

# Tort-based Lawsuit: A Temporary Tactic but Not the Future of Climate Change Litigation

*Yun Wu*

Renmin University of China, Beijing, China

wuyun1212@ruc.edu.cn

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**Abstract.** In recent years, the world has witnessed an increasing number of climate change lawsuits. Individuals and organizations are now employing lawsuits as a tactic to push forward climate change legislation. However, the traditional model of tort-based lawsuit turns out to have an unfavorable outcome for the plaintiffs. The plaintiffs are faced with difficulties in different steps of legal reasoning including civil wrong, tortious act and causation. Besides, even if the plaintiffs win the lawsuit, enforcement of civil courts is limited. The defendants can only be sentenced compensation and finish their responsibility by paying a certain amount of money instead of taking methods to save the climate. In fact, the case-by-case nature of tort-based lawsuit makes it ineffective to slow down climate change. Plaintiffs, often individuals or non-profit organizations are faced with disparity in legal resources with the defendants, often giant enterprises. With the difficulties, more and more plaintiffs now turn their eyes on right-based lawsuit to save the climate. Ultimately, litigation is only a temporary tactic to fill the gap before the existence of laws about climate change. Governments should speed up the process of legislation, and introduce strong administrative supervision to climate change, to save the climate.

**Keywords:** climate change litigation, tort-based lawsuit, ineffectiveness, administrative supervision

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## 1. Introduction

Climate change is a critical issue. As concern about climate change grows, various individuals and organizations are striving to play their part in the campaign. However, the international community and national governments have been slow to take measures to tackle this issue. Under these circumstances, public interest groups have been compelled to turn to the courts for redress[1]. Civil courts and tort-based lawsuits appear to be an option, but given the unfavorable outcomes of thousands of such lawsuits, there must be a better way for us to address climate change. Researchers have conducted extensive studies into lawsuit strategies, yet research into other legal methods for regulating climate pollution is still lacking in this area.

Challenges persist in tort-based lawsuits regarding climate change litigation, despite the numerous precedents. In fact, only 55% of these cases result in a favorable outcome[2], and these do not necessarily lead to a direct impact on climate change protection. It is important to note that this percentage includes cases where the plaintiffs' claims are only partially supported by the courts. Therefore, less than 55% of the cases have a direct impact on climate actions. These unfavorable results stem from the difficulties in legal reasoning associated with tort-based lawsuits. Plaintiffs often struggle to meet the requirements of causation, trespass, and negligence, with courts frequently denying claims due to their inability to provide redress.

In fact, when considering tactical lawsuits, tort-based lawsuits serve as an alternative but not an effective solution. Owing to the case-by-case nature of tort-based lawsuits, this approach is unlikely to significantly slow the overall process of pollution. Typically, the plaintiffs are common interest organizations, while the defendants are often governments or large corporations with substantial legal resources. Faced with this disparity in legal resources, plaintiffs encounter numerous challenges at various stages of the lawsuit, including evidence gathering and court debates. Due to these difficulties, plaintiffs are increasingly turning to rights-based lawsuits and constitutional courts, asserting that climate stability is part of human rights. This shift indicates a move towards rights-based litigation[3]. However, rights-based lawsuits also fail to provide a definitive solution to climate change. Highly dependent on the judicial models of various countries, rights-based lawsuits cannot be implemented in countries without a constitutional court.

Ultimately, whether litigation is the appropriate method to prevent climate change from worsening remains up for debate. As a response to the absence of action by international and national entities, litigation, especially tort-based litigation, is merely a

temporary remedy for climate issues. Furthermore, given that climate change is a global challenge, social groups or individuals are not adequately equipped to monitor government or corporate pollution activities. Although these groups possess the legal right to initiate lawsuits, the authority to regulate climate pollution actions effectively belongs to the social groups, as plaintiffs in the courts. However, since the mitigation of climate change is a global issue, it should be the government, representing all its citizens, that addresses the problem, rather than social groups driven by their own interest considerations. Thus, what is required is stronger administrative regulation to slow the trend of climate change. Since tactical litigation has emerged as a means to address climate issues in the absence of adequate administrative oversight, it is crucial that we update our administrative laws to meet our needs in protecting the climate.

## 2. Useful as a Lawsuit Tactic? Why Tort-Based Lawsuits Cannot Help Plaintiffs Win the Present Lawsuits

### 2.1. A Brief Analysis of the Present Lawsuits

The year spanning from June 1, 2022, to May 31, 2023, saw a total of 190 new climate change lawsuits, bringing the cumulative number to 2,341 cases across 51 countries and 15 international courts or tribunals. Predominantly, these lawsuits target either national governments or major corporations, thereby acting as a regulatory check on either the environmental policies of governments or the pollutive practices of corporations. These are often referred to as tactical lawsuits. Typically, plaintiffs initiate such lawsuits to either halt corporate pollution or to alter a nation's climate policies. By focusing on the covert emission of greenhouse gases, plaintiffs employ civil litigation as a strategic means to combat climate change. Although tort-based lawsuits remain the prevalent choice, an increasing number of plaintiffs are now opting for rights-based lawsuits to curb pollution[4]. However, only 55% of these cases result in favorable outcomes, indicating that the current litigation tactics may not be as effective as anticipated.

Tort-based lawsuits constitute the majority of climate change legal actions. For instance, in the case of *Conservation Law Foundation, Inc. v. Shell Oil Co., et al.*, the plaintiff argued that the defendant's bulk oil storage terminal had failed to prepare for "reasonably foreseeable risks" associated with climate change[5]. The plaintiff demanded, as per Federal Rule of Civil Procedure 34(b)(2)(C), "all documents concerning risks to the Terminal's physical infrastructure from climate change, flooding, sea level rise, and/or severe weather," and questioned whether the defendant had withheld essential documents, a key threshold issue. Despite the ambiguous nature of terms such as "climate change" and "all documents" and the challenge of evidence procurement, the plaintiff successfully navigated these initial hurdles with the court's assistance in securing the defendant's documents. When addressing the core elements of tort-based lawsuits, the plaintiff contended that the defendant's terminal had breached regulations regarding document retention and environmental monitoring. The court partially upheld the Conservation Law Foundation's requests, including the preservation of documents and responses to certain interrogatories, while denying requests that would limit document production. However, the plaintiffs failed to substantiate the critical aspect of the defendants' **Civil Wrong** in their operational processes, leading to the rejection of some of their claims.

In other jurisdictions, tort-based approaches are similarly utilized in climate change litigation. Consider the Chinese case *Friends of Nature v. State Grid Gansu Electric Power Company* [6], where the plaintiff claimed that the defendant had forsaken wind and solar power in favor of fossil-fuel plants, thereby polluting the atmosphere and violating *Environmental Protection Laws*. The plaintiff demanded that the defendant allocate a portion of its profits to environmental protection. The High People's Court of Gansu acknowledged that the case warranted substantive judgment. Yet, before the court could convene, the parties reached a mediation agreement that fulfilled the plaintiff's demands. While this mediation agreement represents a tactical victory in the fight against climate change, it remains unclear how Chinese courts generally view the substantive elements of tort-based climate litigation. Additionally, the plaintiff's readiness to settle might suggest difficulties in proving the defendant's **Tortious Act**, leading them to accept mediation instead of pursuing a more definitive court ruling. Nonetheless, this enforced mediation might serve as an alternative tactical approach for plaintiffs.

Other cases, such as the *Mayor and City Council of Baltimore v. BP P.L.C.* [7] and *Juliana v. United States* [8], also utilize tort-based lawsuits as their legal strategy. However, procedural controversies present significant barriers to reaching substantive judgments. Plaintiffs and defendants engage in prolonged debates over jurisdiction, leading to years of procedural judgments before any substantive issues are addressed. In the case of *Mayor and City Council of Baltimore v. BP P.L.C.*, after six years of proceedings, the Circuit Court for Baltimore City ruled that the plaintiffs were attempting to "seek to address and hold Defendants accountable for a deceptive misinformation campaign, which is simply a way to get in the back door what they cannot get in the front door." The court asserted that global warming is a worldwide problem, and therefore, the plaintiffs cannot seek relief through a specific court. In other words, the court opined that the plaintiffs failed to establish a **Causation** between the defendant's manufacturing activities and climate change in a specific area. This case is not the only instance where plaintiffs face lengthy procedures and challenges in proving the connection between the defendants' actions and the outcomes of global warming. Seven years after the initial lawsuit, the Ninth Circuit ultimately ordered the dismissal of the *Juliana v. United States* case, stating that the courts cannot "step into the shoes" of the political branches to provide the sought relief. Indeed, the plaintiffs failed to

demonstrate causation between the actions of the defendants and the plaintiffs, leading to the court denying any specific connection between the acts of the defendants and the phenomenon of global warming.

Besides the traditional route of tort-based lawsuits where plaintiffs are typically nonprofit organizations, another track of procuratorial public interest lawsuits is prevalent in climate change litigation in China. Under the *Civil Procedure Law* [9] and *Administrative Procedure Law* [10], procuratorates serve as plaintiffs in these lawsuits. Since China ratified the *Paris Agreement* in 2016, various levels of People's Courts have adjudicated more than 1.12 million cases related to climate change [11]. However, although the volume of climate-related lawsuits appears substantial, most cases concern atmospheric pollution or the contracts of carbon emission index trading, with genuine climate change lawsuits constituting only a small fraction of the total [12]. Defendants in procuratorial public interest lawsuits include poorly-performing companies, as emitters, and inactive administrative agencies. For defendants found guilty of actual **Civil Wrongs**, Chinese courts tend to support the plaintiffs' arguments, ordering the defendants to compensate and pay for environmental restoration. In the landmark case *People's Procuratorates of Deqing v. Deqing Minghe Insulation Co., Ltd.* [13], published by the Premier People's Court in February 2023, the Huzhou Medium People's Court deviated from the traditional model of **Harm, Civil Wrong, Tortious Act**, and **Causation** in this tort-based lawsuit and ruled that the defendants were liable for compensation solely for their illegal emission of freon (**Civil Wrong**). Although the emission of freon undoubtedly contributes to climate change, the court primarily based its decision on the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, indicating that this case, as a representative of the "Chinese Style" of climate change litigation, is still conflated with other environmental pollution issues like water and soil pollution [14]. Moreover, as a civil law country, China currently lacks specific statutory law regarding procuratorial public interest lawsuits in the environmental sector, meaning that current environmental procuratorial public interest lawsuits are effectively based on the judicial interpretation [15] issued by the Supreme People's Court in 2015.

At the same time, other tactics also exist in climate change litigation. In the case of *Urgenda v. the State of the Netherlands* [16], the Dutch Supreme Court ruled that the State of the Netherlands is obliged to reduce the emission of greenhouse gases. Based on the European Convention on the Protection of Human Rights and Fundamental Freedoms (ECHR), the state must take measures if there is a real and immediate risk to people's lives and welfare, thereby imposing a duty of care on the state. In this case, the fault of the defendant, the state, stemmed from international covenants concerning human rights. Although the lawsuit itself followed the model of a tort-based lawsuit, the defendant's duty was strongly supported by human rights provisions.

In conclusion, climate change litigation primarily consists of tort-based lawsuits, but the core, or the substantive part, of these lawsuits invariably pertains to human rights. The only exception is the Chinese case, where the basis of the plaintiff's claims is the defendant's non-compliance with a specific rule of law. Tort-based lawsuits are the predominant type of lawsuit, and the plaintiffs typically attempt to demonstrate the negative impact of the defendants' actions on the environment when faced with large companies. However, the link between the companies' actions and the rise in atmospheric temperature is always tenuous, resulting in the plaintiffs often losing these lawsuits. In fact, very few claims brought in tort have been successful, while academic commentary suggests that legal reasoning barriers may defeat the plaintiffs. In human rights lawsuits, where the defendants are states or governments, the plaintiffs enjoy a higher rate of success in winning the lawsuits.

## 2.2. Legal Reasoning Dilemma

The continuous occurrence of cases symbolizes the increasingly obvious influence of human activities on climate change, along with a growing awareness of human rights. However, supporting an actionable right violation in lawsuits proves challenging, leading to unfavorable outcomes in tort-based lawsuits [3]. In fact, when considering the tort requirements—**Harm, Civil Wrong, Tortious Act**, and **Causation**—the infringement by common tort-based climate change cases remains controversial. Unfortunately, the model of a tort-based lawsuit seems to be the only plausible theory in climate change litigation [4].

**Harm** is the requirement that plaintiffs can often meet with ease. There is hardly any debate over the fact that our climate is deteriorating. In the case *Juliana v. United States* [8], plaintiffs claim that psychological harms, impairment to recreational interests, exacerbated medical conditions, and damages to property are all harms caused by climate change. Plaintiffs can also claim the greenhouse effect itself as a kind of harm. In the case *Mayor and City Council of Baltimore v. BP P.L.C.* [7], the plaintiffs assert that the defendants substantially contribute to greenhouse gas pollution, global warming, and climate change. The plaintiffs' statement in this case indicates that the harm consists of the phenomenon of global warming itself. Since global warming is a recognized fact, harm is not the barrier to winning the lawsuits. However, other requirements of tort-based lawsuits pose difficulties for the plaintiffs.

**Civil Wrong** is a challenging claim for plaintiffs. In tort-based lawsuits, defendants are required to undertake tort liability only when they are legally in the wrong. The most common approach for plaintiffs to claim the defendants' civil wrong is by demonstrating their failure to fulfill responsibilities under specific laws concerning climate change. In the case *Conservation Law Foundation, Inc. v. Shell Oil Co., et al.*, the plaintiffs allege that the defendants failed to maintain their documents, as required by Fed. R. Civ. P. 34(b)(2)(C). The court partly supported the plaintiffs' claim, especially regarding their failure to preserve documents. However, in more cases, plaintiffs struggle to find fault with the defendants. Lacking deep insight into the defendants' manufacturing processes, they have little knowledge of the specifics. Without knowing what the defendants do during production, the plaintiffs cannot ascertain how they violate laws or regulations, which results in the defendants committing a civil wrong.

**Tortious Act** is another barrier to winning the lawsuit. It is easy for plaintiffs to claim the defendants continue polluting, but proving the defendants' non-compliance with rules is difficult. For companies as defendants, production itself can constitute the tortious act in tort-based lawsuits, fulfilling the requirement. However, if the defendants are government bodies, states, or companies that fail to reduce air pollution or slow global warming through inaction, plaintiffs have difficulty proving negligence in taking measures to mitigate these issues. In the case *Friends of Nature v. State Grid Gansu Electric Power Company*, the plaintiffs allege that the defendants fail to pay for electricity generated from fossil fuel but had difficulty finding evidence to support their claim. In some countries, defendants are burdened to prove facts or provide evidence, but this is not a universal principle.

**Causation** represents the most significant challenge plaintiffs face in climate change lawsuits. To establish that the defendant's actions are connected to the harm in a specific case, plaintiffs must demonstrate that the actions had a tendency to make the resulting harm more or less probable than it would have been otherwise. This requirement, as noted in the judgment of the case *Conservation Law Foundation, Inc. v. Shell Oil Co., et al.*, poses significant challenges for plaintiffs. Courts typically apply the "but-for" standard to determine whether harm would have occurred without the defendant's polluting actions [1]. However, the global nature of the warming process complicates efforts to isolate the contributions of a specific defendant from those of companies worldwide. This difficulty often arises from the uncertainty of scientific results and gaps in evidence [1]. As a global issue, climate change is fueled by emissions from nearly everyone on the planet, so the impact of a single source may seem minimal within a larger context, unlikely to cause significant adverse effects [1]. Defendants often leverage scientific research and data to refute the connection between their emissions and specific impacts [1]. Consequently, plaintiffs struggle to establish a direct and inevitable link between a defendant's emissions and global warming, making it challenging to convince courts of causation. Moreover, courts may deny plaintiffs the opportunity to initiate lawsuits if they cannot demonstrate the causation between alleged tortious acts and harm in a specific area. In the case of *New York v. The American Electric Power Company, Inc., et al.* [18], the plaintiffs charged the defendants with emitting greenhouse gases, thereby causing global warming and damaging their properties. To support their claims, the plaintiffs utilized scientific studies, model predictions, and documents disclosed by the defendants. However, the court dismissed the plaintiffs' claims, finding the evidence insufficient, despite the combination of scientific reasoning and factual documentation.

The difficulty of establishing legal causation in tort-based climate change lawsuits offers some explanation for the unfavorable outcomes discussed above. Given these legal challenges, it is not surprising that plaintiffs often find themselves at a disadvantage in tort-based climate change litigation, and their likelihood of achieving victory in court remains low.

### 2.3. Enforcement

The primary motivation for plaintiffs to initiate lawsuits is to regulate the defendants' emissions through court judgments. However, even if the court rules in favor of the plaintiffs, the effectiveness of the court's order in contributing to climate protection remains uncertain. In some instances, courts mandate that defendants reduce their emissions, aligning with the plaintiffs' original goal for the lawsuit. Conversely, in other cases, courts may only require defendants to compensate for the damage caused to the climate rather than mandating remedial actions. Sometimes, procedural barriers are set by courts stating that they cannot provide essential recovery through judgment, thereby dismissing the plaintiffs' lawsuits.

Climate change litigation is often more of a political issue than a legal one, leading to debates over the appropriateness of judicial relief for environmental issues [17]. Frequently, courts opt to sidestep making substantial judgments by pinpointing procedural faults with the plaintiffs' cases. In the case *Juliana v. United States* [8], the court concluded that it was not feasible to provide necessary relief to the plaintiffs due to diplomatic and administrative complexities inherent in climate change litigation. The court suggested that such issues are better resolved by governmental rather than judicial means, given the courts' lack of expertise in handling such specialized problems. In effect, the court abstained from making a substantive judgment in the case.

Nonetheless, there has been a shift in how courts decide whether losses can be substantially mitigated. In certain cases, courts have determined that if the plaintiffs' demands could potentially slow global warming, then the losses should be deemed addressable. In the case *Connecticut v. AEP* [19], the Supreme Court of the United States upheld the plaintiffs' argument that the Clean Air Act "speaks directly" to the defendants' operations, leading to a significant judicial decision. Despite varied opinions on the matter, the existence of these lawsuits and the ongoing debate indicate persistent procedural disagreements prior to judgment, presenting another challenge for plaintiffs opting for tort-based lawsuits as a strategic approach.

In their essential judgments, courts do not often order defendants to comply exactly with what plaintiffs request. Although plaintiffs frequently demand that defendants reduce their emissions or provide injunctive relief, the courts tend to favor awarding damages to maximize the effect of climate change litigation. This is because injunctive relief, when granted by the court, suggests that the lawsuit serves as an alternative to administrative regulation, which judges typically wish to avoid [4]. This fundamental contradiction results in courts' general reluctance to halt defendants' polluting activities. For instance, in the case *Conservation Law Foundation, Inc. v. Shell Oil Co., et al.*, the court only supported the plaintiffs' demand for defendants to preserve and provide documents, which did not directly aid broader climate change regulation efforts. Similarly, in the case *Mayor and City Council of Baltimore v. BP P.L.C.* [7], the plaintiffs attempted to shift the burden of climate-change costs onto the defendants, arguing that the defendants benefit from rising sea levels and environmental changes. This stance provided a potential basis for claims, yet it still did not result in injunctive relief that would prevent further pollution by the defendants.

In conclusion, plaintiffs face various procedural difficulties before a case reaches an essential judgment. The lawsuit begins with plaintiffs needing to convince the court that the loss is credible and falls within the court's jurisdiction. After overcoming procedural hurdles, the court still does not necessarily endorse all of the plaintiffs' arguments. Given the distinct roles of the court and government, it is unlikely for the court to issue an injunctive relief that outright bans defendants from contributing to future global warming.

### 3. Way to Win the Lawsuit? Why Tort-Based Lawsuits Are Not a Good Tactic

#### 3.1. The Case-by-Case Model Makes Tort-Based Lawsuits Unqualified

A tort-based lawsuit is a type of legal action aimed at resolving disputes between the plaintiff and the defendant on a case-by-case basis. In countries where previous court judgments serve as guidance for subsequent decisions, the judgments of civil courts partially function as behavioral guidelines. Tort-based climate change lawsuits place significant emphasis on these auxiliary functions, acting as guidelines for behavior. Scholars generally agree that the tort-based lawsuit is admissible; as Astrid Stadler stated in her passage from *Can Civil Courts Save the Climate? Strategic Climate-change Litigation Before Civil Courts*: "... (Therefore,) in the case of the Peruvian farmer, it is simply irrelevant whether the claimant and the NGOs behind him also have political or ideological motives to sue the German company. Therefore, the action is admissible, in principle." However, whether this constitutes a misuse of the civil court remains under debate. Proponents of this type of lawsuit hope the threat of losing potential lawsuits can force companies to cease their emissions during production. Meanwhile, those against tort-based lawsuits for climate change argue that saving the climate is an issue involving everyone, rather than a single plaintiff or a single country.

The problem of global climate change is not caused by a single case and cannot be solved solely through civil trials. Countries with the highest emissions, like the US and China, are not those suffering the greatest impacts of climate change. In fact, countries are affected by emissions from all over the world, not just within their region [1]. Under these circumstances, a plaintiff would have to start civil lawsuits all over the world against anyone who may have violated their rights to live in a stable climate environment, which is impractical. World emissions are like a pool that is the endpoint of millions of pipes, while a tort-based lawsuit attempts to block these pipes one by one. Admittedly, this can slow down the progress of climate change by reducing the number of polluters, but it requires a great amount of legal resources and a lot of time for plaintiffs to initiate these lawsuits. Considering that climate change is a global problem, no single plaintiff can save the climate in this manner alone. While supporters of tort-based lawsuits argue that the obligations the court imposes on certain companies serve as a guideline for other countries, the reality is that competitors of these companies take this chance to expand their production, simultaneously taking advantage of their not being targeted by plaintiffs to become defendants.

What's more, considering individual cases, plaintiffs still cannot adapt the issue of climate change to a case-by-case model to successfully initiate and win a tort-based lawsuit. Despite the well-accepted scientific evidence of the existence of climate change and its impacts, existing scientific reports have long focused on the effects of climate change at the global level, with little attention to how it might manifest locally. This has made it challenging for claimants in climate change cases to prove with certainty that their injuries are a result of emissions from specific sources [1]. In individual cases, plaintiffs cannot conclusively demonstrate that emissions from defendants have led to the effects in a specific region.

Another factor that distances civil courts from climate change litigation is that the court can only make decisions for individual cases, without considering the overall impact on the climate as a whole. The primary duty of civil courts is to resolve disputes between plaintiffs and defendants; however, tort-based climate lawsuits compel civil courts to extend their social impact, a role that should be considered by other parties or agencies within the country. Climate change is a complex, multi-stakeholder issue that requires a challenging process of balancing social, legal, and economic interests—a task better suited to democratically legitimized legislatures and parliaments. What may seem appropriate in a single case could prove problematic when viewed in the broader context. Courts are restricted to exerting control, unable to initiate broader legal changes. This reflects the traditional distribution of tasks and powers in a modern constitutional state.[20]

Admittedly, tort-based lawsuits serve as a tool for plaintiffs to address the problem of climate change, but expecting civil courts to save the climate is undoubtedly an overuse of this kind of lawsuit. While tort-based lawsuits can complement climate change litigation, they should not become the mainstream or the sole approach for plaintiffs and other stakeholders aiming to address climate change. The presence of tort-based lawsuits should not impede our progress in exploring other avenues to protect the planet.

#### 3.2. Unequal Lawsuit Resources Makes It Harder for the Plaintiff to Win

In tort-based lawsuits, plaintiffs and defendants are legally considered equals, a requirement of both civil courts and tort law. Each party independently utilizes their legal resources to support their facts and strengthen their arguments. However, it is common for plaintiffs to possess fewer legal resources than defendants, placing them at a substantial disadvantage. For example, when the plaintiff is an individual and the defendant is a large corporation, the defendant can afford a team of top lawyers to win the lawsuit, or at least minimize any compensation they might be required to pay if they lose. For plaintiffs, hiring a lawyer is a significant

financial burden, putting them at a disadvantage even before the civil trial begins. Additionally, plaintiffs cannot afford to put aside their lives for the duration of a lawsuit, making the lengthy process a heavy burden, whereas defendants can handle the lawsuit with little to no disruption to their daily operations. When initiating a lawsuit against a company or government, the disparity in legal resources and wealth becomes even more pronounced, often leading to unfavorable outcomes for the plaintiff, even if there is clear evidence of infringement by the defendant.

In the context of tort-based climate change lawsuits, this inequality is further exaggerated because the defendants' face are typically large multinational corporations or government entities. The list of defendants in such lawsuits includes formidable entities like BP p.l.c., American Electric Power Co., and the State of the Netherlands. These defendants often have dedicated departments to handle global litigation. In contrast, plaintiffs are frequently non-profit groups focused on climate protection or individuals with significantly fewer resources. For instance, the plaintiff against Shell Oil Co. is the Conservation Law Foundation, Inc., a non-profit regional organization dedicated to environmental protection. With total assets of no more than \$24 million [21], the Conservation Law Foundation struggles to contend with Shell Oil Co., which boasts revenues exceeding \$300 billion [22].

Time is another significant barrier for plaintiffs. It is common for them to fight for years before a court makes a final decision. In the case of *Conservation Law Foundation, Inc. v. Shell Oil Co., et al.*, the lawsuit began in July 2021, and after three years, it has yet to be resolved. Similarly, in *Delaware v. BP America Inc.* [23], it has been four years since the lawsuit was initiated, and the plaintiffs are still awaiting a result. While companies can continue their operations during litigation, plaintiffs exhaust their resources in pursuit of justice. The longer the lawsuit lasts, the more money and effort it demands from the plaintiffs, whereas the defendants are minimally affected by the ongoing legal proceedings.

Most importantly, the risk of losing the lawsuit is always present. The realm of environmental litigation is characterized by costly victories and numerous defeats. Plaintiffs do not always need to prove their case in court or contribute to long-term legal reform. In fact, the existing experiences with private climate litigation have demonstrated this dynamic: although no corporate entities have yet been held legally accountable, the mere possibility has already elevated the concept of climate change to a recognized legal and financial risk for businesses, influencing shareholders and investors to expect companies to manage this risk [24]. Fear of climate change lawsuits motivates defendants to focus more intently on their legal defenses, leading to a greater disparity in legal resources between them and the plaintiffs and thereby making it more challenging for plaintiffs to win.

### 3.3. The Right-Turn of Climate Change Litigation

Confronted with challenges in tort-based lawsuits, plaintiffs are seeking alternative legal avenues to advocate for climate protection. The plaintiffs' right to initiate a rights-based lawsuit was recognized by the court in the case of *Juliana v. United States*. Judge Staton noted that the plaintiffs sued to uphold a fundamental principle woven into the fabric of our liberties: that the Constitution does not permit the nation to engage in willful destruction. She asserted that the plaintiffs have standing to challenge the government's actions, have articulated constitutional claims, and have presented adequate evidence to proceed to trial [8].

Compared to the tort law approach, the human rights framework lowers the burden of proof for plaintiffs. Furthermore, it facilitates judicial and legislative recognition of climate change issues and helps elevate public awareness [25]. In September 2015, Judge Syed Mansoor Ali Shah of the Lahore High Court in Pakistan made a landmark ruling that the national government's delay in implementing the country's climate policy framework infringed upon citizens' fundamental rights [3]. Since then, the Sabin Center for Climate Change Law has documented 303 cases both in the US and internationally [26]. Human rights-based lawsuits constitute over one-eighth of the documented 2,341 lawsuits. Currently, it appears judges are increasingly eager to establish new precedents in climate change litigation. Among these, rights-based lawsuits have shown far more favorable outcomes compared to tort-based suits. For instance, the Urgenda case set a precedent for rights-based lawsuits. Urgenda employed a variety of legal grounds for its claim, one of which included human rights [3]. This approach supported the plaintiff's assertion that the state of the Netherlands was at fault for its inadequate climate protection policies. The judgment in this case indicated that the human right to a climate system capable of sustaining human life [3] is recognized by the court and can be leveraged by plaintiffs in rights-based litigation. This favorable outcome seems to encourage plaintiffs to pursue rights-based lawsuits as a strategy for climate advocacy.

While previous climate change litigation aimed to address climate issues by expanding the interpretations of existing legal concepts, judges have more recently begun establishing new norms based on human rights to close legal loopholes [25]. Given that plaintiffs are attempting to establish rules for companies and governments regarding climate change through litigation, rights-based lawsuits may be a more effective tactic compared to the case-by-case approach of tort-based lawsuits. The prominence of fundamental rights in supreme law endows them with considerable instrumental value, specifically their defensive, beneficial, and procedural auxiliary functions that impose prohibitions or obligations on the state. Additionally, as a transnational litigation tactic, the moral foundation underpinning human rights is stable and universal. To a certain extent, it is isolated from political practices, focusing judicial debates on which measures to address climate change can guarantee basic rights through case-by-case disputes. This approach helps to rectify the narrow political perspective and complex interplay of interests in democratic decision-making. Moreover, climate change is associated with a broad spectrum of "rights groups," including negative rights such as the right to life, as well as various social and economic rights like environmental rights, health rights, drinking water rights, and rights to climate stability. Using basic rights as the basis for litigation not only provides sufficient moral and value judgments for judicial decisions,

but also offers a robust normative foundation for judicial adjudication with significant explanatory scope and varying content and intensity [27].

However, climate change lawsuits cannot rely solely on rights-based approaches. Depending on specific human rights law cultures can be a double-edged sword. In legal systems where human rights are deeply entrenched, it is socially acceptable for the judiciary to proactively create rules. Conversely, the successful experiences in transforming climate litigation through human rights may be limited to a narrow geographical area, specifically a few countries in Western Europe and South America. After all, not all legal cultures regard rights as decisive in litigation [25]. Variations in legal traditions across different countries can lead to disparate outcomes in rights-based lawsuits, particularly in countries like China P.R., where Constitutional Law is not actionable, thereby rendering rights-based lawsuits infeasible. Statistical data also supports this notion. Additionally, in cases where companies are defendants, the applicability of national obligations from international agreements is still under debate [28]. Despite increasing focus on the strategic use of litigation in climate action and the expanding role of substantive human rights claims in climate cases, drawing on the lessons from how human rights advocates have used strategic litigation is not yet mainstream practice [29]. Rights-based lawsuits currently constitute less than 1/7 of all climate change litigation. As a litigation tactic and a means to draw public attention [30], whether rights-based lawsuits will shape the future of climate change litigation remains uncertain.

## 4. Future of the Climate? Why Tort-Based Lawsuits Cannot Save the Climate

### 4.1. Tort Law As a Tactic: Born As a Temporary Choice

Since recognizing climate change as a potential global problem, efforts have been made to slow or thoroughly resolve the issue. With limited success through other avenues, people have turned to various legal methods to address this challenge. Frustration over failures to confront climate change has driven public interest groups, individuals, and local governments to seek redress for both the causes and effects of global warming in courts [1]. In cases where companies are defendants, plaintiffs and defendants possess equal legal standing, necessitating civil courts to address these disputes. For cases against the government, since the policy-making process is typically an internal administrative action, which cannot be the subject of an administrative lawsuit, plaintiffs must also resort to civil court for litigation. Traditionally, common law tort has been touted as a "gap filler"—ready to intervene when regulatory enforcement falls short. Under this framework, tort law occupies a secondary role to administrative regulation but intervenes to address harm-producing activities overlooked by existing regulatory regimes [31]. However, the role of "gap filler" is not the intended design of the tort-based lawsuit system. The theoretical foundation for tort law's guidance function in policy-making is weak, leading to plaintiffs' challenges in winning lawsuits. For instance, since tort-based lawsuits are designed to address specific issues between civil parties, plaintiffs must bear a relatively high burden of proof. Yet, in climate change litigation, plaintiffs often struggle with proving their cases.

Climate change torts cannot be justified by classical tort liability, which emphasizes atomic individualism, nor supported by modern tort liability, which focuses more on social solidarity [32]. Scholars are also skeptical of common law tort as a regulatory response to the risks of global warming. Indeed, regardless of one's stance on the current threat level, it is difficult to disagree with Professor Richard Epstein's assertion that "if there is to be any attack on global warming, it must be through a coordinated national program, not by piecemeal state actions [31]." Furthermore, the suitability of climate change issues for civil court is still under debate. The first wave of private climate lawsuits occurred between 2005 and 2015, primarily in the United States. Several lawsuits filed in state district courts have been dismissed as political issues. Civil courts generally avoid encroaching on the territory of administrative power in handling climate change litigation. Cases such as *Alec L. ex rel. Looz v. McCarthy* and *Kanuk v. State Department of Natural Resources* exemplify this trend. The courts maintain that the allocation of responsibility for global warming is a matter for the executive or legislative branches to decide, not solely a legal issue [33]. Climate change issues are intricately linked to politics, economics, foreign policy, national security, and national interests. As some courts have noted, previous public nuisance cases based on pollution did not involve as many aspects of national or international policy as these cases do [34].

Perhaps in recognition of the flimsy foundation of the gap-filler role, scholars have shifted to articulate the role of tort law as a necessary "catalyst" to stimulate new legislation and administrative regulation. Professor Merrill grudgingly concedes: "This is the only plausible justification for the one remaining use of public nuisance in contemporary America—as an arrow in the quiver of claims asserted by state and local governments seeking to recover huge damage awards from corporate defendants allegedly responsible for various social ills inadequately addressed by existing regulations [31]." However, this in fact again emphasizes that the goal of tort-based climate change lawsuits is to appeal for the intervention of administrative power and legislative attention. A tort-based lawsuit is merely the route we must take when attempting to save the climate, but it is never the ultimate tool for us to reduce emissions and slow down global warming.

### 4.2. Legal Standing Problem

In the model of tort-based lawsuits, the legal standing of plaintiffs poses a significant barrier to these lawsuits being a general solution for addressing climate change issues. In fact, the procedural discussions in current cases reflect the inappropriateness of allowing civil parties to be plaintiffs in lawsuits concerning climate change. Given that the outcomes of tort-based lawsuits can

serve as a form of guidance, these lawsuits have essentially become tools of legislation and administration. Thus, allowing civil parties to initiate litigation is effectively granting them the power and initiative to start the processes of litigation and administration. Recognizing tort-based lawsuits as the mainstream solution to climate change problems partially violates the powers of legislation and administration. This view is also supported by the courts and administrative agencies. In the case of *Juliana v. United States*, the panel held that because the APA only allows challenges to discrete agency decisions, the plaintiffs could not effectively pursue their constitutional claims—regardless of their merits—under that statute. This effectively denies the plaintiffs’ qualifications to initiate lawsuits against government policies. The creation and implementation of a policy are internal administrative acts, which are excluded from lawsuits and the supervision of the court [35]. This exclusivity is what reserves certain powers for the administration, separate from legislation and jurisdiction, to ensure that the administrative power is equal to the other two powers. The EPA also reaffirmed its inviolable administrative power in the case of *Massachusetts v. EPA*. In its petition denial, the EPA concluded that it lacked authority under §7521(a)(1) to regulate new vehicle emissions because carbon dioxide is not considered an air pollutant under §7602(g). Furthermore, even if it had the authority, it would decline to exercise it because such regulation would conflict with other administrative priorities. Regulating climate change is a global issue, at the very least a nationwide one, yet it is nearly impossible for plaintiffs and the court to have a comprehensive view of the current situation within a state or across the entire country. Besides serving a guiding function, the judgment of the court essentially acts as a legal evaluation of the defendants’ actions. However, it is clearly inappropriate for plaintiffs, as civil parties, to suggest that the court make such evaluations. Even if a tort-based lawsuit is essential for climate change litigation, the appropriate plaintiffs should not be citizens or nonprofit organizations, but rather procuratorial or other authorized, officially-based agencies. Moreover, the case-by-case model of tort-based lawsuits restricts the civil court from being the mainstream solution to climate change problems. A judgment that seems reasonable in one case may prove to be unsuitable in another, or when considered in a broader context. The court cannot see the forest for the trees; therefore, it is the duty of the administration to make decisions and evaluations regarding the actions of companies in climate change affairs. For the same reasons, the powers of administration and legislation should collaborate to formulate policies.

Identifying the qualified plaintiff group also presents a significant challenge. Climate change is a global concern, affecting everyone, which paradoxically also means it might concern no one due to the common tragedy. Plaintiffs must demonstrate that their group is large enough to suffer serious consequences, yet they must also prove that they can articulate a precise and specific request that addresses everyone within the plaintiff group. An example of a qualified plaintiff group is the Inuit. The Inuit, being small and distinct enough to present a coherent claim for the infringement of identifiable rights, and simultaneously large enough to experience harm of a serious magnitude collectively, meet this balance [4]. However, such an ideal group of plaintiffs as the Inuit is rare globally. The three-part test for standing is now well-established law in the United States. A plaintiff must show that (1) they have suffered an “injury in fact” that is concrete, particularized, and actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision [4]. In summary, the group of plaintiffs must be large enough to be confronted with imminent and severe harm, yet small enough for the court to trace the source of harm and to prescribe a specific remedy. Given these constraints, it is difficult for those intending to protect the climate to identify an appropriate group of plaintiffs to initiate a tort-based lawsuit.

#### 4.3. Regulative Supervision Is Essential for Climate Protection

Admittedly, lawsuits serve as a tactic to force companies to compensate for their practices, but the case-by-case litigation model naturally conflicts with the nature of climate change. Theoretically and practically, tort-based lawsuits are unsuitable for the demands of climate change litigation, so they can only be a temporary tactic, not the ultimate solution to climate change issues. Although the judgments of tort-based lawsuits in civil courts partially serve as guidance for companies and governments, the analysis of *Juliana v. United States* indicates that “limited and precise” legal standards must always constrain a court in issuing equitable relief, which subtly but significantly narrows the remedial capacity of courts adjudicating large-scale “structural reform” cases. Most importantly, the *Juliana* case subtly but significantly narrows the remedial authority of federal courts sitting in equity [8]. In existing cases, the most significant obstacle remains the strict separation between the judicial power and the legislative and executive powers. Even in Europe, where human rights-oriented climate change litigation has made significant progress, many courts still hesitate to directly change the law or even declare loopholes in the rules [25]. The guidance function of the judgments of civil courts is weakened, so it is high time we looked for another method to promote the litigation of climate change.

In China, a new type of lawsuit has been introduced for environmental affairs. Procuratorates can initiate procuratorial public interest litigations when they observe companies failing to perform their environmental protection duties or administrative agencies illegally exercising their powers. For those who may commit crimes, the procuratorates can also initiate criminal trials. These litigations include civil lawsuits, administrative lawsuits, and criminal lawsuits. Procuratorial public interest litigations significantly solve the legal standing problem in tort-based lawsuits by introducing an official agency as the plaintiff. The procuratorates are typically well-equipped with sufficient legal resources to gather evidence and win lawsuits. However, there are also problems with procuratorial public interest litigations. In civil cases initiated by nonprofit organizations, the initial plaintiffs often face difficulties in liaising with procuratorates. Given that procuratorial public interest litigation is still an emerging system, both Chinese Civil Procedure Law and Administrative Procedure Law lack specific provisions for this type of lawsuit, leading to

procuratorates' reluctance to engage in such litigations and causing confusion during trials. Additionally, procuratorial public interest litigations do not address the inadequacies of legislation, which means cases like *Urgenda v. Netherlands* could not use this type of litigation.

Since litigation is designed to bridge the gap and transition to policymaking and administrative intervention, the ultimate solution for climate change lies in administrative supervision. The responsibility for environmental protection falls to administrative authorities, so addressing climate change necessitates these authorities fulfilling their duties. As Shi-Ling Hsu has noted, while *Massachusetts v. EPA* will undoubtedly prompt the EPA to regulate and perhaps reduce greenhouse gases, it is still the President to whom the EPA Administrator reports. Therefore, it will be the President, not the outcomes of litigation, that will determine the federal agencies' commitment to addressing the issue of regulating and reducing greenhouse gases [4]. Furthermore, with a comprehensive understanding of the state or the country, administrative authorities are well-qualified to develop policies and enforce them. Most importantly, since administrative authorities are authorized by the government, the actions they take represent the will of the nation, thereby circumventing the legal standing issue.

When evaluating the effects, one of the issues with current litigation is its low efficiency and success rate, both of which could be addressed by administrative power. With the flexibility of administration, an administrative authority can complete the punishment of a company within a few months or even days, whereas a tort-based lawsuit commonly lasts for years. Beyond mere punishment, tools such as administrative agreements, administrative guidance, and administrative enforcement can all be utilized, not to mention the option of administrative litigation. With greater efficiency, more companies can be supervised to reduce their emissions to an acceptable level. Additionally, the power of general supervision held by administrations is a crucial tool for saving the climate. Once administrative regulations are established, they have a preventative effect, impacting all stakeholders within the state or country. Compared to the case-by-case approach of litigation, the general supervision provided by administration is undoubtedly a more suitable choice for addressing climate change. The high demands, high costs, and high rate of unfavorable outcomes associated with climate change litigation suggest that it is unlikely to play a significant role in mitigating global climate change. Ultimately, the major efforts to reduce greenhouse gases must be carried out by nation-states and through international agreements [4]. With such international agreements in place, domestic administrative supervision is certain to be enacted to reduce emissions and slow the process of global warming.

## 5. Conclusion

Climate change affects everyone globally, prompting efforts to mitigate its impacts and preserve the environment. When other methods prove ineffective, people often resort to tort-based lawsuits to reduce emissions from large companies and to compel governments to enact climate change policies. However, the generally unfavorable outcomes of these lawsuits suggest that they are not the most effective means for addressing climate concerns. Plaintiffs face significant challenges in establishing the legal elements of tortious acts, harm, civil wrongs, and causation, making it difficult for them to succeed in court. Even when they do win, civil courts typically only order defendants to pay compensation rather than directly mandating reductions in emissions.

The inadequacy of tort-based lawsuits in climate change litigation stems from the inherent conflict between the function and system of civil courts and the overarching goal of environmental preservation. The case-by-case approach of tort litigation is ill-suited to addressing the global crisis of climate change. Additionally, the principle of equal protection in civil courts often highlights the disparity in legal resources between plaintiffs, usually public interest organizations, and defendants, typically governments or large corporations. This inequality in legal resources further contributes to unfavorable outcomes, and tort-based lawsuits offer no solution to bridging this gap. Recognizing the limitations of tort-based lawsuits, plaintiffs are increasingly turning to rights-based lawsuits for climate litigation, which have shown a higher success rate. The proceedings in these cases are generally quicker and more straightforward. Although the right to live in a stable environment is recognized worldwide, the framework for rights-based litigation is not uniformly established across nations. Variations in legal procedures across countries prevent rights-based lawsuits from serving as a global solution.

In reality, tort-based litigation is a temporary measure for plaintiffs. Rather than a solution, it acts as a stopgap pending the establishment of international emissions agreements. As such, tort-based lawsuits are inherently unsuitable for mainstream climate change mitigation efforts. Given that climate change is a global issue affecting all, it is inappropriate for civil parties alone to initiate lawsuits aimed at saving the environment. The government should assume the responsibility to lead and advance these efforts. Since tort-based litigation serves as a transition until international agreements are established, administrative power should gradually take over the role of addressing climate change. The flexibility and authority of administrative power can reframe climate change as a political issue, avoiding judicial indecision in the absence of administrative action. With administrative authorities tasked with resolving climate change, it is likely that both companies and governments will become more proactive in reducing emissions and developing policies to protect the environment.

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