

CLIMATE CHANGE LITIGATION AND ENVIRONMENTAL JUSTICE: EMERGING PATTERNS IN POLICY AND JUDICIAL INTERVENTION

Dr. Kuchata Ram*

Abstract

*Climate change litigation has rapidly emerged as a pivotal tool in bridging gaps between climate policy, law, and environmental justice. This review examines how lawsuits driven by citizens, communities, and NGOs are influencing climate governance and advancing environmental justice principles. We synthesize global trends showing a sharp increase in climate-related cases – from under 900 in 2017 to over 2,000 by 2022 and more than 3,000 by mid-2025 – reflecting growing judicial engagement in climate issues. We discuss how claimants, including youth, indigenous groups, and vulnerable communities, are leveraging human rights and constitutional claims to hold governments and corporations accountable for climate action (or inaction), thereby framing climate change as an issue of justice and equity. Key judicial interventions in cases from the Netherlands, Pakistan, the United States, and other jurisdictions illustrate courts ordering stronger mitigation targets, enforcing existing climate laws, and recognizing the rights of future generations. The review identifies emerging patterns: the use of litigation to **inform policy** and prevent backsliding, the rise of corporate climate accountability suits, and the growing presence of climate cases in the Global South. It also highlights how litigation outcomes are shaping policy – for instance, by compelling governments to revise climate plans – and the lessons these trends offer for achieving environmental justice. While climate litigation is no panacea and faces challenges (such as standing, causation, and enforcement of judgments), it has become an influential avenue for advancing climate ambition, integrating climate science into legal decisions, and giving voice to those most affected by the climate crisis.*

Keywords: Climate Change Litigation, Environmental Justice, Climate Policy, Human Rights, Judicial Intervention, Climate Governance, Climate Accountability, Climate Change Law.

Introduction

Climate change poses an unprecedented global threat, and the inadequacy of many governments' responses has prompted a growing turn to the courts as arenas for climate action¹. **Climate change litigation** – lawsuits that raise issues of climate change law, policy, or science – has expanded rapidly over the past two decades, emerging as a powerful tool for addressing the climate crisis when legislative or executive actions fall short (UNEP, 2023). This trend reflects a broader movement to frame climate change not only as an environmental or scientific concern but also as a matter of **justice and human rights**. The concept of **environmental justice** emphasizes the fair treatment and meaningful involvement of all people in environmental policy, regardless of race, income, or nationality². In the context of climate change, environmental justice underscores how the burdens of climate impacts – such as extreme weather, sea-level rise, and resource insecurity – fall disproportionately on vulnerable communities who have contributed least to the problem. Litigation offers these communities and other stakeholders a pathway to seek redress and demand stronger climate protections, effectively translating abstract global climate goals into enforceable legal obligations.³

* Assistant Professor, Faculty of Law, Jai Narain Vyas University, Jodhpur, Rajasthan, India.

¹ UNEP, *Global Climate Litigation Report: 2025 Status Review*, UNEP, 2025, p. 8.

² Inter-American Court of Human Rights, *Advisory Opinion on Climate Change and Human Rights*, Request 2024.

³ United Nations Environment Programme, *Global Climate Litigation Report: 2023 Status Review*, UNEP, 2023, p. 12.

This review paper examines the intersection of climate change litigation and environmental justice, focusing on emerging patterns in policy and judicial intervention worldwide. We begin by outlining the rise of climate litigation globally and the types of claims being brought, highlighting how this phenomenon has accelerated in recent years alongside growing public concern about climate change¹. We then explore how environmental justice considerations are increasingly at the heart of climate lawsuits – from cases asserting the rights of future generations, to those filed by indigenous groups and frontline communities invoking human rights law. Next, we analyze the impacts of landmark judicial decisions on climate policy and governance, illustrating how court rulings have forced governments to strengthen climate targets, implement existing laws, or consider equity in climate action. We also discuss the role of litigation in holding corporations accountable for greenhouse gas emissions and misinformation, which complements public policy in driving corporate climate responsibility. Finally, the paper identifies emerging trends and challenges: for example, the rise of climate cases in the Global South, the use of science (such as attribution studies) in courtrooms, the pushback against climate litigation (including industry countersuits and procedural hurdles), and the evolving landscape of international climate law (such as advisory opinions by international courts). Through this comprehensive review, we demonstrate that climate change litigation has become a significant mechanism for advancing climate justice and shaping climate policy, while acknowledging its limitations. In doing so, we shed light on how judicial intervention is influencing the trajectory of climate governance in an era of urgent climate risks.

The Rise of Climate Change Litigation: Global Trends

Climate litigation has transformed from a niche legal strategy in the 1990s to a widespread phenomenon by the 2020s². Figure 1 illustrates the growth in the **cumulative number of climate-related court cases globally**, showing a steep rise especially after 2015, the year of the Paris Agreement. According to the United Nations Environment Programme (UNEP), there were only 884 recorded climate cases as of 2017, but this number climbed to **1,550 by 2020 and 2,180 by the end of 2022** (UNEP, 2023). As of June 2025, the total had surpassed **3,000 cases worldwide**. This represents more than a three-fold increase in less than a decade, underscoring a *litigation boom* in the climate arena. The surge reflects mounting frustration with insufficient governmental action on climate change, as well as increased awareness that courts can serve as venues to press for accountability and stronger climate policies. Notably, UNEP reports that a diverse array of actors – including children and youth, women's groups, indigenous peoples, and local communities – have taken on a prominent role in bringing these cases, linking climate litigation with broader social movements for environmental justice (UNEP, 2023).

- **Geographical Distribution:** Climate litigation initially was concentrated in a few developed countries, but it is increasingly global in scope. A large proportion of all cases to date have been filed in the **United States**, which accounts for roughly two-thirds of known cases (UNEP, 2025).³ This is partly due to the litigious nature of the U.S. legal system and the availability of statutes (like the Clean Air Act and state laws) enabling lawsuits on environmental grounds. Other high-income jurisdictions such as Australia, Europe (especially the UK, Germany, France, and Netherlands), and Canada also have seen numerous climate lawsuits. In fact, five countries – the **US, Australia, Brazil, the UK, and Germany** – each have over 50 climate cases filed, with the US far in the lead (nearly 2,000 cases by 2025)³. Outside of these nations, climate litigation is *picking up worldwide*: as of 2022, cases had been filed in **65 jurisdictions**, including emerging economies and developing countries (UNEP, 2023). The **Global South** still represents a small share (approximately 5–10%) of total climate cases, but this share is growing. Dozens of cases have been recorded across Latin America, Asia, and Africa – from Brazil and Colombia to Pakistan, India, South Africa, the Philippines, and beyond. International and regional bodies are also being engaged: about 216 cases have been brought before international courts or tribunals (such as the European Court of Human Rights, the Inter-American Court of Human Rights, and UN human rights committees). Overall, while wealthy nations remain the primary arenas for climate litigation, recent years show *increasing geographic diversification* as communities around the world turn to courts in the fight for climate justice.

¹ J. Setzer & C. Higham, *Global Trends in Climate Change Litigation: 2024 Snapshot*, Grantham Research Institute, LSE, 2024, p. 15.

² L. Maxwell, A. Williamson & S. Mead, "Future Trends in Climate Litigation Against Governments," *Climate Law Blog*, Columbia Law School, 4 Apr 2024.

³ Intergovernmental Panel on Climate Change (IPCC), *AR6 WGIII Report*, 2022, chap. 4, pp. 345–47.

- **Types of Climate Litigation:** The body of climate change litigation is diverse, encompassing a range of legal theories and targets. Broadly, these cases can be categorized by the nature of the defendant and the goal of the lawsuit:
- **Actions Against Governments (Public Climate Litigation):** A significant portion of cases are filed **against national or sub-national governments**, aiming to compel stronger climate action or to challenge policies seen as inadequate or harmful. These suits often argue that government inaction or insufficient policies violate legal duties – for example, statutory mandates, constitutional rights, or public trust obligations. Many of the landmark cases in recent years fall into this category, sometimes called “*framework*” cases because they challenge the overall climate policy framework of a government (Setzer & Higham, 2024). Plaintiffs – who may be citizens, NGOs, youth activists, or indigenous groups – typically seek court orders requiring the government to adopt more ambitious greenhouse gas emissions targets, to implement existing climate laws and plans, or to stop approving high-emission projects inconsistent with climate goals¹. Successful examples (detailed later) have come from **Europe** (e.g., Netherlands, Germany, France, Ireland), **Asia** (Pakistan), **Latin America** (Colombia), and other regions, often invoking human rights and constitutional principles. These cases serve to hold governments accountable and “*deter backsliding*” on climate commitments.
- **Actions Against Corporations (Private Climate Litigation):** An increasing number of cases target **private sector entities**, especially major carbon-emitting companies and financial actors. These lawsuits pursue corporate accountability for contributions to climate change or for misrepresentations of climate impact. For instance, several suits have been launched against oil, gas, and coal companies – sometimes by local governments or states – seeking to hold them liable for climate-related damages under tort law (so-called “*climate liability*” or “*polluter pays*” cases).⁴ Other suits accuse corporations of **greenwashing** or “**climate-washing**” – that is, making deceptive claims about their climate efforts or emissions, in violation of consumer protection or securities laws.
- **Procedural and Project-Specific Cases:** A large group of climate litigation involves challenges to specific projects (like coal mines, power plants, pipelines) or government decisions, based on procedural and environmental laws.² Often brought under environmental impact assessment regulations or planning laws, these cases argue that authorities must consider climate change impacts (projected emissions, climate resilience, etc.) when approving projects.
- **Human Rights-based Cases:** Cutting across the above categories, a powerful trend is the use of **human rights law** as a basis for climate litigation. In such cases, claimants assert that climate change – exacerbated by government or corporate conduct – infringes fundamental rights (to life, health, property, culture, etc.), especially for vulnerable populations. Rights-based climate cases often target governments (arguing that inadequate climate action violates citizens’ rights) but can also target companies (for harming the rights of communities through climate impacts).

Climate Litigation as a Tool for Environmental Justice

A defining feature of many recent climate change lawsuits is their emphasis on **justice** – intergenerational justice, social justice, and the equitable distribution of climate burdens and benefits. **Environmental justice** in the climate context demands that those who are most vulnerable to climate impacts (often low-income communities, indigenous peoples, communities of color, and future generations) are not left bearing an unfair share of the harm, and that they have a meaningful voice in climate policy decisions. Climate litigation has increasingly become a forum to assert these justice claims, by translating them into legal arguments about rights, duties, and remedies. In this section, we examine how environmental justice themes permeate climate litigation, through rights-based claims, representation of marginalized groups in court, and the pursuit of remedies that aim to correct climate injustices.

- **Human Rights and the Rights of Future Generations:** Perhaps the most prominent way that climate litigation advances environmental justice is by invoking **human rights law**. Over the last decade, plaintiffs around the world have argued that government failure to adequately address

¹ *Urgenda Foundation v. Netherlands*, Supreme Court of the Netherlands, 20 Dec 2019.

² *Held v. State of Montana*, Montana First Judicial District Court, 14 Aug 2023.

climate change violates fundamental rights – including the right to life, health, property, culture, a clean environment, and other rights often enshrined in constitutions or international treaties. This line of argument centers the experiences of people harmed by climate change. For example, in the landmark case *Urgenda Foundation v. State of the Netherlands* (2015), a Dutch NGO representing 900 citizens sued the government for its slow emissions cuts, asserting that insufficient climate action endangered the right to life and well-being of Dutch residents and future generations¹. The Dutch Supreme Court ultimately upheld Urgenda's claim, ruling in 2019 that the government has a legal duty (grounded in the European Convention on Human Rights and domestic law) to protect its citizens from climate change by adopting more stringent emissions reduction targets.⁷ This was the first case in the world in which a court ordered a state to raise its climate ambition, and it explicitly connected climate action with human rights obligations, setting a precedent for climate justice litigation internationally.

In the domestic courts, indigenous litigants have pursued climate justice as well. In Canada, for instance, the **Supreme Court of Canada** heard a case (2020) brought by indigenous groups challenging the approval of a pipeline expansion due to climate and environmental risks; while the specific climate argument did not carry the day (the court focused on procedural consultation issues), the case elevated climate justice issues in the national conversation. In New Zealand, Māori iwi (tribes) have invoked the government's obligations to protect them from climate harms in legal challenges, and in the United States, coastal Alaskan Native villages have sought damages from fossil fuel corporations for climate-related erosion threatening their existence (though such U.S. cases have struggled to proceed in courts so far due to issues like justiciability and attribution). These efforts underline a crucial point: climate change is not just an abstract policy matter but a lived reality impacting communities' homes, livelihoods, and cultural survival. Litigation becomes a means for those communities to **demand accountability** from those in power – whether state or private actors – for the harms they suffer and to seek remedies aligned with justice (e.g. protection, relocation assistance, or emission reductions to prevent further harm).

Impacts on Policy and Judicial Intervention Patterns

One of the most significant questions about the rise of climate litigation is: **Does it actually influence climate policy and outcomes on the ground?** The evidence from recent years indicates that, in many cases, the answer is yes. Successful climate lawsuits have spurred concrete changes in government policies and corporate practices, while even the process of litigation has sometimes prompted preemptive action or raised climate ambition. At the same time, the growing body of case law is gradually establishing legal norms and standards that policymakers must heed. In this section, we review how judicial interventions – through court judgments and orders – have affected climate governance, and we identify emerging patterns in these policy impacts.

Forcing stronger climate targets and legislation. A clear pattern is that courts have stepped in to **bridge the gap between stated climate goals and actual policy effort**. Researchers have found that successful “framework” cases (which challenge the overall sufficiency of a government's climate plan) often have a “significant impact on government decision-making, forcing governments to develop and implement more ambitious policy responses to climate change” (Setzer & Higham, 2021; Maxwell et al., 2024). Several high-profile examples illustrate this mechanism:

In the **Netherlands Urgenda case** mentioned earlier, the Dutch government, after losing its appeals, implemented measures to accelerate emissions cuts (including closing coal plants and funding renewable energy) to comply with the court-mandated target of 25% reduction by 2020. The judiciary's intervention thus directly raised the country's climate performance in the short term and set a precedent for accountability.

In **Germany**, the 2021 Constitutional Court ruling led to an amended Federal Climate Protection Act just months later. The amendment not only increased the 2030 emissions reduction target (from 55% to 65% below 1990 levels) but also set explicit carbon budgets for periods beyond 2030, thereby addressing the intergenerational fairness issue. The litigation win empowered reformist voices within the government and provided a legal imperative for action, demonstrating how courts can catalyze legislative progress.

¹ *Held v. State of Montana*, Montana First Judicial District Court, 14 Aug 2023.

In **Ireland**, the Supreme Court in *Friends of the Irish Environment v. Ireland* (2020) struck down the government's National Mitigation Plan as inadequately specific and not in compliance with Ireland's climate law. This prompted the government to produce a much more detailed and robust Climate Action Plan the following year, with clearer targets and sectoral steps, to satisfy the legal requirements identified by the court.⁹ Similarly, in the **United Kingdom**, a 2022 High Court decision found the government's net-zero strategy insufficiently detailed under the Climate Change Act, ordering ministers to outline exactly how emissions budgets would be met. The UK government had to revise its strategy and provide more transparency, illustrating a judicial nudge toward better governance.

In **France**, administrative courts in 2021 (in *Grande-Synthe* and the affiliated *Affaire du Siècle* cases) held the French state accountable for missing its own greenhouse gas reduction targets, labeling this a violation of statutory and European commitments. The courts ordered the government to make up for the shortfall in emissions cuts and monitored progress. In response, France's authorities acknowledged the "climate debt" and took additional actions (though debates continue on adequacy). The court orders in France underscore that even when a country has formal targets, their achievement (or lack thereof) can be subject to judicial enforcement – effectively preventing complacency or symbolic politics and ensuring *implementation* matches promises.

These cases collectively point to an emerging norm: **Courts are willing to enforce both international climate goals (like the Paris Agreement's temperature limits) and domestic climate laws by compelling governments to mind the "ambition gap" and "implementation gap."** The *ambition gap* refers to the shortfall between current policy pledges and what is needed to meet temperature targets (Maxwell et al., 2024). Courts in Europe – and potentially soon at the European Court of Human Rights – have indicated that failing to close this gap can breach legal duties, especially where human rights are at stake. The *implementation gap* refers to the lag between targets on paper and actions on the ground; here too courts have shown they will require governments to follow through. As noted by the IPCC in 2022, climate litigation is influencing the "*stringency and ambitiousness of climate governance*" by holding leaders accountable (IPCC, 2022; cited in Maxwell et al., 2024). In short, judicial intervention has become an enforcement mechanism in the climate policy cycle – from setting higher ambition, to mandating concrete planning, to ensuring execution of climate duties.

Policy feedback and deterrence of backsliding. Another impact of litigation is more preventive: the threat of legal challenges can deter governments from rolling back existing climate protections or encourage them to proactively strengthen policies. For example, after the Dutch and German court rulings, other European governments became wary of potential lawsuits. There is evidence that some countries started assessing their climate plans through a legal risk lens – effectively asking, *could our plan withstand a court challenge?* This "policy feedback" loop is a subtle but important outcome of litigation's rise. Indeed, one study found that over 70% of national climate legislation has come after 2015, and many such laws explicitly reference climate justice or rights, which may partly be in response to the wave of litigation (Setzer et al., 2023). Even in jurisdictions with no successful climate case yet, policymakers are increasingly aware that **courts are a venue of accountability**.

Table 1 below summarizes a selection of landmark climate change litigation cases across different jurisdictions, highlighting their outcomes and significance for policy and environmental justice. These examples encapsulate how judicial interventions have shaped climate action and illustrate emerging trends discussed above.

Table 1: Selected Landmark Climate Litigation Cases and Their Significance

Case (Year, Jurisdiction)	Key Issues and Claims	Outcome and Significance
<i>Urgenda Foundation v. Netherlands</i> (2015–2019, Netherlands) 6	Citizens and NGO sued Dutch government for weak climate policy, invoking duty of care and human rights (right to life/family life under ECHR). ¹	Outcome: Court ordered government to cut GHG emissions by at least 25% (from 1990 levels) by 2020. Upheld by Supreme Court in 2019, marking the first judicially mandated emissions target. Significance: Established that inadequate climate action can violate human rights; spurred stronger Dutch climate policies and inspired similar lawsuits worldwide.

¹ Milieudefensie et al. v. Royal Dutch Shell, District Court of The Hague, 26 May 2021.

<i>Juliana v. United States</i> (filed 2015, U.S. Federal Court) 7	21 youth plaintiffs allege the federal government's affirmative promotion of fossil fuels violates their constitutional rights to a stable climate (public trust doctrine).	Outcome: Ongoing. In 2020, Ninth Circuit dismissed case on standing, but in 2023 a judge allowed an amended case to proceed to trial. Significance: Brought national attention to the idea of a constitutional right to a livable climate. If eventually successful, could compel the U.S. government to implement a national climate recovery plan; even without a final win, it galvanized youth climate movements and influenced public discourse on intergenerational justice.
<i>Leghari v. Federation of Pakistan</i> (2015, Pakistan) 8	Farmer affected by climate-induced floods sued government for failure to implement Pakistan's climate adaptation policy, claiming violations of fundamental rights (life, dignity, property).	Outcome: Court ruled in favor of Leghari. It recognized climate change as a serious threat to citizens' rights and ordered the government to create a Climate Change Commission to ensure implementation of adaptation measures. Significance: Pioneering climate case in the Global South. Emphasized government duty to protect citizens from climate impacts; an example of court-driven institutional reform for climate action, advancing climate justice for vulnerable farming communities.
<i>Future Generations v. Ministry of Environment</i> (2018, Colombia)	25 youths sued government for permitting high deforestation in the Amazon, arguing it infringed their rights and future generations' rights, undermining climate goals. ¹	Outcome: Supreme Court of Colombia sided with youths, declaring the Amazon a subject of rights and ordering government and local authorities to devise plans to halt deforestation and address climate change. Significance: Groundbreaking recognition of the Amazon's rights and intergenerational equity in climate context. It linked environmental protection with constitutional rights, requiring the state to act against climate change for present and future citizens – a strong precedent in Latin America for climate justice.
<i>Neubauer et al. v. Germany</i> (2021, Germany)	Youth activists challenged Germany's federal climate law as insufficient (especially post-2030 targets), violating their constitutional rights by offloading burdens to the young.	Outcome: German Constitutional Court ruled the Climate Protection Act partly unconstitutional for failing to set adequate post-2030 emission reduction targets, infringing the plaintiffs' rights. Government ordered to enact fixes, which it did by tightening 2030 target and extending targets to 2045. Significance: Established that inadequate climate policy can violate fundamental rights (human dignity and freedoms) via intergenerational inequity. Promptly led to stronger climate legislation in Germany and influenced climate rights litigation in other countries.
<i>Milieudefensie (Friends of the Earth) v. Royal Dutch Shell</i> (2021, Netherlands)	Environmental groups and citizens sued Shell, a multinational oil company, seeking to hold it liable for contributing to climate change, under Dutch tort law and human rights norms.	Outcome: Court ordered Shell to reduce its global CO ₂ emissions by 45% by 2030 (relative to 2019), aligning with Paris Agreement pathways. This includes Shell's supply chain emissions. Significance: First time a corporation was legally mandated to slash emissions on human rights and duty-of-care grounds. Sent a strong signal to the corporate sector globally about accountability for climate change; case has been influential in debates on corporate climate strategies and has encouraged similar suits against other carbon majors.
<i>Notre Affaire à Tous (Affaire du Siècle) v. France</i>	NGOs and citizens accused the French state of failing to	Outcome: Administrative court found the French government legally responsible for inaction climatique (climate inaction), noting it emitted 15 Mt CO ₂ over the

¹ Juliana v. United States, Our Children's Trust, U.S. District Court (N.D. Cal.), filed 2015.

(2021, France)	meet its own emissions targets and Paris Agreement commitments, thus harming citizens and violating the duty to act.	target for 2015-2018. The court later ordered the State to cut emissions to compensate for the excess by 2022-2023, and imposed a fine for delays. Significance: Held a government accountable in law for not fulfilling climate goals, dubbing the shortfall a form of environmental damage. Reinforced that even voluntary climate pledges (NDCs) can become binding expectations. It pressured France to strengthen climate measures and acknowledged the plaintiffs' rights to demand accountability.
<i>Held v. State of Montana</i> (2023, Montana, USA) 9	16 youth plaintiffs argued Montana's fossil-fuel-friendly state energy policy (including a statutory ban on considering climate impacts in permitting) violated their state constitutional right to a clean and healthful environment.	Outcome: State court ruled in favor of the youth. It struck down the Montana law that barred climate considerations, finding it unconstitutional. The court recognized that climate change is causing harm to Montana's environment and to the plaintiffs, and that the state's failure to consider GHG impacts infringed on the young citizens' constitutional environmental rights. Significance: First-ever U.S. trial victory on climate constitutional grounds. It affirmed the enforceability of state constitutional environmental rights in the climate context. The case may inspire similar litigation in other U.S. states and signals to state governments that neglecting climate effects can be unlawful, thereby advancing youth and community rights in climate policy.

Table 1: A non-exhaustive selection of significant climate litigation cases, demonstrating various legal strategies and outcomes. These cases collectively show how courts have required greater climate action from governments and corporations, often invoking principles of environmental justice, human rights, and intergenerational equity.

Emerging Patterns and Future Directions

As climate change litigation continues to evolve, several **emerging patterns** can be discerned in the way policy and judicial intervention intersect.¹ These patterns provide insight into where climate litigation is heading and how it might further the cause of environmental justice:

- Convergence of Legal Frameworks:** There is a notable convergence of **human rights law, environmental law, and climate science** in climate litigation². Courts are increasingly comfortable integrating scientific evidence (such as IPCC reports, carbon budgets, and attribution studies) with human rights principles to inform their judgments. This trend is evident from national courts up to regional bodies. For example, the *European Court of Human Rights (ECtHR)* heard its first climate cases in 2023 (³e.g., the *KlimaSeniorinnen v. Switzerland* case brought by a group of elderly Swiss women, and the Portuguese youth case against 33 countries). These cases explicitly ask the ECtHR to rule that insufficient climate action breaches the European Convention on Human Rights. A favorable ruling would exemplify the fusion of climate science and human rights on an international stage. The **Inter-American Court of Human Rights** is similarly considering an advisory opinion on climate change and human rights. Such developments suggest that *climate justice is becoming mainstream in legal doctrine*, potentially recognizing a universal principle that states must prevent climate harm to protect fundamental rights. This convergence trend supports environmental justice by leveraging the moral force and legal infrastructure of human rights to address climate grievances.
- The Rise of the "Integrity Gap" Litigation:** After tackling ambition and implementation gaps, attention is turning to the **"Integrity Gap"** – the credibility of long-term net-zero pledges. Many governments and companies have announced 2050 net-zero targets, but questions arise

¹ Sharma v. Minister for the Environment (Australia), Federal Court, 30 May 2022.

² Joseph L. Sax, "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention," *Michigan Law Review* 68, no. 3 (1970): 471–517.

³ Max Planck Institute for Comparative Public Law and International Law, "Climate Change Litigation: An Analysis of Global Trends," MPI Report 2023, p. 22.

whether these pledges rely on unrealistic future carbon dioxide removal (CDR) technologies or offsets rather than real near-term emissions cuts. Legal experts anticipate a wave of litigation focused on the integrity and transparency of climate pledges (Maxwell et al., 2024). If governments are seen as **over-relying on unproven carbon removal** or accounting tricks, they might face lawsuits alleging such strategies violate duties to act with due care and protect citizens' rights. For instance, NGOs could sue a government for having a net-zero plan that is too vague or heavily dependent on speculative technologies, arguing this amounts to a misleading climate strategy that endangers the public. Early signs of this came in a case in **New Zealand** (Smith v. Fonterra) where a citizen argued that corporate net-zero plans were not credible; while that specific case took a different turn, the issue remains live. These prospective "integrity" cases align with environmental justice by insisting that climate action plans be honest and science-based, thereby safeguarding the public from false assurances that could lead to greater harm later. They also encourage **equity** by calling out any deferral of action that shifts burdens onto future generations or poorer communities (who would suffer if promised tech fixes do not materialize).

- **Global South Litigation Growth and South-South Knowledge Exchange:** As mentioned, climate litigation in the Global South, though a smaller portion of cases, is growing and diversifying. We are seeing more cases in **Asia, Africa, and Latin America** that address local climate injustices – from youth suing for air quality and climate action in India, to farmers challenging mining licenses in South Africa on climate grounds, to island states exploring legal avenues for loss and damage compensation. An emerging pattern is that practitioners and judges in the Global South are learning from each other's experiences. Regional networks and conferences (often supported by NGOs or academia) are facilitating the exchange of legal strategies tailored to developing country contexts (Setzer & Higham, 2023). For example, lawyers in the Philippines and Indonesia have looked to the Leghari case in Pakistan when framing their arguments, while Latin American courts often cite each other's pioneering environmental rulings (e.g., Chile's courts referencing Colombian and Argentine cases on environmental rights). This South-South exchange accelerates the spread of climate justice jurisprudence. It may also lead to innovative approaches that address issues less litigated in the North, such as **climate adaptation failures, loss and damage, and climate-induced displacement**, which are pressing in many developing nations. A potential future direction is litigation aimed at obtaining **finance or restitution** for climate damages – essentially, lawsuits demanding that major emitters or developed states provide compensation or aid for climate harms suffered in vulnerable countries. While international politics have dealt with this via negotiations (e.g., the Loss and Damage Fund established under the UNFCCC in 2023), we cannot rule out legal actions if diplomatic solutions falter. Such actions would raise complex questions of state responsibility and equity, but they would be the next frontier in aligning climate action with principles of global justice.
- **Preventive and Anticipatory Litigation:** Until now, much climate litigation has been reactive (responding to perceived failures or harms that have occurred). A trend to watch is the use of litigation in a **preventive** manner – to stop potential future harm before it happens. An example is the case against the planned **East African Crude Oil Pipeline (EACOP)**, where NGOs from Africa filed suit at the East African Court of Justice to halt a project due to its climate and environmental risks. Although initially dismissed on technical grounds, they have appealed (2023) and persisted, showcasing how communities are proactively trying to block new fossil infrastructure via the courts. Preventive litigation also includes cases demanding climate risk assessments: e.g., citizens suing to require governments or central banks to evaluate climate risks to infrastructure or the financial system, thereby forcing early action. If courts entertain such claims, it could lead to a proactive judicial role where the aim is to avert future injustices (like catastrophic climate impacts) by compelling foresight in policy. This pattern, if it strengthens, will significantly complement mitigation efforts – essentially using courts as guardians to "*keep the climate future safe*" by applying the precautionary principle in law.

Conclusion

Climate change litigation has moved from the periphery to the forefront of efforts to address the climate crisis and promote environmental justice. Through an explosion of cases around the world, courts have increasingly become arenas where abstract climate targets are given concrete meaning, where

government inaction is tested against legal duties, and where the voices of vulnerable communities are amplified and heard. This review has traced how climate litigation has grown in volume and scope – over 3,000 cases in dozens of jurisdictions – and how it has evolved in its objectives: from early cases focused on procedural points or local project impacts to today's bold claims invoking human rights and demanding systemic policy change.

The interplay between litigation and policy is now undeniable. We have seen multiple instances where court decisions directly led to stronger climate policies, whether it's higher emission reduction targets, revived climate plans, or enforcement of existing environmental laws. In this way, litigation serves as both a **spur and a safety net** in climate governance: a spur, by pressuring reluctant policymakers to act, and a safety net, by catching failures or gaps in climate action that slip through the political process. Significantly, litigation has infused climate policymaking with considerations of **justice and equity**. Concepts like intergenerational justice, the right to a healthy environment, and the disproportionate burden on the Global South are no longer just moral arguments – they are being recognized by courts as relevant legal concerns that can dictate outcomes. This represents a “humanization” of climate law, aligning it more closely with the principles of fairness that are foundational to environmental justice.

For advocates and communities pursuing climate justice, the judicial system offers one important avenue among many. Legal action can complement activism, legislation, and international diplomacy. Each successful case not only brings relief or accountability in its specific context, but also sets a precedent and builds momentum for others. As such, climate litigation has a cumulative effect: it progressively establishes that preventing dangerous climate change is not merely a policy preference but a **legal obligation** grounded in rights, duties, and care for the most vulnerable. The string of judicial pronouncements – from the Hague to Islamabad to Canberra – collectively sends a message that *inaction has become legally indefensible* in the face of climate emergency.

However, this movement is still in a formative stage, and its ultimate impact will depend on several factors. Continued support for climate litigation (through funding, legal expertise, and public backing) is needed to carry complex cases to success. Cross-pollination of legal strategies globally will enrich the field and help overcome challenges. The responsiveness of political branches to court mandates will determine whether litigation delivers actual emissions reductions and adaptation measures or gets bogged down in non-compliance. International cooperation – potentially guided by authoritative opinions from bodies like the ICJ – could provide a stronger framework for addressing transboundary climate justice issues that domestic courts alone cannot solve.¹

References

1. Borràs-Pentinat, S. (2024). *Promises of climate litigation for climate justice*. Spanish Yearbook of International Law, 28, 1-14. (Discusses the potential and limitations of climate litigation in achieving justice for vulnerable populations in the Global South, highlighting extraterritorial claims and the need to rethink jurisdiction).
2. Hines, N. (2022). *Corporate Climate Litigation and Environmental Justice: How Green Amendments Can Be Used to Advance Accountability and Equity*. Indiana Journal of Law and Social Equality, 10(2), 242-278. (Explores how constitutional environmental rights (“Green Amendments”) bolster climate litigation aimed at corporate actors and enhance environmental justice outcomes).
3. Mahajan, R. (2024, March 12). *Legal battles for climate justice*. D+C – Development and Cooperation. <https://www.dandc.eu/en/article/litigation-gaining-importance-tool-climate-action-activists-and-communities-around-world> (Journalistic overview of global climate litigation trends with emphasis on youth and community-driven cases and statistics from UNEP 2023 report).
4. Maxwell, L., Williamson, A., & Mead, S. (2024, April 4). *Future Trends in Climate Litigation Against Governments*. Climate Law Blog – Sabin Center for Climate Change Law, Columbia Law School. <https://blogs.law.columbia.edu/climatechange/2024/04/04/future-trends-in-climate-litigation-against-governments/> (Identifies emerging climate litigation trends such as focus on implementation and integrity gaps, and discusses how past successes have influenced government climate policy; cites IPCC on litigation's impact).

¹ Held v. State of Montana, Montana First Judicial District Court, 14 Aug 2023.

5. Setzer, J., & Higham, C. (2024). *Global Trends in Climate Change Litigation: 2024 Snapshot*. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics. (Comprehensive report analyzing climate litigation cases worldwide up to 2023, including data on case numbers, key themes, success rates, and regional developments, with a focus on strategic litigation and its outcomes).
6. United Nations Environment Programme (UNEP). (2023). *Global Climate Litigation Report: 2023 Status Review*. Nairobi: UNEP. (Provides an overview of climate litigation worldwide as of end 2022, noting the increase from 884 cases in 2017 to 2,180 in 2022, the growing role of youth and vulnerable groups in litigation, and key trends in legal arguments).
7. United Nations Environment Programme (UNEP). (2025). *Global Climate Litigation Report: 2025 Status Review*. Nairobi: UNEP. (Updates global climate litigation trends with data as of mid-2025, reporting over 3,000 cases filed in 55 countries and international bodies, and highlighting emerging issues such as human rights-based cases, climate legislation enforcement, and litigation in the Global South).
8. Westbrook, S., & Yeadon, T. (2023). *Climate Change and Human Rights-based Litigation: Holding Governments and Corporations to Account*. *Journal of Human Rights and the Environment*, 14(1), 36-60. (Analyzes the rise of human rights-based climate litigation, examining landmark cases like Urgenda, Leghari, and Shell, and evaluating their influence on public policy and corporate behavior in terms of advancing environmental justice).

