



Contemporary Issues in International Environmental Law: A Comparative Doctrinal Analysis of Climate Regulation and Litigation in the United States and the European Union

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Abstract

Climate change affects business, society, governance, and the ecological environment, making it relevant to all fields of law rather than merely an environmental issue. It represents a systemic challenge that intersects with economic development, human security, public health, corporate conduct, and social justice. The 1992 United Nations Conference on Environment and Development (Earth Summit) marked a significant milestone in international environmental governance by bringing together political leaders, policymakers, and civil society actors to address emerging environmental concerns. Despite international climate commitments, global carbon dioxide emissions have remained persistently high over the last decade, accelerating global warming and intensifying ecological and humanitarian challenges. This highlights the limitations of soft-law approaches and the need for legally binding measures to reduce greenhouse gas emissions.

Against this backdrop, this article undertakes a comparative doctrinal analysis of environmental law and climate governance in the United States and the European Union, examining how environmental activism, climate litigation, judicial intervention, and regulatory mechanisms have evolved into enforceable legal instruments for reducing carbon emissions and promoting environmental accountability. It argues that environmental activism has been a key catalyst in transforming environmental concerns into enforceable legal obligations through litigation, regulatory frameworks, and treaty-based commitments. Using a comparative legal approach, the study explores how environmental demands have been institutionalised through statutory duties, regulatory standards, and judicially enforceable rights. In the United States, activism has influenced environmental governance through public interest litigation, judicial interpretation, and regulatory accountability. In contrast, the European Union has adopted a more institutionalised and participatory model that incorporates procedural rights, public participation, and supranational oversight.

The study employs a doctrinal legal research methodology supplemented by empirical evidence from climate surveys, UNEP reports, landmark judicial decisions, and key international environmental treaties. It concludes that environmental activism is an integral and enduring component of environmental law, shaping its evolution through doctrinal legal developments and judicial activism. This interaction creates a feed-forward loop whereby activism drives legal innovation and enforcement, while evolving legal frameworks further strengthen environmental advocacy, public participation, and accountability.

Keywords: Climate Litigation, Judicial Activism, Environmental Law, Environmental Activism, Procedural Rights,

Introduction

Environmental law has evolved from a peripheral area of legal concern into one of the most significant and rapidly developing fields of contemporary jurisprudence. This transformation has been driven largely by the increasing recognition that environmental degradation poses profound risks to human health, economic development, ecological integrity, and intergenerational equity. (Fisher, Lange, & Scotford, 2013). According to Pring and Pring (2016) and Sands et al. (2018), environmental activism, scientific advocacy, and civil society engagement were instrumental in transforming environmental concerns into legally enforceable obligations. Consequently, the history of environmental law can be understood as a transition from environmental activism to legal enforcement, whereby societal concerns regarding environmental protection gradually became institutionalised through legislation, regulatory standards, judicial decisions, and international legal commitments (Bodansky, 2010; Sands et al., 2018).

The modern environmental movement emerged prominently during the 1960s and 1970s, a period characterized by growing awareness of pollution, industrial hazards, biodiversity loss, and the ecological consequences of rapid economic development (Pring & Pring, 2016). Influential publications such as Rachel Carson's *Silent Spring* highlighted the environmental and public health impacts of pesticide use and helped stimulate widespread public concern regarding environmental degradation (Carson, 1962). Public pressure generated by environmental advocacy contributed significantly to the enactment of environmental legislation and the establishment of regulatory agencies. In many jurisdictions, environmental activism became a catalyst for governmental intervention, prompting lawmakers to address issues that had previously received limited legal attention. Environmental law therefore developed not merely as a response to ecological challenges but also as a consequence of sustained public mobilization and political advocacy (Percival et al., 2022).

The United States represents one of the earliest and most influential examples of environmental activism shaping legal development. Lazarus (2004) and Rodgers (2017) note that environmental activism in the United States played a

central role in the enactment of major environmental statutes, including the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, and the Endangered Species Act. These statutes established comprehensive regulatory frameworks and created mechanisms for judicial review and citizen participation. Importantly, environmental groups utilized litigation as a strategic tool to compel regulatory action, challenge governmental inaction, and promote environmental accountability. Through public interest litigation, activists were able to transform environmental grievances into enforceable legal claims, thereby expanding the role of courts in environmental governance (Farber et al., 2018).

A notable feature of the American environmental model is the central role of litigation in advancing environmental protection. Lazarus (2004) and Rodgers (2017) observe that environmental organizations, including the Sierra Club and the Natural Resources Defense Council, have frequently used litigation to enforce environmental laws and challenge agency actions. The landmark decision in *Massachusetts v. Environmental Protection Agency* demonstrated how litigation can translate environmental advocacy into enforceable regulatory obligations. In that case, the United States Supreme Court recognized greenhouse gases as air pollutants under the Clean Air Act and affirmed the authority of the Environmental Protection Agency to regulate emissions contributing to climate change (*Massachusetts v. Environmental Protection Agency*, 2007). The decision illustrates how environmental activism, supported by scientific evidence and legal advocacy, can influence judicial interpretation and strengthen environmental enforcement mechanisms.

Another important example is *Sierra Club v. Morton*, which significantly influenced environmental standing doctrine. Although the Sierra Club was ultimately unsuccessful in the case, the decision stimulated legal debates concerning public participation and access to justice in environmental matters. Subsequent developments expanded opportunities for environmental organizations and affected communities to seek judicial review of environmentally harmful activities.

Such cases demonstrate the extent to which environmental activism has contributed to the evolution of environmental law by promoting broader access to courts and strengthening mechanisms of accountability (Percival et al., 2022).

In contrast to the litigation-centered model of the United States, the European Union has adopted a more institutionalized and participatory approach to environmental governance. Environmental protection is recognized as a fundamental objective of the European Union and is integrated across numerous policy areas through treaty provisions and legislative instruments. Environmental activism within the European Union has become embedded in governance structures that emphasize transparency, public participation, and procedural rights. Rather than relying primarily on adversarial litigation, the European model seeks to facilitate environmental protection through collaborative governance mechanisms that incorporate public engagement into decision-making processes (Jans & Vedder, 2012).

A key development in this regard was the adoption of the Aarhus Convention, formally known as the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Lee & Abbot, 2003). The Convention established three fundamental pillars of environmental democracy: access to environmental information, public participation in environmental decision-making, and access to justice in environmental matters (UNECE, 1998). These principles have significantly influenced European environmental governance by empowering citizens and civil society organizations to participate actively in environmental protection. Through the incorporation of Aarhus principles into European Union law, environmental activism has become institutionalized within administrative and legal processes, thereby strengthening environmental accountability and regulatory compliance (Jans & Vedder, 2012).

The jurisprudence of the Court of Justice of the European Union has further reinforced the integration of environmental principles into legal systems across Member States. Judicial decisions have consistently emphasized the importance of precaution, sustainable development, environmental integration, and effective enforcement. Through supranational oversight mechanisms, the European Union ensures that Member States comply with environmental obligations, thereby enhancing the effectiveness of environmental regulation. This approach illustrates how environmental activism can influence governance not only through litigation but also through participatory institutions and regulatory oversight structures (Sands et al., 2018).

According to Sands et al. (2018), the growing influence of environmental activism has also contributed to the development of international environmental law. Since the 1972 United Nations Conference on the Human Environment, environmental concerns have increasingly been addressed through multilateral agreements, international organizations, and transnational advocacy networks. International environmental treaties such as the Paris Agreement and the Convention on Biological Diversity reflect the influence of scientific advocacy, public mobilization, and civil society participation in shaping global environmental governance (Bodansky, 2010). These instruments increasingly incorporate monitoring, reporting, compliance, and review mechanisms that strengthen implementation and accountability.

The relationship between environmental activism and legal enforcement has become particularly important in the context of climate change litigation. Around the world, citizens, environmental organizations, and youth movements have increasingly turned to courts to challenge governmental inaction and corporate contributions to climate change. Climate litigation represents a contemporary manifestation of environmental activism, utilizing legal processes to promote accountability and strengthen environmental governance. Recent studies indicate a substantial increase in climate-related litigation globally, reflecting growing public expectations that governments and private actors should be held legally responsible for environmental harms (Setzer & Higham, 2023).

The concept of environmental rule of law provides a useful framework for understanding these developments. According to the United Nations Environment Programme (2019), environmental rule of law requires that environmental rights and obligations be clearly defined, consistently enforced, and subject to independent judicial review. Effective environmental governance depends not only upon the existence of environmental legislation but also upon robust mechanisms for implementation, monitoring, compliance, and enforcement. Without effective enforcement, environmental laws risk becoming symbolic declarations rather than practical instruments for environmental protection. UNEP (2019) further argues that strengthening environmental rule of law is essential for achieving sustainable development and addressing global environmental challenges. The increasing recognition of environmental rights has further strengthened the relationship between activism and enforcement. Courts and legislatures in various jurisdictions have begun to recognize the right to a healthy environment as a fundamental human right.

This development reflects decades of advocacy by environmental organizations, indigenous communities, and human rights groups seeking stronger legal protection for environmental interests. The recognition of environmental rights has expanded opportunities for litigation and strengthened legal mechanisms through which environmental harms can be challenged and remedied (Boyd, 2012).

Against this background, the present study examines the evolution of environmental law and climate governance in the United States and the European Union through the framework of a transition from environmental activism to legal enforcement. Particular attention is given to the role of climate litigation, judicial intervention, judicial activism and regulatory mechanisms in promoting carbon emission reductions and strengthening environmental accountability.

It argues that environmental activism has functioned as a foundational catalyst in shaping environmental legal development and has progressively become institutionalized through legislation, litigation, regulatory mechanisms, and treaty-based obligations. By comparing the American litigation-centered model with the European participatory and supranational approach, the study highlights both convergences and divergences in the processes through which environmental demands are transformed into enforceable legal norms. Ultimately, the article contends that environmental activism is not merely an external influence on environmental law but an enduring component of its development, contributing to its capacity to address contemporary environmental challenges and promote sustainable governance.

Climate change has emerged as the defining environmental challenge of contemporary environmental governance, requiring governments to adopt legal and regulatory measures aimed at reducing greenhouse gas emissions and achieving long-term sustainability objectives. In response to perceived inadequacies in governmental and corporate climate action, climate litigation has become an increasingly important mechanism through which individuals, environmental organisations, and civil society actors seek to enforce climate commitments and promote accountability. Landmark cases in both the United States and Europe have demonstrated the growing willingness of courts to scrutinise climate policies, interpret environmental obligations in light of scientific evidence, and compel stronger action to mitigate carbon emissions (Peel & Osofsky, 2020). Consequently, climate litigation represents a significant intersection between environmental activism, judicial intervention, and legal enforcement.

Research Objectives

The primary objective of this article is to examine the evolution of environmental law in the United States and the European Union through the framework of a transition from environmental activism to legal enforcement. The study investigates how environmental activism has contributed to the development of legal norms, regulatory institutions, judicial doctrines, and enforcement mechanisms that have transformed environmental concerns into legally binding obligations. By adopting a comparative legal approach, the research seeks to identify the pathways through which environmental advocacy has influenced environmental governance and shaped contemporary environmental law.

The specific objectives of the study are:

To analyse the historical relationship between environmental activism and the development of environmental law in the United States and the European Union, with particular emphasis on the institutionalisation of environmental concerns into enforceable legal frameworks (Percival et al., 2022).

To examine the role of litigation, judicial interpretation, and public participation in advancing environmental protection, including the contribution of landmark judicial decisions and procedural rights to environmental governance (Farber et al., 2018; Jans & Vedder, 2012).

To compare the legal and institutional mechanisms through which environmental activism is translated into legal enforcement within the United States and European Union legal systems, identifying similarities and differences in their approaches to environmental regulation and accountability (Sands et al., 2018).

To evaluate the influence of international environmental law and treaty-based obligations on domestic environmental enforcement, particularly the role of international agreements in strengthening compliance and accountability mechanisms (Bodansky, 2010).

To assess the continuing relevance of environmental activism in addressing contemporary environmental challenges, including climate change, biodiversity loss, and environmental justice concerns through legal and regulatory processes (UNEP, 2019; Setzer & Higham, 2023).

To contribute to the broader discourse on environmental rule of law by demonstrating how environmental activism functions as an enduring component of environmental legal development rather than merely an external influence on policymaking (UNEP, 2019).

Significance of the Legal Analysis

This legal analysis is significant because it contributes to an understanding of how environmental law evolves from societal demands into enforceable legal obligations. Environmental protection has become a central concern of national and international governance, yet the mechanisms through which environmental activism influences legal development remain insufficiently explored in comparative legal scholarship. By examining the experiences of the United States and the European Union, this study provides insights into the processes through which environmental advocacy is transformed into legal norms, regulatory standards, and judicially enforceable rights and duties.

First, the study contributes to the academic literature on environmental governance by bridging the gap between environmental activism and legal enforcement. While numerous studies examine environmental movements and environmental regulation separately, fewer studies analyse the direct relationship between activism and the creation of enforceable legal obligations.

This research demonstrates that environmental activism has played a foundational role in shaping environmental law through litigation, public participation, policy reform, and treaty development (Bodansky, 2010; Percival et al., 2022). Second, the comparative analysis enhances understanding of different legal pathways to environmental protection. The United States has traditionally relied on litigation and judicial review to advance environmental objectives, whereas the European Union has adopted a more institutionalised approach centred on procedural rights, regulatory integration, and supranational oversight (Jans & Vedder, 2012). Examining these contrasting approaches provides valuable insights for policymakers, legal practitioners, and scholars seeking to strengthen environmental governance and enforcement mechanisms.

Third, the research contributes to the growing field of environmental rule of law. UNEP (2019) emphasizes that effective environmental governance depends not only on the existence of environmental legislation but also on the capacity to implement, monitor, and enforce legal obligations. By analysing how environmental activism contributes to legal accountability and enforcement, the study highlights the practical importance of environmental rule of law in achieving sustainable development objectives.

Fourth, the study has contemporary relevance because environmental activism continues to shape legal responses to emerging environmental challenges. Climate change litigation, environmental justice movements, and transnational advocacy networks increasingly influence domestic and international environmental governance. Courts worldwide are being called upon to interpret environmental rights, enforce climate commitments, and hold governments and corporations accountable for environmental harm (Setzer & Higham, 2023). Understanding the historical relationship between activism and enforcement therefore provides important lessons for future environmental governance.

Fifth, the research contributes to the development of international environmental law by examining how treaty-based obligations mediate between activism and enforcement. International environmental agreements increasingly incorporate compliance, monitoring, reporting, and accountability mechanisms that reflect demands originating from civil society and environmental advocacy organizations (Sands et al., 2018). Consequently, the study highlights the growing interconnectedness between domestic legal systems and international environmental governance.

Finally, the significance of this legal analysis extends beyond environmental law. It offers broader insights into the relationship between social movements and legal development, demonstrating how public advocacy can influence legal institutions, regulatory frameworks, and judicial decision-making. The findings therefore contribute to discussions concerning democratic participation, environmental justice, regulatory accountability, and sustainable governance. By illustrating how environmental activism becomes institutionalised through legal mechanisms, the study reinforces the view that environmental law is a dynamic and evolving field shaped by continuous interaction between society, law, and governance.

Research Methodology

This study adopts a **qualitative doctrinal legal research methodology** to examine the evolution of environmental law in the United States and the European Union through the transition from environmental activism to legal enforcement. Doctrinal legal research is appropriate because it involves the systematic analysis, interpretation, and evaluation of legal principles, statutory provisions, judicial decisions, and international legal instruments that shape environmental governance (Hutchinson & Duncan, 2012). The study seeks to assess how environmental activism has contributed to the development of environmental legal norms and enforcement mechanisms within different legal and institutional contexts.

Within this doctrinal framework, the research employs a **comparative legal approach** to examine similarities and differences between the environmental legal systems of the United States and the European Union. Comparative analysis facilitates an assessment of how distinct legal traditions, regulatory structures, and enforcement mechanisms have transformed environmental concerns into enforceable legal obligations (Orucu, 2006). The United States and the European Union were selected because both jurisdictions have significantly influenced the development of modern environmental law while adopting different approaches to environmental governance. The United States has traditionally relied on statutory enforcement and public interest litigation, whereas the European Union emphasizes procedural rights, regulatory integration, and supranational oversight. The study further adopts a descriptive and analytical approach in examining the legal materials. This study adopts a doctrinal legal research methodology. The descriptive component traces the historical evolution of environmental activism and its contribution to environmental law-making, including the development of environmental movements, regulatory institutions, and legal frameworks from the 1960s onwards. The analytical component evaluates how environmental advocacy has been translated into

legislation, judicial decisions, administrative regulations, and treaty-based obligations, thereby contributing to the institutionalisation and enforcement of environmental law. Through this doctrinal approach, the study assesses the extent to which environmental activism has functioned as a catalyst for legal development and regulatory accountability within the United States and the European Union.

Sources of Data

The research relies primarily on **secondary legal sources** and **authoritative institutional publications**. These include:

1. Primary Legal Sources

- Federal environmental statutes of the United States, including the National Environmental Policy Act (NEPA), Clean Air Act (CAA), Clean Water Act (CWA), and Endangered Species Act (ESA).
- European Union treaties, directives, regulations, and environmental policy instruments.
- International environmental treaties and conventions, including the Aarhus Convention, the Paris Agreement, the Convention on Biological Diversity, and relevant United Nations environmental declarations.
- Landmark judicial decisions from the United States Supreme Court, federal courts, the Court of Justice of the European Union (CJEU), and other relevant tribunals.

2. Secondary Legal Sources

- Academic books, peer-reviewed journal articles, legal commentaries, and environmental law textbooks.
- Reports published by the United Nations Environment Programme (UNEP), European Commission, Yale Program on Climate Change Communication, Columbia Law School's Sabin Center for Climate Change Law, and other recognized institutions.
- Policy papers, legal analyses, and environmental governance reports published between 2015 and 2022.

Data Analysis

The collected materials are analysed through doctrinal legal analysis and comparative legal reasoning. Relevant statutes, judicial decisions, treaty provisions, and policy documents are examined to identify recurring legal principles, enforcement mechanisms, and patterns of institutional development. The analysis focuses on how environmental activism has contributed to the emergence of enforceable legal norms and how those norms are implemented through judicial and administrative processes. The study also incorporates elements of environmental governance theory and environmental rule of law to contextualise legal developments within broader governance frameworks. Particular attention is given to concepts such as public participation, access to justice, accountability, compliance, and sustainable development (UNEP, 2019).

Case Law Analysis

A doctrinal analysis of landmark environmental cases forms a central component of the methodology. The study examines selected judicial decisions that demonstrate how environmental activism has influenced legal development and enforcement.

In the United States, particular attention is given to cases such as *Massachusetts v. EPA* (2007), *Sierra Club v. Morton* (1972), and other significant environmental litigation that expanded environmental standing, regulatory accountability, and climate governance. Within the European Union, the study analyses relevant decisions of the Court of Justice of the European Union concerning environmental rights, procedural participation, compliance obligations, and environmental protection principles.

The selected cases are examined to identify:

- The role of environmental activists, civil society organizations, and public interest groups in initiating legal proceedings.
- Judicial interpretation of environmental rights and obligations.
- The contribution of courts to environmental enforcement and regulatory accountability.
- The influence of judicial decisions on subsequent environmental governance frameworks.

Comparative Analytical Framework

The comparative analysis is structured around four principal themes:

1. Environmental Activism and Legal Mobilisation – examining how environmental movements influence policy development and legal reform.
2. Institutionalisation of Environmental Norms – analysing the transformation of environmental demands into statutory obligations, regulatory standards, and procedural rights.
3. Enforcement Mechanisms and Judicial Oversight – assessing the role of courts, regulatory agencies, and administrative bodies in ensuring compliance with environmental law.
4. International Environmental Governance – evaluating the influence of international treaties and transnational advocacy networks on domestic environmental enforcement.

This thematic framework—comprising legislation, judicial decisions, international treaties, and environmental activism—facilitates a systematic comparative analysis of environmental governance in the United States and the European Union, while enabling the identification of key areas of convergence, including emerging similarities in climate reporting regimes, and divergence in the distinct pathways of legal development across both jurisdictions.

Literature Review: Climate Litigation and Legal Mechanisms for Carbon Emission Reduction in the United States and the European Union

Climate change has emerged as one of the most significant environmental challenges of the twenty-first century, prompting governments, courts, and civil society actors to develop legal mechanisms aimed at reducing greenhouse gas emissions. Climate litigation has increasingly become a central tool through which environmental activists, non-governmental organisations, and affected communities seek to hold governments and corporations accountable for their climate obligations.

A comparative doctrinal analysis of the United States and the European Union demonstrates that, despite differing legal traditions and institutional structures, both jurisdictions have utilised litigation, judicial intervention, and regulatory frameworks to advance climate governance and carbon emission reduction.

Doctrinal Legal Framework and Comparative Approach

This study employs a doctrinal legal research methodology, involving a systematic examination of primary legal materials, such as legislation, judicial decisions, treaties, and regulatory instruments, alongside relevant academic literature and scholarly analyses, as described by Hutchinson & Duncan (2012). Through a comparative examination of the United States and the European Union, the study evaluates how legal institutions have responded to climate change and the extent to which judicial intervention has influenced carbon reduction policies.

Climate Litigation and Regulatory Development in the United States

The United States has witnessed significant judicial involvement in climate governance, largely driven by environmental activism and public interest litigation. One of the most influential decisions is *Massachusetts v. Environmental Protection Agency* (2007), in which the U.S. Supreme Court held that greenhouse gases constitute "air pollutants" under the Clean Air Act and that the Environmental Protection Agency (EPA) possesses authority to regulate such emissions. The judgment established a critical legal foundation for federal climate regulation and demonstrated the capacity of judicial intervention to compel administrative action (*Massachusetts v. EPA*, 2007).

Environmental standing and citizen enforcement were strengthened in *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.* (2000), where the Supreme Court recognised the standing of environmental organisations to challenge environmental violations.

The decision reinforced the role of civil society in environmental enforcement and provided an important procedural basis for climate-related litigation (*Friends of the Earth v. Laidlaw*, 2000). A more recent example is *Juliana v. United States* (2015), in which youth plaintiffs argued that governmental failure to address climate change violated constitutional rights and the public trust doctrine.

Although the litigation encountered procedural obstacles, it significantly influenced global climate litigation by advancing rights-based arguments and encouraging judicial scrutiny of governmental climate policies (Wood, 2019). The case illustrates the growing reliance on judicial activism to address regulatory shortcomings in climate governance. Collectively, these cases demonstrate that climate litigation in the United States has evolved from regulatory enforcement toward broader constitutional and accountability-based claims, reflecting an increasingly active judicial role in climate governance (Farber et al., 2018).

Climate Litigation and Climate Governance in the European Union

The European Union has adopted a more institutionalised and regulatory approach to climate governance. Unlike the United States, where litigation often focuses on compelling governmental action, the EU has developed comprehensive legislative frameworks aimed at achieving carbon neutrality. A central mechanism is the European Union Emissions Trading System (EU ETS), established in 2005 and subsequently strengthened through successive reforms. The EU ETS operates as a market-based instrument designed to reduce greenhouse gas emissions by setting emission caps and allowing the trading of emission allowances (Jans & Vedder, 2012).

The European Green Deal further represents a transformative policy framework seeking to achieve climate neutrality by 2050. Through legally binding targets, regulatory reforms, and financial mechanisms, the Green Deal institutionalises climate objectives across multiple sectors of the European economy (European Commission, 2019). Judicial intervention has also played a crucial role within the EU. In *Urgenda Foundation v. State of the Netherlands* (2015), Dutch courts ordered the government to strengthen its emission reduction targets, concluding that inadequate climate action violated obligations owed to citizens. The decision became one of the first successful climate cases requiring a government to adopt more ambitious climate policies and has influenced courts worldwide (Peel & Osofsky, 2020).

Similarly, in *Neubauer v. Germany* (2021), the Federal Constitutional Court of Germany held that insufficient long-term emission reduction measures could disproportionately burden future generations, thereby infringing constitutional freedoms. The judgment compelled legislative reform and reinforced the principle of intergenerational equity in climate governance (*Neubauer v. Germany*, 2021).

The Aarhus Convention has further strengthened environmental governance by guaranteeing access to environmental information, public participation in decision-making, and access to justice in environmental matters (UNECE, 1998). These procedural rights have facilitated greater public engagement in climate-related decision-making and enhanced legal accountability throughout the European Union.

Comparative Analysis of the United States and the European Union

A doctrinal comparison reveals both convergence and divergence between the two jurisdictions. Convergence is evident in the increasing reliance on courts to address climate change, the recognition of environmental rights, and the growing use of litigation to enhance governmental accountability. Cases such as *Massachusetts v. EPA* and *Urgenda* illustrate how judicial intervention has become an important mechanism for advancing climate objectives.

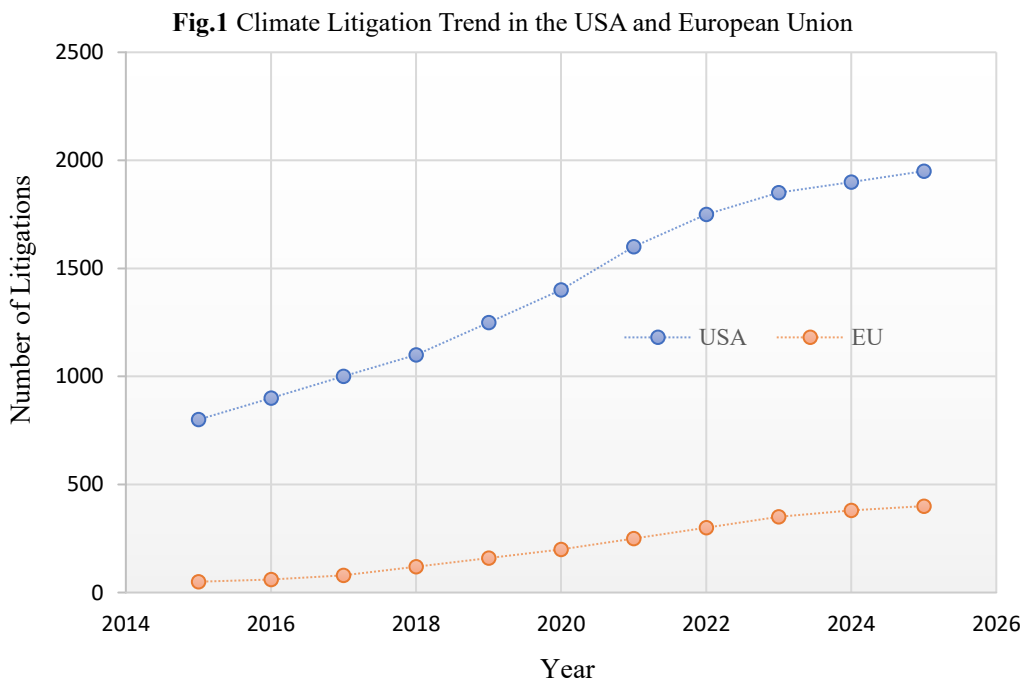
However, significant divergence remains. The United States relies heavily on adversarial litigation, constitutional arguments, and judicial review to compel regulatory action. By contrast, the European Union emphasises legislative harmonisation, administrative governance, and treaty-based procedural rights. While American courts frequently address climate disputes through public interest litigation, European courts operate within a broader framework of regulatory integration supported by instruments such as the EU ETS, the European Green Deal, and the Aarhus Convention.

The literature demonstrates that climate litigation has become a critical instrument for reducing carbon emissions in both the United States and the European Union. Judicial intervention and judicial activism have played significant roles in advancing climate accountability, particularly through landmark decisions such as *Massachusetts v. EPA*, *Juliana*, *Urgenda*, and *Neubauer*. While the United States predominantly relies on litigation-driven enforcement and judicial review, the European Union combines litigation with comprehensive regulatory frameworks and participatory governance mechanisms.

Despite these differences, both jurisdictions illustrate the growing importance of legal institutions in addressing climate change and promoting effective carbon emission reduction strategies.

Empirical Evidence: Climate Litigations Trends -USA and European Union

This study adopts a comparative, doctrinal legal research methodology supported by secondary empirical data on climate litigation trends. The research primarily relies on authoritative legal databases and institutional reports, including the Sabin Center for Climate Change Law Climate Litigation Database and the United Nations Environment Programme Global Climate Litigation Report (UNEP, 2025) on Climate Change and the Environment. These sources are used to identify, classify, and comparatively analyse climate litigation trends in the United States and the European Union over the period 2015–2025. Accordingly, the following line graph is derived from data collected from the aforementioned repositories and depicts climate litigation trends in the United States and the European Union during the period from 2015 to 2025.



Source: Sabin Center for Climate Change Law, 2025.

Figure 1 illustrates climate litigation trends in the United States and the European Union between 2015 and 2025. The data indicate a significant increase in climate-related litigation across both jurisdictions during the study period, reflecting the growing use of legal mechanisms to address climate change and promote environmental accountability. However, the United States consistently remains the most active jurisdiction, recording substantially higher numbers of climate litigation cases than the European Union. This trend can be attributed to the strong tradition of public interest litigation, judicial intervention, and judicial activism within the U.S. legal system, as well as the increasing number of claims brought against governments and private corporations. In contrast, although the European Union has experienced a marked rise in climate litigation, its growth has largely been driven by rights-based claims,

administrative review procedures, and the enforcement of environmental obligations through EU institutions and Member State courts. Overall, the findings demonstrate that climate litigation has emerged as an increasingly important tool of environmental governance in both jurisdictions, while highlighting distinct legal pathways through which climate accountability is pursued.

Discussion

This research paper has examined the evolution of environmental law in the United States and the European Union through the framework of a transition from environmental activism to legal enforcement. The analysis demonstrates that environmental activism has played a significant role in shaping contemporary environmental governance by transforming environmental concerns into legally enforceable rights, duties, and regulatory obligations.

Far from being merely an external influence on policy development, environmental activism has served as a foundational catalyst in the creation, interpretation, and enforcement of environmental law, as described by Percival et al.

The comparative analysis reveals that both the United States and the European Union have institutionalised environmental demands through distinct legal and governance mechanisms. In the United States, environmental activism has influenced legal development through public interest litigation, judicial review, and statutory enforcement. Landmark environmental cases have expanded regulatory accountability, strengthened environmental standing, and enhanced judicial oversight of governmental action (Farber et al., 2018).

By contrast, the European Union has adopted a more participatory and institutionalised approach, incorporating environmental activism into legal and administrative processes through procedural rights relating to access to information, public participation, and access to justice. Supported by treaty provisions and the jurisprudence of the Court of Justice of the European Union, these mechanisms have facilitated the integration of environmental principles into Member State legal systems (Jans & Vedder, 2012).

The study further demonstrates the important role of international environmental law in bridging the gap between activism and enforcement. International environmental agreements increasingly incorporate compliance, monitoring, reporting, and review mechanisms that reflect the influence of environmental advocacy and transnational civil society engagement. Instruments such as the Aarhus Convention and the Paris Agreement illustrate how environmental concerns raised through activism can become embedded within both international and domestic legal frameworks (Bodansky, 2010; Sands et al., 2018).

The findings also underscore the continuing relevance of environmental activism in addressing contemporary environmental challenges. Climate change, biodiversity loss, environmental degradation, and environmental justice concerns have generated new forms of environmental mobilisation, including climate litigation and transnational advocacy networks. These developments demonstrate that environmental activism remains a dynamic force in shaping environmental law and policy. Setzer and Higham (2023) observe that the growing number of climate-related cases worldwide highlights the increasing role of legal mechanisms in addressing environmental challenges and promoting accountability.

Ultimately, this study concludes that the relationship between environmental activism and legal enforcement is neither temporary nor incidental. Rather, environmental activism constitutes an enduring component of environmental legal development, continuously influencing the evolution of environmental governance.

The experiences of the United States and the European Union demonstrate that, despite differences in legal traditions and institutional arrangements, environmental activism remains central to the creation, implementation, and enforcement of environmental law.

Strengthening environmental rule of law therefore requires not only effective legal frameworks and enforcement mechanisms but also the continued participation of citizens, environmental organisations, and civil society actors in environmental governance processes (UNEP, 2019).

In this sense, the transition involving environmental activism, judicial activism, and judicial intervention toward enforcement should be understood not as a completed process, but as an ongoing and evolving relationship that will continue to shape environmental law and environmental governance in the decades to come.

Conclusion

This study has demonstrated that environmental activism is a fundamental driver in the evolution of environmental law in both the United States and the European Union, facilitating the transformation of environmental concerns into enforceable legal norms. Through comparative analysis, it is evident that while the United States primarily advances environmental governance through litigation, judicial intervention, and case law development, the European Union relies more on institutionalised participatory rights and administrative integration supported by supranational judicial oversight. In both systems, judicial activism and court-driven interpretation of environmental principles have played a significant role in strengthening regulatory accountability and expanding the scope of environmental protection. Despite these structural differences, both jurisdictions reflect the enduring influence of activism—amplified through judicial processes—in shaping legal development and embedding environmental principles within domestic and international legal frameworks. The continued emergence of climate litigation and transnational advocacy further confirms that environmental activism, reinforced by judicial intervention, remains central to the ongoing evolution of environmental governance.

Accordingly, the transition from activism to enforcement should be understood not as a concluded historical shift, but as a continuing and evolving process that will remain integral to environmental law in the twenty-first century.

Limitations of the Study

The scope of this research is limited to the legal systems of the United States and the European Union and does not provide an exhaustive examination of environmental law developments in other jurisdictions. Furthermore, the study concentrates on the doctrinal and institutional aspects of environmental law, rather than providing a comprehensive empirical evaluation of environmental outcomes and policy effectiveness. While international environmental agreements are considered, the analysis emphasizes their influence on domestic legal development and enforcement rather than their broader political or economic implications. Despite these limitations, the doctrinal and comparative approach provides a robust analytical framework for examining the transformation of environmental activism into legal enforcement and for understanding how environmental law continues to evolve through the interplay of civil society participation, legal institutions, governance mechanisms, judicial intervention, and judicial activism.

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