FORWARD: CELEBRATING TEN YEARS OF JOULE

Steven Baicker-McKee

STUDENT ARTICLES

CLEANING UP THE CONFUSION: CLIMATE CHANGE LITIGATION AND PREEMPTION

Alexa Austin

THE APPLICATION OF ARTICLE I, § 27 OF THE PENNSYLVANIA CONSTITUTION, THE ENVIRONMENTAL RIGHTS AMENDMENT, TO MODERN CASES AND STATE LAND MANAGEMENT

Maegan Stump

THE SPS AGREEMENT AND CLIMATE CHANGE

Bander Almohammadi

DRESSED TO KILL: HOW THE LACK OF ENVIRONMENTAL REGULATIONS TAILORED TO THE FASHION INDUSTRY IS DESTROYING OUR PLANET

Meghann M. Principe
FORWARD: CELEBRATING TEN YEARS OF JOULE
Steven Baicker-McKee

STUDENT ARTICLES

CLEANING UP THE CONFUSION:
CLIMATE CHANGE LITIGATION AND PREEMPTION
Alexa Austin

THE APPLICATION OF ARTICLE I, § 27 OF THE PENNSYLVANIA
CONSTITUTION, THE ENVIRONMENTAL RIGHTS AMENDMENT,
TO MODERN CASES AND STATE LAND MANAGEMENT
Maegan Stump

THE SPS AGREEMENT AND CLIMATE CHANGE
Bander Almohammadi

DRESSED TO KILL: HOW THE LACK OF ENVIRONMENTAL REGULATIONS
TAILORED TO THE FASHION INDUSTRY IS DESTROYING OUR PLANET
Meghann M. Principe
FOREWORD
Celebrating Ten Years of Joule

Steven Baicker-McKee*

This 10th year of Joule presents an opportunity to reflect on the journal’s success in the context of the ever-changing landscape of energy and environmental issues arising locally and globally. Students interested in energy and environmental law formed Joule in 2012 as a traditional, printed journal. The first issue of Joule contained articles about water rights in the United States and protections for tenants who leased contaminated property under new EPA policy. At the time, the U.S. was just past the peak of the golden age of natural gas, and in particular shale gas. Developments in horizontal drilling had unlocked vast quantities of natural gas entrained in shale formations, including the Marcellus Shale in Western Pennsylvania. Natural gas was cleaner than coal, it had less resistance than nuclear, and renewables were only able to supply a small portion of our energy requirements. The price of natural gas had soared in the 2000s, and jobs in the field were plentiful.

In the ten years since the first edition of Joule, the evolving picture of energy and environmental concerns coupled with volatile political, regulatory, and legal environments have led Joule to cover a broad and complex array of topics. In addition, changes in how the journal’s audience prefers to receive and react to information, along with a desire to be more environmentally responsible, prompted a change in the format of Joule from a printed, bound journal to an online journal and blog. In this format, Joule’s writers and editors can address topics more nimbly and timely, while also inviting readers to contribute to the conversation—and save

---

*Duquesne University, Associate Professor of Law
trees in the process. The new format also reaches a broader audience—the blog posts are accessed around the world by interested people inside and outside the legal profession.

In the Journal’s first five years, because of the dominance of natural gas in the energy sector both nationally and in Western Pennsylvania, many of Joule’s articles and posts centered on issues related in some way to its extraction. For example in Volume 2 (2013), the high volume of lawsuits involving fracking prompted an article on the increasing use of mediation for resolving disputes over natural resources. Posts that year looked at issues like the anxieties prompted by Section 2.1 in Pennsylvania’s new oil and gas law (Act 13) that enabled forced pooling under certain leasing arrangements and public debate over the state’s decision to charge low impact fees rather than likely higher severance taxes in an effort to encourage industry growth. In Volume 3 (2015), articles addressed the property and privacy implications of the Pennsylvania Supreme Court’s rulings on Act 13 as well as a district court case, *Ely v. Cabot Oil and Gas Corp.*, that considered whether strict liability should attach to hydraulic fracking. Articles later examined a ruling on the ownership of pore space for the storage of extracted gas in Volume 4 (2016), and posts that year looked at a suit by the Sierra Club alleging that fracking was causing earthquakes, the growing number of bankruptcies in the oil and gas sectors, and whether additional regulation of methane gas was necessary or desirable. We took a close look at a Pennsylvania case, *Kennedy v. Consol Energy Inc.*, that involved a dispute over whether conveyance of coal rights also transferred the right to coalbed methane gas within the coal, or whether that right belonged to the owners of the oil and gas rights under the property.

Over our second five years, as the natural gas boom subsided and President Trump’s administration initiated dramatic changes in American energy policy and environmental regulation, however, Joule also shifted the focus of topics we covered. Blog posts beginning in
Spring, 2017 looked at the reversals to the Obama administration’s environmental and energy policies that Trump initiated in the first months of his term. This switch included approval of the Keystone XL Pipeline, intended to carry oil from the tar sands in Canada down to the Gulf of Mexico, despite ongoing opposition by environmental groups and Native American groups. A complementary post in January, 2021 contains a discussion of last-minute rollbacks by the departing Trump administration and the re-reversals to environmental and energy policies by the incoming Biden administration, returning to policies more similar to those put in place during the Obama presidency. February, 2021 includes a look at a specific seesaw change—Biden’s decision to revoke the permit for the Keystone XL pipeline. It will be interesting to see what changes come in early 2025; whatever they are, Joule will review them.

In recent years, concerns about pollution have received renewed attention from the public, regulatory agencies, the courts, and this journal. In Volume 6 (2018), for example, we included two articles stemming from the nation’s shift from smaller, family-based farms to large commercial farms and the EPA’s ability under the Clean Water Act to regulate the resulting increased pollution that flowed into interstate waterways. We also examined cases concerning lead contamination of drinking water in Flint, Michigan (January, 2022) and closer to home in the city of Pittsburgh (January, 2018). Another post in January, 2022 examined a federal appeal of a case about who is liable for an environmental cleanup of contamination that occurred before the current owner acquired the property, concluding that the current owner is responsible, and signaling a need for care during prospective real estate deals.

Scientists’ alarm about greenhouse gases, in particular, has generated a sense of urgency about climate change among some parts of the public and government, while generating pushback from others who dispute the dangers. A post from September 2021 compares the “Green New
“Deal” championed by Rep. Ocasio-Cortez and other progressives with the “Green Real Deal,” offered by Rep. Matt Gaetz and a more conservative congressional faction. The limits on Pennsylvanians’ rights to clean water and air under the Pennsylvania Environmental Rights Amendment is explored in Volume 8 (2020), holding out a little hope for better control of emissions that contribute to climate change and threaten the health of Pennsylvanians. Perhaps most significantly, in Volume 9 (2022), Joule looked at a recently heard Supreme Court case in an article concerning West Virginia v. EPA, about whether EPA can regulate greenhouse gases from power plants. This case has potentially big impacts in this particular situation, but also for the ability of the EPA and other governmental agencies to make and enforce environmental rules going forward. The Court’s decision is pending, but this case also emphasizes the potential ability of the Supreme Court, which became entrenched as more conservative during the Trump presidency, to disrupt the goals of a presidential administration with a different political slant.

Joule’s electronic format has enabled prompt examination of issues related to current or unfolding events. The journal looked, for example, at the effects of the shift to working from home on air quality during the COVID pandemic, explored the variables, such as changes in driving habits and production, as well as the war in Ukraine, that have contributed to sharply rising energy costs, and covered some emerging legal theories, such as whether the land and wildlife have rights independent of human ownership.

Finally, despite evolving issues of concerns, Joule has been able to capture currents that endure over the years and shape the body of energy and environmental law. These themes include tension between policies and decisions that promote economic growth versus those that support environmental protection, as well as recurring disagreements about the ability of governmental
agencies to make, implement, and enforce regulations as opposed to control by other governmental branches and private enterprise.

In its first ten years, *Joule* has expanded and changed, becoming an important and useful resource for understanding energy and environmental law in Pennsylvania, the nation, and sometimes the rest of the world. We anticipate further growth of the journal in the coming decade, particularly given the rapid expansion of the science underpinning the fields, the shifting political and economic pressures, and the rights guaranteed by the Pennsylvania Environmental Rights Act. We thank our readers for your past—and, we hope, ongoing—attention to these fields critical to our shared futures. And we invite you to suggest new topics or directions of interest and to join the discussions of the varied and complex issues we explore.
Summary of the Confusion: Climate Change Litigation and Preemption

Alexa Austin*

I. Introduction

Climate change has been described as a “global emergency that goes beyond national borders.” Ninety-seven percent of scientists endorse the view that the current state of global warming is a direct result of human activity; namely the impact of urbanization and the burning of fossil fuels.³

Global warming is the long-term heating of Earth’s climate system.⁴ Since the pre-industrial period, scientists have estimated that human activities have increased Earth’s global average temperature by 1.8 degrees Fahrenheit.⁵ A famous 1998 illustration shows how global temperatures remained relatively flat before taking a sharp uptick.⁶ On the other hand, climate change is the long-term change in the average weather patterns that define Earth’s climate.⁷ Climate change is primarily caused by the burning of fossil-fuels, which emits greenhouse gases that are then trapped in the Earth’s atmosphere, raising Earth’s average surface temperature.⁸ According to the National Aeronautics and Space Administration (“NASA”), climate change has

---

* Candidate for J.D., May 2023, Duquesne University School of Law. B.A. in English, Minor in Business Administration, 2018, Saint Joseph’s University. I am eternally grateful to Professor April Milburn-Knizner, whose invaluable support, feedback, and guidance helped to focus my ideas and develop this Article.


⁵ Id.


⁷ NASA, supra note 4.

⁸ Id.
already impacted the environment through shrunken glaciers, melting ice, shifts in plant and animal ranges, loss of sea ice, accelerated rising sea levels, and intense heat waves.⁹

NASA predicts that there are already long-term impacts of global climate change that are happening in the United States and will continue to happen for years to come.¹⁰ Some of these changes include rise in temperatures, the lengthening of frost-free seasons which impact agriculture and ecosystems, changes in precipitation patterns, more droughts and heat waves, stronger hurricanes that cause more disruption, a rise in sea levels, and an ice-free Artic Ocean.¹¹ These changes are already happening throughout numerous regions in the U.S. and will continue based on current trends.¹²

Because of this global crisis, litigation in the U.S. over climate change has spiked over the last few years.¹³ The United Nations Environment Programme’s Global Climate Litigation Report, published in early 2021, noted that over the last three years climate cases have nearly doubled, with 1,200 cases filed in the United States alone.¹⁴ The report identified a growing number of plaintiffs that sought legal redress from private actors for the private actors alleged contribution to climate change.¹⁵ These private actor defendants are frequently oil and gas companies.¹⁶ While the United States Supreme Court has addressed certain climate change litigation on procedural

---

⁹ NASA, supra note 4.
¹¹ See Id.
¹² See Id.
¹⁴ Id.
¹⁵ Id.
¹⁶ See e.g., City of New York v. Chevron Corp., 993 F.3d 81 (2d Cir. 2021); Bd. of County Commissioners of Boulder County v. Suncor Energy (U.S.A.) Inc., 965 F.3d 792 (10th Cir. 2020); City of Oakland v. BP PLC, 960 F.3d 570 (9th Cir. 2020); County of San Mateo v. Chevron Corp., 960 F.3d 586 (9th Cir. 2020); Rhode Island v. Shell Oil Products Co., L.L.C., 979 F.3d 50 (1st Cir. 2020); City of Hoboken v. Exxon Mobil Corp., 20-CV-14243, 2021 WL 4077541 (D.N.J. Sept. 8, 2021); City of Annapolis, Maryland v. BP P.L.C., CV ELH-21-772, 2021 WL 2000469 (D. Md. May 19, 2021); City of New York v. BP P.L.C., 325 F. Supp. 3d 466 (S.D.N.Y. 2018).
grounds, it has not addressed whether state law tort claims against fossil fuel corporations are preempted by federal law,\textsuperscript{17} namely, the Clean Air Act (“CAA”).\textsuperscript{18} However, the Second Circuit recently found that the City of New York’s action against a large fossil fuel company was preempted by the CAA.\textsuperscript{19}

This Article aims to outline why fossil fuel companies sued under state law likely have a valid preemption defense. Specifically, this Article proffers that based on the purpose of the CAA, and the Supreme Court’s decisions in two seminal cases discussing the purpose of the CAA and the Environmental Protection Agency’s (“EPA”) role in CAA enforcement,\textsuperscript{20} federal law preempts state law causes of actions against fossil fuel companies for the impacts their fossil fuel emissions have on global climate change.

II. Overview of Federal Common Law and Displacement

Although there is no federal general common law,\textsuperscript{21} there remains limited areas of law in which federal common law exists because of the uniquely federal interests.\textsuperscript{22} When Congress is silent on an issue, and there exists a “significant conflict between some federal policy or interest and the use of state law, the Court has found it necessary, in a few and restricted instances, to develop federal common law.”\textsuperscript{23} The Court has held that when dealing with “air and water in their

\textsuperscript{17} See BP P.L.C. v. Mayor and City Council of Baltimore, 141 U.S. 1532 (2021) (ruling on procedural issue of removal and remand); See also, Am. Elec. Power Co., Inc v. Connecticut, 564 U.S. 410, 429 (2011) (noting that “[n]one of the parties have briefed preemption or otherwise addressed the availability of a claim under state nuisance law. We therefore leave the matter open for consideration on remand”).
\textsuperscript{18} Clean Air Act, 42 U.S.C. § 7401.
\textsuperscript{19} City of New York v. Chevron Corp., 993 F.3d 81 (2d Cir. 2021).
\textsuperscript{21} Erie R. Co. v. Tompkins, 304 U.S. 64, 78 (1938).
\textsuperscript{23} Id. at 313.
ambient or interstate aspects” federal common law exists.\textsuperscript{24} However, federal common law is subject to Congressional action.\textsuperscript{25}

When Congress acts, addressing a question “previously governed by a decision rested on federal common law” the need for federal common law and lawmaking by the federal courts disappears.\textsuperscript{26} When determining whether federal common law is displaced, the Court starts with the presumption that Congress articulated the appropriate standards to be applied as a matter of federal law.\textsuperscript{27} In contrast to preemption, displacement does not require the same clear and manifest purpose of Congress.\textsuperscript{28}

\textbf{III. Overview of Preemption}

State laws that interfere with, or are contrary to, federal laws, are invalidated under the Supremacy Clause of the U.S. Constitution.\textsuperscript{29} When a federal law invalidates or supersedes a state law, it is referred to as preemption.\textsuperscript{30} Preemption can be both express or implied and “is compelled whether Congress’ command is explicitly stated in the statute’s language or implicitly contained in its structure and purpose.”\textsuperscript{31} In the absence of explicit preemptive language, there are two types of implied preemption: (1) field preemption and (2) conflict preemption.\textsuperscript{32}

Implied field preemption analysis begins by ascertaining Congress’ purpose of enacting certain legislation.\textsuperscript{33} Unless there is a “clear and manifest purpose of Congress” to supersed the power of

\begin{itemize}
\item \textsuperscript{24} Illinois v. City of Milwaukee, 406 U.S. 91, 103 (1972).
\item \textsuperscript{25} City of Milwaukee, 451 U.S. at 313.
\item \textsuperscript{26} Id. at 314.
\item \textsuperscript{27} Id. at 317.
\item \textsuperscript{28} Id.
\item \textsuperscript{29} See U.S. CONST. art. VI, cl. 2, (providing that the “This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding”); see also Gibbons v. Ogden, 22 U.S. 1, 211 (1824).
\item \textsuperscript{31} Gade v. Nat'l Solid Wastes Mgmt. Ass'n, 505 U.S. 88, 98 (1992).
\item \textsuperscript{32} Id. at 98.
\item \textsuperscript{33} Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947).
\end{itemize}
the states in a certain field, federal law will not preempt the state’s power. The Court has held Congress’s purpose may be evidenced where “the scheme of federal regulation [is] … so pervasive as to make reasonable the inference that Congress left no room for the State to supplement it.” Further, field preemption may be evidenced by the fact that the Act in question touched “a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject.”

Even where Congress has not completely preempted state law in a specific field, state law is preempted where compliance with federal and state regulations is impossible, or where state law is an obstacle to the accomplishment and execution of Congressional purposes and objectives. To determine whether compliance between state and federal regulations is possible, the test is whether both regulations can be enforced without impinging on the federal “superintendence” of the field. In ascertaining whether state law is an obstacle to Congressional objectives, the Court considers “the nature of the power exerted by Congress, the object sought to be attained, and the character of the obligations imposed by the law, are all important in considering … whether supreme federal enactments preclude enforcement of state laws on the same subject.” State laws can be preempted through federal regulations or federal statutes.

IV. The Clean Air Act

Congress first passed the Clean Air Act in 1963, one of the first pieces of federal legislation regarding air pollution control. Congress passed this legislation as a direct response to a

---

34 Id. at 230.
35 Id.
36 Rice, 331 U.S. at 230.
proliferation of the urbanized world which led to increased levels of air pollution and Ozone depletion. In passing the legislation, Congress reiterated that air pollution prevention “at its source is the primary responsibility of States and local governments; and that Federal financial assistance and leadership is essential for development of cooperative … programs to prevent and control air pollution.” The CAA’s purpose was outlined with two overarching congressional goals: first, to promote public health and welfare and develop tools to combat air pollution; second, to provide assistance to states and local governments to implement “regional air pollution prevention and control programs.”

In 1970, Congress authorized four major regulatory programs: the NAAQs, State Implementation Plans (“SIPs”), New Source Performance Standards, (“NSPS”), and National Emission Standards for Hazardous Air Pollutants (“NESHAPs”). In conjunction with the CAA, Congress passed the National Environmental Policy Act, establishing the EPA, the policing unit tasked with implementing and regulating various requirements included in the various pieces of environmental regulatory legislation. The CAA authorizes the EPA to, among other things, establish National Ambient Air Quality Standards (“NAAQS”) that protect the public and to regulate emissions of hazardous air pollutants.

In 1977, Congress made significant changes to the original CAA concerning NAAQS. Finally, in 1990, the federal government’s authority and responsibility under the Act significantly increased with another round of amendments. In the EPA’s Journal published after the 1990

---

42 42 U.S.C. § 7401 (a)(1)-(2).
44 42 U.S.C. § 7401 (b)(1)-(4).
47 Id.
amendments, it highlighted the most significant changes: urban pollution, permits, motor vehicles, air toxics, acid rain, and ozone depletion. One of the most significant amendments in the 1990 CAA was the EPA’s expansion of enforcement authority and the authorization of a program to control over 189 toxic pollutants.

Currently, the CAA delegates responsibility to the EPA for developing acceptable levels of airborne emissions (NAAQS). States are required to create and submit to the EPA a SIP which provides “for implementation, maintenance, and enforcement of [NAAQs] … within such State.” Further, states must enforce the limitations the EPA approves, and the state adopts, and regulate any area covered under the SIP. From this statutory directive, the EPA has promulgated NAAQs for various emissions that directly impact air quality standards. The standards produced by the EPA are not arbitrarily set – it gives “a reasonable time for interested persons to submit written comments” and is provided before there is any adoption or modification to its regulations. In addition, extensive regulations pertaining to proper scientific processes, techniques and equipment are used to measure emissions levels and air quality.

---

53 42 U.S.C § 7409 (b)(1) (Which reads, in relevant part, “National primary ambient air quality standards, … shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.”).
56 See e.g., 40 C.F.R. § 50.4 (setting the national air quality standards for sulfur dioxide); 40 C.F.R. § 50.6 (setting the national primary air quality standards for particulate matter); 40 C.F.R. § 50.8 (setting the national primary ambient air quality standards for carbon monoxide); 40 C.F.R. § 50.11 (setting the national primary air quality for oxides of nitrogen).
58 See 40 C.F.R. § 50.1 (f)-(b).
Furthermore, the CAA contains a “Citizens Suits” clause, or a “savings clause” on state common law claims. The provision outlines the ability, jurisdiction, venue, and rights of citizens to bring suits for harm suffered from air emissions, specifying that:

Nothing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any emission standard or limitation or to seek any other relief... Nothing in this section or in any other law of the United States shall be construed to prohibit, exclude, or restrict any State, local, or interstate authority from--

1) bringing any enforcement action or obtaining any judicial remedy or sanction in any State or local court, or
2) bringing any administrative enforcement action or obtaining any administrative remedy or sanction in any State or local administrative agency, department or instrumentality, against the United States, any department, agency, or instrumentality thereof, or any officer, agent, or employee thereof under State or local law respecting control and abatement of air pollution.

In sum, the CAA is Congress’s delegation of and attempt to: protect and enhance air quality; to prevent and control air pollution; to aid the states with prevention and control of air pollution; and to encourage, assist, and enforce air pollution prevention and control programs.

V. Seminal Cases in Climate Change Litigation

A. Massachusetts v. EPA

Massachusetts v. EPA is the landmark climate litigation case holding that the EPA regulates carbon dioxide and other greenhouse gas emissions from motor vehicles under the CAA. A group of states, local governments, and private organizations (“Petitioners”) alleged that the EPA “abdicated its responsibility under the Clean Air Act to regulate the emissions of four greenhouse gases, including carbon dioxide.” The Court considered two questions: (1) whether the EPA has

---

59 42 U.S.C. § 7604(e)(1)-(2).
60 42 U.S.C. § 7604(e)(1)-(2).
63 Id. at 505.
“statutory authority to regulate greenhouse gas emissions from new motor vehicles” and, if it does, (2) whether it could refuse to do so based on the statutory language in the CAA.  

The case arose in 1999 when a group of private organizations first filed a rulemaking petition under section 202(a) of the CAA asking the EPA to regulate greenhouse gas emissions from new motor vehicles that emit gases. Section 202(a)(1) of the CAA, at the time of litigation, provided:

The EPA Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare…

The rulemaking petition noted that the EPA itself had already admitted that it had the power to regulate carbon dioxide through a memorandum released by its general counsel. After the petition’s submission, the EPA requested public comment on the issue; it received over 50,000 comments over a span of five months.

In September of 2003, the EPA denied the rulemaking petition, stipulating that “(1) contrary to the opinions of its former general counsels, the [CAA] does not authorize the EPA to issue mandatory regulations to address global climate change; and (2) that even if [it] had the authority to set greenhouse gas emission standards, it would be unwise to do so…” The EPA argued that Congress, in enacting the CAA, would have specifically authorized the EPA to do so if that was its intent. Additionally, the EPA stated that even if it had authority to regulate greenhouse gases, it would refuse to exercise that authority because there was “residual uncertainty” in the causal

---

64 Id. at 505.
65 Id. at 510.
66 Id. at 506.
67 Id. at 510.
68 Massachusetts, 549 U.S. at 511.
69 Id.
70 Id. at 512.
connection of human activities and an increase in global surface temperatures. It also reasoned that EPA regulation could hinder the President’s approach to the climate-change problem, and potentially hinder the President’s ability to “persuade key developing countries to reduce greenhouse gas emissions.”

Following the EPA’s lengthy response, the complainants, joined by intervenor States and local governments, sought review in Court of Appeals for the District of Columbia. The court of appeals held that the EPA properly exercised its discretion in denying the petition for rulemaking, which Petitioners appealed.

In answering the first issue, the Court interpreted section 202(a)(1) of the CAA and addressed whether substances that contribute to climate change were included in the definition of the statute. The statute defined air pollutant as “any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive … substance or matter which is emitted into or otherwise enters the ambient air.” The legislature chose to define “welfare” broadly, including “effects on … weather … and climate.” The Court found Congress’s use of the word “any” in its definition of air pollutant, significant. It reasoned that “[o]n its face, the definition embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word “any.””

---

71 Id. at 513.
72 Id. at 513-4.
73 Id. at 514.
74 Massachusetts, 549 U.S. at 514.
75 Id. at 528.
76 Id.; 42 U.S.C. § 7602(g).
77 Massachusetts, 549 U.S. at 506; 42 U.S.C. § 7602(h).
78 Massachusetts, 549 U.S. at 529.
79 Id.
Finding that the statutory language unambiguous, the Court rejected the EPA’s second contention that it could refuse to regulate based on a narrow reading of the statute’s text.\textsuperscript{80} It noted that, contrary to the EPA’s assertion that it cannot regulate emissions because it would require the EPA to overlap with other authorities (such as the Department of Transportation), both federal agencies could “administer their obligations and yet avoid inconsistency.”\textsuperscript{81} It reasoned that

While the Congresses … might not have appreciated … that burning fossil fuels could lead to global warming, [it] did understand that without regulatory flexibility, changing circumstances and scientific development would soon render the Clean Air Act obsolete. The broad language of § 202 (a)(1) reflects an intentional effort to confer the flexibility necessary to forestall such obsolescence.\textsuperscript{82}

The Court accordingly held that the EPA has the statutory authority to regulate – and must regulate if it found that emissions were a danger to public health or welfare – the emission of greenhouse gases from new motor vehicles.\textsuperscript{83} The Court further reasoned that the fact that a statute can be applied in situations not expressly “anticipated” by Congress does not mean there is a statutory ambiguity.\textsuperscript{84} Since greenhouse gases “fit well within the Clean Air Act’s capacious definition of “air pollutant’” the Court held the EPA could regulate the emission of such gases.\textsuperscript{85}

\textbf{B. Am. Elec. Power Co., Inc. v. Connecticut}

Four years after \textit{Massachusetts},\textsuperscript{86} several states, the city of New York, and three private land trusts (“Plaintiffs”) sued four private power companies and the federal Tennessee Valley Authority (“Defendants”) seeking a remedy of abatement of carbon emissions in the form of a “decree setting carbon-dioxide emission for each defendant at an initial cap, to be further reduced annually.”\textsuperscript{87} In

\begin{footnotesize}
\begin{enumerate}
\item Id. at 529.
\item Id. at 532.
\item Id.
\item Id. at 532-33.
\item \textit{Massachusetts}, 549 U.S. at 532-33.
\item Id.
\item Id. at 487.
\end{enumerate}
\end{footnotesize}
Am. Elec. Power Co., Inc. ("AEP"), the Court considered whether the Plaintiffs could maintain a federal common-law public nuisance claim against the carbon-dioxide emitting Defendants.\textsuperscript{88}

Plaintiffs asserted that “the defendants’ carbon-dioxide emissions created a “substantial and unreasonable interference with public rights,” in violation of the federal common law.”\textsuperscript{89} Plaintiffs sought injunctive relief to require the Defendants to cap their carbon dioxide emissions and then reduce them by percentage per year for a decade.\textsuperscript{90} The district court dismissed the suits, but the Second Circuit held that the Plaintiffs stated a claim under federal common law and that the CAA did not displace these claims.\textsuperscript{91} The Court granted certiorari to determine whether federal common law applied, and if so, whether the CAA displaced federal common law.\textsuperscript{92}

The Court first noted that “[w]hen we deal with air and water in their ambient or interstate aspects, there is a federal common law.”\textsuperscript{93} The Court then held, however, that the Plaintiffs’ federal common law claims were displaced by the CAA that authorized the EPA to regulate emissions.\textsuperscript{94} It noted that if Congress expressly addresses a question governed by federal common law, the Court looks to the legislation, not the common law.\textsuperscript{95}

The Court reiterated that legislative displacement of federal common law “does not require the same sort of evidence of a clear and manifest congressional purpose demanded for preemption of state law.”\textsuperscript{96} It then stated that the “test for whether congressional legislation excludes the declaration of federal common law is simply whether the statute speaks directly to the question at

\textsuperscript{88} Id. at 415.
\textsuperscript{89} Id. at 418.
\textsuperscript{90} Id.
\textsuperscript{91} Id. at 419.
\textsuperscript{92} Id. at 420.
\textsuperscript{93} Am. Elec. Power Co., Inc., 564 U.S. at 421.
\textsuperscript{94} Id. at 423.
\textsuperscript{95} Id. at 423.
\textsuperscript{96} Id.
issue.” The Court reiterated its holding in Massachusetts where it made clear air pollution was subject to regulation under the CAA, and accordingly held “we think it equally plain that the Act “speaks directly” to emissions of carbon dioxide from the defendants’ plants.”

Further, the Court rejected the Plaintiff’s argument that federal common law is not displaced unless the EPA expressly exercises its regulatory authority. In rejecting this argument, the Court stated that the relevant inquiry for field preemption is “whether the field has been occupied, not whether it has been occupied in a particular manner.” It reasoned,

It is altogether fitting that Congress designated an expert agency, here, EPA, as best suited to serve as primary regulatory of greenhouse gas emissions. The expert agency is surely better equipped to do the job than individual district judges issuing ad hoc, case-by-case injunctions. Federal judges lack the scientific, economic, and technological resources an agency can utilize in coping with issues of this order.

The Court made clear that the Plaintiff’s proposal that the judiciary first determine what amount of carbon-dioxide emissions is unreasonable, and then determine what level is “practical, feasible, and economically viable,” is irreconcilable with the scheme Congress provided under the CAA. In the Court’s conclusion that federal common law was displaced by the CAA, it expressly refused to address whether state law nuisance law was preempted by the CAA: “We therefore leave the matter open for consideration on remand.”

C. BP P.L.C. v. Mayor and City Council of Baltimore

In the 2021 case of BP P.L.C. v. Mayor and City Council of Baltimore, the Court again narrowly ruled on a procedural issue in a string of consolidated cases that arose when alleged

---

97 Id. at 424.
98 Id.
100 Id. at 426.
101 Id. at 428.
102 Id. at 428.
103 Id. at 429 (emphasis added).
carbon-emitting defendants were sued under state law for various claims.\textsuperscript{104} Baltimore's mayor and city council sued various energy companies for fossil fuel promotion while “concealing their environmental impacts.”\textsuperscript{105} The Court did not address the merits of the claim; it addressed the procedural issue of removal and remand.\textsuperscript{106} The Court’s opinion on whether the CAA will preempt state law causes of action, therefore, is still open for consideration.

VI. Circuit Court Cases Following \textit{AEP}

One year after the Court’s \textit{AEP} decision, the United States Court of Appeals for the Ninth Circuit considered whether a city’s federal common law claims against a fossil fuel company seeking \textit{damages} for the harm its greenhouse gas emissions caused were displaced by the CAA and the EPA action the Act authorizes.\textsuperscript{107}

The City of Kivalina (“Kivalina”), an Alaskan village, asserted that its native village land was severely threatened due to the impact of global warming.\textsuperscript{108} It alleged the changes to its land were “in part from emissions of large quantities of greenhouse gases by the Energy Producers.”\textsuperscript{109} Kivalina sued multiple oil, energy, and utility companies, arguing that “as substantial contributors to global warming, [the Energy Producers] are responsible for its injuries.”\textsuperscript{110} This question differed from the Court’s recent \textit{AEP} decision that addressed whether a city could seek abatement of emissions; not damages.\textsuperscript{111}

\begin{thebibliography}{9}
\bibitem{105} \textit{Id.} at 1535.
\bibitem{106} \textit{Id.} at 1536.
\bibitem{107} Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849, 853 (9th Cir. 2012) (emphasis added).
\bibitem{108} \textit{Id.} at 853-4.
\bibitem{109} \textit{Id.} at 854.
\bibitem{110} \textit{Id.}
\end{thebibliography}
Kivalina argued that its claims arose under federal common law. The Ninth Circuit ultimately concluded that this was a distinction without a difference and that the CAA governed. The court began its analysis by assessing first whether Kivalina’s claims did arise under federal common law, and, if so, whether federal law displaced its federal common law claims. Holding that there was guidance through the Court’s recent *AEP* decision, the Ninth Circuit concluded that an action seeking damages for harm caused by past emissions is displaced by the CAA and the EPA action the Act authorizes.

The court held “displacement is extended to all remedies,” meaning that the *AEP* decision focusing on abatement included causes of actions for damages. It further noted that when a federal common law cause of action is displaced by federal law, it means the field has been made the subject of “comprehensive legislation” by Congress. The court thus concluded that Kivalina’s claims were displaced, noting that “the solution to Kivalina’s dire circumstances must rest in the hands of the legislative and executive branches of our government, not the federal common law.”

Other circuits have not yet directly addressed whether state law claims against multinational carbon-dioxide emitters is preempted by the CAA.
VII. The Second Circuit Finds Climate Change Claims Concerned with Greenhouse Gas Emissions are Preempted by the Clean Air Act: City of New York v. Chevron

In April of 2021, the United States Court of Appeals for the Second Circuit Court weighed in on the issue of whether municipalities could utilize state tort law to hold multinational oil companies liable for damages caused by global greenhouse emissions.\textsuperscript{120} It held that the answer is no.\textsuperscript{121}

In its complaint, New York City (the “City”) alleged that it “is exceptionally vulnerable to the effects of global warming” and that its taxpayers “should not have to shoulder the burden of financing the City’s preparations to mitigate the effects of global warming.”\textsuperscript{122} The City alleged that a group of large fossil fuel producers “are primarily responsible for global warming and should bear the brunt of these costs.”\textsuperscript{123} It sued Chevron Corporation, ConocoPhillips, Exxon Mobil Corporation, BP p.l.c., and Royal Dutch Shell plc (the “Defendants”) to shift the costs of “protecting the City from climate change impacts back onto the companies.”\textsuperscript{124} It requested compensatory damages for past and future costs of “climate-proofing its infrastructure and property” and damages and an injunction to abate the public nuisance and trespass.”\textsuperscript{125}

The district court dismissed the City’s complaint because it determined its claims were displaced by federal common law, reasoning that “transboundary greenhouse gas emissions are, by nature a national (indeed, international) problem, and therefore must be governed by a unified federal standard.”\textsuperscript{126} The district court then determined that the CAA displaced the City’s common

\textsuperscript{120}City of New York v. Chevron Corporation, 993 F.3d 81, 85 (2d Cir. 2021).
\textsuperscript{121}Id. at 85.
\textsuperscript{122}Id. at 86.
\textsuperscript{123}Id.
\textsuperscript{124}Id.
\textsuperscript{125}Id. at 88.
\textsuperscript{126}City of New York, 993 F.3d at 88-9.
law claims that related to domestic emissions. The City appealed the district court’s ruling to the Second Circuit.

A. Federal Common Law

The Second Circuit first addressed whether the City’s state law claims were displaced by federal common law. It noted that federal common law exists in “few and restricted enclaves where a federal court is compelled to consider federal questions that cannot be answered from federal statutes alone.” The few and restricted issues where federal common law are “those in which a federal rule of decision is necessary to protect uniquely federal interests, and those in which Congress has given the courts the power to develop substantive law.” Further, there must be a conflict between the federal interest and state law.

In deciding whether federal common law applied at the case at issue, the court first turned to clarify the nature of the City’s lawsuit. It asked: “Is this a clash over regulating worldwide greenhouse gas emissions and slowing global climate change, or is it a more modest litigation akin to a product liability suit …?” The court held that it was the former, stating

Artful pleading cannot transform the City’s complaint into anything other than a suit over global greenhouse gas emissions… Put differently, the City’s complaint whipsaws between disavowing any intent to address emissions and identifying such emissions as the singular source of the City’s harm. But the City cannot have it both ways. Stripped to its essence, then, the question before us is whether a nuisance suit seeking to recover damages for the harms caused by global greenhouse gas emissions may proceed under New York law. Our answer is simple: no.

---

127 City of New York, 993 F.3d at 89.
128 Id.
129 Id.
130 Id.
131 Id. at 90.
132 Id.
133 City of New York, 993 F.3d at 91.
134 Id. at 91.
135 Id.
The court held that the City’s lawsuit reached past the limits of state law and that federal common law applied.\textsuperscript{136}

**B. Federal Common Law is Preempted by the CAA**

After determining federal common law applied, the Second Circuit held that federal common law claims concerned with domestic greenhouse gas emissions were preempted by the CAA.\textsuperscript{137} The court noted that federal common law is preempted where Congress passes a statute that speaks directly to the questions the judge-made federal rules were designed to answer.\textsuperscript{138} Further, it requires a showing of sufficient legislative solutions to a particular issue that the statute has displaced a field historically reserved for federal common law.\textsuperscript{139}

The court looked to \textit{AEP} and the subsequent Ninth Circuit decision in \textit{Kivalina} to support its conclusion that domestic transboundary emissions claims are directly addressed by the CAA.\textsuperscript{140} It pointed to the Supreme Court’s holding that the CAA provided a remedy for states seeking limits on emissions of carbon dioxide.\textsuperscript{141} To support its finding that suits for damages are also displaced by the CAA, it relied on the holding and reasoning in \textit{Kivalina}, where the Ninth Circuit determined that the CAA displaced Kivalina’s federal common law damages claim.\textsuperscript{142} In sum, the Second Circuit concluded that the CAA displaces the City’s common law damages claims.\textsuperscript{143} It reiterated that the claims would operate as “\textit{de facto} regulation on greenhouse gas emissions.”\textsuperscript{144} Since

\textsuperscript{136} \textit{Id.}
\textsuperscript{137} \textit{Id.} at 94.
\textsuperscript{138} \textit{Id.} at 95.
\textsuperscript{139} \textit{City of New York}, 993 F.3d at 95.
\textsuperscript{140} \textit{Id.}
\textsuperscript{141} \textit{Id.}
\textsuperscript{142} \textit{City of New York}, 993 F.3d at 96; \textit{see also} Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849, 858 (9th Cir. 2012).
\textsuperscript{143} \textit{City of New York}, 993 F.3d at 96.
\textsuperscript{144} \textit{Id.} at 96.
Congress has already addressed the manner and means of regulating carbon emissions, the court held the City’s claims concerning these emissions are displaced by the CAA.\textsuperscript{145}

The court then rejected the City’s final argument; that the City’s state law claims could “snap back into action unless specifically preempted by statute.”\textsuperscript{146} In rejecting this argument, the court noted

Under the City’s view, if Congress were to pass legislation adopting verbatim a judge-made common law rule, that could potentially give birth to new state-law claims – claims that could not have existed in the absence of Congress’s intervention – even though the substance of the applicable federal rule has not changed. Such an outcome is too strange to seriously contemplate.\textsuperscript{147}

While conceding that the CAA employs a cooperative approach between the federal government and the states, the court noted that this cooperation did not give the City power to impose standards on emissions “emanating from all 50 states and the nations of the world.”\textsuperscript{148} It therefore held that the City’s state-law claims are barred.\textsuperscript{149}

\textbf{VIII. Analysis: The Clean Air Act Preempts Climate Change Suits}

Fossil fuel companies sued under state tort law for the impact of their global emissions, regardless of the remedy sought, likely have a valid preemption defense. Congress has spoken directly to states power to regulate greenhouse gas emissions by its enactment of the CAA and its grant of regulatory power to the EPA. While the CAA does not expressly preempt state law, based on Congress’s intent to regulate global greenhouse gas emissions, it impliedly does. States’ attempts to circumvent the prescribed regulations in the CAA by common law claims against global emitters are therefore preempted.

\textsuperscript{145} Id. at 97.
\textsuperscript{146} Id. at 98.
\textsuperscript{147} Id. at 98-9.
\textsuperscript{148} City of New York, 993 F.3d at 100.
\textsuperscript{149} Id. at 100.
A. Express Preemption

Nothing in the text of the CAA expressly preempts common law claims against tortious greenhouse gas emitters. The CAA has, however, expressly preempts states’ powers to regulate certain emitters, such as new motor vehicles. Based on its express preemption of standards relating to mobile sources, any claim against a mobile source in compliance with federal standard is expressly preempted by the CAA. Since there is no express preemption as to stationary sources, such as fossil fuel producers or oil and gas companies that operate within, or outside of, states’ borders, it must be determined whether implied preemption exists.

B. Implied Preemption

a. The Second Circuit correctly held that state nuisance and trespass claims for global emissions are displaced by federal common law

The United States Court of Appeals for the Second Circuit was correct in holding that the CAA displaced state law tort claims when the claims were based on the impact of the companies’ contribution to climate change. In its City of New York decision, it correctly relied on the Supreme Court’s reasoning in AEP which interpreted whether federal common law governed injunctions against global greenhouse gas emitters. The Plaintiff’s suit in City of New York was based on transboundary pollution from the Defendants and the damage it caused to the city, meaning the suit directly implicated the same type of greenhouse gas emitters at issue in AEP. Further, in that case the City did not refute that it sought a local remedy for a global problem. Based on the

---

150 42 U.S.C § 7543(a) (stating that “No State … shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part”).
151 City of New York v. Chevron Corporation, 993 F.3d 81, 95 (2d Cir. 2021).
152 Id. at 88-9.
153 Id. at 91.
claim it raised, the Court’s reasoning in *AEP* governed because the Court forcefully stated that the regulation of global air pollution was directly addressed and governed by the CAA.¹⁵⁴

Further, the Second Circuit’s reliance on *Kivalina*, in which damages instead of abatement was at issue for global emitters, was likely correct. Significant damage remedies act as *de facto* regulation for the emitters to avoid astronomical payouts in the future. Therefore, the court correctly held that the remedy of damages was a distinction without a difference. The City’s complaint made it clear that it sought to act as a regulatory body towards global greenhouse gas emitters to protect the citizens of its state from the impact of global pollution.¹⁵⁵ Such a suit was correctly barred as there is already a significant structure in place and federal regulatory body tasked with regulating these emitters.

While the Second Circuit was ultimately correct in its holding, it seemed to accept the Defendants’ contentions that the City had no interest in protecting its citizens from the impacts of climate change in the form of tort suits. This is contrary to the text of the CAA. The savings clause specifically allows private intervention against emitters that are not compliant with the CAA or with the state itself.¹⁵⁶ However, as the Second Circuit correctly noted, the City overextended its reach by focusing on damages from global climate change and global greenhouse gas emissions. While the City does have an interest in protecting its local citizens from the impact of local emissions, its only tort remedy applies when intrastate emitters cause damage to its citizens.

The Court’s precedent makes clear that when dealing with “air and water in their ambient or interstate aspects” federal common law exists and governs over state law.¹⁵⁷ Accordingly, the

¹⁵⁵ *City of New York v. Chevron Corporation*, 993 F.3d 81, 86 (2d Cir. 2021).
¹⁵⁶ 42 U.S.C. § 7604(e).
Second Circuit correctly applied that suits over global greenhouse gas emissions are governed by federal common law.

b. The Second Circuit correctly found that global greenhouse gas emission regulation is a field occupied by federal legislation

i. Field Preemption

The Second Circuit was correct in holding that global greenhouse emission regulation, in the form of tort suits, is likely a field occupied by the federal government through its enactment of the CAA. Accordingly, the Court is likely to find preemption exists in a climate change litigation suit, particularly where a state has sued a corporation for the impact of its global greenhouse gas emissions.

The Second Circuit’s reliance on the Court’s AEP decision that the CAA provided a remedy for states seeking limits or regulation on emissions from carbon dioxide was correct. It supports the proposition that it is the clear and manifest purpose of Congress to supersede the power of the states in the field of global greenhouse gas emission regulations. The congressional findings and purpose, along with the Court’s interpretation of the CAA to control global greenhouse gas emissions in AEP, shows Congress’s clear intention to supersede the power of the states in greenhouse gas emission regulation. Further, as the court in Kivalina noted, a remedy for abatement versus damages is a distinction without a difference.158 When a state seeks substantial monetary damages for past and future harm, it is skirting the federal government by attempting to regulate the company’s behavior.159 The Second Circuit correctly noted this by finding that the

158 See Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849, 858 (9th Cir. 2012) (noting that “the Supreme Court has held that federal common law addressing domestic greenhouse gas emissions has been displaced by Congressional action. That determination displaces federal common law public nuisance actions seeking damages, as well as those actions seeking injunctive relief”).
159 See City of New York, 993 F.3d at 96 (noting that “the City's claims, if successful, would operate as a de facto regulation on greenhouse gas emissions. And as both AEP and Kivalina conclude, Congress has already “spoken directly to th[at] issue” by “empower[ing] the EPA to regulate [those very] emissions.””)
claims would operate as *de facto* regulation\textsuperscript{160} of global greenhouse gas emissions, which the CAA and the Supreme Court’s interpretation of the text prohibits.

Further, the scheme of regulation through the CAA, and the authority it delegates to the EPA, is “so pervasive as to make reasonable the inference that Congress left no room for the State to supplement it.”\textsuperscript{161} Congress outlined specific procedures required when a state wishes to regulate emissions *within its own state*.\textsuperscript{162} The CAA does not give states blanket immunity to regulate within their own borders – the borders of other states – and the international borders of which a company operates and contributes to greenhouse gas emissions. The federal interest in the regulation of global greenhouse gas emission dominates over state laws on the same subject. Greenhouse gases, as interpreted by the Court in *Massachusetts*\textsuperscript{163}, are within the EPAs regulatory power. Further, the Court has essentially endorsed this view in its admission that, prior to the CAA, federal common law governed claims of global greenhouse gas emissions.\textsuperscript{164}

Accordingly, under the Supreme Court’s jurisprudence as it relates to field preemption and the CAA, it would find that states are precluded from asserting common law claims for the impact of global greenhouse gas emissions because of the extensive federal regulation that operates the field of greenhouse gases.

**ii. Conflicting and Obstacle Preemption**

Conflict preemption does not exist because compliance with federal and state regulations is not impossible. State regulation of greenhouse gas emissions is permitted through the CAA.\textsuperscript{165} When a state opts to regulate greenhouse gas emissions, or to sue for harm that greenhouse gas

\textsuperscript{160} *City of New York*, 993 F.3d at 96.

\textsuperscript{161} *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

\textsuperscript{162} 42 U.S.C. § 7410 (a)(1).


\textsuperscript{165} See 42 U.S.C. § 7410 (a)(1).
emissions cause within its own states, it likely does not conflict with the CAA. In fact, in all practicality, if a state is operating within the bounds of the CAA and adopts a more demanding standard, in most cases, the less demanding standard is met as well. These two laws, therefore, would not conflict. Further, where a state adopts these regulations, or sues tortious emitters within the borders of its own state, its laws or regulations will not conflict with the CAA because the CAA specifically: (1) gives states the ability to regulate and enforce air quality programs within its own state; and (2) gives citizens power to sue emitters that do not comply with state or federal regulations within their own state.\footnote{See 42 U.S.C. § 7410 (a)(1)-(2)(A)-(C); 42 U.S.C. § 7604(e)(1)-(2).} Because of this regulatory flexibility under the current CAA provisions, both regulations can likely be enforced without impinging on the federal “superintendence” of the field.\footnote{Fla. Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132, 142 (1963).}

However, whether state tort law is an obstacle to congressional objectives requires a different analysis. First, the nature of the power exerted by Congress through its enactment of the CAA was interpreted by the Court in \textit{Massachusetts} to include the EPA’s regulation of greenhouse gas emissions.\footnote{Massachusetts v. EPA, 549 U.S. 487, 532 (2007) (holding that “[b]ecause greenhouse gases fit well within the Clean Air Act's capacious definition of “air pollutant,” we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles.”} This power of the EPA to regulate greenhouse gas emissions as interpreted by the Court is strong evidence of Congress’s intent to leave climate change regulation to the federal government. Further, the object sought to be attained, as discussed in the language of the CAA itself, is to promote public health and welfare by developing tools to combat air pollution and to provide federal assistance to states and local governments to implement local air pollution programs.\footnote{42 U.S.C. § 7401 (b)(1)-(4).} This object, and the focus on providing a tool to help local and regional areas with pollution within their own state shows an intent to help with intrastate pollution matters. This
intrastate intention is significant. Such clear and unambiguous language as to its intrastate goals is convincing evidence that the CAA, and the EPA’s regulatory authority, trumps state regulation of global greenhouse gas emissions while giving the states the ability to regulate only within its own boarders. Finally, the character of the obligations imposed by the law all stem around one overarching obligation: the control, regulation, and implementation of air pollution control programs. Part of these obligations is the obligation to regulate and enforce limits on global greenhouse gas emissions.\textsuperscript{170}

In sum, the nature of the power exerted by Congress, the object sought to be obtained, and the character of the obligations imposed by the CAA, lead to the conclusion that suing fossil fuel companies for global greenhouse gas emissions would be an obstacle to the accomplishment and goals of Congress in enacting the CAA.

\section*{IX. Conclusion}

Suits against greenhouse gas emitters seeking damages for the emitters’ contribution to global climate change are preempted by the Clean Air Act. The remedy for states suffering under climate change, global warming, and damage to its states and its citizens, lies with the federal legislature alone. While states rightfully are seeking to protect its citizens from the dire impact of environmental changes, the text of the CAA makes clear that states are given limited power over greenhouse gas emitters.

States are limited to protecting only those within their own borders. The solution to the international climate change crisis, precipitated by greenhouse gas emissions, rests in the hands of

\textsuperscript{170} See Am. Elec. Power Co., Inc. v. Connecticut, 564 U.S. 410, 424 (2011) (holding that air pollution was subject to regulation under the CAA and that regulation made it “equally plain that the Act “speaks directly” to emissions of carbon dioxide”); Massachusetts v. EPA, 549 U.S. 487, 532 (2007).
the federal government or in the executive branch – it cannot be remedied through various suits against fossil fuel emitters.
The Application of Article I, § 27 of the Pennsylvania Constitution, the Environmental Rights Amendment, to Modern Cases and State Land Management

Maegan Stump*

The Environmental Rights Amendment, Article 1, § 27, in the Pennsylvania Constitution, was passed in 1971. Pennsylvania was one of the first states to enact an Amendment of its kind into the state’s Constitution. States that have Environmental or Green Amendments in their state Constitutions include Montana, Illinois, Massachusetts, Hawaii, and Rhode Island. In November 2021, New York passed its own Environmental Rights Amendment called the Green Amendment after it was approved by a public vote of nearly 70% of voters. The United States Constitution does not have an environmental provision.

This paper will discuss the history of the Pennsylvania Environmental Rights Amendment by reviewing noteworthy cases that have affected its interpretation in the judicial system. Next, this paper will discuss the rights created by the language of the Environmental Rights Amendment. Following, this paper will discuss the application of the Environmental Rights Amendment in 2021. Finally, this paper will end with a proposal of a generalized Pennsylvania Planning Rule that mandates land management plans and ensures that state agencies are acting as trustees of the state’s natural resources at all times.

I. Historical Overview of the Environmental Rights Amendment

---

* Candidate for J.D., May 2023, Duquesne University School of Law. B.S. in Environmental Science, 2017, Allegheny College.


The Environmental Rights Amendment states, “The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

This section will discuss the most noteworthy cases that have determined the application of the Environmental Rights Amendment in the judicial system since 1971. For several decades after the Environmental Rights Amendment was passed, it became increasingly difficult for plaintiffs to utilize it in furtherance of claims to benefit the environment.

A. Commonwealth v. Gettysburg Battlefield National Tower (1973)

In 1973, the Pennsylvania Supreme Court heard the case of Commonwealth v. Gettysburg Battlefield National Tower, which involved an agreement negotiated by the National Gettysburg Battlefield Tower, Inc. with the U.S. government to construct an observation tower near Gettysburg’s battlefield. The Commonwealth filed suit to enjoin the construction of the tower in the proposed location because it would obstruct the skyline and would take away from “the historic, scenic, and aesthetic environment of Gettysburg.” The Commonwealth relied on Article I, § 27, the Environmental Rights Amendment, to authorize the suit. The issue presented in this case was whether the constitutional provision was self-executing, meaning that it can be enforced without legislative involvement. The Court found that the Environmental Rights Amendment was not self-executing and stated that the Amendment needed to be paired with additional legislation.

---

6 Id. at 590.
7 Id.
8 Id. at 591.
in order for it to be enforced. The Court expressed concerns that if the Amendment were self-executing, other constitutional issues may arise. In particular, the Court was concerned that a self-executing provision would give rise to Equal Protection and Due Process issues arising under the Fourteenth Amendment of the U.S. Constitution, and would affect the ability of people to enjoy the use of their private property without being challenged under the Environmental Rights Amendment.

B. Payne v. Kassab (1973)

In Payne v. Kassab (hereinafter “Payne”), the Commonwealth Court of Pennsylvania announced the first test associated with the Environmental Rights Amendment. In Payne, the plaintiffs, concerned citizens of the Wilkes-Barre area, invoked the Environmental Rights Amendment in opposition to a street widening project that would cut away a portion of a local park. The plaintiffs asked the court to apply the Environmental Rights Amendment in hopes of enjoining the project to save the park.

A three-part test regarding the Environmental Rights Amendment was derived from the case. The test read:

“1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth’s public natural resources? 2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum? 3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?”

---

9 Id. at 594-595.
10 Id.
11 Id.
13 Id. at 93.
14 Id. at 94.
The court utilized the aforementioned test to balance environmental and social concerns in a realistic way rather than simply relying on a legal standard.\textsuperscript{15} The court found that the public benefit of the widened street outweighed any impact that the project would have on the environment.\textsuperscript{16} This three-part test made it difficult for anyone challenging the Environmental Rights Amendment to succeed, essentially giving the provision no teeth for several decades.


The Pennsylvania Supreme Court’s decision in *Robinson Township v. Commonwealth* (hereinafter “*Robinson Township*”) departed from the three-part test articulated in *Payne* and changed the way the courts interpreted the Environmental Rights Amendment. In *Robinson Township*, municipalities and individuals challenged provisions of Act 13 as unconstitutional under the Environmental Rights Amendment.\textsuperscript{17} Act 13 is a statute that regulates companies and people seeking to extract Pennsylvania’s oil and gas, specifically Marcellus Shale, with “sweeping legislation.”\textsuperscript{18} The Court found several of the provisions in Act 13 to be unconstitutional, affirming two that the Commonwealth Court had found to be unconstitutional and finding Section 3303 of Act 13 unconstitutional.\textsuperscript{19}

In addressing the three-part test derived from *Payne*, the plurality reasoned that the test narrowed the Commonwealth’s duties as a trustee in a way that conflicted with the Amendment.\textsuperscript{20} The plurality discussed the self-executing nature of the Environmental Rights Amendment and found the three-part test unnecessarily assumed the need for legislative action in order for there to

\begin{itemize}
\item \textsuperscript{15} *Id.*
\item \textsuperscript{16} *Id.* at 96.
\item \textsuperscript{17} *Robinson Twp., Washington Cty. v. Com.*, 83 A.3d 901, 915 (Pa. 2013).
\item \textsuperscript{18} *Id.* at 913.
\item \textsuperscript{19} *Id.* at 978.
\item \textsuperscript{20} *Id.* at 967.
\end{itemize}
be judicial relief for a claim.  

Without legislative action, the plurality found that the duties of trustees were being minimized by the judiciary. The plurality opinion revitalized the constitutional teeth given to the Environmental Rights Amendment that was limited by the *Payne* test for several decades.

The multi-part majority opinion is the largest facet of the *Robinson Township* case. The plurality opinion, specifically Parts III and VI(C) for reference, are the portions that most heavily involve the Environmental Rights Amendment and discussion of the constitutionality of Article 13 under the Amendment. Chief Justice Ronald Castille, who wrote the lead opinion, was joined by two other justices in the plurality opinion. Justice Baer joined the plurality in all but the sections discussing the Environmental Rights Amendment and grounded his concurrence in substantive due process.

The plurality opinion began its interpretation with the plain language of the Amendment, noting the two separate rights it establishes. The opinion noted that the Environmental Rights Amendment garners its meaning from the historical context behind the need for the Amendment in the degradation of state natural resources and the legislative history in its passing. It noted that the Amendment received, “unanimous assent of both chambers during both the 1969-1970 and

---

21 *Id.*
22 *Id.*
23 *Id.* at 913.
24 *Id.*
25 *Id.*
26 *Id.* at 1001.
27 *Id.* at 950.
28 *Id.* at 959-960.
1971-1972 legislative sessions.” The plurality also noted that voters in Pennsylvania ratified the Environmental Rights Amendment on a 4-1 margin with over 1 million votes in its favor.


In Pennsylvania Environmental Defense Fund v. Commonwealth (hereinafter “PEDF II”), the Pennsylvania Supreme Court adopted the plurality’s interpretation of the Environmental Rights Amendment in Robinson Township. PEDF II involved an issue of royalties under the Oil and Gas Lease Fund that accumulated from oil and gas leases in Pennsylvania State Forests and where that money was funneled. The money was redirected into the Commonwealth’s General Fund rather than towards conservation and natural resources, in turn, allowing the Commonwealth to determine what that money would be spent on. In PEDF II, the Court largely adopted the same interpretation as constructed by the plurality in Robinson Township, focusing on the Environmental Rights Amendment as granting two separate rights: individual rights and the public trust.

The Court found that the Commonwealth, as a trustee of the Commonwealth’s natural resources, was obligated to structure oil and gas leases in a manner by which the royalties ultimately end up in a way consistent with the Environmental Rights Amendment. The majority in PEDF II held that the sections of the lease pertaining to royalties had violated the Commonwealth’s fiduciary duty under the Environmental Rights Amendment, but noted that redirecting funds was not a violation of the Amendment. However, funneling oil and gas royalties

---

29 Id. at 961.
30 Id. at 962.
32 Id. at 919.
33 Id.
34 Id. at 931.
35 Id. at 936.
36 Id. at 938-939.
into something inherently non-trust related does violate the Amendment as it effectively impinges on the Commonwealth’s duties as a trustee.\textsuperscript{37} Because the majority adopted the interpretation set forth in \textit{Robinson Township}, a new precedent was set for interpreting the Environmental Rights Amendment.


In \textit{PEDF v. Commonwealth} (hereinafter “\textit{PEDF IV}”), the Pennsylvania Supreme Court returned to its decision in the \textit{PEDF II}.\textsuperscript{38} \textit{PEDF IV} involved the diversion of royalties from oil and gas leases on state-owned public land into the Commonwealth’s General Fund rather than being used for conservation purposes.\textsuperscript{39} This case reaffirmed \textit{PEDF II} and further held that the money filtered into the Oil and Gas Lease Fund must not be put into the state’s general fund for uninhibited use.\textsuperscript{40} The Court determined that the Commonwealth is entitled to generate income from assets derived from the trust, Pennsylvania’s natural resources, but that does not mean that the people of Pennsylvania are entitled to that money as distributed through the General Fund.\textsuperscript{41} Instead, the money must be used for “conservation and maintenance of the public resources.”\textsuperscript{42}

In the previous Commonwealth Court decision of this case, \textit{PEDF III}, the Court decided that the royalties could be distributed through the General Fund to the beneficiaries of the trust: the current citizens of Pennsylvania as life tenants and the future citizens of Pennsylvania as remaindermen.\textsuperscript{43} In \textit{PEDF IV}, like in \textit{PEDF II}, the Court relied on the principles that the trust

\textsuperscript{37} Id.
\textsuperscript{39} Id.
\textsuperscript{40} Id. at 314.
\textsuperscript{41} Id.
\textsuperscript{42} Id.
\textsuperscript{43} Id. at 293.
established by the Environmental Rights Amendment was subject to private trust law.\textsuperscript{44} Private trust law would preclude the Commonwealth’s unrestricted use of the royalties through the General Fund.\textsuperscript{45} The Court in \textit{PEDF IV} stated, “[a] remand is unnecessary… as the record is now sufficiently developed and based upon that record we hold that the incomes generated under these oil and gas leases must be returned to the corpus.”\textsuperscript{46} According to the Court, the decision seems to have a degree of finality.

II. The Rights Created by the Environmental Rights Amendment

\textit{Robinson Township}, \textit{PEDF II}, and \textit{PEDF IV} discussed the rights assured by the Environmental Rights Amendment. This section will discuss the sets of rights the Environmental Rights Amendment assures, the involvement of trust law, and the cross-generational aspect of the Environmental Rights Amendment discussed in \textit{PEDF IV}.

For the first time since the 1970s, Chief Justice Ronald Castille’s lead opinion in \textit{Robinson Township} invigorated the Environmental Rights Amendment by establishing that it granted two sets of rights.\textsuperscript{47} \textit{Robinson Township}, as was affirmed in \textit{PEDF II} and \textit{PEDF IV}, clarified that the Environmental Rights Amendment would prevent the Commonwealth from acting in a way that contravened the Amendment and moreover that the Amendment established a framework for Pennsylvania to develop and enforce environmental rights.\textsuperscript{48} The plurality in \textit{Robinson Township} highlighted the placement of the Environmental Rights Amendment in Article I of the

\begin{itemize}
\item \textsuperscript{44} \textit{Id.} at 297.
\item \textsuperscript{45} \textit{Id.} at 313.
\item \textsuperscript{46} \textit{Id.} at 293.
\item \textsuperscript{47} \textit{Robinson Twp., Washington Cty. v. Com.}, 83 A.3d 901, 941 (Pa. 2013).
\item \textsuperscript{48} \textit{Id.} at 950.
\end{itemize}
Pennsylvania Constitution, the Constitution’s Declaration of Rights, which emphasizes the rights of the people of the state.49

The first set of rights, contained within the first sentence of the Amendment, are the individual environmental rights of clean air, water, and various values placed on the environmental integrity of Pennsylvania.50 The constitutional provision places limitations on the state to act in ways or condone actions that are in opposition to preserving its environmental integrity, as well as some historic and esthetic values.51 If another law were to “unreasonably impair” the individual rights granted by the Environmental Rights Amendment, then that law would be unconstitutional.52 The plurality in Robinson Township also stated that the failure to consider the environmental effect of something does not excuse the obligation the constitutional provision creates.53 The first set of rights does not deal with the trust principles that the second and third sentences of the provision do.

The next two sentences of Amendment are the sections that deal, and sometimes struggle, with trust law.54 The second sentence establishes the, “common ownership of the people, including future generations, of Pennsylvania’s natural resources.”55 The third sentence establishes the duties of Pennsylvania to the trust, the natural resources of the state.56 The Commonwealth is the overarching trustee.57 Not every branch of government in the Commonwealth is a trustee, but “the intent of the provision is to permit checks and balances of government to operate for the benefit of

49 Id. at 948.
50 Id. at 951.
51 Id.
52 Id.
53 Id. at 952.
54 Id.
55 Id. at 954.
56 Id. at 956.
57 Id. at 956-957.
the people in order to accomplish the purposes of the trust.”58 This would include a local
government.59 As the trustee, the Commonwealth is obligated to comply with the corpus or
standards provided by the trust.60 In Robinson Township, this fiduciary duty includes the duty to
act with “prudence, loyalty, and impartiality,” with regard to any actions taken which relate to the
public natural resources trust.61 The duty to act with prudence encompasses the trustee’s duty to
use the ordinary skill and care of a reasonably, prudent person.62 The duty to act with loyalty
includes acting with unbiased loyalty to the corpus of the trust and to the benefit of the
beneficiary.63 The duty to act with impartiality includes the duty to act equally and with absolute
fairness in the execution of any duties.64 As the trustee, the Commonwealth is responsible for
upholding its duties to the beneficiary of the trust, the people.65

PEDF II adopted Robinson Township’s interpretation of the Environmental Rights
Amendment, including the private trust fiduciary duty component.66 The use of private trust
language prompted now Chief Justice Baer to concur-in-part and dissent from the primary holding
of the case on the basis that the royalties derived from the oil and gas leases were not part of the
“trust corpus” because the Amendment should not include private trust principles.67 Chief Justice
Baer’s analysis of the trust language reflected back upon the original drafting of the Environmental
Rights Amendment by Representative Franklin Kury, Duquesne University Professor Robert
Broughton, and its legislative history that indicated the second and third sentences to be of public

58 Id.
59 Id.
60 Id. at 957.
61 Id.
62 Restatement (Second) of Trusts § 174 (1959).
63 Restatement (Second) of Trusts § 170 (1959).
64 Restatement (Second) of Trusts § 232 (1959).
67 Id. at 940.
trust nature. Chief Justice Baer explained that while it is easy to rely on the familiarity of private trust, according to Professor Broughton, when the provision was invoked that it was intended to be a public trust with a “fiduciary-like construct.” Public trust language would require the trustee to retain many of the same duties under the trust, but it would give the trustee more leniency to act in the interest of the beneficiary. According to Chief Justice Baer, public trust language does not preclude the Commonwealth from leasing trust property or using royalties to benefit the beneficiaries as it sees fit.

PEDF IV re-affirmed and expanded the Environmental Rights Amendment interpretation adopted in PEDF II including the private-trust-like interpretation. The Court noted that the text of the Environmental Rights Amendment does not limit which generation the provision is intended to benefit and thus should include current and future generations. The Court used the language “cross-generational dimension” that requires the Environmental Rights Amendment to be considered so that “current and future Pennsylvanians stand on equal footing and have identical interests in the environmental values broadly protected by the ERA.” This lengthens the amount of time that trustees must consider when taking an action that may negatively affect the environment. The Court indicated that the trustees “cannot prioritize the needs of the living over those yet to be born.”

Chief Justice Baer dissented in PEDF IV regarding the private trust language, which he also discussed in PEDF II. While agreeing with the basic premise of the decision, he reflected

---

68 Id. at 943.
69 Id.
70 Id.
71 Id.
73 Id. at 310.
74 Id.
upon the Court’s use of private trust language over public trust language once again.75 Chief Justice Baer also noted in his dissent that, “[t]he Court properly…deemed [the Environmental Rights Amendment] self-executing.”76 The self-executing nature of the Environmental Rights Amendment is consistently agreed upon in Robinson Township, PEDF II, and PEDF IV.

III. How will the Environmental Rights Amendment be Applied Going Forward?

Following PEDF IV, the Environmental Rights Amendment has been invoked in Commonwealth Court cases. These cases give an impression as to how the Environmental Rights Amendment will be applied going forward. Section A will introduce state agencies that are trustees under the Environment Rights Amendment. Sections B and C will discuss two cases that have proceeded through Pennsylvania’s Commonwealth Court since PEDF IV. Both Pennsylvania Environmental Defense Fund v. Department of Conservation and Natural Resources (hereinafter “PEDF v. DCNR”) and Delaware Riverkeeper Network v. Department of Environmental Protection (hereinafter “Delaware Riverkeeper”) are cases in which environmental organizations tried to hold Pennsylvania environmental agencies accountable under the Environmental Rights Amendment. Finally, section D will summarize the application of the Environmental Rights Amendment from these two cases and other issues that seem to arise.

A. Who are the Trustees of the Environmental Rights Amendment in Pennsylvania?

The Environmental Rights Amendment states that the Commonwealth is the trustee of the rights derived from the Amendment.77 These trustees include the state agencies that manage the public land and natural resources in Pennsylvania, including the Department of Conservation and

---

75 Id. at 317.
76 Id.
Natural Resources (hereinafter “DCNR”) and the Pennsylvania Game Commission (hereinafter “PGC”). The Department of Environment Protection (hereinafter “DEP”) is an environmental state agency in Pennsylvania that is responsible for enforcing environmental laws and regulation pertaining to the quality of the environment.

The DCNR was established in 1995 and the agency maintains 121 State Parks and 2.2 million acres of state forest land in Pennsylvania. Act 18, the Conservation and Natural Resources Act, split what originally was the Department of Environmental Resources into the DCNR and the DEP. The DEP retained the rulemaking powers of the Environmental Quality Board and the DCNR retained management of the State’s forests and parks. Within the first chapter of Act 18, it states that it implements the DCNR’s duty within Article 1, Section 27, the Environmental Rights Amendment. The Act also includes DCNR’s mission statement,

“The primary mission of the Department of Conservation and Natural Resources will be to maintain, improve and preserve State parks, to manage State forest lands to assure their long-term health, sustainability and economic use, to provide information on Pennsylvania's ecological and geologic resources and to administer grant and technical assistance programs that will benefit rivers conservation, trails and greenways, local recreation, regional heritage conservation and environmental education programs across Pennsylvania.”

The PGC was established in 1895 after Pennsylvania resident, John Phillips, lobbied the state legislature for five years to better protect the state’s wildlife out of concern that the game to hunt was quickly disappearing and the public natural resources were being turned to agricultural

80 Id.
81 Id.
82 Id.
The PGC manages and owns approximately 1.5 million acres of state game land or public land in Pennsylvania. Title 34, the Game and Wildlife Code, highlights the establishment and qualifications behind the PGC along with relevant amendments. Title 34 does not mention Article I, § 27, the Environmental Rights Amendment. However, within the most recent Board of Commissioners Policy Manual for the PGC, the board holds the PGC accountable under the Environmental Rights Amendment. Title 58 regulates game and management of state game lands under PGC’s control. The current mission and vision on the PGC’s website are:

Mission: “Manage and protect wildlife and their habitats while promoting hunting and trapping for current and future generations. Our mission summarizes the reason we exist as an agency and guides decisions we make.”

Vision: “Recognized and respected as the leader in innovative and proactive stewardship of wildlife and their habitats. Our vision is what we hope to be. We are passionate about being a voice for Pennsylvania wildlife and inspired by the natural world in which we live.”

The DEP was also established in 1995 and it retains rulemaking authority to promulgate, adopt, and enforce regulations pertaining to environmental quality in the state of Pennsylvania. Like the DCNR, the DEP was created by Act 18 in Chapter 5. Originally, Act 275 of 1970 created the Department of Environmental Resources, and the DEP retained some of the responsibilities...

---

90 *Id.*
that were not given to the DCNR when Act 18 split the agencies. The DEP’s mission is, “to protect Pennsylvania’s air, land, and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. We will work as partners with individuals, organizations, governments and businesses to prevent pollution and restore our natural resources.” 91

Each of these agencies acknowledges, either in the agency’s founding documents or in the agency’s policy manuals, that it is bound under the Environmental Rights Amendment in the actions it takes. There is no other explicit legal authority that expressly states that the DCNR, the PGC, or the DEP are the trustees under the Environmental Rights Amendment. The only trustee that the Amendment names is the Commonwealth itself. However, the state acts through its agencies. Thus, when the Environmental Rights Amendment names the Commonwealth as the trustee, the Commonwealth is obligated to fulfill that duty through its agencies.

Pennsylvania has approximately 17 million acres of woods, 70% of which is owned by private landowners and the other 30% is public land owned by federal, state, or local governments or agencies.92 The federal government owns approximately 616,000 acres of public land in Pennsylvania between the United States National Park Service, the United States Forest Service, the United States Fish and Wildlife Service, and the United States Department of Defense.93 The Federal Government is not a trustee under the Environmental Rights Amendment and has its own set of regulations in which it manages its public land. The largest managers of public land and natural resources in Pennsylvania are the DCNR and the PGC, who collectively own over 3.7

91 Dep’t Env’t Prot., Mission Statement, https://www.dep.pa.gov/About/Pages/default.aspx (last visited November 19, 2021).
million acres of public land and a significant portion of the 30% of public land in the state. That makes both agencies accountability under the Environmental Rights Amendment important because what they decide to do with the land will affect generations to come. This section highlights that there is some legal authority that state agencies such as the PGC, the DEP, and the DCNR are trustees of the Environmental Rights Amendment, and each agency is obligated to fulfill any duties that arise in connection with the Amendment.

B. PEDF v. Department of Conservation and Natural Resources (2021)

One of the first cases following PEDF IV is PEDF v. DCNR. This case gives an impression of how the Commonwealth Court may enforce the Environmental Rights Amendment going forward. This case involved one of the agency trustees, the DCNR. In Pennsylvania’s Commonwealth Court, PEDF challenged the DCNR’s 2016 State Forest Resource Management Plan (hereinafter “SFRMP”).94 PEDF claimed that from some of the statements written in the 2016 SFRMP, the DCNR violated the Environmental Rights Amendment and their duty as a trustee.95 According to PEDF, the DCNR violated the Environmental Rights Amendment by allowing the sale of public resources and the economic use surrounding resources derived from Pennsylvania’s state forests, namely having to do with oil and gas leasing among other things.96 In challenging the SFRMP and the DCNR, PEDF hoped the court would find that the certain statements within the document and actions taken by the agency violated the Environmental Rights Amendment and as

---

95 Id. at *7.
96 Id. at *5.
a trustee of public natural resources, the DCNR would be forced to comply with its duties under the Environmental Rights Amendment.97

The DCNR has been completing SFRMPs for some time and it conveys the DCNR’s management goals and decisions to the public, but the court highlights that it is not a “prescriptive manual.”98 There is not a regulation that requires the DCNR to adopt a resource management plan like SFRMP and there is not binding regulation that requires DCNR to follow what is written in the SFRMPs.99 To this effect, the court held that the SFRMP is not a binding, regulatory document that the DCNR must follow and while it outlines the agency’s intention, it is only policy.100 The court also concluded that the decision was not ripe for review unless the PEDF challenges a particular action that violates the Environmental Rights Amendment under the SFRMP, rather than the statements made within the SFRMP.101 Finally, the court concluded that the PEDF does not have a right to mandamus relief, if that is what the PEDF sought, because the DCNR is not required by any regulation or legislation to put forth the SFRMP in the first place.102 What the case’s result seems to convey is that the Environmental Rights Amendment is not implicated when a trustee is performing a discretionary duty rather than a mandatory one.

C. Delaware Riverkeeper Network v. Department of Environmental Protection (2021)

Another case that quickly followed the PEDF IV decision was Delaware Riverkeeper. This case involved another agency trustee, the DEP. This petition for review also took place in

97 Id.
98 Id. at *2.
99 Id. at *13.
100 Id. at *13.
101 Id. at *15-16.
102 Id. at *17.
Pennsylvania’s Commonwealth Court. The Delaware Riverkeeper Network sought injunctive and declaratory relief against the DEP for its neglect in cleaning up the Bishop Tube Hazardous Waste Site, violating laws such as the Clean Streams Law, the Hazardous Sites Cleanup Act (HSCA), and the Environmental Rights Amendment. The site was leaching hazardous substances including trichloroethylene, volatile organic compounds, heavy metals, and other similar substances into the watershed, which affected surface and ground water, and it flows downstream into the greater Delaware River Basin which has a very high bar of protection because it is an exceptional value stream.

After the first discovery of the contamination in the 1970-1980s by the DEP’s predecessor, the Department of Environmental Resources, the DEP tried to resolve the issue at Bishop Tube Hazardous Waste Site by conducting studies on the contaminants and installing water treatment systems, putting a fence around the area to keep people out, and plugging leaking pipes. Delaware Riverkeeper Network challenged that the efforts by the DEP were insufficient and that the continued pollution put the surrounding community at a significant public health and environmental risk. The DEP contended that it had been putting forth efforts towards the site, albeit slowly, and by doing so it had fulfilled its duties under environmental laws including the duty to act with prudence under the Environmental Rights Amendment. The final sentence of the opinion before the conclusion includes, “the resolution of whether DEP has violated these environmental laws must wait until after a trial on the merits of Riverkeeper’s Petition and a

---

104 Id.
105 Id. at *2.
106 Id.
107 Id. at *3.
108 Id. at *5.
consideration of what mandatory, rather than discretionary, duties those laws impose on DEP.”

Again, note the emphasis on mandatory duties, rather than discretionary duties, in instances where the court will find that the Environmental Rights Amendment has been implicated.

In both cases, the court consistently held that in order for the Environmental Rights Amendment to be implicated, the duty must be a mandatory duty rather than discretionary one in order to hold trustees accountable for their actions.

D. A Summary of the Current Application of the Environmental Rights Amendment and Lasting Questions Regarding How the Amendment will be Applied Going Forward

The claim in PEDF v. DCNR was not ripe for review without challenging a particular action or statement made by the SFRMP. The holding in PEDF v. DCNR highlights a common theme in the application of the Environmental Rights Amendment. The court thus far has required there to be a mandatory legislative authority present, like a regulation, in order to deem something violative of the Environmental Rights Amendment. In PEDF v. DCNR, there was no regulation requiring the DCNR to make SFRMPs or to follow what the SFRMPs said, and therefore the Court did not think it had the authority to decide on whether these statements conflicted with the DCNR’s duties under the Environmental Rights Amendment. Both of these 2021 Commonwealth Court decisions seem to state that the Environmental Rights Amendment does not apply when there is a discretionary, nonbinding action or statement. This may only be an issue in a fraction of Environmental Rights Amendment cases since the Amendment may still be enforced without a statute when there is a cause of action. However, when a stage agency is responsible for managing

\[109\] Id. at *7.
something like the state forests, one would hope that they should be held responsible to perform both discretionary and mandatory duties.

If PEDF IV reaffirmed PEDF II and expanded upon the application of the Environmental Rights Amendment, accentuating that it was a self-executing constitutional provision that ensured a cross-generational application, then it would seem that there is a broader authority to apply the provision to agency actions. Black’s Law Dictionary defines self-executing as, “effective immediately without the need of any type of implementing action.”110 If the Environmental Rights Amendment is a self-executing authority, then why does there need to be some sort of mandatory or regulatory requirement for the court to enforce the constitutional provision? To only challenge a cause of action, like an ill-advised timber harvest, seems like a step too late. If an agency has put a plan that would seem to otherwise violate their duties under the Environmental Rights Amendment into a discretionary document, perhaps that plan should be able to be challenged before its implemented. Creating an extra step, like some sort of regulatory or legislative authority, only delays the ability to hold the agency accountable.

Administrative agencies are often given broad authority to decide what actions they need to take in order to accomplish their goals. Agencies are given this broad authority because they are often filled with individuals with the necessary expertise to accomplish the goals of the agency. With such broad authority, there is also the likelihood that an agency may be involved in something unfavorable. For example, if an agency in Pennsylvania has a plan to lease an abundance of their land for oil and gas, what authority is there to stop the agency if this plan is listed in a discretionary document? One would think that this is exactly the type of situation that the Environmental Rights

Amendment was intended to control. However, if the two Commonwealth Court cases from 2021 are any indication, there must be some kind of specific authority to stop them other than the Environmental Rights Amendment.

Something else that is notable in the application of the Environmental Rights Amendment may be the court in which the decisions were made. Both 2021 cases, PEDF v. DCNR and Delaware Riverkeeper, were decided in Pennsylvania’s Commonwealth Court. Pennsylvania’s Commonwealth Court is the same court that established the three-part test in Payne that limited the Environmental Right Amendment for decades. PEDF III was also decided in the Commonwealth Court. The holding in PEDF III, that was ultimately kicked back up to Pennsylvania’s Supreme Court, was that the redirection of funds from the Lease Fund to the state’s General Fund was not unconstitutional and obligated the funds to be used toward the corpus of the trust under the Environmental Rights Amendment.111

There seems to be a general disconnect between Pennsylvania’s Commonwealth Court decisions and the Pennsylvania Supreme Court’s decisions. The Commonwealth Court has consistently limited the Environmental Rights Amendment’s application, while the Supreme Court has produced some of the most landmark decisions in favor of environmental law in the state. The Commonwealth Court tends to give less authority to the Amendment and while it may acknowledge the constitutional provision, it does not see it as an explicit authority giving rise to a right-to-relief without another legislative authority present. The Pennsylvania Supreme Court tends to interpret the Environmental Rights Amendment broadly, giving it more authority to be self-executing without any kind of express regulation. If the two Commonwealth Court decisions

from 2021 are appealed to the Supreme Court of Pennsylvania, it would be interesting to see if the Supreme Court would give the Environmental Rights Amendment more force.

There is also the cross-generational aspect of the Environmental Rights Amendment that is raised in PEDF IV. This creates an obligation by environmental state agencies in Pennsylvania to consider the effect of their management on a more long-term scale. For example, in Delaware Riverkeeper, the DEP seemed to slowly, but steadily, work on mitigating the hazardous substances that were leaching from the site. However, that slow effort exacerbated the problem as those hazardous substances ran downstream into even larger waterways, creating an even larger problem to clean up. If the intent behind the Environmental Rights Amendment is to prevent long-term detriment to the environment, by allowing an issue to go that long and progress into a larger issue, the likelihood of detriment to more of the state and more of the beneficiaries of the trust increases. A similar problem would occur if the DEP were to have approached the issue with a more short-term cure, without fixing the actual problem. For example, say the DEP had found a way to temporarily contain the substances at the hazardous waste site in Delaware Riverkeeper in order for them to not leach into the waterways. However, if the DEP left the actual cause of the hazardous substances there, without any solution on how to remove them, what implication does that have on future generations?

There are plenty of similar examples that already exist in Pennsylvania’s waterways today. A significant portion of Pennsylvania’s waterways are affected by acid mine drainage (hereinafter “AMD”) leftover from the coal mining industry. When the coal industry disintegrated, mines were abandoned, causing the impacts of AMD and the orange water seen across Pennsylvania today. One of the ways to mitigate AMD is with active or passive treatment systems. It is fairly easy for some of these systems to break down. What if there is a treatment system, introduced by a state
agency, that breaks down located within or near the Pennsylvania Wilds, a relatively undisturbed forested region in northern Pennsylvania, left unchecked or forgotten? Any short-term positive impact that treatment system had would not benefit future generations unless it is continuously checked and maintained. This example would not adequately address the cross-generational need prescribed by the Environmental Rights Amendment.

By applying the cross-generational aspect of the Environmental Rights Amendment to something like a mitigation plan, it seems like that would magnify the importance for a quick and efficient response to environmental hazards. The cross-generational aspect creates a larger scope for each trustee to consider before taking an action and it makes a trustee’s plan to address something like an environmental hazard much more complicated. The analysis and environmental consideration would need to be far looking and include more scientific data for the best practices possible. This likely requires each trustee to give more time and money to any mitigation project. The Environmental Rights Amendment lacks any specific thresholds. Without something like a scientific basis for best management practices, it is difficult to require an agency implementing a project to stay within specific confines that do not violate the Environmental Rights Amendment.

The provision gives any trustee the broad discretion to decide what that threshold may look like, and it gives the court the authority to decide what a reasonable expectation may be. Besides the numerous existing state environmental statutes and regulations, the Commonwealth Court is correct in that there is no mandatory legislation or regulation that provides any kind of background or standard in which to hold a trustee accountable. Any plan that a state agency would provide to address a problem like an AMD system, unless mandated, would likely not be enforced by the court. Consequently, the issue remains of how to go about requiring a trustee, like an
environmental agency, to provide a cross-generational approach to environmental management, including a means for the court to enforce that duty without a mandate.

IV. Proposal of a Pennsylvania Planning Rule Mandating Land Management Plans

While only addressing a fraction of what the Environmental Rights Amendment concerns, by requiring environmental state agencies in Pennsylvania to provide some sort of land or natural resource management plan would provide some threshold for the courts to refer to when making decisions regarding each agency’s duty as a trustee. This proposed management plan would address only the land and natural resource management and not the wide breadth of other Environmental Rights Amendment related duties. This section discusses the 2012 Planning Rule, which is implemented pursuant to the National Forest Management Act of 1976 (hereinafter “NFMA”), and how something with a similar framework to the 2012 Planning Rule could be used to construct a Pennsylvania Planning Rule that mandates land management plans on state-owned public land.

Admittedly, it would be difficult to provide any kind of quantitative threshold as to what action a trustee takes that would violate the Environmental Rights Amendment. By providing a legislative enactment that requires trustees that manage state public land to provide a management plan, some of their duties under the Environmental Rights Amendment could be satisfied. A management plan that thoughtfully considers cross-generational environmental aspects of management on public land would satisfy the need to conserve the natural resources in the state on a more long-term scale.

The NFMA is a federal law governing the United States Forest Service’s (hereinafter “USFS”) management of national forests, including an interdisciplinary approach to conservation
and resource management that aids in both conservation and in utilizing the resources that are available on the land.\textsuperscript{112} The NFMA provides the regulatory requirements that federal agencies must follow in order to comply with proper management plans.\textsuperscript{113} Throughout the executive administration turnover, different plans for the management of federal forest lands have been published. Currently, the USFS is managing their land under the 2012 Planning Rule.\textsuperscript{114} The 2012 Planning Rule provides a management and development plan for forests and guides the management plan based on the type of use, including harvesting, preservation, or recreational use.\textsuperscript{115} The plans are holistic in the sense that they include plans for multiple-use and include sections in the plan for not only the resources, but the wildlife and specific issues that the particular forest may be exposed to.\textsuperscript{116} The plans are reworked every 15 years to adapt to any foreseeable changes in management in order to conserve the forests in longevity.\textsuperscript{117}

The 2012 Planning Rule was authorized under the Obama Administration after a rather tumultuous history of prior forest plans and forest plan amendments that were struck down in the court system.\textsuperscript{118} The Planning Rule was collaborative.\textsuperscript{119} Many stakeholders came together to refine this version of the Planning Rule in order to accommodate environmentalist groups, individuals, those who profited and relied on resource harvesting, scientists, etc.\textsuperscript{120} A 21-member

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{112} 16 U.S.C.A. § 1601 (West).
\item \textsuperscript{114} 36 C.F.R. § 219.1.
\item \textsuperscript{116} Id.
\item \textsuperscript{117} Id.
\item \textsuperscript{119} Id.
\item \textsuperscript{120} Id.
\end{itemize}
\end{footnotesize}
Federal Advisory Committee was formed in order to represent varying interests in how the forest is used.\(^\text{121}\) The Trump Administration ended the Federal Advisory Committee.\(^\text{122}\) Another highlight of the 2012 Planning Rule was the continuance of multiple-use standards, sustainability, and the use of best available scientific information.\(^\text{123}\) The planning framework under the 2012 Planning Rule includes continual assessment of the forest areas, the process to amend or revise plans, and the continual monitoring of the forest areas.\(^\text{124}\) The 2012 Planning Rule was a win-win for a multitude of user groups that relied on the forests for research, economic value, or recreation.

To comply with the Environmental Rights Amendment’s obligation of natural resource conservation, perhaps a similar planning mechanism could be established in Pennsylvania. In an effort to conserve clean air, water, and other natural values of the environment cross-generationally, Pennsylvania needs a regulatory plan similar to that of the 2012 Planning Rule to govern land management and conservation. As stated in *PEDF v. DCNR*, the DCNR has been creating SFRMPs for decades, but there is no state regulation that requires the DCNR to write the SFRMPs or to follow the management plans laid out in the SFRMPs.\(^\text{125}\) For the courts to hold trustees of the Environmental Rights Amendment, like the DCNR and the PGC, accountable for how their public land is used, perhaps Pennsylvania needs to create a regulatory document like the 2012 Planning Rule to guide such agencies on how state forests and state game lands are to be managed. A Pennsylvania Planning Rule would require the agencies to continually assess and monitor the lands and have a plan for how the lands can be used. The plan, like the 2012 Planning

\(\text{121}\) *Id.*
\(\text{122}\) *Id.*
\(\text{124}\) 36 C.F.R. § 219.5.
Rule, would not preclude a multiple-use scheme, and would allow resource extraction, like timber harvesting, to remain. The Pennsylvania Planning Rule would include aspects of sustainability and the best science available to distinguish limitations on extraction and best management practices for the particular land.

Unlike the federal forest lands addressed by the 2012 Planning Rule, Pennsylvania has more diverse natural resources. Therefore, the science behind the management of each resource would be different. However, the key element of a Pennsylvania Planning Rule is the requirement of a management plan for the particular land or resource in question. For example, the PGC often manages state game lands for specific game. A Pennsylvania Planning Rule would require the PGC to submit a management plan for the state game land that includes conservation goals, management for any resources or biodiversity that could be affected by a management plan for that specific area, what the intended uses of the land are, and any foreseeable issues with the land in the agency’s pursuit to conserve its natural integrity. The plan would have a natural timeline, similar to that of the 2012 Planning Rule, of a decade or so which would give the agency time to monitor and assess any changes in the land and submit any necessary amendments. Like in *PEDF v. DCNR*, if there is nothing requiring the DCNR to manage their land, then it is easy to leave their duties as a trustee under the Environmental Rights Amendment ambiguous and discretionary. By requiring a management plan for Pennsylvania’s natural resources, a trustee’s need to think cross-generationally in their management practices under the Environmental Rights Amendment would be better addressed.

An interdisciplinary approach to land management would be equally as beneficial as it was in establishing the 2012 Planning Rule. The 2012 Planning Rule was received well by user groups and interested parties alike, but much like most proposed regulations, it was subject to challenges.
There are many different user groups in Pennsylvania that maintain a specific interest in how state public land is used. For example, there are people in Pennsylvania who make their livelihoods off of timber harvesting. There are also environmental groups, institutions that use public land in the state for research, and outdoor recreators. There are also groups that hope to modernize the use of Pennsylvania public lands by allowing ATV’s or other off-road vehicles in state parks and on state game lands. By combining the diversity of user groups in Pennsylvania, a similar Advisory Committee could be formed to create a comprehensive land management regulatory scheme. This Advisory Committee could come together to share individualized knowledge and information and set limitations on things like the extraction of natural resources or to set parameters on for where off-road vehicles can be used.

Much like the executive turnovers that affected the federal Planning Rule, a Pennsylvania Planning Rule would likely experience changes during an administrative changeover, like a gubernatorial turnover. The details of the Planning Rule still matter, but the ultimate goal of the Rule would be to require trustees of the state’s public resources to have a management plan in order to satisfy their duties under the Environmental Rights Amendment. If an administrative changeover affected said requirement, then the Commonwealth would likely be subject to a constitutional challenge in the judicial system. The courts could use key elements derived from the Pennsylvania Planning Rule as a barometer to fulfill the requirements of the Environmental Rights Amendment. Like the NFMA, the management plan would need to satisfy federal laws, such as the Endangered Species Act. While it may seem that a Pennsylvania Planning Rule would be an enormous effort requiring a lot of money, time, and resources, the DCNR and the PGC already provide many of their own land management plans, like the SFRMPs or specific game management plans. As long as these existing plans include multiple-use land management
principles and the best science available, they are likely already in compliance. Like the 2012 Planning Rule, the Pennsylvania Planning Rule would also provide the framework for an amendment if an agency would need to alter a plan to adapt to things like climate change. Again, something like the Pennsylvania Planning Rule would only aid one small facet of issues falling under the Environmental Rights Amendment.

V. Conclusion

How the Environmental Rights Amendment is applied in the Pennsylvania Commonwealth Court remains a challenge. While the Supreme Court of Pennsylvania has held that the Environmental Rights Amendment is self-executing in *PEDF II* and *PEDF IV*, the Commonwealth Court seems to seek a more definitive mandatory and regulatory scheme in order to enforce discretionary tasks under the Amendment on to trustees. A Pennsylvania Planning Rule requiring state agencies that are trustees under the Environmental Rights Amendment to maintain a land management plan would fulfill a greater need for agency transparency in their plans to maintain state public land like state forests, state parks, and state game lands with cross-generation conservation in mind. A Pennsylvania Planning Rule would create clearer boundaries in which state environmental agencies can operate in order to satisfy their duties under the Environmental Rights Amendment.
The SPS Agreement and Climate Change

Bander Almohammadi*

I. INTRODUCTION

Climate change negatively affects income inequality of countries around the globe. These negative effects can arise in unlikely ways, such as through the Sanitary and Phytosanitary Measure ("SPS") Agreement. Increasing income disparity between “developed” and “undeveloped” countries is an unintended consequence of the inconsistent application of SPS Agreement’s restrictions on animal/animal product trade. This leads developed countries to generate more wealth. Even more, this causes developing countries to struggle with the effect of climate change. Inconsistent application of the SPS Agreement leads to several questions. Does the World Trade Organization ("WTO") restrict imports from certain countries based on the World Health Organization’s ("WHO") recommendation to protect the national health of states? Do countries apply Sanitary and Phytosanitary Measure ("SPS") agreements that make their decisions justifiable and reasonable to prohibit specific animal products that significantly jeopardize the health of states? To be more precise, when it comes to prohibiting animal products, can countries rely on WHO recommendations regarding the health of the state as has occurred during the pandemic restriction? Many countries put many restrictions based on the WHO recommendations based on public health as stated in international Health Regulations that adopted by WHO in which articulate the criteria of restrictions on goods (which includes animal products), and containers

---

*Doctor of Juridical Science (S.J.D.) candidate at the University of Kansas School of Law. Juris Doctor (J.D.), December 2021, University of Missouri-Kansas City School of Law. Master’s degree in American Legal Studies (L.L.M.), University of Kansas School of Law 2018. He currently is pursuing a Social Justice Graduate Certificate at Harvard Extension School.


etc.\textsuperscript{4} Can we predict the same here when it comes to prohibiting animal production? Can countries refer to the WHO recommendation when applying the SPS measure to justify their action regarding prohibiting importing animals’ products? Or do countries use their measures to restrict animal products and interpret the SPS agreement based on their standards to make their action justifiable? As observed in the cases below, there is no precise mechanism of the SPS agreement that countries could rely on to make the SPS measures consistent and reasonable.

To answer these questions, I will first explain what the SPS Agreement entails. Then, I will discuss climate change alongside the inconsistent application of the SPS Agreement by sharing the impacts the SPS Agreement has had on agricultural commodities, including plants and animals. I argue that three critical aspects need to be addressed when it comes to illustrating the policies behind the SPS, and the objective standard that the WTO adopted and implemented in the SPS agreement. First, the SPS agreement needs to revise to make it more compatible with the current challenge of climate change that impacts all of us. Second, developed countries should share their resources that help developing countries combat the challenge of climate change. Third, the application of the SPS agreement needs to be consistent among nations to avoid any arbitrary and capricious application, as it broadens the gap of income inequality. We all live on one planet. Climate change affects all of us in one way or another. Hence, nations need to cooperate to make a better life for their next generations for the next decade to come. To avoid the tragedy of climate change, I urge cooperation among the nations to reach a deal that benefits all peoples and environments.

\textsuperscript{4} WHO recommendations are based on the public health of the state as regulated in International Health Regulations that were adopted by the WHO in 2005, amended in 2014 and went into force in 2016. See WORLD HEALTH ORGANIZATION, INTERNATIONAL HEALTH REGULATIONS, (2005).
II. BACKGROUND

A. The SPS Agreement

The Sanitary and Phytosanitary Measures (“SPS”) has a key role in trade negotiations around the world.5 The SPS Agreement is an agreement between nations that “concerns the application of food safety and animal and plant health regulations.”6 The key features of the SPS Agreement is that “all countries maintain measures to ensure that food is safe for consumer, and to prevent the spread of pests or diseases among animals and plants.”7 One scholar, Denise Prévost, says that nations “realized that, aside from those SPS measures that are based on legitimate health concerns, many SPS measures exist with more questionable bases. Clearly many governments, under the influence of domestic industry pressure groups, misuse SPS measures as disguised trade barriers for protectionist purposes.”8 She believes that the SPS measures were essential to liberalize the agriculture trade.9 As she mentions “The Punta Del Este Declaration”10 that carved out the Uruguay Round’s11 agenda solicited the agricultural products to be liberalized.12

---

7 Id.
8 Prévost, supra note 5.
9 Id.
10 The Punta Del Este Declaration, “Ministers, meeting on the occasion of the Special Session of the CONTRACTING PARTIES at Punta del Este, have decided to launch Multilateral Trade Negotiations (The Uruguay Round).” See GATT-PUNTA DEL ESTE DECLARATION, http://www.sice.oas.org/trade/Punta_e.asp (last visited April 21, 2022).
11 The Uruguay Round “took seven and a half years,” to form, and by “the end, 123 countries were taking part. It covered almost all trade, from toothbrushes to pleasure boats, from banking to telecommunication, from the genes of wild rice to AIDS treatments. It was quite simply the largest trade negotiation ever, and most probably the largest negotiation of any kind in history.” “The seeds of the Uruguay Round were sown in November 1982 at a ministerial meeting of GATT members in Genevan,… the work programme that the ministers agreed formed the basis for what was to become the Uruguay Round negotiations agenda….., The talk were going to extend the trading system into several new areas, notably trade in services and intellectual property, and to reform trade in sensitive sectors of agricultural and textiles.” Understanding the WTO - The Uruguay Round, WORLD TRADE CENTER, https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact5_e.htm (last visited April 21, 2022).
12 Prévost, supra note 5.
of “agriculture liberation” was meant to liberalize the rules of the “Tokyo Round Agreement” on Technical Barriers to Trade with regard to the SPS measures. Nonetheless, the SPS measures were apart from technical barriers to trade. Consequently, two separate agreements on technical barriers to trade emerged from in the Uruguay Round: first, the Agreement on Technical Barriers to Trade (“TBT Agreement”) applicable to technical regulations, standards and conformity assessment producers other than sanitary or phytosanitary measures; and second, the Agreement on the Application of Sanitary and Phytosanitary Measure (“SPS Agreement”).

B. Climate Change

Human activity plays a huge role in causing climate change, and, in turn, climate change causes a massive danger to food security around the globe. Greenhouse gas admissions, caused by humans’ everyday activities, leads to increased temperature. According to a report published by the State of Agricultural Commodity markets, (“COMO”), greenhouse gas emission between 1951 to 2010 caused a temperature increase of 0.5 Celsius to 1.3 Celsius. As shown by the SOCO report as well as in the map shown below, the increasing temperature shows that the leaders of the world must take action to protect and prevent damage that results from climate change, including but not limited to harm to plants and animals.

13 The Tokyo Round Agreement, “(1973-1979) developed agreements on anti-dumping measures, government procurement, technical barriers to trade and other non-tariff measures which were known as “codes.” See WORLD TRADE ORGANIZATION, WTO, https://www.wto.org/english/docs_e/legal_e/prewto_legal_e.htm (last visited April 21, 2022).
14 Id.
15 Id.
16 Id.
18 Id.
19 Id.
20 Id.
Climate change affects our lives, including all species living on Earth. By default, any change in climate will affect all species, including humans, animals, and plant products. Climate change indirectly impacts all lives by harming the quality of food, water and oxygen. We need to protect the plants as plants are extremely susceptible to the variations of climate change. Consequently, this fact will affect animal production as the animal feeds from the plants. As Earth faces dramatic changes in climate, so, too, will flora and fauna experience dramatic threats to their biological makeup Therefore, countries will hesitate to import animal productions from countries that struggle with disasters that result from climate change. Truly, climate change can greatly affect developing countries. Those who do not have resources, like reliable infrastructure, to combat the effects of climate change are the most vulnerable in terms of agriculture commodities. The following chart shows how climate change has impacted the crop yields so heavily.

---

21 Id. at 11.
22 Id.
23 “[I]t is well known that beneficial plant-associated microorganisms may stimulate plant growth and enhance resistance to disease and abiotic stresses. The effects of climate change factors such as CO2, drought and warming on beneficial plant-microorganism interaction are increasingly being explored.” Stéphane Compan, Marcel G.A. van der Heijden and Angela Sessitsch, Climate Change Effects on beneficial plant-microorganism, Federation of European Microbiological Societies, Blackwell Publishing Ltd (2010).
24 Lopian, supra note 17.
We all rely heavily on plants and their products, and need to pay more attention to the health of plants that provide the necessities of life. Pests greatly affect plant health. The International Plant Protection Convention (“IPPC”) defines a pest as “any species, strain biotype of plant, animal of pathogenic agent injurious to plants or plant products.” The climate impacts plants and their pests both directly and indirectly. Changes in temperatures, water accessibility, carbon dioxide, outrageous climate occasions, precipitation, and ozone levels do influence plants and pests and may prompt organic associations, which would not occur under stable conditions. Likewise, climate change directly affects animals and their products, and their primary source of food either directly or indirectly comes from plants. Animals are also deeply impacted by climate

---

25 “In 2016, the International Plant Protection Convention (IPPC) states that; plant health…. is usually considered the discipline that uses a range of measures to control and prevent pests, weeds and disease causing organisms to spread into new areas, especially through human interaction such as international trade.” Id. at 13.

26 Id. at 13.

27 Id. at 14.

28 Id. “The warming temperate areas may lead to the situation that pests extend their distribution into previously inhospitable areas. An example of this is the Old World bollworm (Helicoverpa armigera), which considerably increased its distribution in the United Kingdom from 1969-2004 and at the northern edge of its range in Europe (FAO, 2008a). Another example is the oak processional moth (Thaumetopoea precession), which has extended northward from central and southern Europe into Belgium, Netherlands and Denmark (FAO, 2008a).”

29 Id. at 17. “The negative effects on plant production are likely to directly affect animal production systems; impairing animal growth, meat, milk and egg yield and quality, as well as reproductive performance, metabolic and health status, and immune response.”
change. There are three ways to view the impact of climate change on animals: effects in physiology, distribution, and adaption.30

III. CLIMATE CHANGE AND THE SPS AGREEMENT

A. Consistent application of the SPS Agreement can help with the harmful effects of climate change.

“The SPS agreement explicitly recognizes the scientific and technical competence of three international standard-setting organizations to do so: The World Organization for Animal Health (OIE) for animal health, the International Plant Protection Convention (IPPC)31 for plant health, and the Codex Alimentarius Commission (Codex) for food and safety issues.”32 All of these organizations are linked to the WTO.

There are several steps that countries must take in order to establish harmonized SPS Agreements around the globe. The WTO defines SPS measures as follows:

(a) to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms;
(b) to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs;

30 Id.
31 “In 2014, the contribution of Working Group II of the Intergovernmental Panel on Climate Change (IPCC) to the Fifth Assessment Report stated that ‘human interference with the climate system is occurring, and climate change poses risks for human and natural systems.’ Risks are extremely likely to occur in rural agricultural systems, in particular. They are unevenly distributed and are generally greater for disadvantaged people and communities in countries at all levels of development (IPCC, 2014b). There is a high confidence by the IPCC that major future rural impacts are expected in the near term and beyond. These impacts will particularly affect water availability and supply, food security, and agricultural incomes, including shifts in production areas of food and non-food crops across the world (IPCC 2014a). In addition, the IPCC predicts that the continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems (IPCC, 2014b). The impact of climate change on agricultural production is generally considered to be negative, with countries in lower latitudes suffering the most from changes in climate (IPCC 2014a). The IPCC estimated that for major staple crops such as wheat, rice and maize in tropical and temperate regions, climate change without adaptation is projected to negatively impact aggregate production (IPCC, 2014a). This is estimated for local temperature increases of 2°C or more above late-20th-century levels. However, some individual areas may benefit from climate change in terms of agricultural production. These increases, however, are not believed to be sufficient to compensate for the yield losses anticipated on a world-wide scale” Id.
32 Id.
(c) to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or (d) to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.\textsuperscript{33}

Sanitary or phytosanitary measures include all relevant laws, decrees, regulations, requirements and procedures including, inter alia, end product criteria; processes and production methods; testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animals or plants, or with the materials necessary for their survival during transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; and packaging and labeling requirements directly related to food safety.\textsuperscript{34} Moreover, Article 2 of the Agreement highlights clearly that all members should make SPS measurements without any unjustifiable or arbitrary discrimination between members.\textsuperscript{35}

For a decade, many disputes have arisen between nations regarding the application of the SPS on prohibiting food and agriculture between nations. Most application of the SPS is capricious and arbitrary. For example,\textsuperscript{36} in 1998, discriminatory treatment occurred between European countries and certain African countries. The European Communities ("EC") imposed a blockade on imports of fish from some African countries. Since then, the European Communities have

\textsuperscript{33} Agreement of the Application of Sanitary and Phytosanitary Measures, supra note 3.
\textsuperscript{34} Id.
\textsuperscript{35} Id. "Article 2: Basic Rights and Obligations: 1. Members have the right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health, provided that such measures are not inconsistent with the provisions of this Agreement; 2. Members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence, except as provided for in paragraph 7 of Article 5; 3. Members shall ensure that their sanitary and phytosanitary measures do not arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail, including between their own territory and that of other Members. Sanitary and phytosanitary measures shall not be applied in a manner which would constitute a disguised restriction on international trade."
\textsuperscript{36} Trade Practitioner, supra note 2.
resumed trade on the grounds that WHO provided evidence that the fish was not a problem.\textsuperscript{37} In this case, we find that there was no issue to ban animal products from certain African countries. The EC did not provide legitimate, and reasonable reason that supports their decisions or measures that the EC needs to be taking into their account must be based on risk assessment.\textsuperscript{38} Moreover, the SPS agreement emphasizes “the principles of transparency and equivalence.”\textsuperscript{39} Due to the lack of measurements of risk assessments as well as the lack of transparency and equivalence in our case, the restrictions were lifted by the WTO. In the following cases, the reader can realize how countries interpret and apply the application of the SPS in different ways in various circumstances. Therefore, the SPS application continues to be capricious and arbitrary among nations. The following cases show the unique application of the SPS Agreement. Consequently, issues arise when uniformity is lacking.

\textbf{IV. THE SPS AGREEMENT AS APPLIED IN JAPAN, AUSTRAILIA, AND THE EUROPEAN UNION.}

\textbf{A. Japan Apples Case}

The Japan Apples case arose on March 1, 2002 due to the restrictions that Japan imposed on imports of apples from the United States.\textsuperscript{40} However, the United States claimed that the maintenance that Japan imposed on the apples, which Japan articulated to be necessary to protect against introduction of fire blight in which the restrictions are too cautious and harsh.\textsuperscript{41} Among other things that the United States claimed,

the prohibition of imported apples from orchards in which any fire blight was detected, the requirement that export orchards be inspected three times yearly for

\textsuperscript{38} S.A. Neeliah, D. Goburdhun, \textit{Complying with the clauses of the SPS Agreement: Case of a developing country}, ELSEVIER at 902 (Dec. 10, 2009).
\textsuperscript{39} \textit{Id.}
\textsuperscript{41} \textit{Id.}
the presence of fire blight and the disqualification of any orchard from exporting to Japan should fire blight be detected within a 500 meter buffer zone surrounding such orchard.\textsuperscript{42}

By imposing the aforementioned measures, the United States claimed that Japan violated Articles 2.2, 2.3, 5.1, 5.3, 5.6, 6.1 and 7 and Annex B of the SPS Agreement.\textsuperscript{43}

The SPS Agreement Article 2.2 emphasizes the idea of food and animal protection.\textsuperscript{44} Japan failed to provide scientific evidence to justify their measure. The Appellate Body\textsuperscript{45} of the WTO found that “the measure was maintained without sufficient evidence with Art. 2.2, as there was a clear disproportionate (and thus no rational or objective relations) between Japan’s measure and the ‘negligible risk’ identified on the basis of the scientific evidence.”\textsuperscript{46} The second issue is that Japan violated Article 5.1, which requires taken by international organizations to protect human, animal or plant life or health to be appropriate.\textsuperscript{47} To this end, the Appellate Body found there is no basis that could be justifiable and applicable to Article 5.1.\textsuperscript{48} Therefore, the measures taken by Japan are capricious and arbitrary. Third, Japan violated Article 5.6, which emphasizes the concept of alternative measures.\textsuperscript{49} With regard to this issue, the Appellate Body found that Japan “acted inconsistently Art. 5.6 because the alleged compliance measure was “more trade restrictive than

\textsuperscript{42} Id.
\textsuperscript{43} Id.
\textsuperscript{44} Id.
\textsuperscript{45} The Appellate Body “was established in 1995 under Article 17 of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU).” See Dispute Settlement – Appellate Body, WTO, https://www.wto.org/english/tratop_e/dispu_e/appellate_body_e.htm (last visited May 10, 2021).
\textsuperscript{46} Panel Report, supra note 40.
\textsuperscript{47} Article 5.1 “Members shall ensure that their sanitary or phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risk to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organization,” Agreement of the Application of Sanitary and Phytosanitary Measures, supra note 3.
\textsuperscript{48} Panel Report, supra note 40.
\textsuperscript{49} Article 5.6 “Without prejudice to paragraph 2 of Article 3, when establishing of maintaining sanitary or phytosanitary measures to achieve the appropriate level of sanitary of phytosanitary protection, Members shall ensure that such measures are not more trade-restrictive than required to achieve their appropriate level of sanitary or phytosanitary protection, taking into account technical and economic feasibility.” Agreement of the Application of Sanitary and Phytosanitary Measures, supra note 3.
required to achieve their appropriate level of sanitary or phytosanitary protection” within the meaning of Art. 5.6.”

Ultimately, Japan did not provide any justifications for the measures, other than citing that the restrictions were applied for the trade protection. In citing these protectionary measures, Japan argued that the language of the Articles 2, 3, 4, 5 is broad. Every country interprets the language of the articles based on their interest, not the standards of the SPS measures.

B. Australian Salmon Case:

Another dispute was the Australia Salmon Case. On October 5, 1995, Australia’s government decided to prohibit any salmon imports from Canada on the ground of quarantine regulation in Australia. Canada complained that the prohibition was inconsistent with the SPS Agreement. On June 12, 1998 the Dispute Settlement Body within World Trade Organization Panel found that Australia’s decision regarding the prohibition of the Canadian’s salmon was inconsistent with Articles 2.2, 2.3, 5.1, 5.5, and 5.6 of the SPS measures. Therefore, Australia’s decision was nullified under the SPS Agreement.

---

50 Panel Report, supra note 40.
52 Id.
53 DSB is “the General Council convenes as the Dispute Settlement Body (DSB) to deal with disputes between WTO members. Such disputes may arise with respect to any agreement contained in the Final Act of the Uruguay Round that is subject to the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU). The DSB has authority to establish dispute settlements panels, after matters to arbitration, adopt panel, Appellate Body an arbitration reposts, maintain surveillance over the implementation of recommendations and rulings contained in such reports, and authorize suspension of concessions in the event of non-compliance with those recommendations and rulings. See, WORLD TRADE ORGANIZATION, Dispute Settlement Body, https://www.wto.org/english/tratop_e/dispu_e/dispu_body_e.htm (last visited April 23, 2022).
54 Appellate Body Report, supra note 51.
55 Id.
On July 22, 1998 Australian’s government appealed the Panel’s decision on the ground that there were incorrect interpretations of Article 5.1, Article 5.5 and Article 5.6 of the SPS Agreement.® The Appellate Body found the following:

- **Article 5.1 of the SPS: Risk Assessment:** “The Appellate Body, although reversing the Panel’s finding because the Panel has examined the wrong measures (i.e. heat-treatment requirement), still found that the correct measure at issue – Australia’s import prohibition – violated Art. 5.1 (and, by implication, Art.2.2) because it was not based on “risk assessment” requirement under Art. 5.1”®

- **Article 5.5 of the SPS: Prohibition on Discrimination and Disguised Restriction on International Trade:** “The Appellate Body upheld the Panel’s finding that the import prohibition violated Art 5.5 (and, by implication Art 2.3) as “arbitrary and unjustifiable” levels of protection were applied to several different yet comparable situation so as to result in “discrimination or a disguised restriction”(e.i. more strict restriction) on imports of salmon, compared to imports of other fish and fish products such as herring and finfish.”®

- **Article 5.5 of the SPS: Appropriate Level of Protection:** “The Appellate Body reversed the Panels’ finding that the heat-treatment violated Art. 5.6 by being “more trade-restrictive that required”, because heat treatment was the wrong measure. The Appellate Body, however, could not complete the Panel’s analysis of this issue under Art. 5.6 due to insufficient facts on the record. (In this regard, the Appellate body said that it would complete the Panel’s analysis in a situation like this “to extent possible basis of the factual findings of the Panel and/or of undisputed facts in the Panel record”).”®

- **False Judicial Economy:** “The Appellate Body found that the Panel in this case exercised “false judicial economy” by not making findings for all the products at issue, in particular, findings in respect of Art. 5.5 and 5.6 for other Canadian salmon. The Appellate Body clarified that, in applying the principle of judicial economy, panels must address those claims on which a finding is necessary to secure a positive solution to the dispute. Providing only a partial resolution of the matter at issue would be ‘false judicial economy’”®

As we can observe, the application of the SPS still not clear enough to justify any restrictions on agriculture and food products between nations around the globe.

---

® Id.
® Id.
® Id.
® Id.
® Id.
C. European Union Beef Case

Another dispute that arises under the SPS Agreement is the European Union’s ban on hormone beef from the United States. The United States and European Union disputed the ban for nearly a decade. The dispute has exposed legitimate substantive and procedural issues, just as the logical proof and agreement concerning the safety of chemical treated meat. Until Renee Johnson’s report regarding the U.S.-European Union Beef Hormone Dispute that was published by the Congressional Research Service in 2015, the European Union kept on prohibiting imports of chemical treated beef meat and confined most meat exports to beef imports produced without the utilization of chemicals. In 1981, the European Union decided to restrict livestock production subjected to chemical hormone treatment. In 1989, the European Union fully banned importation of meat products treated with growth promotants. The ban includes “six growth promotants that are approved for use and administered in the United States.” As a result of this dispute, the United States imposed tariff sanctions on the European Union products. The first tariff imposed on the European Union products was on 1989 in which lasted until 1996. The second tariff was imposed in 1999. On July 2, 1996, the United States requested to establish a panel of the DSB in consultation with the European Union to settle the dispute within the WTO organization. The panel found that the European ban on meat treated with chemical hormone from the United States was inconsistent

62 Renée Johnson is a Specialist in Agricultural Policy.
63 Johnson, supra note 61.
64 Id.
65 Id.
66 Id.
67 Id.
68 Id.
with Articles 3.1, 5.1 and 5.5 of the SPA Agreement. The European Union appealed the decision of the panel. The Appellate Body found the following:

- **Article 3.1 of the SPA: (International Standards):** “The Appellate Body rejected the Panel’s interpretation and said that the requirement that SPS measures be “based on” international standards, guidelines or recommendations under Art. 3.1 does not mean that SPS measures must ‘conform to’ such standards.”

- **Article 3.1 and 3.2 of the SPS (Harmonization):** “The Appellate Body rejected the Panel’s interpretation that Art. 3.3 is the exception to Arts. 3.1 and 3.2 assimilated together and found that Arts. 3.1, 3.2 and 3.3 apply together, each addressing a separate situation. Accordingly, it revered the Panel’s finding that the burden of proof for the violation under Art. 3.3, as a provision providing the exception, shifts to the responding party.”

- **Article 5.1 of the SPA: (Risk Assessment):** “While upholding the Panel’s ultimate conclusion that the EC measure violated Art. 5.1 (and thus Art. 3.3) because it was not based on a risk assessment, the Appellate Body reversed the Panel’s interpretation, considering that Art 5.1 requires that there be a ‘rational relationship’ between the measure at issue and the risk assessment.”

- **Article 5.5 of the SPS (Prohibition on discrimination and disguised restriction on international trade):** “The Appellate Body reversed the Panel’s finding that the EC measure, through arbitrary or unjustifiable distinction, resulted in ‘discrimination or a disguised restriction of international trade’ in violation of Art. 5.5, noting: (i) the evidence showed that there were genuine anxieties concerning the safety of the hormones: (ii) the necessity for harmonizing measures was part of the effort to establish a common internal market for beef; and (iii) the Panel’s finding was not supported by the ‘architecture and structure’ of the measures.”

- **Standard’s Review:** The Appellate Body discussed the issue of whether the European Communities assess the risk based on the objective assessment that subject to the Standard of review stated in Article (11) of the SPS Agreement. Article (11) “is a ‘legal question’ that falls within the scope of appellate review under DSU Art. 17.6.” The Appellate Body found that the panel complied with Article (11).

---

70 Id.
72 Id.
73 Id.
74 Id.
75 Id.
76 European Communities is the European Union. I use the European Community interchangeably with European Union.
77 Appellate Body Report, supra note 71.
V. MOVING FORWARD

To avoid an arbitrary application of the international standard, nations must cooperate in utilizing SPS measurements, in order to flourish the global economy as well as the domestic economy. In addition, the SPS Agreement needs to be applied equally between countries to prevent discrimination and income inequality that cause excessive challenges between countries. If a country claims that an animal, and therefore the animal products, are affected by climate change, but the country lacks SPS measurements, and the animal products threaten the health of their citizens, they have to be clear to articulate the reasons or refer the case to the WTO dispute settlement. There, the WTO may scrutinize the claim and make final decisions whether or not the affected animal products impose a massive threat to their citizens in terms of health otherwise the decision would be unjustifiable and arbitrary. Additionally, besides the WHO recommendations regarding animal productions, countries should take into consideration how climate change affects animals’ physiology, distribution and adaptation. The reasons for prohibiting animal products from any country or region must be reasonable and scientific, otherwise, it will be unreasonable and discriminatory.

After studying the above cases objectively, I can say that the SPS Agreement needs to be addressed globally to reach out to monolithic standard that all nations can rely on when they decide to import agriculture products from other nation, otherwise the application of the SPS will continue to be disputed unabated. Countries need to restrict the import of agricultural products through the development of SPS measures to ensure that they are free from such dangers.\textsuperscript{78} The SPS Agreement sets out various principles that strive to exclude discriminatory and unreasonable

\textsuperscript{78} Id.
measures that risk becoming a protectionist tool.\textsuperscript{79} The SPS Agreement requires that SPS measures depend on logical standards and scientific measures.\textsuperscript{80} However, the measures should be encouraged to be a framework for international standards of “harmonization”\textsuperscript{81}

As a result of the arbitrary application of the SPS, developed countries could raise their income and become richer. In addition to that they could carve out a strong infrastructure that could adopt any changes that result from climate change. Climate change’s impact the prices of the international food, rice production, and maize production.\textsuperscript{82}

The first chart\textsuperscript{83} shows the impact on international food prices.

The second chart\textsuperscript{84} demonstrates the climate change’s impact on rice production.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{impact-graph.png}
\caption{Impact on International Food Prices}
\end{figure}

\textsuperscript{79} Id.
\textsuperscript{80} Id.
\textsuperscript{81} Id.
\textsuperscript{82} Gerald C. Nelson presented his paper in the World Bank Seminar about Climate Change and SPS risks in Washington D.C. on September 22-23, 2009.
\textsuperscript{84} Id.
The third chart\(^8^5\) illustrates the climate change’s impact on maize production.

Last, many developing countries are struggling with the SPS measurements and their application due to the lack of infrastructure and experts in both SPS measurements and climate change affecting plant and animal products. Developing countries need assistance from developed countries in providing experts in food safety, plant health and control, hygiene control, training, 

\(^8^5\) *Id.*
and teaching capability.\textsuperscript{86} For instance, in Mauritius\textsuperscript{87} “there were not enough experts in surveillance, toxicology, risk assessment, and legal knowledge in the SPS area.”\textsuperscript{88} As we see, the aid that is provided by developed countries to developing countries is insufficient.

Instead of taking advantage of developed countries that lack the SPS measurements and banning their plant and animal products affected by climate change, developed countries should provide more help to developing countries to overcome the challenge and difficulty caused by climate change to their plant and animals products as well as help them to increase their income. Consequently, the inequality will be reduced. The SPS Committee has to meet every three months to discuss the issue of the SPS requirements of the trading system.\textsuperscript{89} They should raise the issue of inequality and climate change, which affect animal and plant products worldwide.

\textsuperscript{86} Id.
\textsuperscript{87} Mauritius island is an island nation in the Indian Ocean about 2,000 kilometers (1,200) of the south-east coast of the African continent.
\textsuperscript{88} Neeliah, supra note 38.
\textsuperscript{89} Gretchen H. Stanton, \textit{The SPS Agreement, WTO Agreement on the Application of Sanitary and Phytosanitary Measure}, INTERNATIONAL TRADE FORUM; GENEVA, at 24.
Dressed to Kill: How the Lack of Environmental Regulations Tailored to the Fashion Industry Is Destroying Our Planet

Meghann M. Principe*

I. The Fashion Industry and the Environment

“More is more and less is a bore.” This quote from fashion icon Iris Apfel seems to have been taken to heart by the fashion industry, which has advanced the ideology that a new outfit is needed for every occasion, and that outfits are not meant to be repeated. This culture of buying new clothing has become even more prevalent and harmful to the environment largely due to the “fast fashion” phenomenon. Fast fashion is “clothes that are made and sold cheaply, so that people can buy new clothes often.” Generally, this increased demand leads to increased production from polluting factories. In turn, this leads to more waste due to increased consumption of clothing from the fashion industry.

Fast fashion producers are able to keep their costs low because they use cheap, synthetic materials and place their factories in countries that do not have strict labor laws. Because the factories that produce the textiles used in fast fashion clothing items are located South Asian countries such as Bangladesh, Vietnam, and Indonesia, fast fashion companies choose to outsource here. This is able to happen because these countries have the lowest wages in the industry, oppose unionization, and lack strict, if any, laws pertaining to employee safety. Over ninety-seven percent

---

* Candidate for J.D., May 2023, Duquesne University School of Law. B.A. in Letters, Arts, and Sciences, 2020, The Pennsylvania State University. Meghann would like to thank her family and friends for their unwavering love and support, as well as her advisor and editors for their guidance and encouragement.

2 Iris Apfel


5 Id.

6 Id.
of garments in the United States are made overseas.\textsuperscript{7} Due to the magnitude of this outsourcing, there is nothing that United States’ law can do to have any substantial effect on the production component of the fast fashion industry. However, there are other avenues for protecting the environment through options such as imposing harsh import taxes, adopting a sui generis, or “of its own kind,” copyright model, creating industry standards, and implementing a circular economy.

A. Fast Fashion

Fast fashion is “an approach to the design, creation, and marketing of clothing fashions that emphasizes making fashion trends quickly and cheaply available to consumers.”\textsuperscript{8} “Slow fashion”, on the other hand, can be described as “locally grown materials, often domestically manufactured or sourced on a relatively small scale.”\textsuperscript{9} Some of the most popular fast fashion brands today are Shein, Zaful, Boohoo, Missguided, and Fashion Nova.\textsuperscript{10} Experts have estimated that the fast fashion industry will grow to $30.58 billion in 2021 from its already astounding $25.09 billion in 2020.\textsuperscript{11} By 2025, the global fast fashion market is projected to reach about $40 billion.\textsuperscript{12} Fast fashion makes up over twenty percent of the global fashion industry.\textsuperscript{13}

\textsuperscript{12} Id.
B. The Fashion Market

Clothing production today has nearly doubled in comparison to pre-2000 levels. However, the amount of time that an item of clothing is worn has dropped forty percent since that time. A 2019 poll found that “thirty-three percent of women consider an outfit to be ‘old’ after wearing it fewer than three times.” As a result of fast fashion, consumers in the United States consume at least four hundred percent more clothing than we did thirty-five years ago. This percentage is continuing to increase as a result of the major changes in how we have been consuming fashion during the COVID-19 pandemic. The COVID-19 pandemic has caused the fashion industry to shift their primary focus to online sales rather than in-store shopping. This unexpected need to immediately shift to online retail platforms has turned out to be a major boost for the most popular fast fashion brands mentioned above that never had a physical store location in the first place. Fast fashion’s increase in popularity is largely due to social media. Between advertisements and influencers, social media has become an integral part of shopping. In fact, a 2015 report by the Urban Land Institute found that “forty-five percent of millennials spend over one hour each day looking at retail sites.” The report further found that fifty-percent of the men

---

19 Id.
20 Id.
21 Id.
22 Id.
23 Id.
and seventy-percent of the women felt that shopping is “a form of entertainment.”

This percentage has likely increased dramatically as a result of the ongoing COVID-19 pandemic. One company that has greatly benefitted from the shift in consumer habits is Shein. Shein surpassed Amazon to become the United States’ most-downloaded shopping app in both the Apple and Android App Stores during May of 2021. This extremely popular fast fashion company now boasts being the most downloaded shopping app as of July 2021. The company Shein alone releases about nine hundred new clothing items every single day on its website. Shein makes up almost one-third of the United States’ fast fashion market. The vast majority of the clothing on Shein’s website do not last more than three months in stock. Due to fast fashion manufacturers’ habit of copying designs from the runway and social media, Shein, and fast fashion brands like it, are facing intellectual property lawsuits from small designers and large companies alike.

Although some fast fashion consumers may do so out of financial necessity, it is the people who do large “hauls” that are quickly contributing to our already massive waste problem. These fashion hauls are typically videos posted on social media that show an influencer trying on different clothing items all bought at once in a very large quantity. Fast fashion is able to stay at the forefront due to its large following on social media and its trendy clothing that mimics recent runway designs. A major trend of fast fashion is having influencers show off their “hauls” of

24 Id.
26 Id.
27 Id.
28 Id.
29 Id.
clothing to their followers on social media apps such as Instagram and TikTok.\textsuperscript{33} These hauls, which are largely popular among Millennials and Gen Z, feature influencers purchasing anywhere from $400 to $2000 worth of clothing at a time. Considering that these fast fashion brands sell clothing for $5, spending $400 on a haul can mean purchasing eighty items of clothing.\textsuperscript{34} One social media influencer from the United Kingdom documented a haul of more than thirty bikinis from Shein, which altogether cost her £100.\textsuperscript{35}

In order for influencers to maintain their subscribers, they need to continue to post content. This leads to a cycle of buying clothing, wearing it once or twice, and then doing another large haul to create more content to post.\textsuperscript{36} The consumers that are purchasing excessive quantities of clothing items from fast fashion brands for hauls have created and continue to reinforce a culture of constant shopping to our planet’s detriment. Clothing items bought from hauls are often never worn again and are presumably just left to collect dust in the back of the consumer’s closet.\textsuperscript{37} Those who partake in hauls have glamorized the idea of having something new and on-trend for every single day.\textsuperscript{38}

C. The Environmental Impact of the Fashion Industry and Fast Fashion

Fashion has been characterized as an ever-changing industry that requires designers, producers, and consumers to keep up with trends. There is a need to reconcile this ideology with the environmental harm caused by the fashion industry’s waste and pollution. “Waste” can be defined as “materials or substances that are discarded and no longer used, typically resulting in

\begin{itemize}
\item\textsuperscript{33} See Fang, supra note 31.
\item\textsuperscript{34} See Tammy Gan, Why Are Massive Shein Hauls So Popular on TikTok, Green is the New Black (June 28, 2021), https://greenisthenewblack.com/shein-ultra-fast-fashion-consumerism-tiktok-influencer/
\item\textsuperscript{35} How Trump’s Trade War Built Shein, China’s First Global Fashion Giant, supra note 25.
\item\textsuperscript{36} Fang, supra note 31.
\item\textsuperscript{37} See Gueye, supra note 15.
\item\textsuperscript{38} Fang, supra note 31.
\end{itemize}
landfill, incineration, or leakage into the environment.” In order to mass-produce these cheap clothing items for consumers, fast fashion companies must use cheap material. The most popular inexpensive material used by fast fashion producers is polyester. Polyester makes up over half of all clothing today. Polyester is a plastic that is made out of fossil fuels. It is not biodegradable, and it requires large amounts of energy to create. This means that not only are these polyester-made products never going to break down, but also their production process is significantly contributing to pollution. Experts expect that polyester production will triple from 2007 to 2025. Around sixty percent of materials that the fashion industry uses to produce clothing are made of plastic. Clothing in landfills made out of non-biodegradable materials may sit there for two-hundred years. Overall, the production of textiles from the fashion industry results in 93 trillion liters of water being consumed per year. It is estimated that less than 1% of all textiles worldwide are recycled into new materials.

Additionally, the fashion industry produces over ninety-two million tons of waste per year. It is estimated that if our production and consumption habits remain unchanged, there will

40 See Bédat, supra note 17.
41 Id.
42 Id.
43 Id.
44 Id.
45 Id.
47 Id.
be over one hundred and fifty million tons of clothing either in landfills or waiting to be incinerated in the year 2050.\textsuperscript{52} As of 2021, the fashion industry is responsible for ten percent of the world’s carbon footprint.\textsuperscript{53} This percentage is five times larger than the carbon footprint that the aviation industry is responsible for.\textsuperscript{54} Without any changes, the fashion industry’s carbon footprint is projected to reach twenty-six percent of the world’s carbon footprint by 2050.\textsuperscript{55} The only industry that pollutes more than the fashion industry is the oil industry. \textsuperscript{56}

While it is true that the concern of the large-scale waste buildup caused by fast fashion is partially dependent upon how and whether consumers choose to discard of their old clothes, the ability to responsibly get rid of clothing ultimately reflects how thoughtfully the clothing was produced. Generally, the producers of clothing are the ones that can bear the cost to change their ways. On average, each consumer discards about sixty percent of their new clothes in the first year.\textsuperscript{57} Every second, one garbage truck full of clothes is sent to landfills or incinerated.\textsuperscript{58} However, if producers invest in higher-quality, longer-lasting materials, this number could decrease dramatically. A major issue with fast fashion brands is that their clothes oftentimes do not even last long enough to be washed for the first time.\textsuperscript{59} Fast fashion’s business model relies on

\textsuperscript{53} Thuy Dang, Interest of Female consumers in Finland about Sustainable fashion: Survey on Female Consumers in Finland, (2021).
\textsuperscript{54} Bédat, supra note 17.
\textsuperscript{57} See Ashton, supra note 52.
consumers viewing their clothing as a photo opportunity that can later be disposed of to make way for the next photo opportunity.\(^6\)

**II. The History of Fashion Legislation in the United States**

Although there is no legislation in place in the United States to specifically deter fast fashion’s environmental harm, one pathway for lawsuits against fast fashion retailers is through trademark, patent, and copyright law.\(^6\) These claims against fast fashion retailers have focused on the intellectual property issues created by fast fashion rather than the environmental issues. However, these intellectual property actions have been somewhat impactful in limiting fast fashion, and thereby creating a corollary, although minimal, solution to the environmental issues.

Intellectual property actions are the most common way for smaller companies and individual designers to assert claims against fast fashion retailers. Another avenue that has been taken recently, particularly by celebrities, is making claims against retailers for right of publicity and misappropriation.\(^6\)

The Copyright Act of 1976 allowed copyright protection for “pictorial, graphic, or sculptural features” of the “design of a useful article” as long as they “can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”\(^6\) In 2005, the Second Circuit case of *Chosun Inter., Inc. v. Chrisha Creations, Ltd.* established a separability analysis for determining whether a design element was physically separable or conceptually independent.

---

\(6\) Gueye, *supra* note 15.


separable from the article itself.\textsuperscript{64} In order to be afforded some level of copyright protection, there must be a showing that the design is able to be separated from the function of the article.\textsuperscript{65}

In 2017, the Supreme Court addressed the issue of fashion design copyright in the case \textit{Star Athletica, L.L.C. v. Varsity Brands, Inc.}.\textsuperscript{66} This case discussed the separability requirement implemented under 17 USCS § 101.\textsuperscript{67} Under § 101, a separability analysis required a design to incorporate “pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”\textsuperscript{68} Here, the Court no longer required a design to be physically separable in order to receive copyright protection.\textsuperscript{69} Instead, a design is eligible for copyright protection if it is either conceptually separable or physically separable.\textsuperscript{70} This created an additional avenue for designs to receive copyright protection.

\textbf{III. European and United Nations’ Intellectual Property and Fashion-Specific Legislation}

Although the \textit{Star Athletica} decision was a major step in the right direction for protecting fashion designs under intellectual property law in the United States, we are still lagging behind other countries, primarily in Europe. In the European Union, there are two legislative acts that offer broad intellectual property protection.\textsuperscript{71} One of these acts, the “Directive on the Legal Protection of Designs” offers up to twenty-five years of protection for a registered design

\begin{itemize}
\item \textsuperscript{64} Chosun Inter., Inc. v. Chrisha Creations, Ltd., 412 F.3d 324 (2nd Cir. 2005).
\item \textsuperscript{65} Id.
\item \textsuperscript{67} Id.
\item \textsuperscript{68} 17 USCS § 101
\item \textsuperscript{69} Id.
\item \textsuperscript{70} Id.
\item \textsuperscript{71} See García, supra note 61.
\end{itemize}
anywhere within the European Union. The directive was adopted in 1998. The directive effectively created a uniform registered design law across the European Union. The second act which created rights for European Union member states is the “Unregistered Community Design.” This act offers protection to unregistered designs for up to three years. The three year time period begins on the date that a design is first available to the public in the European Union. The European Union definition of a “design” does not require an analysis of the functional or aesthetic aspects of the design.

Additionally, the European Union adopted multiple environmental regulations, beginning with the Circular Economy Action Plan in March of 2020. This action plan is a part of the European Green Deal. The President of the European Commission set a target of reaching climate neutrality by the year 2050. Another major step toward this goal is the European Union Strategy for Sustainable Textiles. This initiative is planned to begin in the first quarter of 2022. It will “create conditions and incentives to boost competitiveness, sustainability and resilience of the EU textile sector.” The goal is to shift the European Union to a circular economy characterized by

---

73 Id.
74 Id.
75 Id.
76 Id.
77 Id.
78 Id.
80 Id.
81 Id.
83 Id.
84 Id.
products that are durable, repairable, recyclable, reusable, and energy-efficient. Applying “circular economy principles to productions, products, consumption, waste management, and secondary raw materials” will in turn help the European Union reach a climate-neutral state. The European Union member states will focus on investing in research and innovation to combat climate change. This focus will incentivize sustainability and boost competitiveness within the European Union textile sector. Further, the European Union hopes to implement a legal obligation to have separate collection methods for waste textiles by the year 2025.

France, which is regarded as the home of fashion, offers the most comprehensive design protection in the world. In France, a design is protected under both French copyright law and industrial design law. Since the early 1900’s, French courts have ruled that both of these options are available to fashion designs under their sui generis system. Under French copyright law, registration is not required in order to be afforded protection. The French legislature did not want to restrict designers by having any formal requirements to be protected under copyright law. In response to the large-scale copying of fashion designs, both foreign and domestic manufacturers are permitted to license designs and have them legally marketed.

---

85 Id.
86 Id.
87 Id.
88 Id.
89 Id.
90 Id.
91 Id.
92 Veronika Trusinová, Copyright and industrial-model protection of fashion industry artefacts - comparative study, Faculty of Law, Masaryk University, Field of Law and Jurisprudence Of Civil Law, (March 31, 2017)
93 Id.
94 Id.
95 Id.
Additionally, France has an “unofficial minister of fashion.” Brune Poirson, a Secretary of State within the Ministry of Ecological and Inclusive Transition, advocates for the environment against the fashion industry. Poirson has made efforts to put an end to fashion companies’ habit of destroying their unsold products. Poirson also drafted the anti-waste law that urged making washing machine filters an industry requirement in an effort to prevent microfibers from entering the water stream. Microfibers, which can be defined as textile fibers, or fragments of textile fibers, that are shed from the product during production, use, and after-use phases, are extremely harmful to the planet. Polyester is responsible for a large amount of microfibers being released into the water stream. Under this new sweeping law, which was passed by the French Parliament in January of 2020, every washing machine that is made and sold in France beginning in January of 2025 is required to have a microfiber filter.

This anti-waste law also made it mandatory for luxury and designer brands, as well as those selling electrical items or hygiene and cosmetic products, to recycle or redistribute any unsold or returned products. Companies that do not attempt to reuse or recycle materials and products, and instead destroy them, could be fined up to €15,000. Overall, the disposal of unsold garments amounts to $900 million USD being wasted each year. The law further contains a “polluter

---

97 Id.
98 Id.
99 Id.
100 Id.
101 Id.
pays” clause requiring companies to foot the bill of any destruction of waste that they have created. The “polluter pays” clause was included with the goal of deterring companies from overproducing, thereby lessening the quantity of items that would require disposal. Some of France’s largest fashion companies, such as Armani, Nordstrom, Adidas, H&M, and Stella McCartney have joined a pact to reach a goal of zero greenhouse gas emissions by the year 2050. Additionally, the French government wants to phase out all non-reusable and non-recyclable plastics within the next five years.

In the United Kingdom, steps to combat “greenwashing” are beginning in early 2022. “Greenwashing” is “to make people believe that your company is doing more to protect the environment than it really is.” The United Kingdom’s Competition and Markets Authority published the “Green Claims Code” in order to give businesses compliance guidelines on “green claims.” The United Kingdom’s Green Claims Code closely mirrors the International Chamber of Commerce Framework for Responsible Environmental Marketing Communications from 2019. Under the United Kingdom’s guidelines, these green claims can be found either implicitly or explicitly in regard to products that are being marketed as “eco-friendly,” purporting to have a positive or no environmental impact, be less damaging than a previous version of the same product,

---

106 Ho, supra note 103.
107 Id.
109 Kleiderly, supra note 104.
112 Press Release, supra note 110.
or be less damaging than competing products. This means that any product claiming to be “eco-friendly” must have an explanation of what the term means, followed by how the product meets the term’s qualifications. The Competition and Markets Authority will begin reviewing any misleading or false environmental and sustainability claims for greenwashing and will take actions against offenders beginning in 2022. The Competition and Markets Authority is able to take businesses to court in order to enforce their consumer protection laws. The goal is to make consumers more aware of the environmental impact a product will have prior to purchasing. Only allowing true green claims to survive, this will give the true eco-friendly businesses the credit that they deserve. The Chief Executive of the Competition and Markets Authority said, “Any business that fails to comply with the law risks damaging its reputation with customers and could face action from the CMA.” This comes as a result of the Competition and Markets Authority’s finding that 40% of online green claims were misleading. In order to comply, claims must be truthful, accurate, clear and unambiguous, meaningful, and substantiated. Further, the claims must not omit or hide any relevant information and the claims must consider the entire life cycle of the product.

In response to a 2019 Environmental Audit Committee report detailing problems and possible solutions to the environmental impacts of the fashion industry both in the United Kingdom and abroad, the United Kingdom government made a pact to update their Resource and Waste Strategy to include micro-fiber shedding requirements. Another government report made a pact

115 Id.
116 Press Release, supra note 110.
117 Guidance, supra note 114.
118 Press Release, supra note 110.
119 Guidance, supra note 114.
120 Parmar, supra 108.
to educate children at a young age in school about sustainability in order to help future consumers make informed choices.  

The United Kingdom’s government has received many proposals aimed at lessening the environmental impact of the fashion industry. One proposal from Members of Parliament included charging fashion producers a penny per garment to raise £35 million for better clothing collection and recycling. Another proposal suggested reforming taxation and rewarding companies that design products with lower environmental impacts, while also penalizing those that fail to do so. Although the government narrowly rejected these proposals, it has said that they are already taking action to deal with the fashion industry, and that more plans are currently in the works. Already on track to begin in April of 2022 is the United Kingdom’s tax on virgin plastics. Some cross-party Members of Parliament proposed broadening this to include a tax on synthetic textile products, but this proposal was also rejected.

Sweden, which has often been regarded as the leading country for sustainability, is taking significant action to change the fashion industry. The Swedish Fashion Council made a major statement regarding sustainability in the fashion industry by cancelling Stockholm Fashion Week in 2019 in order to focus on the country’s sustainability objectives. Sweden has acknowledged that although consumers need to change their habits and become more mindful, real change is not possible until sustainable products are easily accessible. In May of 2020, the Swedish

---

121 Id.
123 Id.
124 Id.
125 Id.
126 Id.
127 Id.
128 Parmar, supra 108.
129 Id.
130 Id.
government announced its plan to implement a chemical tax on footwear and clothing. This was supposed to begin in April of 2021, but its implementation has been postponed to January 1, 2022. This tax proposal hopes to begin a phase out of hazardous chemicals, thereby reducing the environmental impact from product manufacturing, washing, and waste. This proposal will also help increase the overall quality of recycled garments. The tax will not only apply to footwear and clothing produced in Sweden, but also products imported from other European Union countries. Sweden also gives tax breaks to companies that are focusing on the restoration of garments for longer life cycles.

Also beginning January 1, 2022, Sweden is set to implement a new governmental policy of “Extended Producer Responsibility” legislation. The Swedish government will begin phasing in licensed textile collection systems on January 1, 2024. The goal is that at least 90 percent of the textile waste that has been collected will be either designated for material recovery or reused by the year 2028. This Extended Producer Responsibility hopes to improve waste collection and management by shifting waste management’s cost and collection from Sweden’s local

---

132 Id.
133 Id.
134 Id.
135 Id.
136 Karasz, supra note 105.
138 Id.
139 Id.
governments to the producers.\textsuperscript{140} This will provide incentives to persuade producers to carefully consider the environmental design of the product throughout all stages of its life cycle.\textsuperscript{141}

The United Nations has acknowledged the dire need to address the environmental damage caused by the fashion industry. The United Nations Alliance for Sustainable Fashion “is an initiative of United Nations agencies and allied organizations designed to contribute to the Sustainable Development Goals through coordinated action in the fashion sector.”\textsuperscript{142} This initiative’s purpose is primarily educational.\textsuperscript{143} The United Nations Alliance for Sustainable Fashion simply identifies problems and potential solutions with member nation’s policies and presents their findings to the member nations’ governments with the hopes of encouraging policy in response.\textsuperscript{144}

IV. Solutions

In order for the United States to combat the fashion industry’s negative impact on the environment, major change is needed. At the very least, the United States should implement a sui generis copyright system that would aim to strengthen copyright protection specifically for fashion designs. This would weaken the fast fashion industry significantly because the essence of fast fashion is copying designs. By protecting fashion designs under their own independent legal classification, fast fashion producers would be deterred from copying designs in fear of being sued.

\begin{itemize}
  \item \textsuperscript{141} \textit{Id.}
  \item \textsuperscript{142} United Nations Alliance for Sustainable Fashion, \textit{What is the UN Alliance for Sustainable Fashion}, https://unfashionalliance.org/.
  \item \textsuperscript{144} \textit{Id.}
\end{itemize}
The United States government does not need to completely create its own solutions to the environmental problems caused by the fashion industry as a whole. Rather, it would be easy for United States legislators to adopt the laws and proposals from other countries. The best way to tackle this problem is by appointing somebody to oversee and lead a governmental body specifically created to address the fashion industry’s environmental regulations, similar to France’s unofficial “Minister of Fashion,” Brune Poirson. The person in this position would focus on understanding the environmental harm caused by the fashion industry, regulating companies, and punishing those that do not comply with regulations.

Mirroring the European Union, the United States should implement a legal obligation to have separate collection methods for waste textiles. Although it may not be feasible to achieve this by the European Union’s deadline of the year 2025 because we are already behind, legislators could plan for a 2030 deadline with immediate attention. As evidenced by the widespread support of and adoption by the European Union, this would likely receive bipartisan support in the United States.

Following the French anti-waste law, the United States should create a similar piece of legislation. The waste that is created by the fashion industry is a major problem that only continues to grow. By prohibiting destruction of unsold products, these items would hopefully have a long life cycle, rather than simply becoming waste before a consumer even enjoys them. The United States should create fines for companies that do not attempt to reuse or recycle their materials and products. This fine should be rather hefty in order to make it a real financial burden that will convince companies to comply. There should be no concern that companies will find it more economically sound to destroy their products in order to keep their value up and just pay the fine than it would be to put in the effort to reuse or recycle them. United States legislators should also
mimic the “Polluter Pays” Clause of the French anti-waste law. All companies that do not comply with the requirement to attempt to reuse or recycle their materials and products will be required to foot the bill for any destruction of waste that they need, on top of the fine. This requirement will take the burden off of municipalities and put it on to the producers. Additionally, this would be an effective way to prevent companies for overproducing products. The incoming requirement for French washing machines to contain filters that would catch microfibers should be followed as well.

Another French regulation that the United States should replicate is the phase out of all virgin, nonreusable, and nonrecyclable plastics. Switching to only reusable and recyclable plastics will allow us the opportunity to deal with all of the existing virgin, nonreusable, and nonrecyclable plastics without constantly replacing this with more plastic. Companies will turn away from the highly popular, cheap polyester that they currently use and instead turn to high-quality recycled polyester. This polyester is made out of discarded plastic bottles. Turning to high-quality, recycled polyester would create a major demand for recycling bottles. It would also force the United States to invest in research for creating technology to recycle existing fabrics into new fabric. When implemented, there should be a steadfast deadline for companies to comply by.

Looking to the future and focusing on long-term change for the fashion industry, the United States should consider mimicking the United Kingdom and begin to educate young children in school about sustainability. This will allow the future generations to make mindful, educated choices as consumers. Consumers should understand that where they buy their clothing matters. As children, we should be taught about sustainability in regard to the fashion industry in particular

\[145\] Segran, supra note 96.
because besides food, it is what we purchase the most. Understanding the environmental impacts of our purchases and knowing our choices will likely make a huge difference.

Together, all of these changes would start to have a positive impact on the fashion industry’s environmental harm. Although more is needed, these would be a good start for the United States. For even larger scale change, the United States should focus on three major things: greenwashing, a circular fashion economy, and tax implications.

A. **Greenwashing**

Greenwashing is a major problem in the fashion industry today. It seems that almost every store and website claims that they create their products to be “green,” “environmentally friendly,” “eco-conscious,” “ethically-sourced,” and “sustainable.” Yet, there is no industry standard definition for these terms, and thus no basis for these claims made by companies. In order to combat this, United States legislators must define these terms and hold these companies to strict industry standards.

The United Kingdom’s “Green Claims Code” review and enforcement is set to begin January 1, 2022. This consumer protection law will be governed by the Competition and Markets Authority. The United States should create a code with industry standard definitions similar to the United Kingdom’s. The code should be published a few months prior to the beginning of enforcement to allow companies to review their claims’ compliance and either edit or delete them altogether. Similar to the United Kingdom, these guidelines should include green claims made both explicitly and implicitly. Any greenwashing terms used must be accompanied by the term’s definition, an explanation of how the product falls within the definition, and describe the product’s entire life cycle. Any false or misleading claims should be subject to harsh fines and prosecution. As the governing body over unfair business practices, the United States’ Federal Trade
Commission should be the regulatory agency to lead this charge. Complying claims should be given certifications from the Federal Trade Commission to separate the truly sustainable companies from the misleading ones.

In addition to the greenwashing guidelines, the Federal Trade Commission should also implement requirements for transparency, defined as “the ability to make information (for example on product specifications, chemical inputs, materials used, and production practices) available to all actors of the supply chain (including users/consumers), allowing common understanding, accessibility, comparability, and clarity.”146 There needs to be legislation that requires all companies to make public reports on their environmental impact. This would hold companies accountable for their environmental harm and allow consumers to make educated choices. It is very rare to find fashion companies that honestly report on their environmental data. Companies must be responsible for at least inconspicuously posting their supply chain information, the processes of how the products were made, and the materials used to create the products. Companies that fail to comply must be penalized similarly to those that do not comply with the greenwashing guidelines.

B. Circular Fashion

Possibly the most effective strategy to protect the environment from future harm caused by the fashion industry is to shift from a linear fashion economy to a circular fashion economy. A circular fashion economy allows a single item of clothing to repeatedly create value throughout its life cycle. This starts with sale, followed by resale or repeated rental, being returned, repaired, recycled, refurbished, and finally resold to start the cycle again.147 Remaking clothing items would be an important part of a circular economy as well. Remaking a product is the “operation by which

146 Ellen MacArthur Foundation, supra note 39.
a product is created from existing products or components.”148 Remaking can include “disassembling, re-dyeing, restyling, and other processes to improve physical durability.”149

Implementing a circular fashion economy will cause producers in the fashion industry to create their products to last. A circular fashion economy is impossible without durable clothing. Companies should rethink their business models and try to focus on creating collections that are timeless and reject the already declining popularity of seasonal pieces.150 According to the Ellen MacArthur Foundation, a circular economy is based on three principles: “eliminate waste and pollution, keep products and materials in use, and regenerate natural systems.”151 A circular fashion economy will actually allow the fashion industry to make up for the $500 billion already lost due to clothing being trashed rather than recycled and re-worn.152 Clothing items and the materials used to make them must be designed to be taken apart in order to be recycled, remade, or reused. A circular fashion economy would reduce the need for virgin materials due to the use of already existing, more valuable materials. This would slow and eventually halt the fashion industry’s reliance on polyester. In turn, the harmful microfibers that are released from polyester would decrease.

A key component of a circular fashion economy is “reverse logistics.”153 Reverse logistics would allow companies the opportunity to recover materials and products from secondary resale or disposal.154 This would allow products to continue holding value and being desirable. Some companies have already begun this process by partnering with intermediaries.155 For example,

148 Ellen MacArthur Foundation, supra note 39.
149 Id.
150 McKinsey, supra note 147.
151 Ellen MacArthur Foundation, supra note 36.
152 Gueye, supra note 15.
153 McKinsey, supra note 147.
154 Id.
155 Id.
Patagonia has partnered with a start-up, Trove, to repurchase their own products and then sell them again at a reduced price.\textsuperscript{156} Trove purchases, processes, prices, and photographs these products prior to listing them for Patagonia.\textsuperscript{157} ThredUp, an increasingly popular online used-clothing store is in partnerships with a few companies, such as Amour Vert and Reformation, that allows customers to send used clothing from any brand in exchange for shopping credits to these retailers.\textsuperscript{158} CaaStle, a logistics company based in the United States partners with companies to manage their entire reverse logistics process.\textsuperscript{159} This includes customer service, warehousing, and cleaning the products for resale.\textsuperscript{160} A leader in reverse logistics is the United Kingdom fashion label, Mulberry. Mulberry has kept an in-store stock of leather for repairing and refurbishing all of its items since opening in the 1970’s.\textsuperscript{161} Mulberry has also implemented its own buy-back program that allows customers to resell their used products back to Mulberry in order to be repaired and resold.\textsuperscript{162}

Some other companies are ahead of the curve when it comes to adopting their own circular fashion economy principles as well. Swedish brand Filippa K is leading the way in sustainable practices by creating the “Collect programme” which offers a discount to consumers if they return clothing items that they no longer want. The brand aims to recycle, remake, and resell 100\% of clothing items that they collect by 2030.\textsuperscript{163} H&M, another Swedish fashion brand, has started

\textsuperscript{156} Id.
\textsuperscript{157} Id.
\textsuperscript{158} Id.
\textsuperscript{159} Id.
\textsuperscript{160} Id.
\textsuperscript{161} Id.
\textsuperscript{162} Id.
placing garment collection stations in their physical store locations in order to make recycling convenient for customers.  

Another important aspect of a circular fashion economy is large-scale rental. In an ideal circular fashion economy, consumers would be able to rent their clothing items from companies and then return them to be used by another consumer. According to the Ellen MacArthur Foundation, “One piece of trendy, durable clothing can be used by up to forty different people.” A company that has recognized the value of renting clothing is Rent the Runway, an online clothing rental service particularly focused on high-end clothing for special events. Rent the Runway’s mission statement is “Buy Less. Wear More. We’re disrupting a centuries old industry and powering a new frontier for fashion. One in which women buy less, wear more and contribute to a more sustainable future.”

Rent the Runway also repairs the clothing that they rent out. Since 2018, they have performed about four million garment repairs. According to the Rent the Runway website, eighty-nine percent of their customers have reported that since joining Rent the Runway, they have shifted their habits and now buy fewer clothes than they did before. Their website also estimates that over the past decade, their rental model has prevented the production of 1.3 million garments through lowering demand for these items. This adds up to having saved “sixty seven million gallons of water, enough electricity to power 12,657 households for a year, and carbon dioxide emissions equivalent to 47,737 roundtrip flights between Newark, NJ and Dallas, TX.” A major

---

164 Karasz, supra note 105.
165 Gueye, supra note 15.
166 Rent the Runway, supra note 16.
167 Id.
168 Id.
169 Id.
170 Id.
171 Id.
contributing factor to their success is their presence on social media. Presence on social media is so valuable today because altogether, Millennials and Gen Z make up $350 billion of the consumer market in the United States alone.\textsuperscript{172} Rent the Runway has seen large-scale success with its unique rental business model. In 2019, Rent the Runway was valued at over $1 billion.\textsuperscript{173}

The European Innovation Council adopted a new Circular Economy Action Plan in March of 2020 as a main component to the European Green Deal, which aims to grow European sustainability.\textsuperscript{174} In adopting a circular fashion economy, the European Innovation Council acknowledged just how imperative it is for the fashion industry to make changes in order to meet the President of the European Commission’s 2050 climate neutrality target for the European Green Deal.\textsuperscript{175}

In order to shift to a circular fashion economy, local governments must implement collection infrastructure that will facilitate the reuse of clothing through grants from the federal government. This money should come in part from the tax collected on fast fashion items that are imported into the United States, as well as from tax collected from companies that do not comply with supply chain and packaging material requirements. Local governments will need to partner with companies to help make collection accessible by having local collection stations, and even weekly home pick-ups. This would not only help the environment, but also provide more jobs in every community.

\begin{footnotesize}
\footnotesize\textsuperscript{172}\textsuperscript{172} Gueye, supra note 15.
\footnotesize\textsuperscript{173}\textsuperscript{173} Danny Parisi, \textit{Can Fashion Rental’s Recovery Carry Rent the Runway to a Successful IPO?}, GLOSSY, (Jul. 20, 2021), https://www.glossy.co/fashion/can-fashion-rentals-recovery-carry-rent-the-runway-to-a-successful-ipo/.
\footnotesize\textsuperscript{174}\textsuperscript{174} European Innovation Council, supra note 79.
\footnotesize\textsuperscript{175}\textsuperscript{175} Id.
\end{footnotesize}
C. Higher Tax

A regulatory approach that would very likely help solve this problem is placing higher taxes on items from the fashion industry that are not sustainably made. Companies that thoughtfully design their products should receive tax benefits as a reward. Having the greenwashing certifications guide industry standards will be helpful because it will allow companies to know the requirements that they need to meet in order to receive these tax benefits, while also providing the government with standards to determine which companies must be taxed more heavily.

In regard to fast fashion items that are typically imported to the United States from other countries, there needs to be an especially high tax on these imports. The additional tax money collected from the fashion industry should be invested in environmental research and solutions to change the fashion industry. The tax implications would not end with imports, however. They should extend to companies that do not use recycled plastic for packaging throughout the supply chain, that use virgin plastic rather than high-quality polyester, and for using any materials that are not sustainably sourced.

V. Conclusion

The need for the fashion industry to be held accountable and work to make drastic efforts toward sustainability is dire. It is not enough to make small changes and label things as “eco-friendly.” The fashion industry as a whole needs a completely new design. This needs to start with the fashion industry changing their marketing technique of promoting the ideology that a new outfit is needed for every single day.

Although the facts and statistics regarding the environmental harm caused by the fashion industry may make change seem hopeless, our society appears to be changing for the better.
Consumers seem to care a lot about the environmental impact of their purchases and want to make better choices. One hopeful statistic is that by 2028, the secondhand market is projected to grow one and a half times the size of the fast fashion market.\textsuperscript{176} It is not enough, however, for consumers to be the ones that care about the environmental harm caused by the fashion industry. Real change relies on the fashion industry acknowledging their impact and taking the necessary steps to lessen their harm to the environment. These proposed solutions would help ease the burden that the fashion industry has placed on our planet. Urgent reform within the fashion industry is needed to save our planet.

\textsuperscript{176} Gueye, supra note 15.