# Climate Change and Eminent Domain: Using the Takings Clause to Avert a Climate Crisis


## *By Matthew Carson, Los Medanos College*
## *Mentors: Ryan Hiscocks and Jennifer Saito*



## Acknowledgements

The author wishes to acknowledge Professors Ryan Hiscocks and Jennifer Saito for their encouragement throughout this process and the librarians at Los Medanos College for helping him locate research.



## Abstract

We are facing a global warming crisis. For years policymakers and academics have proposed a number of different possibilities to stave off the destruction of Earth. In spite of this, very little has been achieved. Large-scale interventions are arguably necessary for the US government to meaningfully combat global warming. This paper explores the possibility and constitutionality of discontinuing fossil fuel extraction and production through the acquisition of private fossil-fuel companies or their land by means of the governmental right to seize private property known as eminent domain.


## Introduction

Economic growth and lifestyle changes since the industrial revolution have led to unprecedented increases in greenhouse gas emissions and climatic warming levels[1]. Since at least the 1950s, anthropogenic greenhouse gas emissions have increased to the highest in history[2], with the last 30-year period recorded as the warmest in the last 1400 years[3]. About 40 percent of those emissions remain in the atmosphere, and the ocean has absorbed about 30 percent, leading to ocean acidification; plants or soil have absorbed the rest of the emissions[4].

Human activity is causing today's climate change. According to the Intergovernmental Panel on Climate Change (IPCC): "Emissions of CO2 from fossil fuel combustion and industrial processes contributed about 78% of the total [greenhouse gas] emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010."[5] It is also extremely likely[6] "that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in [greenhouse gas] concentrations and other anthropogenic forcings" combined[7], leading to surface temperature increases on every continent except Antarctica, the "retreat of glaciers since the 1960s,…the increased surface melting of the Greenland ice sheet since 1993,…and Arctic sea-ice loss since 1979."[8]

Researchers have estimated that global warming is responsible for approximately 150,000 deaths per year worldwide, and that number may double by 2030[9]. Indeed, if the temperature rises another 1.5–2°C, places

---

[1] Dutch, "Anthropogenic Climate Change."
[2] IPCC, "Summary for Policymakers," 2.
[3] IPCC, "Summary for Policymakers," 2.
[4] IPCC, 4.
[5] IPCC, 5.
[6] The IPCC term "extremely likely" denotes a 95–100% probability.
[7] IPCC, "Summary for Policymakers," 5.
[8] IPCC, 5.
[9] World Health Organization, "Climate Change"; Scientific American, "The Impact of Global Warming."

such as China may experience tens of thousands of additional deaths per year, especially in densely populated urban areas[10]. Additionally, Dengue, a mosquito-borne virus, is expected to affect more people in the coming years because of global warming. As of this writing, "Dengue causes the greatest human disease burden of any arbovirus, with an estimated 10,000 deaths and 100 million symptomatic infections per year."[11] As the disease's territory expands with global warming, more people are likely to be at risk. By 2080, the population at risk of contracting dengue is expected to increase by 2.25 billion from 2015 levels[12]. In addition, changes in temperature and rainfall patterns may detrimentally affect food production patterns, increasing rates of malnutrition and diminishing the health of those affected. Extreme weather events could detrimentally affect crop production and both livestock and fisheries may become more vulnerable to disease[13].

There is clearly a global warming crisis. Recent proposals, such as Alexandria Ocasio-Cortez's Green New Deal (GND), have set a goal of reducing greenhouse gas emissions from human sources by 40–60 percent from 2010 levels by no later than 2030, and reaching net-zero emissions by 2050[14]. Recent articles have suggested the nationalization of the fossil fuel industries as one possible intervention[15], and Peter Gowan has suggested the possibility of using eminent domain to achieve this end[16]. The desired outcome would be to eventually decommission petroleum refineries and other facilities that process fossil-fuels once they are nationalized.

## The History of Eminent Domain and The Public Use Doctrine

Eminent domain refers to the right for the government (at any level) to seize property form a private owner. Although the US Constitution does not expressly provide this right, it is presumed to exist through various theories. One such theory holds that the Constitution does not create the power of eminent domain, but instead it is an "inherent power of the sovereignty" or the inherent right of the government to "act[ ] in the interest of the whole public, to force the owner of the property to sell the same to the public, *from whom the title originally came, and subject to whose needs it is always held* [emphasis added]," and a necessary power to preserve the state and "the growth and welfare of the community."[17] According to this perspective, the government may exercise its eminent domain power as it sees proper.

However, the Takings Clause of the Fifth Amendment places a restriction on governmental eminent domain powers, precluding the government from seizing private property if that property is not taken for "public use" or if "just compensation" is not provided[18]. Over the years, the US Supreme Court has considerably expanded what qualifies as "public use." *Berman v. Par*ker[19] was one of the most significant expansions of the public use doctrine, and it significantly narrowed the scope of judicial review[20]. The *Berman* court allowed the transfer of condemned property (property acquired through eminent domain power) to private developers because it was deemed to result in a "general public advantage."[21] In enacting the District of Columbia Redevelopment Act of 1945, Congress determined that the condemnation and redevelopment of substandard housing and slum areas of Washington, D.C. were required because those areas were "injurious to the health, safety, morals,

---

[10] Wang et al., "Tens of Thousands Additional Deaths Annually in Cities of China between 1.5 °C and 2.0 °C Warming," 3.
[11] Messina et al., "The Current and Future Global Distribution and Population at Risk of Dengue," 1508.
[12] Messina et al., 1510.
[13] US EPA, "Climate Impacts on Agriculture and Food Supply."
[14] Ocasio-Cortez, "H.Res.109 - 116th Congress (2019-2020)," 3.
[15] Aronoff, "Is Nationalization an Answer to Climate Change?"; Skandier, "Nationalize the Fossil Fuel Industry."
[16] Gowan, "A Plan to Nationalize Fossil-Fuel Companies."
[17] Havran, "Eminent Domain and the Police Power," 380.
[18] "[N]or shall private property be taken for public use, without just compensation." U.S. CONST., amend V.
[19] Berman v. Parker, 348 U.S. 26.
[20] Lewis, "Hawaii Housing Authority v. Midkiff," 576.
[21] Lewis, 576.

and welfare of the public."[22] In a decision that overturned previous rulings forbidding the usage of eminent domain power to transfer to a private party, the US Supreme Court reasoned that rectifying those problems qualified as a public purpose, even if the property was ultimately transferred to a private party; therefore, the Act was deemed constitutional.

*Hawaii Housing Authority v. Midkiff*[23] built on the Berman court's reasoning, allowing for eminent domain powers to be used to break up the concentration of private land ownership by condemning the land and then offering it for sale to its current tenant or occupant[24]. The court reiterated that it follows a two-prong test in determining the constitutionality of an eminent domain condemnation: it must have a public use or serve a legitimate public purpose, and the exercise of eminent domain power must have a rational relationship with the possible public purpose. In doing this, the court emphasized that its scope of judicial review in such matters is extremely narrow.

The most recent and perhaps most controversial eminent domain case was that of *Kelo v. City of New London*[25]. While much of the decision has no direct bearing on the question concerning the use of eminent domain to end fossil-fuel extraction[26], it did reaffirm its previous rulings. The *Kelo* court continued its very broad interpretation and refused to issue a bright-line public use rule[27]. Instead, the court opined that "Without exception, our cases have defined [public use] broadly, reflecting our longstanding policy of deference to legislative judgments in this field,"[28] indicating that the court intends to continue its rational basis level of review.

## Using Eminent Domain to Avert a Climate Crisis

With the broad interpretation of what constitutes a "public use," it is possible to envision how the government might use eminent domain powers to fight global warming and avert a climate crisis. To this end, the federal government could nationalize the fossil-fuel industry by purchasing with its eminent domain powers a controlling stake in every major fossil-fuel firm in the US[29]. This approach would allow the quick transition from fossil fuels to renewable energy that might take much longer if the US offered market-based incentives instead. By purchasing a majority stake, the government could then announce its intention to both stop generating a profit and force a compulsory buyback using its eminent domain power in the future; this would force shareholders to either sell their remaining shares as soon as possible or be left holding an asset worth far less than what they paid[30]. A similar phenomenon occurred when the Justice Department announced that they would phase out private prisons: stock prices fell sharply as investors scrambled to prevent further losses[31].

Nonetheless, this is a largely uncharted judicial territory. There are no federal appellate or Supreme Court cases to provide precedence directly related to this question, so it is unclear exactly how the court would rule. In the past, the court has struck down attempts to nationalize industry, but not because it violated the Fifth Amendment's Takings Clause. For example, in *Youngstown Sheet & Tube v. Sawyer*[32], the Supreme Court heard a case in which President Truman nationalized the steel industry via executive order. During this time, the United States was fighting the Korean War. Simultaneously, there were ongoing labor disputes between

---

[22] Lewis, 571.
[23] Hawaii Housing Auth. v. Midkiff, 467 U.S. 229.
[24] Lewis, "Hawaii Housing Authority v. Midkiff," 574–76.
[25] Kelo v. City of New London, 545 U.S. 469.
[26] *Kelo* allowed a municipal government to use its eminent domain powers to transfer private property to Pfizer, a pharmaceutical company, because it was anticipated to stimulate economic growth within the city.
[27] Kelo v. City of New London, 545 U.S. 469 at 486–87.
[28] Kelo v. City of New London, 545 U.S. 469 at 480.
[29] Gowan, "A Plan to Nationalize Fossil-Fuel Companies."
[30] Gowan.
[31] Gowan; Ingraham, "Private Prison Stocks Collapse."
[32] Youngstown Sheet & Tube Company v. Sawyer, 343 U.S.

mill operators and the labor union representing the mill workers. Negotiations fell apart, but because the steel industry was of crucial importance to the war effort, Truman ordered the Secretary of Commerce to seize and nationalize the steel mills so they could continue operation[33]. The steel mill owners claimed the President's actions were "not authorized by an act of Congress or by any constitutional provisions," and quickly brought suit[34]. When the Supreme Court heard the case, they agreed: the seizure was unconstitutional because the President was acting without congressional authority, which violated the separation of powers[35].

While this does not answer the Fifth Amendment question, it does raise some other issues with regard to how the government could carry out the acquisition. Based on *Youngstown*, Congress would have to pass a bill either expressly ordering the nationalization of the fossil-fuel companies or create some mechanism that allows the President to carry out the nationalization. That is to say, that absent some mechanism created by Congress, the President likely could not simply order fossil fuel nationalization using eminent domain powers via executive order. However, there is little doubt that Congress could authorize such nationalization.

Nevertheless, there is another approach to nationalization that could be instituted via executive order. One option focuses on acquiring fossil-fuel reserves through eminent domain to "keep it in the ground." As Aaron Eisenberg observed in *The Trouble*, there is a long-standing history of using eminent domain power to protect "environmentally sensitive areas" using an existing legal mechanism set forth in the Antiquities Act of 1906[36]. According to the Act,

> *the President of the United States is authorized to…to declare…historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land.*[37]

Furthermore,

> *When such objects are situated upon a tract covered by a bona fide unperfected claim or held in private ownership, the tract, or so much thereof as may be necessary for the proper care and management of the object, may be relinquished to the Government, and the Secretary of the Interior is hereby authorized to accept the relinquishment of such tracts in [sic] behalf of the Government of the United States.*[38]

The first quoted section of the Act allows the President to declare objects of "scientific interest" as national monuments, and because global warming is a phenomenon of great scientific interest, this opens up the possibility of declaring oilfields and other sites with large fossil-fuel reserves as national monuments. The latter quote from the Act, in indicating the Secretary of the Interior's authorization to accept the relinquishment of privately-owned tracts, implicates eminent domain powers. This establishes an important nexus between a law designed to protect areas of scientific interest, implicating the public use doctrine, and the government's power to acquire those areas if they are private property, implicating a form of eminent domain power.

Moreover, using the Antiquities Act as a mechanism to forbid fossil-fuel extraction would obviate the potential separation of powers pitfall. The reason that the Supreme Court struck down the nationalization of the steel industry as unconstitutional was because Congress had not authorized the President to use the state's eminent domain powers in such a way. That is, there was no statutory scheme or mechanism for the President

---

[33] Hanna, "A History of Nationalization in the United States," 23.
[34] Youngstown Sheet & Tube Company v. Sawyer, 343 U.S. at 583–84.
[35] Hanna, "A History of Nationalization in the United States," 24.
[36] Eisenberg, "Embracing Eminent Domain for the Sake of the Planet"; United States Department of Justice, "History Of The Federal Use Of Eminent Domain"; Antiquities Act of 1906.
[37] Antiquities Act of 1906, sec. 431.
[38] Antiquities Act of 1906, sec. 431.

to carry out such an acquisition. However, using the Antiquities Act avoids this pitfall, and does not run afoul of the ruling in *Youngstown* because Congress has explicitly authorized the President to act in such a way.

In addition, the court is "severely limited" in its ability to review national monument declarations made via the Antiquities Act. *Tulare Co. v. Bush*[39] made this quite clear. In that case, President Clinton, acting under the authority of the Antiquities Act, designated Giant Sequoia National Monument, which comprised "327,769 acres of land located within the Sequoia National Forest in southern central California," a national monument pursuant to the Act[40]. Tulare County, along with other groups and individuals with interests in the use of the land within the boundaries of the Monument sought declaratory relief from the court, alleging, *inter alia*, that: the proclamation did not identify objects of historic or scientific with reasonable specificity; the proclamation designated non-qualifying objects as the basis of the monument; and the proclamation violates the Antiquities Act because "it is not confined to the smallest area compatible."[41] However, the district court was not persuaded and found that "The Antiquities Act sets forth no means for reviewing a President's proclamation other than specifying that a President has discretion in his or her use of the Act."[42] It further reiterated that, while national monument designations made pursuant to the Antiquities Act are reviewable, "Courts are severely limited in their review of congressionally authorized presidential actions," and:

> *It has long been held that where Congress has authorized a public officer to take some specified legislative action[,] when in his judgment that action is necessary or appropriate to carry out the policy of Congress, the judgment of the officer as to the existence of the facts calling for that action is not subject to review.*[43]

Scholar Brent J. Hartman has further observed that the President leaves the court powerless to review his declaration simply by including the words "scientific" or "historic" and "smallest compatible" in the proclamation[44]. Indeed, there have been six challenges to the use of the Antiquities Act, and none have been successful[45]. Moreover, the Antiquities Act does not define the few limitations it does impose (i.e., the "smallest area compatible" and the "historic or scientific interest" provisions), further making challenges to Presidential proclamations difficult[46].

In addition, case law shows definitively that the use of eminent domain to address environmental concerns comes within the public use doctrine. Indeed, in cases such as *U.S. v. Eighty Acres of Land*, the District Court ruled that the government, acting in accordance with the Emergency Relief Appropriation Act of 1935, could exercise its eminent domain powers for environmental purposes. The Act allocated 350 million dollars toward "sanitation, prevention of soil erosion, prevention of stream pollution, sea-coast erosion, reforestation, forestation, flood control, rivers and harbors and miscellaneous projects."[47] The government sought to condemn (exercise its eminent domain power) forestland around a stream to build a dam and reforest the surrounding areas as flood and soil erosion prevention measures. The landowners sued, alleging that the purposes for condemnation of their land did not constitute a public use. In addressing this question, the court averred, "That reforestation, forestation, prevention of forest fires, flood control and prevention of soil erosion are public purposes it would seem no one can reasonably doubt."[48] The court continued by indicating that

---

[39] Tulare County v. Bush, 185 F. Supp. 2d 18.
[40] Tulare County v. Bush, 185 F. Supp. 2d 18 at 21.
[41] Tulare County v. Bush, 185 F. Supp. 2d 18 at 22.
[42] Tulare County v. Bush, 185 F. Supp. 2d 18 at 24.
[43] Tulare County v. Bush, 185 F. Supp. 2d 18 at 24, citing United States v. George S. Bush & Co., 310 U.S. 371 at 380.
[44] Hartman, "Extending the Scope of the Antiquities Act," 163.
45 Tulare County v. Bush, 185 F. Supp. 2d 18 at 30, n. 1.
[46] Hartman, "Extending the Scope of the Antiquities Act," 164.
[47] Emergency Relief Appropriation Act of 1935, sec. 115 (h).
[48] United States v. Eighty Acres of Land, 26 F. Supp. 315 at 320.

because great floods and dust storms have destroyed lives, property, and led to soil erosion across the country, the prevention of them have become "national objectives."[49]

Because the language of the *Eighty Acres* court is broadly supportive of including the prevention of environmental hazards within the scope of the public use doctrine, that same reasoning could be extrapolated to claims that nationalization of fossil-fuel industries using eminent domain power meets the public use requirement of the Fifth Amendment and is therefore constitutional.

## Direct and Inverse Condemnation

There are two significant types of Takings condemnations. Direct condemnation is when the government intentionally and explicitly acknowledges that it is using its eminent domain power to take private property[50]. With these cases, it is clear that a taking has occurred, and the only grounds on which the owner could challenge the taking is by suing to claim that the taking was not for the public good or that the government did not pay just compensation. Inverse condemnations, also called regulatory takings, are different. In an inverse condemnation, an owner-plaintiff sues the government alleging that some regulation or restriction imposed rises to the level of a taking because it has devalued the property or made it worthless. In these cases, the court must first determine if a taking did in fact occur. If the regulation or government action rises to the level of a taking, then the plaintiff is entitled to just compensation; if not, the case is dismissed. There is another significant difference between direct condemnation and inverse condemnation. With inverse condemnation, the government wants to avoid their actions being considered a taking, while with direct condemnation, the government is very clear that it plans to use its eminent domain power.

The President could use the Antiquities Act's mechanism for declaring national monuments without directing implicating the Takings Clause. However, it could likely implicate a regulatory taking because of the stringent environmental limits such a designation places on monuments. Regulatory takings jurisprudence is guided by two legal tests. The Lucas rule, as articulated in *Lucas v. South Carolina Coastal Council*[51], established that a regulation is a per se taking "when the owner of a real property has been called upon to sacrifice all economically beneficial uses in the name of the common good, that is, to leave his property economically idle."[52] That is, if the owner-plaintiff can show that all value is removed from the land through a regulation, then he or she is entitled to full compensation, regardless of the "importance of the governmental objective or to other factors relied upon in previous cases."[53] The bar to establish a Lucas per se taking is extremely high, however. The land must be completely stripped of its productive and economic uses[54]. If a case meets this standard, there is no need for further analysis, and the government must pay the private owner for a taking.

If a case fails to meet the bar for a Lucas per se taking, then the balancing test found in *Penn Central Transportation Co. v. New York City*[55] is invoked, which balances the state's interests against interference with a property owner's rights. Nevertheless, any attempt for a state to ban fossil-fuel extraction by declaring national monuments pursuant to the Antiquities Act is likely to come within the Lucas per se taking rule because it will remove any economic use that the owner was expecting of the property. In this context, it would seem that there is no way for the government to avoid paying the fossil-fuel companies for their land. The government would either have to pay when directly acquiring the land through a direct taking, or they could regulate the land through national monument declarations and face the potential of an indirect condemnation

---

[49] United States v. Eighty Acres of Land, 26 F. Supp. 315 at 320.
[50] Meltz, "Takings Law Today: A Primer for the Perplexed," 312.
[51] Lucas v. South Carolina Coast Council, 505 U.S. 1003.
[52] Lucas v. South Carolina Coast Council, 505 U.S. 1003 at 1019.
[53] Margolies, "Fossil Fuel Extraction Bans," 90; Brooks, "Regulatory Takings in the Oil, Gas and Mineral Context," 62–63.
[54] Margolies, "Fossil Fuel Extraction Bans," 90.
[55] Penn Central Transportation Company v. New York City, 438 U.S. 104.

case from the owners. The choice of which approach to take comes down to what mechanisms are available to the current administration. The Antiquities Act's national monument designations are an existing framework to keep fossil fuels in the ground, and the president can act unilaterally to make such designations. Alternatively, if the ideological composition of Congress were congenial to the idea of ending the extraction of fossil fuels to save the planet, they could authorize an eminent domain action legislatively, which would be much more securely in place than a monument designation by executive order.

## Ethics and Levels of Scrutiny

Using eminent domain to end fossil-fuel extraction or acquire the fossil-fuel industry is constitutional for the reasons already discussed. Although there was quite a bit of outrage after the *Kelo* decision, opponents of the expansion of eminent domain powers have little precedent to rely on to establish their argument. One argument that could gain traction, however, is that the court should use an intermediate level of scrutiny instead of the rational basis test they now use to evaluate the public use requirement of the Fifth Amendment. These arguments are strong and well-reasoned. For instance, lawyer Micah Elazar argues that the court could consider an intermediate level of scrutiny he calls "cost-benefit rationality."[56] To pass this test, the public good served by an eminent domain action must outweigh the social costs. The simplest application of this test would simply weigh

> *the intended public benefits against the burdens that a taking would impose on the dispossessed party and require, at the least, that the benefits to the public not be disproportionate to the harms imposed on the party whose property is taken.*[57]

Although no court has adopted this as of this writing, this approach offers some important ethical considerations that thus far have been left out of takings jurisprudence. In employing such a test, the court could offer an ethically rigorous justification and assure that the public use doctrine is interpreted and applied judiciously. It is also quite likely, given the severity of the global warming crisis and the potential for life and property loss, that the court would uphold using eminent domain powers to avert a global warming crisis as constitutional even if this level of scrutiny were utilized. In this way, the court could, if a case such as what has been described makes it before them, both uphold the taking as constitutional to avoid furthering global warming and give an ethically sound justification.

## Conclusion

With global warming threatening to destroy property and lives, there is little doubt that something drastic must happen. Activists and politicians have been talking about the problem for years without significantly making an impact. Global warming poses a grave threat, and using the state's eminent domain powers is a viable option for staving off the crisis. Takings Clause precedence supports this approach as constitutional because it certainly meets the public use requirement put forth in the Fifth Amendment, and the Antiquities Act offers a ready-made framework that the President could use to initiate this process quickly.

---

[56] Elazar, "'Public Use' and the Justification of Takings," 252.

[57] Elazar, 273.

# *Bibliography*


Antiquities Act of 1906, 16 U.S.C. § 431-433 (1906).

Aronoff, Kate. “Is Nationalization an Answer to Climate Change?” The Intercept (blog), September 8, 2018. https://theintercept.com/2018/09/08/jeremy-corbyn-labour-climate-change/.

Berman v. Parker, 348 U.S. 26 (U.S. Supreme Court 1954).

Brooks, David K. “Regulatory Takings in the Oil, Gas and Mineral Context.” Energy & Min. L. Inst. 34, no. 3 (2013): 57–121.

Dutch, Steven I. “Anthropogenic Climate Change.” In Salem Press Encyclopedia of Science. Salem Press, 2019. https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=ers&AN=89475491&site=eds-live&custid=s8427273.

Eisenberg, Aaron. “Embracing Eminent Domain for the Sake of the Planet.” The Trouble, February 25, 2019. https://www.the-trouble.com/content/2019/2/25/embracing-eminent-domain-for-the-sake-of-the-planet.

Elazar, Micah. “‘Public Use’ and the Justification of Takings.” University of Pennsylvania Journal of Constitutional Law 7, no. 1 (September 1, 2004): 249.

Emergency Relief Appropriation Act of 1935, 49 Stat. § 115 (n.d.).

Gowan, Peter. “A Plan to Nationalize Fossil-Fuel Companies.” Jacobin, March 26, 2018. https://jacobinmag.com/2018/03/nationalize-fossil-fuel-companies-climate-change.

Hanna, Thomas M. “A History of Nationalization in the United States: 1917-2009.” The Next System Project, November 4, 2019. https://thenextsystem.org/sites/default/files/2019-09/A_History_of_Nationalization_in_the_US-Hanna-NSP.pdf.

Hartman, Brent J. “Extending the Scope of the Antiquities Act.” Public Land & Resources Law Review 32 (July 2011): 153–91.

Havran, T. “Eminent Domain and the Police Power.” Notre Dame Law Review 5, no. 7 (April 1, 1930): 380–84.

Hawaii Housing Auth. v. Midkiff, 467 U.S. 229 (U.S. Supreme Court 1984).

Ingraham, Christopher. “Private Prison Stocks Collapse after Justice Department Promises to Phase Them Out.” Washington Post, August 18, 2016. https://www.washingtonpost.com/news/wonk/wp/2016/08/18/private-prison-stocks-collapse-after-justice-department-promises-to-phase-them-out/.

IPCC. “Summary for Policymakers.” Edited by Core Writing Team, R.K. Pachauri, and L. A. Meyer. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change AR5 (2014): 1–31.

Kelo v. City of New London, 545 U.S. 469 (U.S. Supreme Court 2005).

Lewis, Gail. “Hawaii Housing Authority v. Midkiff: The Public Use Requirement in Eminent Domain.” Environmental Law 15, no. 3 (1985): 565–91.

Lucas v. South Carolina Coast Council, 505 U.S. 1003 1003 (U.S. Supreme Court 1992).

Margolies, Joseph. “Fossil Fuel Extraction Bans: A Takings Analysis.” Environmental Claims Journal 30, no. 1 (January 2, 2018): 87–106. https://doi.org/10.1080/10406026.2017.1406231.

Meltz, Robert. “Takings Law Today: A Primer for the Perplexed.” Ecology Law Quarterly 34, no. 2 (2007): 307–80.

Messina, Jane P., Oliver J. Brady, Nick Golding, Moritz U. G. Kraemer, G. R. William Wint, Sarah E. Ray, David M. Pigott, et al. “The Current and Future Global Distribution and Population at Risk of Dengue.” Nature Microbiology 4, no. 9 (September 1, 2019): 1508–15. https://doi.org/10.1038/s41564-019-0476-8.

Ocasio-Cortez, Alexandria. “H.Res.109 - 116th Congress (2019-2020): Recognizing the Duty of the Federal Government to Create a Green New Deal.” Webpage, February 12, 2019. https://www.congress.gov/bill/116th-congress/house-resolution/109/text.

Penn Central Transportation Company v. New York City, 438 U.S. 104 (U.S. Supreme Court 1978).

Scientific American. “The Impact of Global Warming on Human Fatality Rates.” Scientific American, June 17, 2009. https://www.scientificamerican.com/article/global-warming-and-health/.

Skandier, Carla. “Nationalize the Fossil Fuel Industry.” In These Times, November 17, 2017. http://inthesetimes.com/article/20700/nationalize-the-fossil-fuels-industry-carbon.

Tulare County v. Bush, 185 F. Supp. 2d 18 (United States District Court, District of Columbia 2001).

United States Department of Justice. “History Of the Federal Use of Eminent Domain.” Environment and Natural Resources Division, April 13, 2015. https://www.justice.gov/enrd/history-federal-use-eminent-domain.

United States v. Eighty Acres of Land, 26 F. Supp. 315 (District Court, E. D. Illinois 1939).

U.S. CONST. amend V (n.d.).

US EPA, OA. “Climate Impacts on Agriculture and Food Supply.” Overviews and Factsheets. US EPA, August 17, 2016. https://www.epa.gov/climateimpacts/climate-impacts-agriculture-and-food-supply.

Wang, Yanjun, Anqian Wang, Jianqing Zhai, Hui Tao, Tong Jiang, Buda Su, Jun Yang, et al. “Tens of Thousands Additional Deaths Annually in Cities of China between 1.5 °C and 2.0 °C Warming.” Nature Communications 10, no. 1 (August 6, 2019): 3376. https://doi.org/10.1038/s41467-019-11283-w.

World Health Organization. “Climate Change.” WHO. Accessed November 24, 2019. https://www.who.int/heli/risks/climate/climatechange/en/.

Youngstown Sheet & Tube Company v. Sawyer, 343 U.S. 579 (U.S. Supreme Court 1952).