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MATERIALIZING PRESIDENT BIDEN'S "CLEAN ENERGY REVOLUTION" THROUGH FEDERAL LAND ACQUISITIONS

Lisa Blitstein*

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I. INTRODUCTION

On January 20, 2021, President Joseph Biden took the Oath of Office and began undertaking his climate change plan, *The Biden Plan for a Clean Energy Revolution and Environmental Justice (The Biden Plan)*.¹ While President Biden's agenda will benefit from a Democratic government trifecta with slim majorities in the House and Senate, it still faces challenges of continued congressional partisanship; substantial rollbacks in environmental policy from former President Trump's administration; and ongoing pushback by the fossil fuel industry.² Inside President Biden's administration, the current rate of policymaking to address climate change is not rapid enough to meet President Biden's benchmark of 100% clean energy by 2050.³

^{*} J.D. Candidate, May 2022, University of Baltimore School of Law, B.A., Communication, 2015, The George Washington University. Thank you to Professor Sonya Ziaja, whose zeal for environmental law and constructive feedback is always very much appreciated. I also want to thank my wonderful parents and friends for being my cheerleaders throughout law school. I am grateful to the University of Baltimore Law Review for their commitment to showcasing excellent work. This Comment reflects my belief in the Jewish principle of pikuach nefesh, which tells us that preserving human life and health takes precedence over all other laws.

The Biden Plan for a Clean Energy Revolution and Environmental Justice, JOE BIDEN FOR PRESIDENT [hereinafter The Biden Plan], https://joebiden.com/climate-plan/ [https://perma.cc/RNY2-XFE8] (last visited July 30, 2021); see also Jean Chemnick, Here Are All the Climate Actions Biden Took on Day One, SCI. AM. (Jan. 21, 2021), https://www.scientificamerican.com/article/here-are-all-the-climate-actions-bidentook-on-day-one/ [https://perma.cc/WV26-FYBE].

² See EPA Watch: Serving as a Watchdog to Protect the Environment, ENV'T INTEGRITY PROJECT, https://environmentalintegrity.org/trump-watch-epa/regulatory-rollbacks/ [https://perma.cc/7FJ6-TRV2] (last visited July 30, 2021); see also Emma Newburger, Biden's Climate Change Agenda Will Face Big Obstacles with Evenly Divided Senate, CNBC (Jan. 30, 2021, 9:30 AM), https://www.cnbc.com/2021/01/30/bidens-climatechange-agenda-to-face-obstacles-with-senate-.html [https://perma.cc/4XL2-C82X] ("The Biden administration has a slim Democratic Senate majority that's 10 votes short of the 60 needed to break the Senate's filibuster and pass climate bills."); Jim Tankersley & Michael D. Shear, With Democrats in Control, Biden Moves to Advance Agenda, N.Y. TIMES, https://www.nytimes.com/2021/01/07/business/democrats-bidenagenda.html [https://perma.cc/BLW2-FPSE] (Jan. 20, 2021) ("In the House, Democrats will have only a 12-seat advantage, potentially dampening the multi-trillion-dollar ambitions that Mr. Biden laid out in the 2020 campaign to expand health care, reduce economic inequality and combat climate change").

^{3.} See Elinor Aspegren, Wind Energy Had a 'Banner Year' in 2020. Here's What That Means for Joe Biden's Climate Plan, USA TODAY (Feb. 12, 2021, 12:38 AM), https://www.usatoday.com/story/news/nation/2021/02/11/wind-energy-joe-bidenclimate-plan-texas-wyoming/6715555002/ [https://perma.cc/X47G-BBP8] ("Despite the wind energy industry's gains in 2020, the U.S. remains far from carbon neutrality . . . a main goal in the Biden administration's climate plan."); The Biden Plan, supra note 1 ("As President, Biden will lead the world to address the climate emergency . . . by

Externally, political and corporate influences threaten to continue stalling the urgent actions needed to address the climate crisis.⁴ For President Biden to achieve a 100% clean energy economy, he needs more aggressive, more creative strategies to establish legislation and institute long-term climate goals that will persist long beyond his time in the White House.⁵

This Comment argues that three federal land acquisitions strategies offer President Biden legal means to execute his long-term renewable energy goals by targeting properties currently being used for nonrenewable energy production, but his administration must carefully weigh the desirable expedience of these approaches with their respective social, political, and economic costs. Part II of this Comment provides an overview on *The Biden Plan* and three possible approaches to federal acquisition of nonrenewable fossil fuel facilities: (A) a government buyback approach; 6 (B) a federal regulatory takings approach;⁷ and (C) a federal eminent domain approach.⁸ Part III reviews the actions that President Biden has taken toward his energy and climate goals since the start of his term.⁹ Part IV discusses the viability of utilizing each proposed approach for federal land acquisitions to further his administration's goals.¹⁰ Part V concludes and provides recommendations to urge President Biden's development of an acquisitions strategy through the three outlined approaches.¹¹

ensuring the U.S. achieves a 100% clean energy economy and net-zero emissions no later than 2050.").

^{4.} See The Biden Plan, supra note 1; Coral Davenport & Lisa Friedman, The Battle Lines Are Forming in Biden's Climate Push, N.Y. TIMES (Mar. 2, 2021), https://www.nytimes.com/2021/01/26/climate/biden-climate-change.html [https://perma.cc/SZ5U-X6KX].

^{5.} See The Biden Plan, supra note 1. President Biden uses the term "clean energy" in reference to renewable, "low- and zero-carbon technologies," including lithium-ion batteries, solar panels, wind turbines, and potentially nuclear power. Id.; see also Newburger, supra note 2 ("Without new climate legislation from Congress, Biden's orders to reverse Trump's rollbacks on emissions from vehicles, power plants and oil and gas drilling could be easily undone by a future administration."); Miranda Green, Activists Fear Biden's Climate Pledges Are Falling Apart: 'We Aren't Seeing Grit', THE GUARDIAN (June 22, 2021, 6:00 PM), https://www.theguardian.com/environment/2021/jun/22/biden-climate-change-plan-environment [https://perma.cc/Y6E8-CZ3E].

^{6.} *See* discussion *infra* Sections IV.A.1, IV.A.2.

^{7.} See discussion infra Sections IV.B.1, IV.B.2.

^{8.} See infra Part II.

^{9.} See infra Part III.

^{10.} See infra Part IV.

^{11.} See infra Part V.

II. OVERVIEW OF *THE BIDEN PLAN* AND THREE FEDERAL LAND ACQUISITIONS APPROACHES

A. The Biden Plan

The Biden Plan is a detailed blueprint for clean energy and climate policy, divided into five overarching goals: (1) transition the U.S. to a 100% clean energy economy with net-zero emissions by 2050; (2) invest in land, water, transportation, and energy infrastructure to adapt and mitigate climate impacts; (3) lead the global response to climate change and rejoin the Paris Agreement; (4) assist vulnerable communities that are disproportionately impacted by climate change and for-profit polluters; and (5) ensure that industrial workers and communities are not left behind.¹² The Biden Plan sets forth many intended outcomes, but its overarching objectives are to achieve a 100% clean energy economy and, in turn, improve quality of life for all, with a particular focus on marginalized and poor communities who are impacted most by environmentally degradative energy infrastructure across the nation.¹³ President Biden's emphasis on clean energy derives from clear projections that fossil fuel consumption creates climate change: the U.S. Energy Information Administration and the U.S. Environmental Protection Agency (EPA) estimate that the burning of petroleum, natural gas, and coal is responsible for between ninety-seven and ninety-nine percent of all U.S. energy-related carbon emissions.¹⁴ CO2 emissions accelerate climate change, and the Intergovernmental Panel on Climate Change projects global temperature increases in excess of 1.5°C between 2030 and 2052 due

^{12.} See The Biden Plan, supra note 1; Chemnick, supra note 1 (explaining that President Biden initiated U.S. reentry to the Paris Agreement on his first day in office).

^{13.} See The Biden Plan, supra note 1 ("[E]nvironmental burdens and benefits have been and will continue to be distributed unevenly along racial and socioeconomic lines – not just with respect to climate change, but also pollution of our air, water, and land."); Patricia Romero-Lankao et al., Part B: Chapter 26: North America, in CLIMATE CHANGE 2014: IMPACTS, ADAPTION, AND VULNERABILITY: WORKING GROUP II CONTRIBUTION TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 1439, 1471 (Vincente R. Barros et al. eds., 2014); Alice Kaswan, Domestic Climate Change Adaption and Equity, 42 ENV'T L. REP. 11125, 11125–27 (2012).

Energy and the Environment Explained: Where Greenhouse Gases Come From, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/energyexplained/energy-and-theenvironment/where-greenhouse-gases-come-from.php [https://perma.cc/P75N-ZM5G] (May 21, 2021); see Sources of Greenhouse Gas Emissions, EPA, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions
[https://perma.cc/8LA4-U4SA] (last visited Aug. 9, 2021).

to anthropogenic climate impacts.¹⁵ Carbon emissions have and will continue to exacerbate climate impacts, including inundation, heat waves, illness, and resource scarcity, especially for the populations already most exposed to these effects.¹⁶ Thus, federal adherence and expansion to President Biden's plan for eliminating carbon emissions is critically important, and President Biden does not have the luxury of spare time.¹⁷ His actions on climate change and renewable energy during his first term will, in no uncertain terms, impact how many more lives are lost as a consequence of climate change.¹⁸

B. Three Proposals for Federal Land Acquisition Programs

Since energy-related carbon emissions are a primary catalyst for climate change and are President Biden's primary concern in *The Biden Plan*, he should seek a course of action that will allow for the rapid diminishment of carbon consumption and the expansion of clean

^{15.} Christopher B. Field et al., *Part A: Global and Sectoral Aspects, in* CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY: WORKING GROUP II CONTRIBUTION TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 535, 554 (Christopher B. Field et al. eds., 2014) [hereinafter IPCC 2014].

^{16.} See id. at 6. The COVID-19 pandemic makes such impacts empirical: climate change may be a risk factor for disease transmission and, in the U.S., the rates of COVID-19 transmission, hospitalization, and death are highest in Black and Hispanic or Latinx communities. See William A. Calo et al., Reaching the Hispanic Community About COVID-19 Through Existing Chronic Disease Prevention Programs, CTRS. FOR DISEASE CONTROL & PREVENTION (June 25, 2020), https://www.cdc.gov/pcd/issues/ 2020/20 0165.htm [https://perma.cc/5RM3-P9K2]. The CDC's statistics correlate disease with socioeconomic status, which also affects access to resources like healthcare. See Coronavirus, Climate Change, and the Environment: A Conversation on COVID-19 with Dr. Aaron Bernstein, Director of Harvard Chan, HARV. T.H. CHAN. SCH. PUB. HEALTH: C-CHANGE, https://www.hsph.harvard.edu/c-change/subtopics/ coronavirus-and-climate-change [https://perma.cc/9BTR-D5V5] (last visited Oct. 2, 2021); Risk for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html [https://perma.cc/WL2P-F2LF] (Sept. 9, 2021).

See Kate Ramsayer, Emissions Could Add 15 Inches to Sea Level by 2100, NASA-Led Study Finds, NASA (Sept. 17, 2020), https://climate.nasa.gov/news/3021/emissionscould-add-15-inches-to-sea-level-by-2100-nasa-led-study-finds/ [https://perma.cc/3FP7-7LBP].

See IPCC 2014, supra note 15, at 5 (describing "[t]he potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts"); Oliver Milman, Biden's Clean Energy Plan Would Cut Emissions and Save 317,000 Lives, THE GUARDIAN (July 12, 2021, 12:01 AM), https://www.theguardian.com/us-news/2021/jul/11/biden-administration-cleanenergy-climate-crisis [https://perma.cc/P8HH-PM6S].

energy before his 2050 benchmark.¹⁹ Such action could be effectuated through comprehensive acquisition of fossil fuel facilities, which would then be transitioned into clean, renewable energy sources.²⁰ This Comment proposes three legal approaches that President Biden may take to implement a federal acquisitions program. First, he could initiate a national buyback of nonrenewable coal, oil, and gas energy sites by using the federal budget to incentivize the fossil fuel industry into a clean energy transition.²¹ Second, President Biden may utilize regulatory takings, where polluting land uses like coal and oil refining are effectively "taken" when federal laws, like those promulgated at EPA, phase the uses out of existence.²² Under this approach, the federal government would not physically acquire properties. Instead, the properties would become available through policies designed to scale down fossil fuel procurement.²³ Third, federal eminent domain powers may allow the federal government to reduce, and ultimately eliminate carbon emissions in furtherance of the public welfare during a time of climate crisis.²⁴ To justify eminent domain, President Biden should draw parallels that compare (1) the socioeconomic "blight" that fossil fuel facilities impart on the communities situated around them, with (2) similar policy concerns that have prompted use of Fifth Amendment federal eminent domain powers in the past.²⁵

- See Milman, supra note 18; Sandra Rizzo & Jamie Lee, Bident Must Sustain Laser Focus to Meet Lofty Green Goals, LAW360 (Nov. 25, 2020, 3:48 PM), https://www.law360.com/articles/1331805/biden-must-sustain-laser-focus-to-meetlofty-green-goals [https://perma.cc/YBD9-CN5S].
- 20. See, e.g., Aaron Eisenberg, Embracing Eminent Domain for the Sake of the Planet, THE TROUBLE (Feb. 25, 2019), https://www.the-trouble.com/content/2019/2/25/embracing-eminent-domain-for-the-sake-of-the-planet [https://perma.cc/RJ4G-E3KL].
- 21. See discussion infra Section IV.A (discussing federal buybacks).
- 22. See discussion infra Section IV.B (discussing federal regulatory takings); see, e.g., Juliet Eilperin & Brady Dennis, Biden is Hiking the Cost of Carbon. It Will Change How the U.S. Tackles Global Warming., WASH. POST (Feb. 26, 2021, 8:11 PM), https://www.washingtonpost.com/climate-environment/2021/02/26/biden-cost-climate-change/ [https://perma.cc/Q5ZT-WP5N] (summarizing President Biden's plans to make government approval of fossil fuel projects more stringent by associating higher cost projections with greenhouse gas emissions). See generally John H. Klock & Peter H. Cook, The Condemning of America: Regulatory "Takings" and the Purchase by the United States of America's Wetlands, 18 SETON HALL L. REV. 330, 355 (1988).
- 23. See infra notes 81–88 and accompanying text.
- 24. See Eisenberg, supra note 20.
- 25. U.S. CONST. amend. V. President Biden should carefully study past federal eminent domain efforts before embracing them again. *See infra* notes 33–39 and accompanying text. Consider, for example, the federal urban renewal program, which was adopted to revitalize neighborhoods in the 1950s. *See* Jon C. Teaford, *Urban Renewal and Its Aftermath*, 11 HOUS. POL'Y DEBATE 443, 445–51 (2000). "Blight" is a term used to

The Biden Plan does not specifically mention using buybacks, regulatory takings, or eminent domain.²⁶ However, the federal acquisition and repurposing of nonrenewable energy facilities would unequivocally expand upon President Biden's clean energy plans and 2050 emissions benchmark.²⁷ Likewise, sites acquired through federal acquisitions could be directly transformed through sustainable investments in alternative energy sources, green spaces, affordable housing, public transit, and other infrastructural improvements to further quality of life, particularly for vulnerable communities.²⁸ President Biden's administration should consider how voluntary buybacks, regulatory takings, and eminent domain can inform the primary goals of his climate plan and allow for rapid expansion of renewable energy infrastructure.

III. HISTORICAL BACKGROUND AND PRESIDENT BIDEN'S ACTIONS TOWARD THE BIDEN PLAN

Since taking office, President Biden has made some progress toward his 2050 emissions goal by placing a moratorium on new federal land and water leases to the fossil fuel industry.²⁹ His administration has also indicated plans to recalculate the "social cost of carbon"—the figure used by the federal government to calculate how much environmental and economic damage results from one ton of carbon to make it more difficult for nonrenewable energy projects to be approved for land leases.³⁰ In addition, President Biden is establishing a Civilian Climate Corps Initiative to expand the federal government's land protections and put tens of millions of people to work on

describe infrastructural or economic decline. Historically, the federal response was to acquire blighted properties and replace them with new neighborhoods and businesses. *See id.* at 450.

^{26.} See generally The Biden Plan, supra note 1.

^{27.} Federal land acquisitions would constitute "[1] an enforcement mechanism [to achieve 100% clean energy] that includes milestone targets no later than the end of his first term in 2025" and "[2] a historic investment in clean energy and climate research and innovation." *See id.*

^{28.} These investments are discussed throughout The Biden Plan. See id.

See Maggie Astor, A Crucial Test Is Coming for Biden's Climate Agenda, N.Y. TIMES (Sept. 17, 2021), https://www.nytimes.com/2021/07/08/us/politics/biden-climateagenda.html [https://perma.cc/HPZ7-NZLA]; Bill McKibben, The Biden Administration's Landmark Day in the Fight for the Climate, NEW YORKER (Jan. 28, 2021), https://www.newyorker.com/news/daily-comment/the-biden-administrationslandmark-day-in-the-fight-for-the-climate [https://perma.cc/C2QC-UQ4H].

^{30.} See Eilperin & Dennis, supra note 22.

environmental preservation and biodiversity projects.³¹ President Biden is also not acting alone—his climate change team includes political experts who forcefully express support for federal appropriations of lands and renewable energy development.³² For example, President Biden's Special Presidential Envoy for Climate, former Senator John Kerry, said that "if we build out a huge infrastructure for gas now to continue to use it as the bridge fuel . . . we're going to be stuck with stranded assets in ten, twenty, thirty vears."³³ Similarly, the Chairman of the U.S. Federal Energy Regulatory Commission (FERC), Rich Glick, has grappled with the disproportionate impacts of fossil fuel projects on the poor throughout his career, and he hopes to help President Biden implement more clean energy projects like wind and solar farms.³⁴ Still, President Biden must consider how to respond to the litany of obstacles that The Biden Plan does not explicitly address. Among them, he must determine exactly how his administration will acquire authority over enough land to achieve a 100% carbon-free economy by 2050.

If President Biden considers a federal acquisitions approach, he should listen to concerns about the adverse consequences of federal intervention, like those from Rich Glick, that highlight a critical need for the President to learn from past federal efforts.³⁵ For example, federal eminent domain is the most aggressive of the three proposed approaches outlined in this comment because it would take property directly from private entities in exchange for the government's "just

^{31.} See The Biden Plan, supra note 1 ("Biden recognizes we must go further, faster and more aggressively than ever before, by . . . [p]rotecting biodiversity, slowing extinction rates and helping leverage natural climate solutions by conserving 30% of America's lands and waters by 2030."); Maegan Vazquez & Kate Sullivan, Biden Aims for Comprehensive Climate Approach as He Halts New Oil and Gas Leases on Federal Land, CNN PoL. (Jan. 27, 2021, 4:35 PM), https://www.cnn.com/2021/01/27/ politics/climate-executive-orders-joe-biden/index.html [https://perma.cc/K5SS-ECS2]; Tik Root, 9 Questions About the Civilian Climate Corps, Answered, WASH. Post, https://www.washingtonpost.com/climate-solutions/2021/09/16/civilian-climate-corps-explained/ [https://perma.cc/B6KG-ZNL9] (Sept. 16, 2021, 1:00 PM).

^{32.} See Elizabeth Elkin, Who's Who on Biden's Sprawling Climate Team, BLOOMBERG: BLOOMBERG GREEN (Jan. 27, 2021, 9:25 AM), https://www.bloomberg.com/news/features/2021-01-27/who-s-helping-joe-bidenfight-climate-change-a-bloomberg-green-guide [https://perma.cc/HH9F-R5LW].

^{33.} McKibben, *supra* note 29; Elkin, *supra* note 32.

See Stephen Cunningham & Naureen S. Malik, Biden Pick for Energy Regulator to Play Key Role in Green Shift, BLOOMBERG (Jan. 21, 2021, 11:32 AM), https://www.bloomberg.com/news/articles/2021-01-21/ferc-s-rich-glick-says-he-sbeen-chosen-to-lead-energy-regulator [https://perma.cc/P5QD-NAS6].

^{35.} See id.

compensation."³⁶ However, this approach to federal takings has often backfired and created detrimental socioeconomic effects on the populations intended to benefit from it.³⁷ The federal government has used eminent domain in attempts to rectify urban blight and infrastructural decline, but the term "blight" has often been construed and applied to disproportionately impact Black communities or the poor, while benefitting richer, whiter communities under the guise of an inclusive solution.³⁸ When used to take homes and businesses, eminent domain walks a precarious tightrope between beneficial restoration and burdensome gentrification, which can easily displace people in impacted communities.³⁹ Consequently, the success of eminent domain in the climate context is contingent on President Biden's ability to both acquire fossil fuel facilities and efficiently replace them with infrastructure that benefits the existing local communities around them.⁴⁰ An emphasis on communication and negotiation with communities would also be needed under a regulatory takings approach because the phasing-out of fossil fuels would similarly phase out jobs which may currently pay more than renewable energy work.⁴¹ Likewise, President Biden may negotiate and purchase fossil fuel facilities under a more transactional, buyback approach; however, the federal government would still need to form collaborative relationships with local communities, particularly southern and rural ones, which remain largely employed by the fossil fuel industry.⁴²

^{36.} See U.S. CONST. amend. V.

^{37.} See, e.g., Sarah Fox, Environmental Gentrification, 90 U. COLO. L. REV. 803, 821–23 (2019).

^{38.} See id. at 817–25.

^{39.} See id. at 826.

^{40.} See *id.* at 842 (discussing how developers intending to engage in environmentally harmful land uses will purchase the cheapest real estate, which corresponds with communities of color).

See Josh Lederman, Green vs. Blue: Biden's Climate Plans Face Labor Concerns, NBC NEWS (Mar. 6, 2021, 6:12 AM), https://www.nbcnews.com/politics/white-house/greenvs-blue-biden-s-climate-plans-face-labor-concerns-n1259732 [https://perma.cc/3NWK-TP36] ("[A]s it stands, wind and solar jobs just don't pay as well. A power plant operator, for example, makes an average of \$79,400 per year . . . compared to \$46,900 for a solar installer and \$56,700 for a wind turbine technician.").

^{42.} See Jennifer A. Dlouhy & Ari Natter, Biden Climate Plan Includes Oil-Lease Pause, Subsidy Review, BLOOMBERG 27, 2021, 1:23 PM), (Jan. https://www.bloomberg.com./news/articles/2021-01-27/biden-to-order-climatemeasures-including-oil-leasing-moratorium [https://perma.cc/5NRB-TFE4] ("Workers have been fed a false narrative' that 'dealing with climate is coming at their expense,' [John] Kerry said. Instead, he said, 'there's a lot of money to be made in the creation of these new jobs in these new sectors."").

It may prove challenging for President Biden to secure the public's trust.⁴³ The fossil fuel industry's automatic response since his election has been to proactively stockpile land leases and inhibit any transition of these areas into new and alternative forms of energy.⁴⁴ Overall, President Biden must appeal to communities that are dependent on fossil fuel jobs, and he must make clear that federal acquisitions would be intended to provide sustainable infrastructure, lucrative green job creation, green space, and adaptive management for projected local climate impacts.⁴⁵

Climate change, in itself, may already be persuading people to internalize the importance of eliminating fossil fuel emissions. For example, the 2021 severe winter snowstorms in Texas were but one recent instance when climate change, induced by carbon pollution, catalyzed dangerous weather extremes in the U.S.⁴⁶ Some southern U.S. policymakers who previously championed the fossil fuel industries in their states have become interested in alternative energy, and more may become amenable as they personally witness the severe costs and consequences of deferring action on clean energy policies.⁴⁷ But President Biden's approach must be proactive, not reactive. While he will more than likely continue to face persistent political challengers to his climate change policies, the implementation of buybacks, federal regulatory takings, eminent domain, or a combination of all three, during his first term may offer swift, thorough means to meet his ambitious goals for eliminating domestic carbon emissions and may demonstrate to his skeptics that intensive federal action on clean energy can be effective.⁴⁸ Furthermore, an acquisitions

^{43.} See id.; Chitra Kumar, Rural Americans Are the Future of the Clean Energy Economy— Policymakers Must Catch Up, HILL: CONG. BLOG (Mar. 1, 2021, 5:30 PM), https://thehill.com/blogs/congress-blog/energy-environment/541121-rural-americansare-the-future-of-the-clean-energy [https://perma.cc/65EY-5PCX] ("Building a broader base of support for climate mitigation and adaption won't come easy, based on what we're seeing in Texas").

^{44.} *See* Dlouhy & Natter, *supra* note 42 ("Oil companies stockpiled leases and drilling permits in advance of Biden's election").

^{45.} See id.; Lederman, supra note 41.

Extreme climate impacts in the U.S. are not limited to Texas. See Andrew Freedman, Deadly Texas Blackout Shows Our Vulnerability to Coming Climate Extremes, WASH. Post (Feb. 22, 2021, 2:57 PM), https://www.washingtonpost.com/weather/2021/ 02/22/texas-blackout-climate-change-resilience/ [https://perma.cc/CX4R-PM3B]; see also Kumar, supra note 43; Scott Neuman & Vanessa Romo, As Texans Recover Power, 'It's Life Or Death' for Many Bracing for More Frigid Temps, NPR (Feb. 18, 2021, 8:18 PM), https://www.npr.org/sections/live-updates-winter-storms-2021/2021/02/ 18/968973671/its-life-and-death-texans-still-without-power-as-nation-faces-morewinter-storms [https://perma.cc/HB4H-DUD8].

^{47.} See Kumar, supra note 43.

^{48.} See Davenport & Friedman, supra note 4.

approach could effectively undercut opposing arguments about the benefits and feasibility of *The Biden Plan* because direct federal intervention would demonstrate that President Biden's plan is not merely an abstraction, and that land is actively being repurposed for renewable resources, sustainable infrastructure, and green job creation.⁴⁹ Regardless of his strategy, President Biden cannot wait for the clean energy bandwagon to finally arrive and must act with the notion that anything short of complete, national decarbonization will create more social, economic, and political costs than savings.⁵⁰

Part IV summarizes the viability and challenges of the government buyback, federal regulatory takings, and federal eminent domain approaches to land acquisitions.⁵¹

IV. VIABILITY OF THREE FEDERAL LAND ACQUISITIONS APPROACHES

A. Viability of a National Energy Lease Buyback Approach

1. Overview

A government buyback of lands being leased for nonrenewable energy production would be a voluntary, market-based approach to land acquisition.⁵² Federal buybacks of private property are not new: in 1968, Congress created the National Flood Insurance Program (NFIP), which allows homeowners in floodplains to sell their properties back to the federal government after a flood event if they cannot sell to a private buyer.⁵³ Climate change increases the risks of property inundation in low-lying areas, so the NFIP and other federal buyback initiatives may become more popular to prevent economic losses as coastline property values diminish.⁵⁴ Similarly, government buybacks are often used as disaster relief tools rather than proactive

^{49.} See The Biden Plan, supra note 1 (outlining these uses as goals for his clean energy plan).

^{50.} See Eilperin & Dennis, supra note 22.

^{51.} See infra Part IV.

See Brian Prest, Policy Options for Oil and Gas Leasing Reform on Federal Lands and Waters, RES. (Dec. 21, 2020), https://www.resourcesmag.org/archives/policy-optionsoil-and-gas-leasing-reform-federal-lands-and-waters/ [https://perma.cc/6TXF-A4NN] ("Another option is for the federal government to buy back existing leases, which would circumvent the legal question [of ending federal leases]....").

^{53.} See Katie Sinclair, Water, Water Everywhere, Communities on the Brink: Retreat as a Climate Change Adaptation Strategy in the Face of Floods, Hurricanes, and Rising Seas, 46 ECOLOGY L. Q. 259, 278–79 (2019).

^{54.} *Id.* at 279; *see also 20 Good Ideas for Promoting Climate Resilience*, GEO. CLIMATE CTR. (July 2014), https://climateaccess.org/system/files/GCC_Resilience.pdf [https://perma.cc/VT7K-53RU].

means for infrastructural and economic stimulus.⁵⁵ For example, the federal government reactively addressed the 2008 economic collapse through a buyback approach by purchasing \$225 billion in mortgage-backed securities.⁵⁶ However, buyback programs have significant potential as long-term policy solutions for critical sectors of the economy, including housing, energy, and agriculture.⁵⁷ The fossil fuel industry recently called for federal help as it reels from economic losses due to the COVID-19 pandemic, but this current industry downswing also portends a larger economic catastrophe from continued reliance on carbon energy.⁵⁸ Actions taken now would help to mitigate future crises before oil wells run dry, the U.S. becomes dependent on foreign markets for alternative energy supplies, or it becomes too late for any amount of carbon reduction to halt further climate change.⁵⁹

2. Existing Demand and Challenges for a Buyback Approach

A buyback program would be a market-based approach, which requires willing sellers.⁶⁰ Thus, President Biden's primary challenge would be to convince the fossil fuel industry to negotiate a sale. His prospects of reaching these amicable agreements are dubious, considering that the industry purchased an abundance of oil and gas leases to mitigate potential policy changes before President Biden took

^{55.} See Robert W. Adler, Balancing Compassion and Risk in Climate Adaptation: U.S. Water, Drought, and Agricultural Law, 64 FLA. L. REV. 201, 203 (2012) ("Even absent climate change, disaster relief is often controversial if it encourages behavior that increases long-term risk. For example, compensating property owners in flood- or storm-prone regions may encourage construction in those areas, thus increasing societal risk.").

See Anna Lowrey, U.S. Completes Sale of Mortgage-Backed Securities, Earning \$25 Billion, N.Y. TIMES (March 19, 2012), https://www.nytimes.com/2012/03/20/business/ us-completes-sale-of-mortgage-backed-securities.html [https://perma.cc/GUF9-QLYT].

^{57.} See Adler, supra note 55, at 205.

See Sanjay Patnaik et al., How Biden and Congress Can Use COVID-Related Corporate Stimulus to Boost Climate Resilience, BROOKINGS (Feb. 19, 2021), https://www.brookings.edu/research/how-biden-and-congress-can-use-covid-relatedcorporate-stimulus-to-boost-climate-resilience/ [https://perma.cc/46CU-UMXQ].

See IPCC 2014, supra note 15, at 554; see also Peak Oil: What to Do When the Wells Run Dry, FORBES (July 20, 2010, 2:12 PM), https://www.forbes.com/2010/07/20/peakoil-wells-run-dry-personal-finance.html [https://perma.cc/JSR6-YJK9] (describing the importance of alternative energy resources in planning for oil depletion).

See Matthew Brown, US Drilling Approvals Increase Despite Biden Climate Pledge, AP NEWS (July 12, 2021), https://apnews.com/article/joe-biden-business-scienceenvironment-and-nature-6ac8ff49970e4b052489678b40e3ba82 [https://perma.cc/E54D-JSNE].

office.⁶¹ Then again, some pronounced oil and gas lobbyists are coming forward to endorse bold actions on climate change.⁶² Most recently, the American Petroleum Institute drafted its endorsement of a higher carbon tax on fossil fuel costs.⁶³ This position by lobbyists is substantially different from former President Trump's provision of billions of additional dollars to oil companies, in response to fossil fuel industry profit losses in 2020.64 Perhaps there is greater demand now for a federal oil and gas lease buyback, as the fossil fuel industry substantially increases consumer costs to combat dim industry profit margins and the global supply chain continues to struggle.⁶⁵ Even if it was previously unthinkable that energy leaseholders would give up their land rights, the current "perfect storm" of unprecedented economic consequences from the COVID-19 and climate crises could put enough additional pressure on fossil fuel interests to consider negotiations.⁶⁶ While a rapid and total sea change by the fossil fuel industry in support of a national buyback is unlikely, support for some environmentally-driven initiatives would have precedent: in the 1980s, for example, the federal government issued many oil and gas leases to corporate interests in Montana's Badger-Two Medicine region, an

63. *Id.*

^{61.} Fossil fuel companies are not the sole enemy of aggressive action toward clean energy; President Biden's administration has issued over 2,100 drilling approvals since taking office, breaking the president's promise to end new drilling on federally owned lands. *See* Brown, *supra* note 60; Dlouhy & Natter, *supra* note 42.

^{62.} See Steven Mufson, *Top Oil and Gas Lobbying Group Close to Backing a Carbon Tax*, WASH. POST (Mar. 2, 2021, 6:32 PM), https://www.washingtonpost.com/climate-environment/2021/03/02/api-climate-carbon-tax/ [https://perma.cc/6734-E9FB].

See Antonia Juhasz, Bailout: Billions of Dollars of Federal COVID-19 Relief Money Flow to the Oil Industry, SIERRA CLUB (Aug. 26, 2020), https://www.sierraclub.org/sierra/bailout-billions-dollars-federal-covid-19-reliefmoney-flow-oil-industry [https://perma.cc/AY5C-CYGU].

^{65.} See Will Englund, Oil Companies' Losses in 2020 Were Staggering. And That Was Before the Government Focused on Climate Change., WASH. POST (Feb. 4, 2020, 8:34 AM), https://www.washingtonpost.com/business/2021/02/04/exxonmobil-oilcompany-losses/ [https://perma.cc/RWT6-JXN2]; see also Jim Robbins, On U.S. Public Lands, Can Biden Undo What Trump Has Wrought?, YALE ENV'T 360 (Jan. 20, 2021), https://e360.yale.edu/features/on-u-s-public-lands-can-biden-undo-what-trumphas-wrought [https://perma.cc/F8KL-3VUJ] ("Oil leases on 550,000 acres were auctioned off in the Arctic National Wildlife Refuge, fetching just \$14.4 million, far less than anticipated."); see also High Natural Gas Prices Make This the Time to Build Back Better - With Clean Electricity, FORBES (Nov. 15, 2021, 7:45 AM), https://www.forbes.com/sites/energyinnovation/2021/11/15/with-high-natural-gasprices-now-is-the-time-to-build-back-better/?sh=7b90c0003a07 [https://perma.cc/ARA8-N9K2].

^{66.} See Englund, supra note 65.

area rich with biodiversity and home to the Blackfeet Nation.⁶⁷ Over time, many of the leaseholders voluntarily gave up their rights to the land in the interests of environmental preservation and cultural value.⁶⁸ This outcome may be repeatable today, particularly because there is substantially more data to support a correlation between carbon consumption and environmental destruction than existed four decades ago.⁶⁹

There is at least one source of funding for clean energy spending that is explicitly stated in The Biden Plan: the federal government procurement system, which allows the government to negotiate up to \$500 billion in contracts with commercial businesses every year.⁷⁰ If the price of a buyback approach is calculated according to the Department of the Interior's cost of \$1.50 to \$2.00 per acre to purchase federal leases, then the procurement system would theoretically provide for a purchase of up to 250 billion acres of land for clean energy uses.⁷¹ In addition, a federal energy lease buyback program would likely have the support of environmentalist, non- governmental organizations (NGOs), which have tried purchasing leases to prevent fossil fuel projects for decades with their robust fundraising apparatuses.⁷² NGOs cannot ordinarily buy new oil and gas leases because of federal restrictions and qualifications on who can purchase them.⁷³ However, a collaborative effort between NGOs and the government could tap into more resources for buying back existing leases.⁷⁴ Still, the federal

68. See Dlouhy & Natter, supra note 42.

74. See Regan, supra note 72.

See Associated Press, Oil Companies Lock in Drilling, Challenging Biden on Climate Change, L.A. TIMES (Jan. 11, 2021, 1:05 PM), https://www.latimes.com/worldnation/story/2021-01-11/oil-companies-lock-in-drilling-challenging-biden-on-climate [https://perma.cc/DKS6-798Q]; In Victory for Blackfeet Nation, Appeals Court Upholds Protection of Sacred Badger-Two Medicine, EARTHJUSTICE (June 16, 2020), https://earthjustice.org/news/press/2020/badger-two-medicine-victory [https://perma.cc/98RG-DDR8].

^{69.} See IPCC 2014, supra note 15.

^{70.} See The Biden Plan, supra note 1; What is Government Procurement, GMP, https://www.gmpgov.com/what-is-government-procurement/ [https://perma.cc/S27U-7HWU] (last visited Feb. 28, 2021).

^{71.} General Leasing: General Oil and Gas Leasing Instructions, U.S. DEP'T OF THE INTERIOR: BUREAU OF LAND MGMT., https://www.blm.gov/programs/energy-andminerals/oil-and-gas/leasing/general-leasing [https://perma.cc/83XR-HP2J] (last visited Aug. 12, 2021) ("Annual rental rates for both competitive and noncompetitive leases are \$1.50 per acre (or fraction thereof) in the first 5 years and \$2.00 per acre each year thereafter.").

See Shawn Regan, Why Don't Environmentalists Just Buy What They Want to Protect?, PROP. & ENV'T RSCH. CTR. (Dec. 16, 2020), https://www.perc.org/2020/12/16/whydont-environmentalists-just-buy-what-they-want-to-protect/ [https://perma.cc/3EMT-HDMG].

^{73.} See General Leasing: General Oil and Gas Leasing Instructions, supra note 71.

government may need to magnify its purchasing amount substantially, from its current \$1.50 to \$2.00 sale amount for federal leases, to entice leaseholders into relinquishing their rights to profit from the land for the duration of their ten-year lease.⁷⁵ Similarly, the legal precedent, that might otherwise allow the federal government to determine market value, is largely useless because voluntary buybacks are not bound to the laws of "just compensation," leaving the government at the mercy of leaseholders to engage in productive, fair negotiations.⁷⁶

Assuming some energy leaseholders felt enough pressure to sell their land, the federal government would still need to negotiate with thousands more. Corporate stockpilers purchased nearly 5,000 permits in 2020 alone and did so specifically to prevent the lands from being preserved.⁷⁷ The price-tag for a national buyback of the necessary magnitude to meet President Biden's 2050 goal, assuming there is a price at which leaseholders nationwide would be willing to sell, could be staggering.⁷⁸ Even if all leaseholders were willing to sell, it would be infeasible for President Biden's administration to perform a sweeping sale of all leases at once; even with enough money to buy every existing lease, there would also need to be enough money to transition the facilities into sources of clean energy. However, President Biden's strategy for a buyback program could involve the gradual purchase of leases alongside a concurrent, gradual transition to renewable energy.⁷⁹ A lengthier timeline for federal buybacks would match The Biden Plan's goal to invest "\$1.7 trillion over the next ten years, leveraging additional private sector and state and local investments to total to more than \$5 trillion," and ultimately achieve 100% net-zero emissions by 2050.80 If developed over ten years, a buyback program would also align more closely with the rate of

^{75.} See Robbins, supra note 65.

See, e.g., United States v. Miller, 317 U.S. 369, 373–74 (1943) (providing an example of "just compensation"); United States *ex rel*. Tenn. Valley Auth. v. Powelson, 319 U.S. 266, 278–79, 281, 284 (1943).

^{77.} See Associated Press, supra note 67.

^{78.} See Regan, supra note 72. Even on a small scale and at the fixed rate set by the government, it takes millions of dollars to buy leasing permits: "Nonprofit organizations such as the Nature Conservancy do it all the time, raising millions of dollars in donations to buy land or easements to protect important landscapes from development." *Id.*

^{79.} By 2025, President Biden intends to have an enforcement mechanism in place to reach a 100% carbon-free economy by 2050. If he adopted a land acquisitions program, it could be developed leading up to 2025, then implemented from then until 2050, at the latest. See The Biden Plan, supra note 1.

^{80.} Id.

progress in climate and energy research and technology, which is another priority within *The Biden Plan*.⁸¹

Overall, a federal buyback program has the necessary legal foundation to begin immediately but may need at least a decade to complete.⁸² A ten-year plan is beneficial because it would allow the federal government to develop infrastructure as technology improves, but it would not be immediate and would cap the maximum amount of acquirable land by the end of President Biden's time in office. Notwithstanding the timespan, a federal buyback approach would be an ambitious proposal to achieve *The Biden Plan* and the monetary costs could exceed its practicality in the immediate future.⁸³ But *The Biden Plan* is, in itself, already an ambitious objective to achieve a series of "Unprecedented Executive Actions" toward aggressive climate and energy policies.⁸⁴ Thus a buyback approach, even if utilized alongside other approaches or across a longer timeline, may provide President Biden with the necessary leverage to immediately begin eliminating the nation's reliance on fossil fuels.

B. Viability of a Federal Regulatory Takings Approach

1. Overview

Unlike a buyback approach, a federal regulatory takings approach would not provide leaseholders with a choice about whether to give up their land.⁸⁵ However, regulatory takings are also not the same as taking land via eminent domain.⁸⁶ Whereas eminent domain allows the government to physically take property for a public use, regulatory takings are effectuated by legislation when the owner retains title but the government's action limits use of a property to such an extent that

83. See supra notes 60–82 and accompanying text.

^{81.} *Id.* (*The Biden Plan* aims to "[m]ake a historic investment in energy and climate research and innovation, as well as clean and resilient infrastructure and communities.").

^{82.} See supra notes 79–81 and accompanying text.

^{84.} *See The Biden Plan, supra* note 1 (introducing a "bold plan" to address climate change and detailing a series of plans, actions, and policies designed to meet President Biden's goals).

^{85.} *See, e.g.*, Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1014–19 (1992) (framing the Supreme Court's "takings" jurisprudence by describing the issue as whether or not the owner of property subject to regulation must be compensated for the regulatory takings, rather than whether or not said owner has a choice in the matter).

^{86.} But see Andrea L. Peterson, The False Dichotomy Between Physical and Regulatory Takings Analysis: A Critique of Tahoe-Sierra's Distinction Between Physical and Regulatory Takings, 34 ECOLOGY L.Q. 381, 381–441 (2007) (arguing that the Supreme Court should treat physical and regulatory takings equally for the purpose of just compensation to property owners).

it is deemed equivalent to a taking.⁸⁷ *Penn Central Transportation Company v. City of New York* provides the touchstone test for fact-specific regulatory takings: the Court balances the economic impact on a property owner against the character of the government action.⁸⁸ Since *Penn Central*, the Supreme Court has upheld its case-by-case approach to quantifying the extent of regulatory impacts and has maintained that regulatory takings which "interfere[] with distinct investment-backed expectations" are nonetheless essential government exercises in furtherance of the public good.⁸⁹

Federal regulatory takings are different from physical invasions because regulatory takings do not require government compensation in exchange.⁹⁰ The Supreme Court has consistently maintained that "[g]overnment hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law[,]" and that the benefits of government regulation outweigh most adverse economic effects on individual property owners.⁹¹ The Court's concern is that the government would be unable to afford substantial legislation if it was required to compensate for every land-use regulation affecting property values.⁹²

Critics of the regulatory takings doctrine raise various objections, including that the Constitution did not intend to give legislators the power to regulate land use without restrictions; the doctrine is too amorphous and open-ended to be consistently applied; federal regulatory takings strip the states of their power to control property; and regulatory takings discourage people from owning property for fear that it will be regulated out of their hands.⁹³ Yet, the factually-specific nature of a regulatory takings analysis has allowed the government to protect important natural resources and to further the public good without the burden of compensation.⁹⁴ For example, the

- 88. Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 124 (1978).
- 89. Id.

- 91. Pa. Coal Co. v. Mahon, 260 U.S. 393, 413 (1922); *Penn Cent. Transp. Co.*, 438 U.S. at 124 (quoting *id.*).
- 92. See Peterson, supra note 86, at 388.
- 93. See J. Peter Byrne, Ten Arguments for the Abolition of the Regulatory Takings Doctrine, 22 ECOLOGY L.Q. 89, 90–117 (1995).
- 94. See Klock & Cook, supra note 22, at 332–39 (discussing cases in which government regulation did not amount to a compensable "taking").

^{87.} See Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency, 535 U.S. 302, 326 (2002) (alteration in original) (quoting *Lucas*, 505 U.S. at 1015) ("In the decades following [*Pa. Coal Co. v. Mahon*, 260 U.S. 393 (1922)], we have 'generally eschewed' any set formula for determining how far is too far, choosing instead to engage in "essentially ad hoc, factual inquiries."").

^{90.} See Andrus v. Allard, 444 U.S. 51, 65 (1979).

Supreme Court in *Andrus v. Allard* upheld the constitutionality of the Eagle Protections and Migratory Bird Treaty Acts which prohibit the commercial sale of any part of bald and golden eagles.⁹⁵ The Court reasoned that the legislation is not akin to a total taking of property when the legislation causes reductions to the commercial property value of the animals.⁹⁶ The positive environmental effects of this regulatory taking have been palpable. When *Andrus* was decided in 1979, bald eagles were on the verge of extinction.⁹⁷ In 2007, through the combined impacts of legislation and environmental restoration, bald eagles were removed from the list of Threatened and Endangered Species.⁹⁸ There is no existing environmental regulatory takings case to specifically answer the question of whether there can be regulations that push fossil fuel extraction into obsolescence. Nonetheless, the regulatory takings doctrine is flexible and could prove useful as a creative means to effectuate new decarbonization legislation.⁹⁹

2. Existing Demand and Challenges for a Regulatory Takings Approach

From a legal standpoint, the Biden Administration does not have time to waste and should avoid strategies that could be contested for years in court.¹⁰⁰ Just as the laws at issue in *Andrus* restrict the commercial sale of bald eagles, decarbonization legislation under a regulatory takings approach could prohibit the use of land for the extraction, procurement, and sale of fossil fuels.¹⁰¹ However, the Supreme Court normally applies principles of federal regulatory takings doctrine on a case-by-case basis.¹⁰² Thus, it may prove complicated to justify the doctrine's application to the entire energy sector, whose profit margins

^{95.} Andrus, 444 U.S. 51, 52–54, 67–68.

^{96.} See id. at 66–68.

^{97.} Traci Watson, *Bald Eagles, Once Almost Extinct, Make Comeback*, AM. EAGLE FOUND. (June 27, 2007), https://www.eagles.org/bald-eagles-once-almost-extinct-make-comeback-2/ [https://perma.cc/222C-3UD4].

See History of Bald Eagle Decline, Protection and Recovery, U.S. FISH & WILDLIFE SERV.: MIDWEST EAGLES, https://www.fws.gov/midwest/eagle/history/index.html [https://perma.cc/DKN3-JLY5] (May 5, 2020) (providing an overview of legislation passed to protect and recover the bald eagle species).

^{99.} But see Michael Stone, Fossil Fuels, Takings, and Rawlsian Justice, 13 WASH. U. JURIS. REV. 147, 148, 160 (2020) ("The unpopularity of regulations leaves them vulnerable to backsliding under an adverse administration or Congress, which retains the ability to enact new legislation or repeal old legislation should it become inconvenient.").

^{100.} See IPCC 2014, supra note 15, at 14–25 (outlining a multitude of ways in which "[i]ncreasing magnitudes of warming increase the likelihood of severe, pervasive, and irreversible impacts" from climate change); Rizzo & Lee, supra note 19.

^{101.} See Andrus v. Allard, 444 U.S. 51, 57–59 (1979).

^{102.} See Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 123-24 (1978).

cascade to other sectors including agriculture, manufacturing, transportation, and retail commerce.¹⁰³ At the same time, the Court's prudential concern for respecting the separation of powers also means deferring to the federal government's judgment when an expansion of law falls within the powers of another branch.¹⁰⁴ For example, authorization for sweeping decarbonization legislation may be justified pursuant to the federal government's enumerated Commerce Clause and Taxing powers.¹⁰⁵ A constitutional argument in favor of expanded authority, when placed in the context of the climate crisis and the COVID-19 pandemic, would be akin to how Congress justified new legislation during the New Deal Era as necessary to regulate interstate commerce and market prices of goods during an economic crisis.¹⁰⁶ Furthermore, the fossil fuel industry already appears amenable to some regulatory takings; its apparent support for carbon tax legislation would enable the federal government to phase carbon energy out of use by making it too expensive to be practical.¹⁰⁷

A regulatory takings approach would allow President Biden to direct money which would otherwise be spent purchasing land into renewable energy projects and green job creation programs.¹⁰⁸ Since the government is not required to provide compensation for regulatory takings, the costs would only derive from the normal expenses of promulgating legislation.¹⁰⁹ In addition, President Biden may employ this strategy alongside other approaches that require the government

^{103.} *See The Biden Plan, supra* note 1 (considering various impacts of a clean energy transition on other economic sectors, including those mentioned above).

^{104.} See THE FEDERALIST NO. 47, at 247 (James Madison) (1788).

^{105.} See Nat'l Fed'n of Indep. Bus. v. Sebelius, 567 U.S. 519, 549–66 (2012). The Court held for the government and allowed a mandate under the Affordable Care Act to impose a tax on those who do not purchase insurance. *Id.* The mandate was permissible in part because it was deemed similar to other taxes that have been imposed to influence and encourage people toward certain forms of conduct. *Id. See also* United States v. Lopez, 514 U.S. 549, 555 (1995) (providing that Congress can regulate acts with a "substantial relation" to interstate commerce); United States v. Darby, 312 U.S. 100, 121 (1941) (holding that Congress has the power to prohibit substandard labor practices and unfair competition because they have a substantial effect on prices of goods in the market).

^{106.} See Darby, 312 U.S. at 114–15.

^{107.} See Eilperin & Dennis, supra note 22 ("[T]he 'social cost of carbon,' could reach as high as \$125 per ton once the [Biden] administration conducts a more thorough analysis.").

^{108.} See The Biden Plan, supra note 1 ("We can export our clean-energy technology across the globe and create high-quality, middle-class jobs here at home.").

^{109.} See Penn. Coal Co. v. Mahon, 260 U.S. 393, 413 (1922).

to buy properties, thus allowing him to offset a percentage of the costs. 110

For example, President Biden could narrow his regulatory takings to eliminate a particular fossil fuel use, such as coal, and utilize a buyback, an eminent domain approach, or both, to phase out oil and natural gas. Whether regulatory takings are used alone or as a complement to other approaches, they are a legislative channel that has been used to implement important and successful environmental legislation in the past and may enable President Biden to achieve his 2050 clean energy benchmark.

C. Viability of an Eminent Domain Approach

1. Overview

The federal government has historically applied eminent domain to construct public utilities, maintain national parks and environmental areas, and preserve historic places.¹¹¹ Large-scale efforts have also included decades of government buyback programs in the twentieth century and a record of federal "slum clearance," starting in the 1800s.¹¹² In the mid-1950s, the foundational eminent domain case of *Berman v. Parker* defined the scope of eminent domain to takings for "[p]ublic safety, public health, morality, peace and quiet, [and] law and order."¹¹³ The Supreme Court held that legislatures can, in the interest of urban renewal and redevelopment, use eminent domain to acquire non-blighted properties within an otherwise blighted area.¹¹⁴ In 2005, *Kelo v. New London* extended *Berman* by holding that takings for the purpose of economic development constitute a public use and allow for property transfers from one private party to another if the recipient party uses the property to provide "public benefits."¹¹⁵

While eminent domain is meant to stimulate economic growth and promote the public welfare, one of its greatest drawbacks is its potential failure to achieve equity and protection for vulnerable

^{110.} *See generally* Stone, *supra* note 99 (arguing that eminent domain is not only possible to acquire fossil fuel deposits but would only require the government to compensate at the value that the land would have if it were not used for fossil fuel procurement).

^{111.} *History of the Federal Use of Eminent Domain*, U.S. DEP'T OF JUST., https://www.justice.gov/enrd/history-federal-use-eminent-domain [https://perma.cc/TPF3-E9A4] (May 15, 2015).

^{112.} See Sinclair, supra note 53, at 296; Teaford, supra note 25, at 445–51. Much like federal efforts aimed at rectifying "blight," the targeting of eminent domain to "slums" has disproportionately exploited and displaced low-income communities in favor of pricy residential and commercial areas. See id. at 444.

^{113.} Berman v. Parker, 348 U.S. 26, 32 (1954).

^{114.} Id. at 36.

^{115.} Kelo v. New London, 545 U.S. 469, 472 (2005).

communities.¹¹⁶ Inherent in the use of eminent domain is the possibility for governmental abuse of the law, to benefit private individuals and burden marginalized populations.¹¹⁷ For example, a group of organizational petitioners filed an amicus brief in 2005 concerning the application of eminent domain in Kelo.¹¹⁸ The brief argued that economic development alone does not justify eminent domain, as "[t]he history of eminent domain is rife with abuse specifically targeting minority neighborhoods. Indeed. the displacement of African- Americans and urban renewal projects were so intertwined that 'urban renewal' was often referred to as 'Negro removal.""¹¹⁹ Even when eminent domain efforts are not purposely designed to impose disparate impacts, their application can reflect underlying systems of discrimination.¹²⁰ For example, Katie Sinclair's scholarship on the use of eminent domain in the aftermath of Hurricane Katrina in 2005 indicates that Black and poor residents of New Orleans' Lower Ninth Ward were disparately impacted by the storm's damage to the city.¹²¹ Furthermore, the federal restoration and retreat programs implemented to prevent inundation were concentrated more on affluent, whiter areas, and were slow to respond to the city's displaced Black residents, resulting in higher death tolls based on race. 122

Federal emergency responses are not the only actions that make apparent the disconnect between federal strategies for eminent domain and the actual needs of impacted communities. Professor Sarah Fox argues that efforts to solve longstanding environmental problems and implement adaptive management in marginalized, low-income, and non-white communities often produce the adverse effect of gentrification.¹²³ Consequently, residents in impacted communities may never benefit from revitalization efforts—such as the addition of green spaces or affordable housing developments—because they are forced out by increasing property values and projects targeted at attracting new people, not the existing populations.¹²⁴ Likewise,

124. Id.

^{116.} See Teaford, supra note 25, at 443–46.

^{117.} See id. at 445.

^{118.} Brief for NAACP, AARP, Hispanic Alliance of Atlantic County, Inc., Citizens in Action, Cramer Hill Resident Association, Inc., and the Southern Christian Leadership Conference as Amici Curiae Supporting Petitioners at 7-12, Kelo v. City of New London, 545 U.S. 469, 472 (2005) (No. 004–108).

^{119.} *Id.* at 7.

^{120.} See Sinclair, supra note 53, at 263–67.

^{121.} See id.

^{122.} See id.

^{123.} See Fox, supra note 37, at 805–07.

Eminent Domain and Environmental Justice: A New Standard of Review in Discrimination Cases contextualizes the risks of eminent domain within the modern environmental justice movement's focus on disproportionate concentrations of environmental hazards in marginalized communities.¹²⁵ Professor Janet Thompson Jackson takes a similar stance, and contends that the law of eminent domain does not sufficiently involve social justice considerations to prevent blight removal and economic development from being made at the expense of poor people.¹²⁶ Jackson explains that "[t]aking from the poor to give to the rich is not a new issue in environmental law, and the environmental justice movement was founded in part to oppose this trend," where the burdens of a "public use" are felt most by people who may not receive the benefits at all.¹²⁷

2. Existing Demand and Challenges for an Eminent Domain Approach

President Biden must prioritize the needs of impacted communities if he chooses to utilize federal eminent domain in furtherance of his 2050 benchmark.¹²⁸ Eminent domain has commonly been used to acquire blighted properties in urban, predominantly non-white and lowincome communities.¹²⁹ In the climate context, however, the catalysts for those conditions are the nonrenewable, "dirty" energy facilities that create the most substantial pollution and perpetuate socioeconomic decline.¹³⁰ To that end, President Biden may declare a national climate emergency that necessitates federal takings to eliminate carbon pollution from fossil fuels.¹³¹ While this raises concern among some legal experts and politicians about the potential expansion of executive

- 128. See supra notes 112-23 and accompanying text.
- 129. See Sinclair, supra note 53, at 295.
- See Ryan Schleeter, New Research: Air Pollution from Fossil Fuels Costs the World \$8 Billion Every Day, GREENPEACE (Feb. 12, 2020), https://www.greenpeace.org/usa/ news/new-research-air-pollution-from-fossil-fuels-costs-the-world-8-billion-everyday/ [https://perma.cc/D66P-DTAX].
- 131. See Marcella Burke, Ethan Davis & Cason Hewgley, *The Power of a National Climate Emergency Declaration*, LAW360 (Feb. 11, 2021, 4:10 PM), https://www.law360.com/articles/1354077 [https://perma.cc/Z764-6ZMM].

^{125.} See generally Catherine E. Beideman, Comment, Eminent Domain and Environmental Justice: A New Standard of Review in Discrimination Cases, 34 B.C. ENV'T AFFS. L. REV. 273 (2007).

^{126.} See Janet Thompson Jackson, What is Property? Property is Theft: The Lack of Social Justice in U.S. Eminent Domain Law, 84 ST. JOHN'S L. REV. 63 (2010).

^{127.} Beideman, supra note 125, at 274.

power,¹³² advocates view eminent domain as an immediate way to deploy concrete action and stop treating status quo carbon emissions like a sustainable business model.¹³³ Representative Alexandria Ocasio-Cortez (D-NY), Representative Earl Blumenauer (D-OR), and Senator Bernie Sanders (I-VT) are calling for the U.S. to declare a climate emergency.¹³⁴ In response to former President Trump's use of eminent domain, Representative Ilhan Omar (D-MN) tweeted directly him. saving: "Our next President should declare a at #NationalEmergency on day 1 to address the existential threat to all life on the planet posed by Climate Change."¹³⁵ One journalistic thinkpiece from 2019 outlines the application of eminent domain to achieve the goals of the Green New Deal Resolution (GND); it sets forth these competing political pressures and concludes that eminent domain is a palatable way to take control over unsustainable polluting infrastructure without crossing а line of total industry nationalization.136

A climate crisis declaration need not be motivated solely by environmental considerations. There are 147 oil refineries in the U.S., each with a surrounding population of thousands of people, including young children who must breathe in polluted air and incur severe adverse health effects like cancer and congenital disabilities.¹³⁷ Considering the health effects of air pollution on the already-deadly respiratory COVID-19 pandemic, President Biden may be uniquely situated to appeal to people across the political spectrum through an eminent domain plan that fulfills environmental and public health

^{132.} See Amelia Thomson-DeVeaux, *Does Trump's National Emergency Set a Problematic Precedent for Conservatives?*, FIVETHIRTYEIGHT (Feb. 15, 2019, 1:00 PM), https://fivethirtyeight.com/features/does-trumps-national-emergency-set-a-problematic-precedent-for-conservatives/ [https://perma.cc/N66K-KM6K].

^{133.} See Eisenberg, supra note 20.

^{134.} See Expressing the Sense of Congress that There Is a Climate Emergency Which Demands a Massive-Scale Mobilization to Halt, Reverse, and Address its Consequences and Causes, H.R. Con. Res. 52, 116th Cong. (2019); Emily Holden, Sanders and Ocasio-Cortez Move to Declare Climate Crisis Official Emergency, THE GUARDIAN (July 8, 2019, 3:57 PM), https://www.theguardian.com/environment/2019/ jul/08/climate-crisis-sanders-ocasio-cortez-emergency [https://perma.cc/4S92-K8XS].

^{135.} Ilhan Omar (@IlhanMN), TWITTER (Feb. 15, 2019, 1:53 PM), https://twitter.com/IlhanMN/status/1096482619246723074 [https://perma.cc/XP4K-L2E3]; see also notes 137, 139–42 and accompanying text.

^{136.} See Eisenberg, supra note 20.

^{137.} *Map Feature: Oil Refineries in the United States*, EARTHJUSTICE, https://earthjustice.org/features/147refineries [https://perma.cc/ARY8-68F4] (Oct. 21, 2014).

needs alike.¹³⁸ Likewise, the economic effects of the pandemic on the fossil fuel industry provide President Biden with leverage to gather support for a clean energy economy.¹³⁹ Finally, eminent domain would allow President Biden to distinguish himself from former President Trump's unfulfilled promises, to revive the fossil fuel industry, by giving blue-collar workers a physical place to look for new job prospects.¹⁴⁰

President Biden's use of an eminent domain approach to secure nonrenewable energy facilities would allow him to pursue legal avenues like those used by previous administrations to further public health, safety, and welfare.¹⁴¹ The concept of federal intervention in national emergencies is well-supported: for example, President George W. Bush approved a \$700 billion economic bailout for mortgagebacked securities during the 2008 financial crisis.¹⁴² Most recently, former President Trump's actions have called into question the breadth of Executive Branch discretion to declare a national crisis as a justification for eminent domain.¹⁴³ Specifically, he used eminent domain substantially to execute the "emergency" construction of a wall at the southern U.S. border.¹⁴⁴ A November 2020 study by the Government Accountability Office (GAO) found that former President Trump's administration acquired, or was working to acquire,

140. See Taylor Kuykendall, U.S. Coal Jobs Down 24% from the Start of Trump Administration to Latest Quarter, S&P GLOB. MKT. INTEL. (Nov. 20, 2020), https://www.spglobal.com/marketintelligence/en/news-insights/latest-newsheadlines/us-coal-jobs-down-24-from-the-start-of-trump-administration-to-latestquarter-61386963 [https://perma.cc/2FUN-J5NB]; Oliver Milman, Will Coalminers Stand by Trump as Jobs Disappear?, THE GUARDIAN (Sep. 28, 2020, 10:06 AM), https://www.ecowatch.com/trump-coal-miners-2020-election-2647844484.html [https://perma.cc/6HSR-5UUQ].

- 141. See infra notes 142–46.
- 142. See Kimberly Amadeo, What Was the Bank Bailout Bill?, THE BALANCE (Oct. 26, 2020), https://www.thebalance.com/what-was-the-bank-bailout-bill-3305675 [https://perma.cc/2SMJ-VYH5].

144. Id.; Gerald S. Dickinson, Property Musings at the U.S.-Mexico Border, 33 MD. J. INT'L L. 162, 162–82 (2018).

See Callum O'Reilly, COVID-19's Impact on the Energy Sector, HYDROCARBON ENG'G (Nov. 19, 2020, 9:30 AM), https://www.hydrocarbonengineering.com/cleanfuels/19112020/covid-19s-impact-on-the-energy-sector/ [https://perma.cc/2MHR-LM5H]; Robert Rapier, Will Covid-19 Hasten the Demise of Fossil Fuels?, FORBES (July 12, 2020, 6:00 PM), https://www.forbes.com/sites/rrapier/2020/07/12/will-covid-19-hasten-the-demise-of-fossil-fuels/ [https://perma.cc/X7MD-8FXU].

^{139.} *See supra* notes 57–58, 64–65 and accompanying text (noting the fossil fuel industry had major profit losses in 2020 due to the COVID-19 pandemic).

^{143.} See Camilo Montoya-Galvez, New Report Details Trump Effort to Seize Thousands of Acres of Private Land for Border Wall, CBS NEWS (Nov. 24, 2020, 7:15 AM), https://www.cbsnews.com/news/trump-border-wall-plans-private-land-seizure/ [https://perma.cc/4KRT-KWJ5].

approximately 5,275 acres of private land to build the wall through "fee simple" acquisitions—i.e. eminent domain—as of July 2020.¹⁴⁵ Thus, President Biden's use of eminent domain to address the climate crisis would reflect a continuation of similar policies from Republican predecessors aimed at disaster prevention and economic protection.¹⁴⁶

Federal eminent domain may risk overbreadth in the environmental arena because the meaning of "public use" is not altogether clear with respect to who should benefit from a taking, how they should benefit, and to what extent.¹⁴⁷ Beyond the government's use of eminent domain to designate national parks and protected lands, there is no clear-cut precedent for President Biden to engage in takings that further environmental policies or amount to the total acquisition of an industry.¹⁴⁸ There may also be a federalism question concerning whether the federal government can use eminent domain to acquire property originally allocated for use under state eminent domain laws.¹⁴⁹ In Eminent Domain as Climate Policy, Professor Alexandra B. Klass outlines how states provide eminent domain rights for fossil fuel projects and argues that a transition to clean energy should happen through eminent domain at the state level.¹⁵⁰ However, Professor Klass goes on to say that there are no state-level clean energy laws that curb the development of new projects, and this leaves open a potential avenue for federal intervention or, if not total control, state and federal collaboration.¹⁵¹ While there is no federal eminent domain power to build oil pipelines, there is clear federal power (under the Fifth

On January 8, 2019, conservative blogger and radio host Erick Erickson tweeted, "If the President declares a national emergency and starts using eminent domain and reprogrammed dollars to build a wall, it is only a matter of time before a progressive President declares climate change a national emergency and uses eminent domain to shutter coal plants, etc." The tweet received over 10,000 favorites and over 2,400 retweets before it was deleted one week later. One can only conjecture his reason for deleting it—maybe he realized he was giving his opposition some ammunition.

- 150. Id. at 49, 51-52, 57-59, 72-77, 79-80.
- 151. Id. at 57-58.

^{145.} *See generally* U.S. GOV'T ACCOUNTABILITY OFF., GAO-21-114, SOUTHWEST BORDER: INFORMATION ON FEDERAL AGENCIES' PROCESS FOR ACQUIRING PRIVATE LAND FOR BARRIERS (2020).

^{146.} Eisenberg, *supra* note 20.

See id.

^{147.} See id.

^{148.} See History of the Federal Use of Eminent Domain, supra note 111.

See Alexandra B. Klass, Eminent Domain Law as Climate Policy, 2020 WIS. L. REV. 49, 58–60 (2020).

Amendment's Takings Clause, *Berman*, and *Kelo*) to acquire property that causes detrimental effects on the surrounding community, and repurpose it in furtherance of a public use.¹⁵² There may also be authority for expansion of federal power under § 1222 of the Energy Policy Act of 2005.¹⁵³ This law allows the Secretary of Energy to authorize construction of new hydroelectric power facilities in any state being served by the Southwestern or Western Area Power Administrations, which provide electricity to a cumulative coverage area of more than one million square miles.¹⁵⁴ Beyond hydroelectric power, Klass says that Congress has the power to extend federal eminent domain for energy and infrastructure projects in the national interest, even where state law may pose a barrier.¹⁵⁵

Overall, a federal acquisition and repurposing of nonrenewable energy facilities through eminent domain may allow President Biden to "[e]nsur[e] that all U.S. government installations, buildings, and facilities are more efficient and climate-ready," and "harness[] the purchasing power and supply chains to drive innovation."¹⁵⁶ Rather than relying on polluters to self-regulate, eminent domain may help propel the United States toward President Biden's 2050 benchmark by providing a clear "enforcement mechanism" for net-zero emissions.¹⁵⁷ There is likely enumerated federal power to utilize eminent domain in furtherance of *The Biden Plan*.¹⁵⁸ President Biden may also justify eminent domain as an implied power of federal intervention, by framing his plan as an action in times of crisis, similar to former President Trump's use of eminent domain to build a border wall under

153. See 42 U.S.C. § 16421(a) (2018).

- 155. See Klass, supra note 149, at 59.
- 156. The Biden Plan, supra note 1.
- 157. Id.
- 158. See supra notes 111–15 and accompanying text.

^{152.} Berman v. Parker, 348 U.S. 26, 28 (1954); Kelo v. City of New London, 545 U.S. 469, 484 (2005). The Fifth Amendment's provision of takings "for public use" has often been used for federal purposes of environmental restoration, providing a precedent for its use in the climate context. *See, e.g., History of the Federal Use of Eminent Domain, supra* note 111 ("Condemnation cases like that against the Gettysburg Railroad Company exemplify another use for eminent domain: establishing parks and setting aside open space for future generations, preserving places of historic interest and remarkable natural beauty, and protecting environmentally sensitive areas.").

^{154.} Id. § 16421(a); see also Facts About WAPA, W. AREA POWER ADMIN., https://www.wapa.gov/newsroom/FactSheets/Pages/about.aspx [https://perma.cc/TJ2D-6RR3] (Dec. 28, 2020) (discussing WAPA's service area which covers 1.3 million square miles with hydroelectric power and provides wholesale power to consumers in 15 western states).

the rationale of national security.¹⁵⁹ Furthermore, President Biden need not use eminent domain alone; he may choose to combine it with buybacks, federal regulatory takings, or both, to meet his 2050 benchmark.¹⁶⁰

Eminent domain is the most aggressive approach to federal acquisitions, and President Biden should carefully consider its drawbacks with respect to environmental justice, equity, federalism, and overall pushback from the fossil fuel industry.¹⁶¹ President Biden's team understands that it is critical to prioritize disproportionately impacted populations in environmental policies, and The Biden Plan enumerates goals to reach that end.¹⁶² Ultimately, carbon pollution creates substantial detriments to quality of life, so a careful eminent domain framework for eliminating this environmentally and socioeconomically costly use may aid everyone, including impacted communities for whom emissions present the greatest risks.¹⁶³

V. CONCLUSION AND RECOMMENDATIONS TO URGE FEDERAL LAND ACQUISITIONS

This Comment presented three potential routes for President Biden to acquire nonrenewable, fossil fuel energy sites in furtherance of his national decarbonization goals.¹⁶⁴ *The Biden Plan* is conducive to incorporating federal land acquisition approaches into his 100% clean energy economy framework. Moving forward, President Biden must materialize his goals and address carbon pollution through unambiguous federal actions that will persist beyond his time in office. The three outlined approaches for federal acquisitions include a federal buyback approach;¹⁶⁵ a federal regulatory takings approach;¹⁶⁶ and a federal eminent domain approach.¹⁶⁷ Of the approaches, a buyback

^{159.} See Eisenberg, supra note 20; see also Dickinson, supra note 144, at 171 ("Indeed, a major national infrastructure project that extends thousands of miles will . . . surely culminat[e] in the use of the federal eminent domain power if landowners refuse to negotiate the sale of their land.").

^{160.} See supra notes 52–110 and accompanying text.

^{161.} See supra notes 116–36, 147–55 and accompanying text.

^{162.} President Biden must do more than promise to aid disproportionately impacted communities. *See The Biden Plan, supra* note 1 (The plan enumerates—as a major goal—the need to "[s]tand up to the abuse of power by polluters who disproportionately harm communities of color and low-income communities.").

^{163.} See IPCC 2014, supra note 15, at 558.

^{164.} See supra Part IV.

^{165.} See discussion supra Section IV.A.

^{166.} See discussion supra Section IV.B.

^{167.} See discussion supra Section IV.C.

would likely be costliest.¹⁶⁸ This approach allows the government to freely negotiate with the fossil fuel industry. However, its success is contingent on fossil fuel lessees agreeing to the government's offers.¹⁶⁹ Alternatively, a regulatory takings approach would use established legislative processes to achieve clean energy.¹⁷⁰ It may also save the government money because it would not require the sale of energy leases. However, President Biden's administration could still face exorbitant litigation fees and time spent defending against the fossil fuel industry under this approach.¹⁷¹ Finally, a federal eminent domain approach may be justifiable as an act made pursuant to a national climate emergency.¹⁷² This approach is subject to the costs of "just compensation" and market value, so it may provide a balance of desirability and cost effectiveness.¹⁷³ However, President Biden would face critics arguing that this is a heavy-handed approach and a violation of state property rights.¹⁷⁴ All three approaches would require extensive preparation to ensure that they do not encroach on state or private property rights. But, President Biden may effectively balance the political, social, and economic benefits and drawbacks of each approach through a combination of the three.

Finally, the concept of fairness in the context of federal land acquisitions is complicated. The federal government should argue in favor of the public good, for which there is no obvious definition; the fossil fuel industry will argue in favor of profit margins, and the states will argue in favor of their sovereignty over land rights. Yet, fairness and equity in the climate change context means promulgating policies to devalue carbon emissions that damage peoples' lives and livelihoods.¹⁷⁵ Not everyone may be willing to engage in a clean energy transition, even if it would ultimately benefit their quality of life.¹⁷⁶ However, President Biden has three powerful tools at his disposal to use independently or combined. As President Biden continues his time in office, he must balance the competing considerations of his administration, corporate interests, the American people, and the environment, for all of whom an idleness toward clean energy would be the greatest failure of all.

^{168.} See supra notes 75–78 and accompanying text.

^{169.} See supra notes 60-67 and accompanying text.

^{170.} See supra notes 85–92, 97–99 and accompanying text.

^{171.} See supra notes 109–10 and accompanying text.

^{172.} See Burke et al., supra note 131.

^{173.} See Stone, supra note 99, at 147, 148.

^{174.} See generally Klass, supra note 149.

^{175.} See Beideman, supra note 125, at 274.

^{176.} See Lederman, supra note 41.