechanisms; however, regulation on its own will not be enough. The government does not always have the resources or incentive to go after every violator. And in some instances, the government itself will be seeking to use ineffective or even sham offsets.[34] Scholars have not yet focused on how offset litigation can and will supplement regulation in those areas where regulation alone will not suffice.

Litigation, all its headaches and inefficiencies notwithstanding, is not just normatively desirable if offsets are to become respectable tools of climate change policy; it is inevitable. The first few offset-related lawsuits have already been decided,[35] and as the market for offsets skyrockets, more litigation is sure to follow. Indeed, one prominent corporate law firm is already warning its clients of "a coming wave of litigation" in the offset space.[36]

This Note is the first scholarly work to examine offset litigation and argue that citizen-led litigation can and must play a vital role in keeping the offset industry accountable. As previous scholars have argued in other, non-environmental

---

33. *See* Thomas P. Healy, *Clearing the Air: Pursuing a Course to Define the Federal Government's Role in the Voluntary Carbon Offset Market*, 61 ADMIN. L. REV. 871 (2009); Maria Savasta-Kennedy, *The Newest Hybrid: Notes Toward Standardized Certification of Carbon Offsets*, 34 N.C. J. INT'L L. & COM. REGUL. 851 (2009); Robert J. Carpenter, *Implementation of Biological Sequestration Offsets in a Carbon Reduction Policy: Answers to Key Questions for a Successful Domestic Offset Program*, 31 ENERGY L.J. 157 (2010); Keith Duffy, *Soil Carbon Offsets and the Problem of Land Tenure: Constructing Effective Cap & Trade Legislation*, 15 DRAKE J. AGRIC. L. 299 (2010); Timmons, *supra* note 6; Samuel L. Brown, *Carbon Markets and Carbon Offsets*, 36 NAT. RES. & ENV'T 56 (2022); Albert C. Lin, *Making Net Zero Matter*, 79 WASH. & LEE L. REV. 679 (2022); Nicholas P. Espenan, *Improving Voluntary Carbon Markets Through Standardization and Blockchain Technology*, 23 WYO. L. REV. 141 (2023); Sarah Everhart, *Growing Carbon Credits: Strengthening the Agricultural Sector's Participation in Voluntary Carbon Markets through Law and Policy*, 31 N.Y.U. ENV'T L.J. 65 (2023); Bryce A. Davis, *A Climate Solution on Shaky Ground: The Voluntary Carbon Market and Agricultural Sequestration*, 2023 UNIV. ILL. L. REV. 955 (2023).

34. *See* Part III *infra*.

35. *See* Parts III.A and V.A *infra*.

36. *Carbon Offsets: A Coming Wave of Litigation?*, QUINN EMANUEL URQUHART & SULLIVAN, LLP (Sept. 7, 2022), https://perma.cc/UE2X-S3TB.

contexts, litigation can serve a crucial role in keeping markets functional by providing an accountability and transparency mechanism.[37] Citizen litigation can also drive broader societal and political change through the discovery process by bringing the public's attention to problems previously concealed, as in the case of the successful lawsuits against Big Tobacco in the 1990s.[38] This Note takes inspiration from prior work by exploring options available to private plaintiffs seeking to challenge carbon offset plans as insufficient or fraudulent. Existing state and federal environmental law, consumer protection and securities regulation, and even basic contract law all hold promise for citizens looking to hold offset buyers, sellers, and brokers accountable.

The rest of the Note proceeds as follows. Part II will provide an overview of carbon offsets, discussing why they are needed, how they work, and key problems that they currently face. Part III will discuss the possibility of using citizen-led litigation to keep government actors accountable when they participate in projects involving carbon offsets. Part IV will examine citizen lawsuits against private-sector carbon offset buyers, sellers, and brokers under a variety of antifraud and market protection statutes. Part V will consider the possibility of contract claims involving shoddy offsets. Part VI concludes by observing that citizen-led litigation may prove to be a powerful force for curbing the fraud and inefficiency rife in the offset world.

The United States will never achieve its climate change goals if we continue to rely on sham offsets. This Note offers a way forward to ensure that offsets help, rather than hinder, us on our path toward a carbon-free future.

## II. BACKGROUND

This Part will provide background on carbon offsets for the uninitiated. Section A explains how carbon offsets work and provides a brief history of their role in environmental law. Section B discusses the need for offsets, explaining that—flaws notwithstanding—we likely need effective offsets in order to meet realistic climate goals. Section C discusses the key players in the carbon offset world—both the buyers, sellers, and brokers, and the private- and public-sector bodies that govern the space. Finally, Section D discusses challenges in offset governance and proposed best practices.

### A. WHAT ARE OFFSETS?

The basic idea behind an offset is that the environmental harm of one action can be "offset," or in other words, canceled out, nullified, or mitigated, by the

37. *See* Roy Shapira, *A Reputational Theory of Corporate Law*, 26 STAN. L. & POL'Y REV. 1, 10–14 (2015) (discussing how litigation can reduce the information costs of revealing corporate mismanagement); Shannon Rose Selden, *(Self-)Policing the Market: Congress's Flawed Approach to Securities Law Reform*, 33 J. LEGIS. 57, 93–98 (2006) (arguing that securities litigation is essential to maintaining the health of capital markets).

38. *See* Nora Freeman Engstrom & Robert L. Rabin, *Pursuing Health Through Litigation: Lessons from Tobacco and Opioids*, 73 STAN. L. REV. 285, 358–59 (2021).

corresponding environmental benefit of another action. The most intuitive example of an offset is a transaction where an increase in emissions at one site corresponds with a decrease in emissions at another site. For example, suppose a chemical company plans to build a factory that will emit 100 metric tons of $CO_2$ per year. If the company wanted (or was required by law) to offset the environmental impact of this factory, it could pay another factory owner to reduce emissions by 100 metric tons per year. The net effect would theoretically be zero new units of pollution annually. A more complex (and challenging to verify) example of an offset is one in which the offsetting activity is not the *reduction* of current emissions, but rather the *prevention* of emissions that would have otherwise occurred. To continue with the previous example, suppose that instead of paying another factory owner to reduce their emissions, the chemical company instead pays to permanently conserve a tract of woodland that was otherwise certain to be logged, thus preventing the release of the equivalent of 100 metric tons of $CO_2$ per year.

Offsets as an environmental management tool are not new, nor are they limited to the climate change context. The widespread adoption of offsets in U.S. environmental law dates to the 1970s, when industry groups complained that the 1970 Clean Air Act (CAA) Amendments "effectively put a stranglehold on major industrial development" by prohibiting new sources of air pollution in regions that were in non-attainment for national ambient air quality standards (NAAQS).[39] In response, the U.S. Environmental Protection Agency (EPA) in 1976 adopted a policy allowing the permitting of new emissions sources in non-attainment areas, provided they were offset by corresponding emissions reductions. Congress then endorsed this approach in the 1977 CAA Amendments.[40] In fact, the most famous administrative law case of all time, *Chevron v. Natural Resources Defense Council*, involved this same history of offset regulation.[41] The case featured a challenge to EPA regulations embracing the so-called "bubble concept," which treated a physical facility with multiple emission sites as a single "bubble" for CAA permitting purposes.[42] The upshot of this was that facilities that wanted to install or modify existing equipment could avoid having to apply for a new CAA permit so long as any increased emissions resulting from the project were offset by corresponding emissions reductions elsewhere in that same facility.[43] The Supreme Court upheld EPA's regulations, holding that they were a "reasonable" interpretation of the CAA and "entitled to deference."[44]

Offsets also played a critical role in the successful Acid Rain Program established under Title IV of the 1990 CAA Amendments. The program set up a cap-and-trade system in which emitters of sulfur dioxide (the main cause of acid rain)

---

39. Jack L. Landau, *Who Owns the Air? The Emission Offset Concept and its Implications*, 9 ENV'T L. 575, 577 (1979).

40. *Id.* at 578–581; *see also* Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, 467 U.S. 837, 847–52 (1984).

41. *See generally Chevron*, 467 U.S. 837.

42. *Id.* at 840–41.

43. *Id.* at 840, 855–58.

44. *Id.* at 865.

could purchase offsets in the form of emissions allowances in order to meet their compliance requirements.[45] The program is considered highly successful and resulted in sulfur dioxide reductions of over 90%.[46]

A carbon offset is similar in concept to these earlier types of offsets. A good working definition is that a carbon offset is a "measurable reduction, avoidance, or sequestration of GHG emissions from a source not covered by an emission reduction program."[47] It is worth noting from this definition that, despite the name, carbon offsets can refer to efforts to offset emissions of other GHGs, not just carbon dioxide. That said, carbon dioxide emissions account for 79% of U.S. GHG emissions, and discussions about mitigation tend to use carbon reductions as a proxy for reductions of GHGs more broadly.[48]

The first carbon offset may have occurred in 1989, when an American electric company invested $2 million to plant fifty million trees in Guatemala to offset the $CO_2$ emissions from a new power plant being built in Connecticut.[49] Carbon offset trading began in earnest following the 1997 UN Kyoto Protocol, which created a voluntary carbon trading system called the Clean Development Mechanism (CDM).[50] Theoretically, about one billion tons of $CO_2$ offsets have been offered for sale through the CDM, but the program has been criticized as totally ineffective—a 2016 report found that only 2% of CDM offsets had a "high likelihood" of achieving emissions reductions.[51] Today, the carbon offset market may be worth up to $2 billion,[52] and is on track to grow to between $5 and $50 billion by 2030.[53]

The terms "carbon offset" and "carbon removal" are sometimes confused, but they refer to different things: A carbon offset is best understood as a measurable *unit* or *credit*. Carbon removal refers to the actual *process* of removing $CO_2$ from

---

45. Scott Schang & Teresa Chan, *Federal Greenhouse Gas Control Options from an Enforcement Perspective*, 2 SAN DIEGO J. CLIMATE & ENERGY L. 87, 89–93 (2010).

46. *Acid Rain Program Results*, EPA (Dec. 14, 2022), https://perma.cc/4VXU-YQX2; *see also* David A. Weisbach, *Regulatory Trading*, 90 U. CHI. L. REV. 1095, 1108–09 (2023) (discussing the success of the sulfur dioxide trading program).

47. RAMSEUR, *supra* note 4.

48. *Overview of Greenhouse Gases*, EPA (Oct. 10, 2023), https://perma.cc/NXK5-WDDL.

49. VALENTIN BELLASSEN & BENOÎT LEGUET, THE EMERGENCE OF VOLUNTARY CARBON OFFSETTING 3 (2007), https://perma.cc/24KC-6SH9.

It will not surprise the reader to learn that this first ever carbon offset project was largely a failure, offsetting only 10% of the emissions of the power plant. Heidi Blake, *The Great Cash-for-Carbon Hustle*, THE NEW YORKER (Oct. 16, 2023), https://perma.cc/N69P-9CRV.

50. Fred Pearce, *Is the 'Legacy' Carbon Credit Market a Climate Plus or Just Hype?*, YALE ENV'T 360 (Mar. 9, 2021), https://perma.cc/GX74-Y29U.

51. *Id.*

52. *Voluntary Carbon Market Value Tops US$2B*, CLIMATE TRADE (Aug. 4, 2022), https://perma.cc/AGT6-GJP8.

53. Christopher Blaufelder et al., *A Blueprint for Scaling Voluntary Carbon Markets to Meet the Climate Challenge*, MCKINSEY (Jan. 29 2021), https://perma.cc/LB4B-6EDP. A more aggressive projection estimates that the market will be worth $250 billion by 2050. *Where the Carbon Offset Market is Poised to Surge*, MORGAN STANLEY (Apr. 11, 2023), perma.cc/UA3H-GUYA.

the atmosphere or ocean.[54] Removal techniques can be nature-based, such as afforestation (planting new forest), restoring naturally carbon-storing peatlands, or other methods of soil carbon sequestration.[55] There are also engineered removal methods. For an example of engineered removal, the nascent technology of direct air capture works by capturing $CO_2$ directly from the air and pumping it into deep geologic storage.[56] A carbon offset might reflect a given amount of carbon removal, but it could also work by preventing the emission of GHGs that might otherwise have occurred. For example, an offset could protect a forest from deforestation, or fund a renewable energy project that would not otherwise be built.[57] Likewise, carbon removal might be undertaken for the purpose of generating a certain number of carbon offsets, but conceptually a government or other actor could undertake carbon removal without reference to a carbon offset program.

### B. THE NEED FOR OFFSETS

To prevent the worst consequences of climate change, humanity must dramatically reduce its emissions of GHGs by the middle of this century.[58] The consensus solution to this challenge is to electrify as much of our economy as possible (by, for example, switching from fossil fuel-burning vehicles to electric ones), make electricity as clean as possible (by using only zero-carbon energy sources, principally wind and solar), and by making other sectors of the economy as low-emitting as possible.[59] It is technologically feasible to achieve net-zero emissions by 2050 while keeping social and economic costs high but manageable.[60] More than 140 countries, with emissions totaling 88% of the global total, have goals to achieve net-zero emissions by roughly 2050,[61] although these goals are often unenforceable.[62]

That word "net" is key, however. The idea behind net-zero is that we will not reduce our gross emissions all the way to zero. Instead, to mitigate the worst effects of climate change humanity will reduce gross emissions substantially, and then offset the remaining emissions by using techniques that store emissions or prevent

---

54. For oceanic carbon removal, *see* KATIE LEBLING, ELIZA NORTHROP, COLIN MCCORMICK, & ELIZABETH BRIDGWATER, WORLD RES. INST., TOWARD RESPONSIBLE AND INFORMED OCEAN-BASED CARBON DIOXIDE REMOVAL: RESEARCH AND GOVERNANCE PRIORITIES 5–8 (2022).

55. Lin, *supra* note 33, at 688–89.

56. *Id.* at 690–91.

57. Some third-party verifiers do not certify deforestation programs and only certify energy efficiency and renewable energy programs. *See* Tori Timmons, *supra* note 6, at 1372.

58. IPCC, 2018 SUMMARY FOR POLICYMAKERS, GLOBAL WARMING OF 1.5 °C, 18 (2018).

59. *See* INT'L ENERGY AGENCY, NET ZERO BY 2050: A ROADMAP FOR THE GLOBAL ENERGY SECTOR 18–19 (2021), https://perma.cc/UGC4-W3AX; *Is It Possible to Achieve Net Zero Emissions?*, NAT'L ACADS. (Oct. 27, 2021), https://perma.cc/D334-UM72.

60. INT'L ENERGY AGENCY, *supra* note 59, at 3.

61. UNITED NATIONS, *supra* note 7.

62. Lin, *supra* note 33, at 698.

their release into the ecosystem.[63] For example, the International Energy Agency's model for achieving net-zero emissions in the energy sector by 2050 assumes that 1.9 gigatons of $CO_2$ will be removed from the atmosphere annually.[64]

Why not go further and aim for absolute zero emissions? Granted, achieving *literally* gross zero emissions is impossible—even premodern societies produced enough GHG emissions to noticeably impact the climate (although of course on a scale that pales in comparison to what we are doing today).[65] But it probably *is* feasible to achieve very low gross emissions, functionally equivalent to an "absolute zero" emissions world. However, achieving absolute zero would require both revolutionary changes to all aspects of our society, and major individual lifestyle changes.[66] Relatedly, the degrowth movement has advocated a broader shift away from a liberal, capitalist mindset that assumes continuous economic growth to one that accepts the idea that GDP may have to decrease in order for humanity to live sustainably on the planet.[67] Whatever the merits of such an approach, climate policymakers have not put the degrowth model, or even the less all-encompassing absolute zero emissions target, on the table as possible options for addressing the climate crisis.[68] No major emitting country is currently planning to achieve absolute zero emissions.[69]

The reason for the policy world's preference for net-zero emissions boils down to two assumptions: 1) a commitment to continued economic growth for the foreseeable future,[70] and 2) the continued existence of difficult-to-decarbonize industries. As for the first assumption, policymakers assume that any plan that would call for sustained economic contraction is politically unfeasible.[71] The second assumption is grounded in the fact that there are currently processes that are either impossible or impractical to make carbon-neutral. For example, cement manufacturing is inherently carbon intensive. Though there are ways to make the process more carbon-efficient, there is no known way to make cement manufacturing

63. *Id.* at 687 ("Net zero emissions cannot be achieved through mitigation efforts alone. . . . Residual GHG emissions will necessitate significant levels of carbon removal from the atmosphere.").

64. INT'L ENERGY AGENCY, *supra* note 59, at 55, 79.

65. *See* Monte Morin, *Study Reveals Ancient Greenhouse Gas Emissions*, L.A. TIMES (Oct. 3, 2012, 12:00 AM), https://perma.cc/D6JC-N7WN; Kelly April Tyrrell, *Ancient Farmers Spared Us from Glaciers but Profoundly Changed Earth's Climate*, SCIENCE DAILY (Sept. 6, 2018), https://perma.cc/L6GS-823K.

66. *See* Allwood, J.M., et. al, UK FIRES, ABSOLUTE ZERO 2–3 (2019).

67. *See* GIORGIOS KALLIS, DEGROWTH 1–12 (2018).

68. *See* Scott D. Campbell & Moira Zellner, *Wicked Problems, Foolish Decisions: Promoting Sustainability Through Urban Governance in a Complex World*, 73 VAND. L. REV. 1643, 1663 (2020) (stating that degrowth has "been met with significant skepticism and remains more central to activism—and stronger in Europe than in the United States—than to planning scholarship or practice").

69. *See* UNITED NATIONS, *supra* note 7.

70. *See* INT'L ENERGY AGENCY, supra note 59, at 13 (stating that its decarbonization plan is designed to "ensur[e] continued economic growth").

71. Even the Green New Deal, arguably the most progressive climate change agenda in the political mainstream, was predicated on the idea that it would grow the economy and create millions of new jobs. *See* Lisa Freedman, *What Is the Green New Deal? A Climate Proposal, Explained*, N.Y. TIMES (Feb. 21, 2019), https://perma.cc/Q8J6-MPYT.

entirely carbon-free, and there is currently no known scalable substitute for cement as a building material (though there are promising innovations that may change this).[72] Similar challenges confront efforts to reduce emissions from the steel and chemicals industries.[73] Barring unforeseeable technological revolutions, these processes are with us to stay. Thus, carbon offsets will be needed to meet net-zero goals.

In any plausible climate mitigation strategy, carbon offsets must have at least some role to play. This is not to say that we should view offsets as a panacea, allowing us to continue burning fossil fuels with abandon in the belief that it will all be offset. Climate scientists are right to warn that too much faith in net-zero goals and the use of offsets to achieve them can create a dangerous "business as usual" mentality that distracts from the reality that "large and sustained cuts to carbon emissions need to happen now."[74] But even if the world acted more aggressively to cut emissions than it is currently doing, a role for carbon offsets will remain.[75] Current projections suggest that for the United States to achieve net zero emissions, carbon removal would need to offset between 10 to 20 percent of current GHG emissions.[76]

### C. CARBON OFFSET PLAYERS

Businesses, nonprofits, governments, and individual consumers are all in the market for carbon offsets. These markets can be either mandatory or voluntary.[77] Mandatory (or compliance) markets are those where there is a government-mandated, market-based emissions reduction program such as cap-and-trade.[78] The most significant examples of such programs are the cap-and-trade programs of the European Union and the state of California, and China's emissions trading scheme (ETS), which launched in the summer of 2021.[79] The details vary program to program, but generally in mandatory markets companies can meet a certain percentage of their emissions reduction requirements by purchasing offsets from other entities.[80] In California, for example, companies can achieve between

---

72. *See* Samantha Gross, *The Challenge of Decarbonizing Heavy Industry: Executive Summary*, BROOKINGS INST., (2021), https://perma.cc/D4ES-2DWY; Max Åhman, *Unlocking the "Hard to Abate" Sectors*, WORLD RES. INST., https://perma.cc/5EU4-8WTZ (last accessed Dec. 16, 2022). For news of a promising new carbon-free cement technology, *see* Dino Grandoni, *Cement Warms the Planet. This Green Version Just Got a Key Nod of Approval*, WASHINGTON POST (July 13, 2023), https://perma.cc/RS4R-2UQT.

73. Åhman, *supra* note 72.

74. James Dyke, Robert Watson, & Wolfgang Knorr, *Climate Scientists: Concept of Net Zero Is a Dangerous Trap*, THE CONVERSATION (Apr. 22, 2021), https://perma.cc/RJ3G-NL4P.

75. *Id.*

76. Lin, *supra* note 33, at 688.

77. Samuel L. Brown, *Carbon Markets and Carbon Offsets*, 36 NAT'L RES. & ENV. 56, 57 (2022).

78. *Id.*

79. *Id.* For more on China's ETS, *see* David Stanway, *A Year on, China's $CO_2$ Market Yet to Drive Big Emission Cuts*, REUTERS (July 22, 2022), https://perma.cc/BH9E-929S.

80. *See* Timmons, *supra* note 6, at 1370–71.

four to eight percent of their required emissions reductions by purchasing offsets.[81] By contrast, voluntary markets, as the name would suggest, are those where the buyers of offsets are not legally required to reach certain emissions reductions.[82] Buyers of offsets in the voluntary market might have a variety of motives, some laudable and some more cynical:

> In the case of individuals . . . those participating in the voluntary market are seemingly driven by a sense of environmental responsibility and altruism. In the case of organizations and corporate consumers, participation may be motivated by a sense of corporate social responsibility, a perceived market advantage in claiming voluntary carbon neutrality, or the potential advantage of precompliance (i.e. banking that future legislation will recognize current GHG reduction).[83]

Buyers can procure offsets by going through a broker, who serves as the intermediary between the emitter and those running the offset project. For example, an individual consumer or business wishing to offset their emissions could purchase offsets from a company such as Terrapass, which then purchases offsets on the buyer's behalf and removes the offsets from the marketplace.[84] Alternatively, buyers can procure offsets directly by consulting a registry of verified offset projects.[85]

### D. CHALLENGES AND BEST PRACTICES IN OFFSET GOVERNANCE

Effective governance of carbon offsets is currently bedeviled by two immense challenges. The first is the lack of any universal standards for how to define, verify, and monitor offsets. The second is the inherent difficulty of ensuring the efficacy of offsets because of the very nature of how offsets function. This section will begin by outlining the challenges any offset program must resolve in order to be effective, before turning to a brief survey of the organizations currently involved in verifying offsets, and then conclude with a discussion of regulatory reforms.

Because there is no universal standard-setting organization, there is no uniform definition for the requirements of offsets. That said, a broadly accepted set of best practices that any credible carbon offset program must achieve does exist. For example, under California's cap-and-trade system, offsets "must be real, additional, quantifiable, permanent, verifiable, and enforceable."[86] Other definitions

---

81. DIRECT ENVIRONMENTAL BENEFITS IN THE STATE (DEBS), CAL. AIR RES. BD., https://perma.cc/3D4J-R94Z (last viewed Dec. 16, 2022).

82. Brown, *supra* note 33, at 57.

83. Savasta-Kennedy, *supra* note 33, at 853.

84. *See Frequently Asked Questions*, TERRAPASS, https://perma.cc/H3EN-SKY7 (last visited Feb. 5, 2023).

85. Timmons, *supra* note 6, at 1370.

86. Golden Door Props., LLC v. County of San Diego, 264 Cal. Rptr. 3d 309, 324 (2020) (citing Cal. Code Regs., tit. 17, § 95802(a)).

vary but use similar criteria.[87] Two criteria that are frequently added are that offsets must not cause negative externalities, such as leakage,[88] and that offsets be exclusive.[89]

An offset is *real* when it reflects "actual, quantifiable reductions of greenhouses gases."[90] An offset is not real if the offset project does not actually exist yet.[91]

*Additionality* refers to the idea that the offsets must reduce emissions below a quantity that would otherwise be emitted.[92] If the emissions reduction would have occurred regardless, then the offset is worse than pointless, since "purchasing offset credits in lieu of reducing your own emissions will make climate change worse."[93] Additionality is probably the most difficult to grasp conceptually because it requires imagining a negative hypothetical—what would have happened in the future had this offset not been sold. For instance, how does one satisfactorily prove that a forest would have been cut down but for the protection provided by the offset? It is also hard to ensure additionality because of the realities of the current energy marketplace:

> Evaluating whether GHG reductions are additional can be deceptively difficult. The challenge is that GHG-reducing activities occur all the time. Sometimes this is because the activities are required by law. . . In other cases, investments that reduce emissions are made simply because they are profitable, without any consideration of carbon offset credits. An investment in energy-saving lighting, for example, can pay for itself through avoided energy costs. . . For an activity or project to be additional, the possibility to sell carbon offset credits must play a decisive ("make or break") role in the decision to implement it.[94]

*Permanence*, meanwhile, is necessary because carbon dioxide can remain in the atmosphere for thousands of years. Offsets are often considered "permanent" if they will last for 100 years, although this is arguably an arbitrary cutoff since the $CO_2$ being offset by the program will remain in the atmosphere for centuries to come.[95] Offsets involving afforestation or reforestation are especially vulnerable to impermanence, since the trees could burn down, die, or be logged at any time.[96]

---

87. Savasta-Kennedy, *supra* note 33, at 868-69.

88. Timmons, *supra* note 6, at 1372.

89. *Exclusive Claim to GHG Reductions*, CARBON OFFSET GUIDE, https://perma.cc/J5EW-EKCX (last visited Feb. 5, 2023).

90. Timmons, *supra* note 6, at 1372.

91. Brian Palmer, *Should You Buy Carbon Offsets?*, NRDC.ORG (May 11, 2022), https://perma.cc/892U-F39Q.

92. *See* Savasta-Kennedy, *supra* note 33, at 868; Timmons, *supra* note 6, at 1372.

93. GHG Management Institute & Stockholm Environmental Institute, *Additionality*, CARBON OFFSET GUIDE, https://perma.cc/JW8J-HYZZ (last visited Feb. 5, 2023).

94. *Id.*

95. GHG management Institute & Stockholm Environmental Institute, *Permanence*, CARBON OFFSET GUIDE, https://perma.cc/F62M-47J7 (last visited Feb. 5, 2023).

96. Lin, *supra* note 33, at 748.

While forestry credits are popular in the United States, these concerns have led the European Union to ban forestry credits in its emissions trading system.[97]

*Leakage* refers to a situation where "a project causes greenhouse gas emissions outside the boundaries of the project."[98] For example, an offset protecting a certain area of forest from deforestation might lead to more logging in a different area of the forest. Currently, leakage may be so severe as to make many forest protection products nearly useless, at least from a GHG emission mitigation perspective. A study by the Intergovernmental Panel on Climate Change found that up to 92% of the reduction in timber harvesting in the United States would be made up for by increased logging elsewhere in the world.[99] To account for this risk, trading systems discount the amount of GHG mitigation achieved by offsets by a certain percentage.[100]

Finally, *exclusivity* refers to the concept that carbon offsets must not be double counted. There are three types of double counting that could occur: (1) double issuance, in which a carbon offset verifier issues two different credits for one single GHG reduction; (2) double use, in which two different buyers purchase the same offset (most likely because of fraud on the seller's part); and (3) double claiming, in which two parties claim credit for the same emission reduction.[101]

Different entities police the reliability of offsets in the mandatory and voluntary markets. In the former, the law specifies requirements for offsets and may designate approved third-party verifiers.[102] For instance, in California, which has a statewide cap-and-trade program, there are regulations setting forth the requirements for offsets.[103] There, the California Air Resources Board (CARB), which administers the program, lists third parties approved to verify offsets.[104] In voluntary markets, no regulatory body is in charge, so buyers must rely entirely on private third-party verifiers. Prominent third-party verification programs include the American Carbon Registry,[105] the Climate Action Reserve,[106] the Gold Standard,[107] and the Verified Carbon Standard (VCS) by Verra.[108] These organizations both set generally applicable standards for determining the validity of carbon offsets, and maintain a registry of specific offset programs they have

97. *Id*. at 741-42.

98. Timmons, *supra* note 6, at 1373; *see also* Albert C. Lin, *Fixing Net Zero Leakage*, 58 WAKE FOREST L. REV. 119 (2022) (defining leakage).

99. Gert Jan Nabuurs et al, *Forestry*, CLIMATE CHANGE 2007: MITIGATION 544, 572 (2007).

100. Lin, *supra* note 33, at 739–40.

101. CARBON OFFSET GUIDE, https://perma.cc/J5EW-EKCX (last visited Feb. 5, 2023).

102. *Carbon Offset Verification: Are Your Offsets Legit?*, TERRAPASS (Nov. 21, 2022), https://perma.cc/7FAA-H32Z.

103. *See* 17 Cal. Code Regs. § 95802(a).

104. Timmons, *supra* note 6, at 1371.

105. AM. CARBON REGISTRY, https://perma.cc/LZ7T-DH7J (last visited Feb. 5, 2023).

106. *About Us,* CLIMATE ACTION RESERVE, https://perma.cc/3GMX-7CJT.

107. GOLD STANDARD, https://perma.cc/242H-GSQX (last visited Feb. 5, 2023).

108. *Verified Carbon Standard*, VERRA, https://perma.cc/RM8T-YDT5 (last visited Feb. 5, 2023).

verified.[109] All third party verifiers have broadly similar standards, but there is no universally recognized body that sets standards in the way that, for example, the Codex Alimentarius (co-run by the United Nations and World Health Organization) sets international food safety and labeling standards.[110]

The lack of universal standards and the inherent difficulties associated with offset governance have led to concerns that the carbon offset market is ripe for fraud and abuse.[111] However, it is worth noting that government-run offset programs do not necessarily guarantee reliability either. A scientific study published in 2022 concluded that 29% of forestry offsets connected with California's cap-and-trade program were over-credited.[112] In other words, the system credited 30 million tons of $CO_2$, worth $410 million, in emissions reductions that did not actually occur.[113] This systematic failure was the result not of fraud or malice, but of erroneous statistical assumptions about the amount of carbon emission reductions resulting from improved forestry management.[114]

The 2022 Center for American Progress report mentioned in the Introduction provides a robust set of policy recommendations for regulators and legislators to ensure that offsets align with environmental management best practices.[115] These proposals include setting a clear legal definition for concepts such as verifiability, permanence, and additionality. On the permanence side, the authors argue that offsets must be considered valid only if they "physically remove carbon dioxide from the atmosphere and store them indefinitely (without risk of a forest fire or clear-cutting)."[116] The authors also argue that government agencies should set clear, objective standards and avoid endorsing private-sector standard setting organizations—unlike, for example, California, which publishes a list of officially endorsed private verifiers for use in its cap-and-trade system.[117] California's approach is concerning as it essentially delegates the regulation and enforcement of this important issue to unaccountable private organizations. The authors conclude that it is no argument to say that most offsets today would fail the standards they advocate:

---

109. To use Verra as an example, *see generally* VERRA, VERIFIED CARBON STANDARD (2022), https://perma.cc/2ZR7-UA4V (setting forth Verra's standards for verifying carbon offsets); *Welcome to the Verra Registry,* VERRA, https://perma.cc/A3U6-TWFZ (last visited Feb. 5, 2023) (showing a list of Verra offset registries).

110. For an overview of the Codex Alimentarius, *see* Sam Halabi, *The Origins and Future of Global Health Law: Regulation, Security, and Pluralism*, 108 GEO. L.J. 1607, 1631, 1646–47 (2020).

111. *See* Savasta-Kennedy, *supra* note 33, at 856.

112. Grayson Badgley et al., *Systematic Over-Crediting in California's Forest Carbon Offsets Program*, 28 GLOBAL CHANGE BIOLOGY 1433, 1440 (2022).

113. *Id*. at 1433.

114. *Id*.

115. Fredman & Phillips, *supra* note 12.

116. *Id*.

117. *See Mandatory GHG Reporting - Verification Bodies*, CAL. AIR RES. BD., https://perma.cc/82BP-H8D3 (last visited Feb. 5, 2023).

> It is important to note that meeting higher standards may be impossible for many, if not most, offsets on the market today. However, if that is the case, then arguably these offsets—particularly nature-based offsets such as forest projects—should not exist at all.[118]

These policy proposals are laudable and should guide federal and state policymakers. That said, private litigation will be an important vehicle to achieve some of these same accountability goals without the need to wait for legislators and regulators to act.

## III. CITIZEN ENFORCEMENT

When units of state, local, or federal governments are the ones buying, selling, or approving the use of carbon offsets, citizen enforcement provides a vehicle for private plaintiffs to keep government actors accountable. This Part will examine the possibilities for offset litigation both under state-level environmental policy acts and under the federal National Environmental Policy Act (NEPA). The Part will begin with a close analysis of a successful citizen lawsuit brought under California law before turning to a discussion of litigation under other state environmental laws and conclude with a discussion of NEPA.

### A. THE *GOLDEN DOOR* CASE

Courts are capable of scrutinizing offset plans closely to ensure that they are properly designed and not illusory. In the 2020 case *Golden Door Properties, LLC v. County of San Diego*, a group of environmental NGOs and a local resort hotel owner successfully challenged San Diego County's regional development plan under California state law.[119] The plaintiffs argued that the County's proposal to use carbon offsets violated the California Environmental Quality Act (CEQA).[120] Under CEQA, state government units must prepare an environmental impact statement and make a "good-faith effort" to calculate the amount of GHG emissions resulting from government projects.[121]

The County's problems stemmed from its deficient attempts to participate in California's statewide emissions goals. In 2016, the California Legislature enacted Senate Bill No. 32, which established a statewide target of reducing the state's GHG emissions to 40% below 1990 levels by 2030.[122] To comply with this goal, the County's general development plan committed the County to meet

118. Fredman & Phillips, *supra* note 12.

119. Golden Door Props., LLC v. County of San Diego, 264 Cal. Rptr. 3d 309 (Cal. Ct. App. 2020).

120. *Id*. at 321.

121. *Id*. at 323 (citing CAL. CODE REGS. At other 14 § 15064.4(a)) (2024).

122. *Id*. at 326. California has since set more stringent targets for emissions reductions. In September 2022, the state enacted a package of legislation that committed the state to an 85% reduction in GHG emissions by 2050. *See* Press Release, Office of Governor Gavin Newsom, *Governor Newsom Signs Sweeping Climate Measures, Ushering in New Era of World-Leading Climate Action* (Sept. 16, 2022), https://perma.cc/7MWP-CS47.

or exceed the state's emissions reduction requirements.[123] To help meet these emissions reduction goals, the County relied in part on a carbon offset program called "M-GHG-1," which allowed County-approved projects to mitigate GHG emissions after all feasible onsite emissions reductions had been achieved.[124] The trial court found M-GHG-1 violated CEQA because of serious design flaws.[125]

The Court of Appeal, affirming, found that the M-GHG-1 plan differed in several crucial respects from carbon offset best practices.[126] Most importantly, the plan did not require that offsets comply with protocols developed by CARB, the agency responsible for administering offsets for California's cap-and-trade system.[127] This was a problem for the County because without this reliance on the CARB protocols, the County could not show that its offsets would be "real, permanent, verifiable, and enforceable," as required by state law.[128] The court was especially concerned that M-GHG-1 allowed offsets to be purchased from other countries without adequate assurances that reductions in those countries would actually occur.[129] This violated CARB protocols, which allowed the use of overseas offsets only after the state attorney general and governor had formally determined that the offsets in another country have as strict or stricter enforceability than in-state offsets.[130]

Furthermore, the court found that M-GHG-1 failed to ensure that its offsets would be additional. Additionality, the court explained, is necessary because if the reduction would have occurred even without the sale of the offset, then no net GHG reduction will have been achieved.[131] However, perhaps because verifying additionality is "expensive [and] onerous," the text of M-GHG-1 avoided any reference to an additionality requirement for offsets.[132] Because of these flaws, the court concluded that M-GHG-1 was "unenforceable"[133] and thus violative of CEQA because the County's environmental impact report relied on reductions from M-GHG-1 that were impossible to verify.[134]

The court found that M-GHG-1 also violated CEQA in a second way by impermissibly deferring GHG mitigation efforts. The regulations implementing CEQA provide that the "[f]ormulation of mitigation measures shall not be deferred until some future time."[135] The court found that M-GHG-1 violated this provision

123. *Golden Door Props.*, 264 Cal. Rptr. 3d at 326.
124. *Id.* at 331.
125. *Id.* at 337–38.
126. *Id.* at 321.
127. *Id.* at 343–44.
128. *Id.* at 340 (citing CAL. HEALTH & SAFETY CODE § 38562(d)(1)–(2)).
129. *Id.* at 345.
130. *Id.* at 343.
131. *Id.* at 343–344.
132. *Id.* at 346.
133. *Id.* at 339.
134. *Id.* at 354.
135. CAL. CODE REGS. tit. 14, § 15126.4(a)(1)(B) (2004).

because the plan lacked the objective criteria needed to determine *both* whether onsite mitigation was unfeasible, *and* whether the offsets would actually be effective. As to the first issue, the court held that M-GHG-1 indefinitely deferred GHG mitigation efforts because the plan "contain[ed] no objective standards" for determining whether onsite mitigation efforts were actually feasible, and without these standards the plan "provide[d] no reasonable assurance that any onsite GHG reduction will actually occur."[136] As to the second point, the court was concerned that M-GHG-1 vested the determination as to whether a proposed offset registry would be "reputable" and "consistent" with California law in the sole discretion of the program director.[137] Without objective criteria constraining the director's decision, the court could not be confident that the County would actually choose offsets that would result in GHG mitigation.

The significance of *Golden Door* for offset litigation is twofold: for one, it shows that courts are capable of wading into the technical complexities of offset programs to critically evaluate them. The *Golden Door* court was conversant with many of the main challenges that any offset program would need to overcome to be effective, including the difficulties of monitoring the validity of overseas offset programs, and determining whether a given emission avoidance would have occurred even in the absence of the offset sale.[138] An earlier California case, involving a challenge to the state's offset protocol, saw a court grapple in detail with the requirements for offsets to be additional.[139] Second, the case shows that citizen suits may be a viable way to hold government agencies accountable whenever they commit themselves to using carbon offsets. This is the case even for statutes that do not expressly require a particular amount of GHG emission mitigation. For example, CEQA requires agencies to "consider feasible means . . . of mitigating the significant effects of greenhouse gas emissions" but does not require a set amount of mitigation or—strictly speaking—even require any amount of mitigation per se.[140] Nevertheless, once an agency commits to using offsets as part of its mitigation plan, citizen suits can be an effective way of ensuring that offsets actually do their job of offsetting emissions.

### B. OTHER CITIZEN ENFORCEMENT

State environmental policy acts (SEPAs) are statutes modeled upon NEPA that require environmental reporting of state governmental actions.[141] Currently, 20

136. *Golden Door Props.*, 264 Cal. Rptr. 3d at 351.
137. *Id.* at 352.
138. *See id.* at 341, 343.
139. *See* Our Children's Earth Found. v. State Air Resources Bd., 184 Cal. Rptr. 3d 365 (Cal. Ct. App. 2015).
140. CAL CODE REGS. TIT. 14 § 15126.4(c) (2024).
141. Daniel P. Selmi, *Themes in the Evolution of the State Environmental Policy Acts*, 38 URB. LAWYER 949, 951 (2006).

states have some form of SEPA.[142] These laws, also sometimes called "little NEPAs,"[143] typically require state government units to prepare an environmental impact report for projects that may have significant impacts on the environment, and empower private plaintiffs to seek judicial review of state agencies for SEPA compliance.[144] The laws vary considerably state-by-state, but several state courts have held that GHG emissions must be considered in preparation of state environmental impact statements.[145] However, states have struggled to determine how to properly assess the GHG emissions from state actions.[146] For example, the state of Washington's Department of Ecology rescinded its guidance on calculating GHG emissions in 2016 on the grounds that the guidelines needed to be revised in light of new information, but has yet to issue new guidelines.[147] In the absence of these guidelines, the Washington state courts have been uncertain how to evaluate GHG emissions in litigation under Washington's SEPA.[148]

So far, citizen enforcement of state governmental carbon offset plans has been limited, and almost nonexistent outside of California. Beside *Golden Door*, there has only been one other successful challenge to a state government offset plan under CEQA, in which an environmental group successfully vacated a county's environmental impact statement for a vineyard redevelopment project.[149] The project purported to offset its emissions by conserving a tract of woodland, but the court concluded that future development on this tract was not "reasonably foreseeable" and thus there was no showing that the offsets were additional. However, this case was unpublished and thus not of precedential value.[150]

These limitations notwithstanding, citizen-led enforcement under state law may prove a fruitful option and may become more popular as an increasing number of states have set climate mitigation requirements.[151] If state or local governments

---

142. *States and Local Jurisdictions with NEPA-like Environmental Planning Requirements*, COUNCIL ON ENV'T QUALITY, https://perma.cc/H79Q-EK6F (last visited Feb. 5, 2023).

143. Brent Murcia, *Mending MEPA Analysis: Properly Addressing Climate Change Costs Under the Minnesota Environmental Policy Act*, 22 MINN. J. L., SCI., & TECH. 221, 226–27 (2021).

144. Selmi, *supra* note 141, at 958, 994.

145. *See* Murcia, *supra* note 143, at 245 (stating that at least five states—California, Massachusetts, Minnesota, New York, and Washington—require consideration of GHG emissions in state environmental reviews).

146. Macee Utecht, *NEPA, SEPA, and the Evergreen-House Gas State: How Washington's State Environmental Policy Act and the Absence of Greenhouse Gas Calculation Guidance Negatively Impacts Future Project Proposals*, 19 WASH. J. ENV'T L. & POL'Y 67, 87–88 (2020).

147. *Id*. at 83.

148. *Id*. at 84–87.

149. Living Rivers Council v. Cnty. of Napa, Nos. A154253, A154300, A154314, 2019 WL 4746753, at *29–30 (Cal. Ct. App. Sept. 30, 2019).

150. *See* Cal. App. R. 8.1115(a)–(b) (prohibiting citation of unpublished opinions except in limited circumstances).

151. *See Table of 100% Clean Energy States*, CLEAN ENERGY STATES ALLIANCE, https://perma.cc/Q6AV-PNZ5 (last visited Feb. 5, 2023); *U.S. States Greenhouse Gas Emissions Targets*, CTR. FOR CLIMATE AND ENERGY SOLUTIONS, https://perma.cc/QY2K-Z76X (last visited Feb. 5, 2023).

attempt to meet their climate goals in part through carbon offsets, litigants should consider using state environmental policy statutes to keep them honest.[152]

### C. CITIZEN ENFORCEMENT UNDER NEPA

At the federal level, NEPA has no express requirement to consider GHG emissions. There is also no general federal law requiring the government to reduce its emissions. Nevertheless, NEPA may hold potential for keeping federal agencies accountable whenever they incorporate offsets into their environmental planning.

NEPA applies to federal actions "significantly affecting the quality of the human environment."[153] Federal actions requiring NEPA review include purely federal activities such as military procedures,[154] joint state-federal projects such as the construction of a new highway,[155] and federal approvals for private actors, such as the decision to grant a permit to build a new natural gas pipeline[156] or to open up federal waters to oil and gas drilling.[157]

At its core, NEPA requires federal agencies to take a "hard look at environmental consequences" before acting.[158] The statute requires agencies considering these actions to prepare and disclose a "detailed statement" analyzing the predicted environmental impacts of such actions.[159] The Supreme Court has long held that the statute "itself does not mandate particular results" but rather "imposes only procedural requirements on federal agencies" to analyze environmental impacts.[160] In other words, NEPA requires federal agencies to think about and publicize potential environmental impacts before they act, but it does not require agencies to actually change their actions to achieve any particular level of environmental protection.[161] The statute charges the Council on Environmental Quality (CEQ), an agency housed within the Executive Office of the President, with developing regulations to implement NEPA.[162]

The NEPA environmental review process has three tiers: First, certain categories of federal actions that are deemed to have little environmental impact are

---

152. *See generally* Pladen Flynn & Michael Barsa, *State Citizen Suits, Standing, and the Underutilization of State Environmental Law*, 52 ENV'T L. REP. 10473 (2022).

153. 42 U.S.C. § 4332(C).

154. *See* Winter v. Nat'l Res. Def. Council, 555 U.S. 7, 33 (2008) (rejecting a challenge to the Navy's decision not to prepare an EIS for training exercises involving sonar that could harm marine mammals).

155. *See* Fath v. Tex. Dep't of Transp., 924 F.3d 132, 135 n.1 (5th Cir. 2018) (reviewing the Texas Department of Transportation (TxDot)'s NEPA review of a proposed highway pursuant to an agreement with the Federal Highway Administration whereby "TxDot took responsibility for NEPA compliance").

156. *See* Sierra Club v. Fed. Energy Regul. Comm'n, 867 F.3d 1357, 1363 (D.C. Cir. 2017) (reviewing FERC approval of a natural gas pipeline under NEPA).

157. *See* Ctr. for Biological Diversity v. U.S. Dep't of Interior, 563 F.3d 466, 471 (D.C. Cir. 2009).

158. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989).

159. *Id.*

160. Dep't of Transp. v. Public Citizen, 541 U.S. 752, 756 (2004) (quoting Robertson, 490 U.S. at 350).

161. *See* Clay F. Kulesza, *The Devil's in NEPA's Details: Amending NEPA to Prevent State Interference with Environmental Reviews*, 62 WM. & MARY L. REV. 1041, 1046 (2021).

162. 42 U.S.C. § 4332(B); COUNCIL ON ENVIRONMENTAL QUALITY, https://perma.cc/H5DN-6LBU (last visited Feb. 5, 2023).

"categorically excluded" from NEPA review.[163] If the action is not categorically excluded, agencies will then prepare an "Environmental Assessment," a concise report in which the agency either determines that the action is a "major Federal action" requiring a full Environmental Impact Statement (EIS), or else issues a "finding of no significant impact (FONSI)," in which case no EIS will be issued.[164] If the action is "major," the agency must first publish a draft EIS for public comment, and then publish a final EIS, along with a "record of decision" explaining the agency's decision-making reasoning.[165] A full EIS, including appendices, can total well over 1,000 pages.[166]

NEPA does not itself contain a private right of action for parties challenging an agency's environmental impact review.[167] Instead, litigants seeking to challenge the adequacy of an agency's NEPA review may bring a challenge under the Administrative Procedure Act (APA), which allows private plaintiffs to challenge otherwise-unreviewable "final agency action" in court.[168] NEPA litigation under the APA typically involves challenges either to an agency's decision not to prepare an EIS,[169] or the sufficiency of the EIS itself.[170]

To challenge an agency's NEPA review process, plaintiffs must have both "prudential" (also called statutory) standing under the APA, and Article III standing. Prudential standing is rarely an obstacle in NEPA litigation under the APA because plaintiffs need only show that they have suffered an injury to an interest that NEPA "arguably" protects,[171] such as an interest in the environment.[172] Constitutional standing, however, is a more substantial obstacle. Plaintiffs must demonstrate that they "(1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that is likely to be redressed by a favorable judicial decision."[173] Crucially for environmental law, the complained injury may be as simple as harm to an animal species that the plaintiff enjoys observing "even for purely esthetic purposes."[174]

---

163. *See National Environmental Policy Act Review Process*, EPA (Oct. 5, 2022), https://perma.cc/MZT7-UZ5B; *Categorical Exclusions*, COUNCIL ON ENV'T QUALITY, https://perma.cc/34SF-CYTY (last visited Feb. 5, 2023).

164. *Public Citizen*, 541 U.S. at 757–58.

165. Kulesza, *supra* note 161, at 1046–47.

166. COUNCIL ON ENVIRONMENTAL QUALITY, LENGTH OF ENVIRONMENTAL IMPACT STATEMENTS (2013–2018) (2020), https://perma.cc/9JND-ED7W.

167. *See* Ashley Creek Phosphate Co. v. Norton, 420 F.3d 934, 939 (9th Cir. 2005); Kevin T. Haroff, *On Thin Air: Standing, Climate Change, and the National Environmental Policy Act*, 46 VAL. UNIV. L. REV. 411, 417 (2012).

168. 5 U.S.C. §§ 702, 704.

169. *See* Public Citizen, 541 U.S. at 762–63 (reviewing an agency's FONSI and decision not to prepare an EIS).

170. *See generally Robertson*, 490 U.S. 332.

171. *See* Lexmark Int'l v. Static Control Components, Inc. 572 U.S. 118, 129–130 (2014).

172. *See* Nuclear Info. & Res. Serv. v. Nuclear Regul. Comm'n, 457 F.3d 941, 950 (9th Cir. 2006) ("It is well settled that the zone of interests protected by NEPA is environmental.").

173. Spokeo, Inc. v. Robins, 578 U.S. 330, 338 (2016).

174. Lujan v. Defenders of Wildlife, 504 U.S. 555, 562 (1992).

These standing requirements are easiest to meet when the plaintiffs challenge "a project that will occur at a specific place."[175] For example, consider the 2017 D.C. Circuit case *Sierra Club v. FERC*, in which the plaintiff environmental organization challenged the adequacy of an EIS prepared by the Federal Energy Regulatory Commission (FERC) in connection with its approval of a pipeline.[176] The plaintiff successfully established standing by showing that the proposed pipeline would cross onto the property of several individual Sierra Club members or otherwise disrupt these members' daily lives.[177] Having established standing, the plaintiffs were entitled "to object to any deficiency in the [EIS]" regardless of whether that deficiency was itself "directly tied to the members' specific injuries."[178] Thus, the court allowed Sierra Club to challenge FERC's failure to consider the project's climate change impacts,[179] even though the harms from climate change itself probably would not be a sufficiently particularized injury to establish standing.[180]

Standing is more challenging to establish when plaintiffs challenge the NEPA review of a federal action that is not site-specific.[181] The D.C. Circuit has held that it applies "more exacting scrutiny" to a challenge to the NEPA review of a "challenged government action [that] is not one located at a particular 'site.'"[182] The Ninth Circuit has held that in NEPA cases the plaintiff must show a "geographic nexus between the individual asserting the claim and the location suffering an environmental impact."[183] This geographic nexus requirement may defeat standing when, for example, plaintiffs challenge the adequacy of an agency's NEPA process in adopting a general nationwide policy.[184]

Plaintiffs have had some recent success challenging agency NEPA reviews that failed to take GHG emissions into account. Although the statute contains no reference to climate change or greenhouse gases, courts have required agencies to

---

175. Adrienne Smith, *Standing and the National Environmental Policy Act: Where Substance, Procedure, and Information Collide*, 85 B.U. L. REV. 633, 641-42 (2005).

176. Sierra Club v. Fed. Energ. Regul. Comm'n, 867 F.3d 1357, 1363 (D.C. Cir. 2017).

177. *Id.* at 1365–66.

178. *Id.* at 1366.

179. *Id.*

180. *See* Ctr. for Biological Diversity v. U.S. Dep't of Interior, 563 F.3d 466, 478–479 (D.C. Cir. 2009) (holding that plaintiff could not establish injury-in-fact or causation by arguing that a challenged agency action would generally exacerbate climate change and thus risk harm to the species the plaintiff enjoyed viewing).

181. *See* Smith, *supra* note 175, at 642.

182. Fla. Audubon Soc'y v. Bentsen, 94 F.3d 658, 667 (D.C. Cir. 1996).

183. Citizens for Better Forestry v. U.S. Dep't of Agric., 341 F.3d 961, 971 (9th Cir. 2003) (quoting Public Citizen v. Dep't of Transp., 316 F.3d 1002, 1015 (9th Cir. 2003)).

184. *See* Whitewater Draw Natural Res. Conservation Dist. v. Mayorkas, 5 F.4th 997, 1020 (9th Cir. 2021) (holding that plaintiffs lacked standing to maintain a NEPA challenge to agency's immigration policies in part because there was no "geographic nexus" between where the plaintiffs lived and claimed environmental impacts along the U.S.-Mexico border); Nuclear Info. & Res. Serv. v. Nuclear Regul. Comm'n, 457 F.3d 941, 953 (9th Cir. 2006) (holding plaintiffs failed to show a "geographic nexus" in NEPA challenge to proposed nationwide radioactive materials transportation standards by failing to explain what particular regions of the country would be most impacted by the standards).

evaluate climate impacts in their NEPA reviews for over a decade.[185] In the *Sierra Club* case discussed above, the D.C. Circuit held that FERC was required to calculate the indirect, downstream GHG emissions that would foreseeably result from its approval of a new natural gas pipeline, or at least explain to the court why it would be impossible to do so.[186] The court also held that FERC could not avoid calculating downstream GHG emissions "just because the emissions in question might be partially offset by reductions elsewhere."[187] Even if reductions would have completely offset the emissions resulting from the approval, the court explained that NEPA requires agencies to "discuss both the good and bad" even when "the good consequences of a project will outweigh the bad."[188] One circuit has cast doubt on *Sierra Club* on the grounds that downstream emissions should not be considered the legally relevant effect of an agency's actions.[189] But the D.C. Circuit has continued relying on *Sierra Club*, most notably in 2022, where the court again ordered FERC to calculate the downstream GHG emissions foreseeably resulting from its approval of a pipeline, rejecting the agency's argument that the exact amount of resulting emissions were too difficult to predict.[190] Significantly, the court called FERC's arguments that the net effects on GHG emissions were uncertain a "total non-sequitur," as the possibility of offsetting benefits cannot excuse an agency from considering environmental harms under NEPA.[191]

Offsets might come into play in the NEPA analysis in several scenarios. For one, the federal government might itself seek to offset the emissions associated with a federally owned or managed program, such as the construction of a military base or the purchasing of new Postal Service trucks.[192] For another, a private company or unit of state or local government seeking federal approval might claim to use offsets to counter the direct effects of its emissions.[193] And finally, an agency might consider whether upstream or downstream users of a private facility requiring federal approval would themselves use offsets to mitigate the impact of new emissions. If, as FERC has tried repeatedly to do, agencies attempt to use the possibility of offsets to avoid having to calculate GHG emissions at all,

---

185. *See* Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008) ("The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.").

186. *See* Sierra Club v. Fed. Energy Regul. Comm'n, 867 F.3d 1357, 1374 (D.C. Cir. 2017).

187. *Id.* at 1375.

188. *Id.*

189. *See* Ctr. for Biological Diversity v. U.S. Army Corps of Eng'rs, 941 F.3d 1288, 1300 (11th Cir. 2019).

190. Food & Water Watch v. Fed. Energy Regul. Comm'n, 28 F.4th 277, 287–89 (D.C. Cir. 2022).

191. *Id.* at 289.

192. *See* Ecosystem Inv. Partners v. Crosby Dredging, LLC, 729 F. App'x 287, 290 (5th Cir. 2015) (regarding a NEPA challenge to Army Corps decision to build "replacement marshes" to offset the Corps' destruction of other marshes resulting from flood management project).

193. *See* Tinicum Twp. v. U.S. Dep't of Transp., 685 F.3d 288, 296 (3d Cir. 2012) (city government planned to purchase emissions credits to offset emissions from federally-approved construction project at Philadelphia International Airport).

plaintiffs can point to *Sierra Club*, which requires agencies to consider GHG emissions even if the net emissions impact is uncertain or even zero.

Although NEPA does not mandate substantive outcomes, it may still be a valuable way to hold actors planning to use offsets accountable. Citizens can use NEPA to force agencies to explain why they used one method of carbon offsets over another, or why they used offsets at all rather than simply reducing the direct emissions of a project, or how offsets will help the agencies meet self-imposed emissions reduction goals.[194] Furthermore, NEPA's "information-forcing" approach helps give the public information about the use of offsets, information that can be used to guide future policy proposals and other litigation.[195] NEPA may also ensure that federal agencies themselves make decisions that are more environmentally sound by ensuring that if offsets are used, they are held to rigorous standards.[196]

Under President Biden's Executive Order 14057, the federal government plans to "achieve net-zero emissions across federal operations by 2050."[197] This plan features an interim goal of a 65% net decrease in GHG emissions by 2030.[198] The Executive Order also calls for the federal government to achieve net-zero emissions across federal buildings by 2045, with a 50% reduction by 2030.[199]

As of this writing, the Administration has yet to reveal detailed plans for how it intends to achieve these net-zero goals. That said, given that these targets are for net-zero rather than zero gross emissions, it seems plausible that the plans will involve the use of carbon offsets.[200] To the extent that the federal government commits itself to these goals in future federal projects and outlines the use of offsets to reach net-zero emissions, NEPA will be a powerful tool to police the use of these offsets.

---

194. *See* Audubon Society of Portland v. Haaland, 40 F.4th 967, 980 (9th Cir. 2022) ("NEPA also requires agencies to analyze a reasonable range of alternatives to the proposed action.").

195. *See* Alan Masinter, *The National Environmental Policy Act and the Value of Information*, 22 NYU J. LEGIS. & PUB. POL'Y 465, 469 (2020) (arguing that NEPA fosters "public participation in federal decisionmaking"); Robert W. Adler, *In Defense of NEPA: The Case of Legacy Parkway*, 26 J. LAND, RES., & ENV'T L. 297, 300 (2006) (arguing that NEPA works to "facilitate better environmental decisions that promote a broader set of interests on behalf of a wider public").

196. *See* Adler, *supra* note 195, at 300–301 (arguing that most projects "have been made much more environmentally sound by routine NEPA compliance").

197. *Net-Zero Emissions Operations by 2050, Including a 65% Reduction by 2030*, SUSTAINABILITY.GOV, https://perma.cc/7VGH-DM28 (last visited Feb. 5, 2023).

198. *Id.*

199. *Net-Zero Emissions Buildings by 2045, Including a 50% Reduction by 2032*, SUSTAINABILITY.GOV, https://perma.cc/JM3G-EEM9 (last visited Feb. 5, 2023).

200. In one provision of a set of instructions released to federal agencies regarding implementing E.O. 14,057, the White House CEQ stated that "[a]s CEQ and OMB have not yet provided guidance on the appropriate use of emissions removal technologies, agencies should not employ emissions removal strategies or offsets at this time." COUNCIL ON ENVIRONMENTAL QUALITY, IMPLEMENTING INSTRUCTIONS FOR EXECUTIVE ORDER 14057 (Aug. 2022), https://perma.cc/5DRB-FA86. Thus, offsets are discouraged for now, but the Administration notably chose not to rule them out for the future.

## IV. FRAUD AND UNFAIR COMPETITION

The prior Part examined the possibility of citizen-led litigation to hold governmental units to account for their plans to use offsets. This Part will consider options for private plaintiffs to challenge corporate plans to use offsets, starting first with unfair competition law, then turning to securities law, before finally considering commodities law.

### A. FTC ACT AND STATE UNFAIR COMPETITION STATUTES

The Federal Trade Commission Act (FTC Act) prohibits "unfair methods of competition" and "unfair or deceptive acts" in interstate commerce, and charges the FTC with enforcing these prohibitions.[201] The FTC is empowered to seek both civil penalties and injunctive relief.[202] Since 1992, the FTC has published the Green Guides, which offer the Commission's nonbinding interpretation of the FTC Act as it relates to deceptive advertising involving environmental claims.[203] The Green Guides were last updated in 2012,[204] and are currently being revised.[205]

The Green Guides discuss carbon offsets in one terse section that takes up less than one column of text on one page of the Federal Register.[206] On the whole, the section is seriously deficient. It fails to set forth even the basic requirements that offsets be real, additional, quantifiable, permanent, verifiable, and enforceable.[207] It does make some effort to ensure additionality, but only by disapproving offsets derived from mitigation efforts that "have already occurred or will occur in the *immediate* future," or that were already "required by law."[208] These guides fail to ensure additionality because they do not disapprove offsets representing mitigation activity that was likely but not certain to occur in the foreseeable future. For example, the Green Guides do not appear to disapprove the sale of offsets for conserving a tract of forest that was unlikely to ever be developed, so long as there was no law prohibiting development and there was no showing that the forest was already certain to be conserved in the immediate future. The Green Guides thus fail to reflect offset best practices, which ask not only whether GHG mitigation was already required by law, but also whether the mitigation would have otherwise occurred in a "business-as-usual scenario."[209] Even worse, the Green Guides

201. 15 U.S.C. § 45(a).
202. *Id.* § 45(l).
203. Shanor & Light, *supra* note 19, at 2071.
204. *Id.*
205. *See* Guides for the Use of Environmental Marketing Claims, 87 Fed. Reg. 77766–77770 (Dec. 20, 2022) (to be codified at 16 C.F.R. pt. 260).
206. 77 Fed. Reg. 62126 (Oct. 11, 2012) (codified at 16 C.F.R. § 260.5).
207. *See supra* note 87 and accompanying text.
208. 16 C.F.R. § 260.5(b) (emphasis added).
209. *See* Golden Door Props., LLC v. County of San Diego, 264 Cal. Rptr. 3d 309, 342 (2020) (citing CAL. HEALTH & SAFETY CODE § 38562(d)(1)–(2)); CAL. CODE REGS. tit. 17, § 95802(a)(4); *see also supra* notes 92–94 and accompanying text (discussing the requirements of additionality).

say nothing at all about permanence; in other words, nothing in the Green Guides would seem to disapprove the sale of offsets for a project that, for example, only stores $CO_2$ underground for fifty years, or only conserves a forest for the next decade. The Guides do encourage sellers to "employ competent and reliable scientific and accounting methods to properly quantify claimed emission reductions and to ensure that they do not sell the same reduction more than one time," but this requirement seems only to do the bare minimum of disapproving pure fraud.[210] The Guides do not even require a seller of offsets to use a trusted third-party verifier.

In any event, the FTC Act does not provide a private cause of action, so private plaintiffs cannot sue directly for violations of it.[211] However, private parties may submit complaints of deceptive advertising to the FTC, and the FTC may then conduct an investigation and bring a complaint against the offender.[212] Furthermore, if the FTC's revised Green Guides developed a workable definition of carbon offsets, that definition could be used as persuasive or even binding authority by private plaintiffs in tort litigation or other state law contexts. Maine, Minnesota, New York, and Rhode Island have all incorporated the Green Guides into their state laws as binding requirements.[213] For example, California's Unfair Competition Law—unlike the FTC Act—provides a private cause of action,[214] and expressly incorporates the definitions in the Green Guides for its definitions of deceptive environmental marketing claims.[215]

### B. SECURITIES LAW

Citizens, investors, and environmental groups interested in holding corporations accountable for their use of offsets may find some success through litigation under the federal securities laws. Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 prohibit "fraud or deceit in connection with the purchase or sale of a security."[216] Moreover, Section 11 of the Securities Act of 1933 creates a private right of action for material misstatements or omissions in the disclosure documents that accompany a public offering of securities.[217]

The Supreme Court has recognized an implied private right of action under Section 10(b) and Rule 10b-5, but only for a corporation's shareholder or other purchasers and sellers of securities.[218] Environmental groups might consider

210. 16 C.F.R. § 260.5(a).

211. Holloway v. Bristol-Myers Corp., 485 F.2d 986, 989 (D.C. Cir. 1973).

212. *See Report to Help Fight Fraud!*, FED. TRADE COMM'N, https://perma.cc/FS34-QYF6 (last visited Feb. 5, 2023).

213. MEEGAN BROOKS & ANTHONY ANSCOMBE, NAVIGATING FTC GUIDANCE AND GREEN MARKETING LITIGATION 3 (2019), https://perma.cc/YHV5-G9CF.

214. CAL. BUS. & PROF. CODE § 17204.

215. CAL. BUS. & PROF. CODE § 17580.5(a).

216. 17 C.F.R. § 240.10b–5.

217. 15 U.S.C. § 77k.

218. Blue Chip Stamps v. Manor Drug Stores, 421 U.S. 723, 730–31 (1975).

purchasing shares in target corporations for the purposes of establishing standing, although this does not appear to be a common practice currently. However, the prospect of a large financial settlement may suffice to encourage investors to sue for economic reasons alone. For example, a pension fund has brought a class action securities lawsuit against Exxon Mobil, alleging that the company's climate-related misrepresentations caused the company financial harm.[219] The claim survived a motion to dismiss and remains pending in federal district court as of this writing.

Some commentators argue that plaintiff shareholders could use securities litigation under 10b-5 to challenge alleged corporate greenwashing.[220] However, case law suggests greenwashing may not give rise to a true 10b-5 challenge. Commentators have pointed to a 2004 securities class action case against the automaker Ford, in which the company was accused of making misleading statements about the quality and safety of Ford cars.[221] The Sixth Circuit held that Ford's statements constituted "mere puffery or hyperbole" and thus were "not material, even if they were misleading."[222] Thus, a company's vague claims that they are, for instance, eco-friendly, or committed to going green—even if misleading—are likely to be held as immaterial puffery and thus not actionable.[223]

The puffery doctrine may be less of a barrier when a shareholder challenges a corporation's commitment to using carbon offsets than it is in other securities litigation contexts. Because offsets are inherently quantifiable, a company's announcement that it will achieve net-zero emissions by purchasing a specific number of offsets may well be concrete enough to rise above puffery. If plaintiff shareholders have reason to believe that the offsets are a sham, then a lawsuit under 10b-5 might be viable.

That said, significant barriers remain that make 10b-5 a challenging vehicle for holding corporations accountable for their use of offsets.[224] Rule 10b-5 does not impose an affirmative duty to disclose unless some other positive law imposes the duty or in limited circumstances where silence would itself constitute fraud.[225] Moreover, "Rule 10b-5 requires plaintiffs to show economic loss as a result of the material misrepresentation (usually a drop in share price)."[226] This economic loss requirement is likely to present a substantial barrier to litigants challenging a corporation's use of sham offsets unless the company's share price falls. As a final obstacle, securities class action plaintiffs are subject to a heightened

219. Ramirez v. Exxon Mobil Corp., 334 F. Supp. 3d 832, 840 (N.D. Tex. 2018).

220. *See* Shanor & Light, *supra* note 19, at 2071.

221. *Id.* at 2071–72 (citing *In re* Ford Motor Co. Sec. Litig., Class Action, 381 F.3d 563 (6th Cir. 2004)).

222. *Ford*, 381 F.3d at 570.

223. *See* Shanor & Light, *supra* note 19, at 2072.

224. For the inherent challenges associated with securities litigation in the environmental context, see generally Robert K. Cowan, *Time for Plan(et) B? Why Securities Litigation Is a Misguided Attempt at Regulating Climate Change*, 33 GEO. ENV'T L. REV. 1 (2021).

225. *See In re* Time Warner Inc. Sec. Litig., 9 F.3d 259, 267 (2d Cir. 1993).

226. Shanor & Light, *supra* note 19, at 2072.

pleading standard under the Private Securities Litigation Reform Act (PSLRA), which requires plaintiffs to plead facts giving rise to a "strong inference" that the defendant acted with fraudulent intent.[227]

The Securities and Exchange Commission (SEC) is currently considering substantially increasing its role in regulating climate-related disclosures. In March 2022, the Commission issued a proposed rule that would require public companies to regularly disclose "climate-related risks and metrics," including their total direct and indirect emissions; the risks that climate change poses to their business; and, if applicable, any climate mitigation or adaptation plans.[228] The SEC subsequently revised its proposed rule in the face of intense opposition from Wall Street and industry groups.[229] The final rule was published in March 2024, after substantive work on this Note was complete, and is certain to be challenged in court.[230]

With these caveats in mind, it is worth noting that the 2022 proposed rule contained promising proposals for enhancing offset accountability. The SEC proposed requiring companies that use offsets "to disclose the role that carbon offsets . . . play in the registrant's climate-related business strategy."[231] This would include disclosing the amount of carbon reduction represented by offsets the company has purchased, "a description and location of the underlying projects, any registries or other authentication of the offsets . . . and the cost of the offsets."[232] The proposal went on to note that companies that rely on offsets may face financial risks, as "the value of an offset may decrease substantially and suddenly if, for example, the offset represents protected forest land that burns in a wildfire and no longer represents a reduction in GHG emissions."[233]

The SEC's final rule preserved some, but not all, of the offset-related requirements. If the final rule survives the inevitable court challenges it will face, then it would provide some valuable information for private litigants looking for ways to keep companies accountable for their use of offsets. Instead of having to pin down vague corporate assurances about net-zero plans or consult private third-party verification lists, individuals and groups would obtain access to detailed information about every public company's offset plans using the SEC's public database.

---

227. Tellabs, Inc. v. Makor Issues & Rights, Ltd., 551 U.S. 308, 314 (2007) (citing 15 U.S.C. § 78u–4(b)(2)).

228. The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21334 (proposed Apr. 11, 2022) (to be codified at 17 C.F.R. pts. 210, 229, 232, 239, 249), https://perma.cc/F7BX-CE9L.

229. The Enhancement and Standardization of Climate-Related Disclosures for Investors, Secs. & Exch. Comm'n, https://www.sec.gov/files/rules/final/2024/33-11275.pdf (Mar. 6, 2024).

230. Brian Croce, *SEC Climate Disclosure Rule Certain to Be Challenged*, PENSIONS & INVESTMENTS (Oct. 3, 2022), https://perma.cc/DP5N-EQRE. *See also* J. Robert Brown, Jr., *Mother Nature on the Run: The SEC, Climate Change Disclosure, and the Major Questions Doctrine*, 60 SAN DIEGO L. REV. 321 (2023) (evaluating SEC's proposed climate rules against the "major questions doctrine" applied in *West Virginia v. EPA*, 597 U.S. 697 (2022)).

231. 87 Fed. Reg. 21334.

232. *Id.* at 481.

233. *Id.* at 78.

### C. COMMODITY EXCHANGE ACT

A newly promising area for offset litigation is the Commodity Exchange Act (CEA), which regulates the trading of commodities and commodity futures and is administered by the Commodity Futures Trading Commission (CFTC).[234] Commodity futures are "contracts in which the purchaser agrees to buy or sell a specific quantity of a physical commodity at a specified price on a particular date in the future."[235] The CEA applies both to commodity futures and to transactions involving the underlying commodities themselves.[236] The CEA contains an anti-fraud provision, Section 4(b), that is analogous in some ways to Section 10(b) of the Securities Exchange Act.[237] Like securities fraud claims, commodity fraud claims can be brought either by the agency tasked with administering the statute—in the commodities context, the CFTC—or by private plaintiffs who bought or sold the commodity futures. Section 22 of the CEA provides a private right of action to plaintiffs against fraud and market manipulation, provided that the plaintiff was involved in the challenged commodity or commodity future transaction.[238] To avail themselves of this private right of action, environmental groups should consider purchasing carbon offsets for the purposes of establishing standing.

Historically, the CFTC has had little involvement in offset regulation, and there do not appear to be cases involving carbon offsets litigated under the CEA. However, this may be changing. In April 2022, the Chicago-based CME Group, the world's leading commodity derivative exchange, announced that over 100 million carbon offset contracts had been traded in its marketplace.[239] This flurry of economic activity has attracted regulatory attention. In June 2022, the CFTC held its first ever "Voluntary Carbon Convening," a conference featuring carbon offset market participants including standard-setting organizations.[240] At the opening of the conference, CFTC Chairman Rostin Benham announced the CFTC's ambitions in the field, stating that "[t]he CFTC is uniquely poised as the regulator at the forefront of climate-related risk management[.]"[241] In particular, Benham noted that carbon offsets are already being traded on commodities markets:

---

234. *Commodity Exchange Act & Regulations*, CFTC, https://perma.cc/8LU6-U5UR (last visited Feb. 5, 2023).

235. *Investment Products: Futures and Commodities*, FINRA.ORG, https://perma.cc/ZFL5-B77 (last visited Feb. 5, 2023).

236. 7 U.S.C. §§ 6b, 13.

237. *Id.* § 4b.

238. Loginovskaya v. Batratchenko, 764 F.3d 266, 270 (2d Cir. 2014) (citing 7 U.S.C. § 25(a)(1)).

239. Press Release, CME Grp., CME Group's Voluntary Carbon Emissions Offset Contracts Surpass 100 Million Offsets Traded (Apr. 22, 2022), https://perma.cc/JU5R-CV36.

240. Press Release No. 8525-22, CFTC, *CFTC Announces Voluntary Carbon Markets Convening* (May 11, 2022), https://perma.cc/469T-6UKF.

241. Opening Statement of Chairman Rostin Behnam at the CFTC Voluntary Carbon Markets Convening, Washington, D.C. (June 2, 2022), https://perma.cc/HLM4-3RR2.

> Multiple carbon offset derivatives contracts are already listed on the CFTC's regulated exchanges today and more are expected. The CFTC must build its capacity to ensure the ongoing integrity of these markets, identify and pursue any potential fraud or other abusive practices in the underlying markets, and promote responsible innovation and fair competition.[242]

Benham expressed optimism that the voluntary carbon market would play an important role in reducing or avoiding GHG emissions and would "grow in a responsible way," while noting that offsets must "represent true abatement" to be effective.[243]

On the same day as the Convening, the agency issued a "Request for Information on Climate-Related Financial Risk" (RFI).[244] The RFI included three questions on voluntary carbon markets, all focusing on gathering information on whether and how the CFTC should improve the integrity of carbon offset markets and minimize fraud or manipulation.[245] Notably, the RFI also asked whether the CFTC should create "some form of registration framework" for the carbon offset market.[246]

The CFTC's RFI attracted submission from over eighty commenters, including industry groups, environmental organizations, and members of Congress.[247] The CFTC held a second "Voluntary Carbon Markets Convening" in July 2023, at which Chairman Benham reiterated the CFTC's interest in regulating offset fraud and market manipulation and highlighted the formation of two new anti-fraud enforcement initiatives related to offset markets.[248]

Following these two convenings, in December 2023, the CFTC released proposed guidance on the listing of carbon offset derivative contracts on exchanges.[249] This proposed guidance would not impose any binding legal requirements on market participants, but it does express the Commission's views on how to ensure compliance with existing law. The guidance would encourage market participants to ensure that carbon credits adhere to basic requirements such as additionality and permanence, and that they are based on projects with proven transparency and accountability measures.[250]

---

242. *Id.*

243. *Id.*

244. *See* 87 Fed. Reg. 34856 (June 8, 2022).

245. *See* 87 Fed. Reg. 34860 (June 8, 2022).

246. *Id.*

247. Behnam, *supra* note 241.

248. Press Release No. 8754-23, CFTC, *CFTC Announces Agenda for the July 19 Voluntary Carbon Markets Convening* (July 18, 2023), https://perma.cc/8S6V-7QWP. Unlike after the first convening, the CFTC did not issue a press release after this event.

249. Commission Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts; Request for Comment (proposed Dec. 27, 2023), https://www.cftc.gov/sites/default/files/2023/12/2023-28532a.pdf; *see also* Press Release No. 8829-23, CFTC, *CFTC Issues Proposed Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts* (Dec. 4, 2023), https://www.cftc.gov/PressRoom/PressReleases/8829-23.

250. *Id.*

The CFTC's actions relating to offsets have been fairly modest so far, but CFTC regulation could go a long way toward ensuring a credible and effective carbon offset market.[251] The CFTC's proposed reforms could improve the viability of the CEA for private offset litigation in two respects. For one thing, more aggressive CFTC enforcement could provide the basis for follow-on private litigation. For another, enhanced federal standards for offsets would make it easier for plaintiffs to challenge offsets that fall short of the mark under theories of fraud or market manipulation.

If both the SEC and CFTC successfully promulgate meaningful offset disclosure and registration requirements, plaintiffs would have two different avenues for policing the carbon offset market. Litigation under the CEA could go after fraudulent *sellers* and *brokers* of offsets, while securities litigation could enhance oversight of the corporate *buyers* of offsets. Successful regulatory policymaking could thus yield a regime of robust citizen, investor, and shareholder oversight over the offset markets.

## V. CONTRACT LAW

Contract law and the goals of environmental policy have long had an uneasy relationship. The goal of the former is to advance, within reason, the intentions of private parties;[252] the goal of the latter is in large part to limit the scope of permissible private actions for the sake of preventing environmental harms. Historically, environmental groups have struggled to challenge private contracts on the grounds that they harmed the environment.[253]

In the context of offsets, however, contract law provides an opportunity to vindicate, rather than obstruct, environmental goals. Offsets involve a contract whose aim is ostensibly to improve the environment (or at least prevent additional environmental harms). Thus, contract law provides private parties with another vehicle to hold sellers of carbon offsets accountable. The first section will discuss breach of contract claims. The second will discuss possible third-party beneficiary liability. In both instances, the relevant caselaw is extremely limited, making it hard to predict how fruitful this body of law may turn out to be.

### A. BREACH OF CONTRACT

If a party purchases a carbon offset, then it could sue the seller for breach of contract if the seller misrepresents the offset or otherwise fails to ensure that the

---

251. Fredman & Phillips, *supra* note 12.

252. *See* Jody P. Kraus & Robert E. Scott, *The Case Against Equity in American Contract Law*, 93 S. CAL. L. REV. 1323, 1347 (2020) ("[T]he purpose of contract law is to discover and enforce the parties' ex ante intent[.]").

253. *See* Myanna Dellinger, *Trophy Hunting Contracts: Unenforceable for Reasons of Public Policy*, COLUM. J. ENV'T. L. 395, 456 (2016) (explaining that under traditional contract doctrine a third party cannot sue to invalidate a contract on the grounds that it is against public policy as harmful to the environment).

offset meets the agreed-upon terms. Environmental groups interested in holding offset companies accountable through contract law should consider purchasing some offsets from the major brokers and then monitoring the offset projects procured on their behalf for signs of fraud or inefficacy.

Any private individual can easily enter into a carbon offset contract by purchasing offsets from one of the many retail-facing carbon offset brokers such as Terrapass or Native. It is impossible to characterize the exact terms of a carbon offset purchase agreement without actually making a purchase, but some elements of any agreement can be ascertained simply by visiting the websites of these companies. Terrapass has a "Terms & Conditions" page in which it purports to absolve itself from liability for factors "beyond [its] reasonable control" including "fire."[254] At first glance, this would appear to be an attempt to prevent a plaintiff from holding Terrapass liable if they purchased an afforestation-based offset and then the forest burned down. Native also a publicly-viewable "Terms & Conditions" page in which the company makes various representations, including that it will ensure that the offsets it procures on behalf of its customers are verified by "one of the leading carbon offset standards," and that it will ensure that purchased offsets are "retired" on the customers' behalf to prevent double counting.[255] Notably, Native's terms and conditions also contain a binding arbitration clause,[256] while those of Terrapass do not.[257] Without precedential caselaw, it is unclear how courts will hold offset brokers accountable to retail consumers for ineffective or illusory offsets.

Two unreported federal district court cases involve carbon offset breach of contract claims; however, neither reached a decision on the merits. In the 2017 case *Aldabe v. Environmental Services, Inc.*,[258] defendant ESI agreed to evaluate the plaintiff's proposed carbon offset project to conserve a tract of rainforest in Bolivia.[259] The evaluation process eventually stalled when ESI was unable to determine whether Aldabe's project complied with the third-party Verified Carbon Standard (VCS) protocol.[260] Aldabe then sued both ESI and VCS in federal district court in Massachusetts, claiming breach of contract.[261] The case called into question the scope of liability arising from offset verification, but it never reached a decision on the merits. Instead, the court dismissed the case on the grounds that it lacked personal jurisdiction over the defendants.[262]

---

254. *Terms & Conditions*, TERRAPASS, https://perma.cc/YK7D-SWMC (last visited Feb. 5, 2023).
255. *Terms & Conditions*, NATIVE, https://perma.cc/L9JA-T8PS (last visited Feb. 5, 2023).
256. *Id.*
257. TERRAPASS, *supra* note 254.
258. Aldabe v. Env't Servs., Inc., C.A. No. 16-11067-MLW, 2017 WL 7035658 (D. Mass. Sept. 20, 2017).
259. *Id.*
260. *Id.* at *5.
261. *Id.* at *6.
262. *Id.* at *8.

In the 2023 case *Dakus v. Koninklijke Luchtvaart Maatschappij, N.V.*, the plaintiff sued the Dutch airline KLM for breach of contract and violations of state consumer protection statutes.[263] She alleged that she relied on KLM's false statements about its carbon offset programs when she chose to buy a KLM flight ticket over cheaper options from competitors that did not tout their carbon offsets. However, her claims, like those of Aldabe, were dismissed on jurisdictional grounds, as the defendant produced evidence showing the plaintiff had purchased the tickets through a third party and never verified that the ticket was from KLM at the time of purchase. For this reason, the court held that the plaintiff never suffered a legally cognizable injury and thus lacked standing.[264]

As the carbon offset industry continues to grow, *Aldabe* and *Dakus* are unlikely to be the last cases of individuals aggrieved at problems in the carbon offset world. While some plaintiffs may continue to struggle with jurisdictional issues, breach of contract litigation involving carbon offsets is likely to expand.

### B. THIRD PARTY LIABILITY

A final, untested, way to hold offset market participants accountable is through a theory of third-party beneficiary liability. Under the common law of contracts, the parties to a contract may have a binding duty to an intended third-party beneficiary of their agreement.[265] The creation of a duty to a third-party beneficiary is tightly conscribed. For instance, under New York law a party asserting third-party beneficiary rights must prove 1) the existence of a valid contract, 2) that the contract was intended for the third party's benefit, and 3) that the benefit to the third party was sufficiently immediate as to support the presumption that the parties intended to compensate the third party "if the benefit is lost."[266]

Professor Eisenberg has surveyed the third-party beneficiary doctrine, finding the "donee beneficiary" as one of the most commonly recurring claims in the doctrine.[267] In these contexts, the parties agree to a transaction with the goal of providing a charitable or donative benefit to a third party.[268] The most familiar example of this is in the context of a life insurance policy, in which an individual contracts with an insurance company for the goal of benefiting the individual's survivors after their death.[269]

---

263. Dakus v. Koninklijke Luchtvaart Maatschappij, N.V., No. 22-CV-7962 (RA), 2023 WL 5935694 (S.D.N.Y. Sept. 12, 2023).

264. *Id.* at *4–7. A nearly identical challenge to KLM's offset program has been filed in a federal district court in Virginia, but there has been no ruling in that case other than a denial of KLM's motion to transfer venue. *See Long v. Koninklijke Luchtvaart Maatschappij, N.V.*, No. 3:23CV435 (RCY), 2024 WL 23149 (E.D. Va. Jan. 2, 2024).

265. RESTATEMENT (SECOND) OF CONTRACTS §§ 302, 304 (Am. L. Inst. 1981).

266. Madeira v. Afford. Hous. Found., Inc. 469 F.3d 219, 251 (2d Cir. 2006).

267. Melvin Aron Eisenberg, *Third Party Beneficiaries*, 92 COLUM. L. REV. 1358, 1389 (1992).

268. *Id.*

269. *Id.* at 1390–91.

Many carbon offset projects claim to have social benefits in addition to environmental ones. For example, the offset broker Native offers an offset project that will supposedly distribute cookstoves, biofuel, and organic fertilizer to low-income farmers in Mexico, which Native claims will both avoid the emissions of 385,000 tons of $CO_2$ and cause "[i]mproved livelihood for 3000 farming households."[270] A similar Native-offered project purports to distribute solar-powered cookstoves to the Malagasy people in Madagascar, thus avoiding deforestation and resulting in "[i]mproved air quality and jobs for Malagasy people."[271]

The factual context of these projects may seem at first blush far removed from the life insurance context; however, a plausible argument exists that the communities benefited by these projects are the intended donee beneficiaries of the offset transaction. This theory would characterize the offset transaction as one in which the retail consumer purchased the offset from the broker with the intended result of conferring a charitable benefit to these communities. If the offset project failed for whatever reason to actually deliver these benefits to the Mexican farmers or Malagasy people, they could try to sue Native on the theory that they are intended third-party beneficiaries of the offset transaction.

The prospect that offsets might fail the communities they purport to serve is not merely hypothetical. In December, 2022, Levi Sucre Romero, an indigenous community leader in Costa Rica, published an op-ed in the New York Times castigating what he termed "carbon cowboys" from rich western countries, who claim to help indigenous communities but then "talk them into signing away their rights to the carbon in their forests."[272] More recently, an article in the New Yorker investigated a forestry-based offset project in Zimbabwe, validated by Verra, that may have overcounted the climate benefits by a factor of thirty. Under the terms of the offset project, the owner of the forest—a wealthy white Zimbabwean businessman—was to keep 30% of the earnings from the sale of offsets, while the local communities were to keep the remainder. But internal audits found that millions of euros that were supposed to go to local communities were nowhere to be found.[273]

Whether third party beneficiary liability will be a practically feasible way for communities to hold offset brokers and sellers accountable for their promises is hard to say. The communities are often located abroad, meaning it will likely be difficult to gather evidence and witnesses for use in a U.S. courtroom. Further, the intended beneficiaries are often communities rather than named individuals, which may make it hard for any individual plaintiff to establish standing. Courts

---

270. *From Waste to Fuel: Improving Agriculture and Livelihoods in Mexico*, NATIVE https://perma.cc/CCK7-VD5U (last visited Feb. 5, 2023).

271. *Madagascar Solar and Efficient Cookstoves*, NATIVE, https://perma.cc/V5QM-3PUC (last visited Feb. 5, 2023).

272. Levi Sucre Romero, *My Community Doesn't Exist Just to Absolve You of Your Climate Sins*, N.Y. TIMES (Dec. 1, 2022), https://perma.cc/T2XD-DDBL.

273. Blake, *supra* note 49.

are split on whether third-party claims are viable in such contexts.[274] Nevertheless, contract law offers a promising, if largely untested, avenue for offset accountability.

## VI. CONCLUSION

Billions of dollars are spent annually to achieve emissions reductions that have been repeatedly shown to be wildly inflated, if not fictitious, all while rich countries continue to emit billions of tons of $CO_2$ and other GHGs into the atmosphere every year. The private sector and the free market had their chance to regulate offsets. They failed. But for all their flaws, offsets are likely with us to stay. Yes, we must cut GHG emissions as fast as possible, but at a minimum the world will always need ways to offset the emissions from those human activities that cannot be made fully carbon-free.

Carbon offsets are indeed broken, but they can be fixed. To make offsets work the way humanity needs them to work, legislators and regulators must act to create strict transparency and enforcement regimes. That said, private litigation also has a crucial role to play. Litigation can bring public attention to problems that were long ignored or concealed. It may take only a few unfavorable judgments for the tide to turn against defendants, prompting major political and social reform.[275] The discovery process can turn up sensitive corporate information that regulators would be unable to find on their own.[276] Ultimately, vigorous litigation will spur better regulation.[277]

This Note has surveyed ways in which private litigation can be a tool to hold the buyers, sellers, and brokers of carbon offsets accountable. It is by no means an exhaustive survey of every legal regime or theory that might be conducive to offset-related litigation. What it has aimed to show is that if environmental plaintiffs are willing to get creative and to try sometimes-untested legal theories, they may find that existing state and federal laws provide ways to keep offsets honest.

---

274. The extent to which an individual can successfully claim standing to sue as a third-party beneficiary of a contract that was intended to benefit the individual's community as a whole is disputed. *Compare* S. Tex. Water Auth. v. Lomas, 223 S.W. 3d 304, 306–308 (Tex. 2007) (holding that individual city residents had no standing to claim third-party beneficiary rights under a contract to supply water to the city); *with* City of Indianapolis v. Kahlo, 938 N.E. 2d 734, 743 (Ind. App. 2010) (concluding that individual city residents had standing as third-party beneficiaries to claim rights under a contract involving the development of a public plaza that had been built "for the use and benefit of the public").

275. *See* Freeman Engstrom & Rabin, *supra* note 38, at 358–59.

276. *See* Thomas O. McGarity, *The Complementary Roles of Common Law Courts and Federal Agencies in Producing and Using Policy-Relevant Scientific Information*, 37 ENV'T L. 1027, 1051 (2007).

277. *Id.* at 1051, 1062; *See* Freeman Engstrom & Rabin, *supra* note 38, at 292 ("[L]litigation can, at least some of the time, serve not as a substitute to governmental action, but as a spark to generate broader governmental and private reform.").