CLIMATE CHANGE IN THE COURTS: AN ASSESSMENT OF NON-U.S. CLIMATE LITIGATION

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ABSTRACT

As the impacts of a warming climate system become more apparent and countries across the globe begin to implement mitigation and adaptation measures, the issue of climate change has increasingly arisen in litigation. While there has been substantial literature examining how the issue of climate change has manifested in U.S. courts, this article is the first large-scale assessment of climate change litigation outside the United States. Based on an empirical study of all reported non-U.S. litigation, this article discusses what types of claims have arisen; how climate litigation varies by jurisdiction; who the key players are; and what their primary goals are. Drawing upon these findings, this article assesses how courts have dealt with the issue of climate change and the role litigation is playing in the formation of climate change policy.

This comprehensive assessment reveals that climate change litigation is almost entirely concentrated in five jurisdictions: Australia, New Zealand, the European Union, Spain, and the United Kingdom. The nature of these suits varies widely across jurisdictions, reflecting each jurisdiction's unique legislative and regulatory framework, energy portfolio, and legal system. Generally, however, non-U.S. climate change cases have mostly been tactical suits aimed at specific

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projects or details regarding implementation of existing climate policies, especially emissions trading systems. In examining climate change jurisprudence, this article finds that the courts accept the scientific consensus surrounding climate change and tend to treat climate change much like any other environmental issue.

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INTRODUCTION

A recent study of 66 countries by GLOBE International found that most jurisdictions have taken considerable legislative steps to address climate change. Together, the countries in the GLOBE study have enacted almost 500 climate laws. According to GLOBE, the typical Annex I country has passed a new climate change law every 18 months, except for 2008-2010, in which there was notable acceleration. All but four countries have passed a flagship climate change law establishing a comprehensive, unifying basis for climate change policy. The United States is one of the four countries with no flagship climate change law. Despite mounting scientific evidence, climate change has proven to be particularly contentious in the United States, and national legislative action has not been forthcoming. This political environment has created fertile ground for climate change litigation in the United States. By the end of 2010, the U.S. courts resolved 144 climate change claims.

In 2012, Professor David Markell of Florida State University College of Law and J.B. Ruhl of Vanderbilt University Law School published an empirical assessment of climate change litigation in the United States.⁶ Markell and Ruhl concluded that while courts have generally acknowledged that climate change is an important issue, courts have not developed a distinct climate change jurisprudence.⁷ In

^{1.} See generally Michael Nachmany et al., GLOBE Int'l The Globe Climate Legislations Study (4th ed. 2014), http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2014/03/Globe2014.pdf [hereinafter Globe Climate Legislations].

^{2.} Id. at 24.

^{3.} Id. at 26.

^{4.} Id. at 7.

^{5.} Id. at 71.

^{6.} See generally David Markell & J.B. Ruhl, An Empirical Assessment of Climate Change In The Courts: A New Jurisprudence Or Business As Usual?, 64 FLA. L. REV. 15 (2012).

^{7.} Id. at 77-78.

addition, while courts have tried to urge Congress and administrative agencies to act, there is little evidence to suggest that litigation has had much impact on climate change policy, with the exception of *Massachusetts v. EPA.*⁸

Using the Markell and Ruhl study as a model, this paper investigates the role courts have played in the development of climate change policy outside the United States. Part I outlines the methodology employed to conduct a comprehensive analysis of non-U.S. climate change litigation. Part II discusses what types of claims have arisen; how climate litigation varies by jurisdiction; who the key players are; and their primary goals. Part III draws upon these findings to assess how courts have dealt with climate change and the role litigation is playing in the formation of climate change policy.

I. METHODOLOGY

This study aimed to include all reported climate change litigation decisions from all jurisdictions outside of the U.S. through 2013. This study followed the definition of climate change litigation crafted by Markell and Ruhl, which includes: "any piece of federal, state, tribal, or local administrative or judicial litigation in which the ... tribunal decisions directly and expressly raise an issue of fact or law regarding the substance or policy of climate change causes and impacts." Under this definition, a case was only included in the study if climate change played a central role in one or more issues under consideration by the court. It is sufficient that climate change impacts constituted one factor considered by the court in making a determination. For example, if a court found that an agency must consider climate change impacts in conducting an environmental impact assessment, or if a court found that climate change impacts justified the denial of a planning permit, then the case would qualify as climate change litigation. Any claims that arose out of laws and policies pertaining to climate change would also be included.

This definition has some limitations.¹⁰ As Markell and Ruhl note, their definition of climate change litigation only includes explicit discussion of climate change.¹¹ Therefore, this survey excludes cases in

^{8.} Id. at 82.

^{9.} Id. at 27.

^{10.} Id.

^{11.} See id. ("[W]e did not include any matter that had not actually been filed as active administrative or judicial litigation in a tribunal, thus excluding non-adjudicatory events, such as the filing of a petition for rulemaking, or pre-litigation events, such as issuance of a notice of

which climate change concerns motivated litigation but did not serve as the legal basis of the suit. On the other hand, this methodology includes cases argued on the basis of climate change concerns, but potentially motivated primarily by other concerns. For example, the challenge of an airport extension maybe be on the basis of increased GHG emissions, but may really have been motivated by nearby residents' concerns about increased noise and traffic. Of course, actions are brought for various reasons and where a case is brought by a group of citizens, motivations may differ from one individual to the next. This methodology avoids questions of motivation by adhering to an objective standard.

Due to limited resources, this survey considered only judgments and decisions. Cases in which climate change was mentioned in the complaint but not included in the final decision were excluded. This differs from the Markell and Ruhl study, which included claims that had not yet been resolved.¹²

To identify cases, this survey primarily relied on the Sabin Center for Climate Change Non-U.S. Climate Litigation Chart ("SCCCL").¹³ This resource is consistently updated through standard research methods on legal search engines, suggested additions by subscribers, and other methods. While all cases in the database are relevant to climate change litigation, some did not fit the definition of climate change litigation adopted for this assessment and were thus excluded. The chart was supplemented through utilizing legal search engines, which cover Australia, the European Union, and the United Kingdom. It was not possible to conduct a supplemental search for other jurisdictions, especially those that do not provide English decisions; however, SCCCL makes a substantial effort to work with contacts from multiple jurisdictions to ensure that the chart is accurate and comprehensive.

Case identification proceeded through July of 2014 and included all climate change cases decided through 2013. Through this process, 173 cases were identified. Following Markell and Ruhl, these cases were coded by eight factors: (1) year; (2) jurisdiction; (3) type of

intent to file suit.").

^{12.} See id. ("Given time and resource constraints, we focused on reviewing complaints where we could obtain them, and on intermediate and final judicial decisions, to detect whether our criteria were met.").

^{13.} See SABIN CENTER FOR CLIMATE CHANGE LAW, Non U.S. Climate Litigation Chart, 2–18 (2015), http://web.law.columbia.edu/sites/default/files/microsites/climate-change/non-u.s._litigation_chart_7.23.15.pdf.

claim being brought; (4) type of plaintiff; (5) type of defendant; (6) general objective of the litigation; (7) statutes and other legal sources supporting the claims; and (8) outcome.¹⁴

The coding process focused only on the portions of any case relevant to climate change. Where a case has multiple issues of fact or law, the case was categorized only with respect to the issue pertaining to climate change. Thus, a case would be considered successful if the plaintiff succeeded with respect to its climate change arguments, even if the claim failed on account of another issue.

Claims were coded based on the claim as it originated in the court of that jurisdiction. For example, if an environmental group challenged a local council's approval of planning permits for a coalfired power plant, the case would be coded as a case to prevent the permitting of an emissions source. If the case were successful and appealed by the corporation proposing the coal-fired power plant, the categorization would not change, though its success would be based on the higher tribunal's decision.

A. Coding of Parties in Climate Change Litigation

To understand who the key players are in climate change litigation, parties were divided into three groups: citizens, industry and government. The citizen group includes suits by individuals, environmental groups, and non-environmental citizen organizations, such as informal community organizations. The industry category refers to for-profit corporations and industry groups. The government category includes local, state, national, or supranational governments.

B. Types of Climate Change Litigation

In categorizing the litigation, claims were primarily divided based on whether the defendant was public or private. Claims against public entities were divided into four groups based on the type of government action being challenged. Claims against private parties were divided into two groups based on the type of defendant. Claims against corporations were included in one group and claims against individuals were included in another. Each group was divided into categories based on the type of claim (See Tables 1 and 2).

The categorization process of the climate change litigation claims was based on the Markell and Ruhl categorization, but with adjustments to reflect variation in the legal frameworks, and types of cases seen outside of the U.S. Categories were only maintained if there were cases that fell within them.

1. Suits against Governments

Claims against governments were divided into four groups. The first group of cases ("Substantive Government Group") addresses substantive climate change mitigation or adaptation actions by governments. This group includes claims to require a government body or agency to promulgate a statute, rule, or policy to reduce GHG emissions by regulating direct or indirect sources. Also included in the Substantive Government Group are substantive claims that arise in response to the promulgation of climate change laws and regulations. This includes challenges to the promulgation of laws and policies intended to control GHG emissions or ensure resilience to climate change. In addition, where the law creates any sort of benefit or incentive system, any suit brought seeking access to such benefit is included in this category. Finally, any enforcement action against a government body failing to comply with its responsibilities under the law or regulation would be included in the Substantive Government Group.

The second category comprises cases concerning environmental impact assessment ("EIA") and permitting requirements ("EIA and Permitting Group"). While the Substantive Government Group cases address the development of substantive climate change policies intended to control GHG emissions or ensure climate change resilience, the EIA and Permitting Group cases focus on procedural requirements in the context of land use and planning. The EIA and Permitting Group cases usually are brought under EIA laws or planning policies and address how climate change should factor into assessment and planning decisions. Climate change arises in planning in a number of ways. A proposed project may contribute to climate change by emitting GHG emissions. Alternatively, a proposed project may be impacted by climate change through sea level rise or increased risk of fires. Lastly, a proposed project may mitigate

^{15.} See, e.g., Coral Davenport, E.P.A. Says Pipeline Could Spur Emissions, N.Y. TIMES (Feb. 3, 2015), http://www.nytimes.com/2015/02/04/us/politics/epa-review-of-keystone-pipeline-notes-potential-rise-in-greenhouse-gases.html (discussing the potential effects of "planetwarming greenhouse gas [GHG] emissions").

^{16.} See, e.g., NAT'L OCEANIC & ATMOSPHERIC ADMIN., Planning for Sea Level Rise in the Northeast: Considerations for the Implementation of Tidal Wetland Habitat Restoration Projects 9 (2011) (outlining the "[c]hallenges associated with tidal wetland restoration projects in the face of sea level rise").

climate change impacts by creating renewable sources of energy.¹⁷

The third group ("Rights Group") comprises climate change claims arising out of common law and statutory rights. This group includes claims to extend the scope of human, property, or civil rights to provide protection to individuals or the public against the effects of or responses to climate change. This category also includes claims for access to information or asserting the right of public participation.

The fourth group of claims against governments ("Climate Science Group") includes a few miscellaneous cases regarding government portrayal and dissemination of climate science. Table 1 displays the groups and categories for claims against corporations and provides the number of claims that arose under each category.

Table 1. Categorization of Claims against Governments¹⁸

Table 1. Calego	orization of Claims against Governments	<u>S'</u>
Suits Against Governments		
Claim Group	Claim Category	Cases (%)
Substantive	Encouraging mitigation measures:	3 (1.5%)
Climate Change	Substantive law claim to require a	
Regulation	legislature or agency to promulgate a statute, rule, or policy establishing new or more stringent limits on emissions	
	Challenging government emissions reduction measure: Substantive law claim challenging legislative or agency promulgation of statute, rule, or policy establishing new or more stringent limits on emissions	31 (18%)
	Access to incentives: Claim to challenge a statute, rule, or policy denying a corporation or other entity from receiving an incentive or benefit for emissions reductions, offsets, etc.	2 (1%)

^{17.} See, e.g., GLOBAL ENERGY FACILITY, Example GEF Renewable Energy Projects, https://www.thegef.org/gef/node/10555 (last visited Oct. 28, 2015) (providing examples of energy projects aiming to increase use of renewable energy resources).

^{18.} The data referenced in this table is available at Meredith Wilensky, Non-U.S. Litigation Comparative Research Spreadsheet (Sep. 30, 2015) (unpublished database) (on file with author).

	Enforcement claim: Government enforcement claim against a government entity alleging violation of a domestic law or international agreement Preventing adaptation action: Substantive law claim challenging statute, rule, policy, or permit that proposes new or more extensive climate change adaptation actions	3 (1.5%) 1 (0.5%)
Environmental Impact Assessment	Encouraging permitting of an emissions source: Claim challenging an agency decision to reject or place limits on proposals to carry out, fund, or authorize a direct or indirect emissions source	12 (7%)
	Challenging permitting of an emissions source: Claim to prevent or limit a legislative or agency decision to carry out, fund, or authorize an indirect or direct emissions source	28 (16%)
	Challenging adaptation action: Claim to prevent a government entity from authorizing new or more extensive climate change adaptation actions	2 (1%)
	Encouraging reverse EIA: Claim to impose on public or private entities a new or more extensive impact assessment focused on impacts of climate change on a proposed project	20 (11.5%)
	Challenging reverse EIA: Claim to prevent imposition on public or private entities of a new or more extensive impact assessment focused on impacts of climate change on a proposed project	19 (11%)

	Encouraging renewable energy siting: Claim to require a public entity to consider climate change mitigation impacts in deciding whether to grant a permit to a proposed renewable energy project	11 (6.5%)
	Challenging renewable energy siting: Claim to prevent a public entity from weighing climate change mitigation impacts above other impacts that would result from a proposed renewable energy project	14 (8%)
Rights	Rights related to climate change: Claim to extend scope of human rights, property rights, or civil rights to provide protection of individual or public against the effects of, responses to, or belief in climate change	4 (2.5%)
	Property rights: Claim to prevent enforcement of climate change measure based on private property rights	1%
	Access to information: Claim to require a public entity to disclose information pertaining to GHG mitigation or adaptation actions	5 (3%)
Climate Science	Climate science: Claims challenging portrayal of climate science or climate scientists	2 (1%)

2. Suits against Private Parties

The first group of suits against private parties is comprised of claims against corporations. Actions against corporations include liability claims alleging that GHG emissions or inadequate adaptation by a corporation resulted in personal injury, property damage or economic loss. Claims against corporations also include enforcement actions for false green advertising and violation of a permit or

regulatory emissions limits. The Corporate Group also includes a few cases initiated by corporations relating to disputes arising out of the sale of emissions credits. Table 2 summarizes the categories for claims against corporations and provides the number of claims that arose under each subcategory.

Table 2. Categorization for Claims against Corporations ¹⁹

Suits Against Corporations	
Claim Category	<u>Cases</u>
Liability for personal injury and property damage: Claim to impose statutory, tort, nuisance, or other property damage or personal injury liability on source from emissions or for inadequate adaptation or mitigation measures	0
Business liability: Claim to impose contract, fraud, etc., on business for monetary liability for inadequate climate change mitigation or adaptation measures.	0
Liability for greenwashing: Claim to impose liability on a company for misleading consumers to believe that their products contribute to climate change mitigation or adaptation	
Enforcement claim: Government enforcement claim against direct or indirect emissions source alleging violation of permit or regulatory limits	2 (1%)
Emissions credits disputes: Property or contract disputes arising out of the sale of emissions credits	2 (1%)

The second group of claims against private parties is comprised of climate change claims brought against individuals. These claims arise out of either an individual's involvement in climate change protests or alleged noncompliance with climate-related regulations. Table 3 (next page) summarizes the categories for claims against individuals and provides the number of claims that arose under each subcategory.

Table 3. Summary of Case Numbers for Claims against Governments by Claim Type²⁰

Suits Against Individuals

Climate change protests: Criminal suits against 3 climate change protestors or requests for injunction (1.5%) of activism promoting climate change mitigation or adaptation.

Enforcement claim: Government enforcement claim 1 against individual alleging noncompliance with (0.5%) greenhouse gas emissions regulations.

C. General Objective of the Litigation

This assessment followed the categorization of the Markell and Ruhl publication and identified cases as "pro" or "anti," denoting whether the plaintiff had the objective of increasing regulation or liability associated with climate change. Each category was deemed pro, anti, or not applicable. For example, within the Substantive Government Group, cases to require the government to act to set GHG emissions standards (Category A1) were considered pro litigation, while actions challenging GHG emissions standards and adaptation regulations (Category A2 and A5) were considered anti litigation. Cases challenging a government decision denying a corporation a benefit for emissions reductions (Category A3) were considered not applicable.

II. FINDINGS

A. Litigation by Type

Of the 173 climate change cases included in this assessment, 159 cases were claims against government entities. As demonstrated in Figure 1, the largest group by far was the EIA and Permitting Group. With 107 cases, the EIA and Permitting Group accounted for 62 percent of all non-U.S. climate change litigation. These cases focus on procedural requirements for land use and planning including EIA and construction and emissions permits. The second largest group was the Substantive Government Group. With 38 cases, this category represents 23% of climate change litigation.

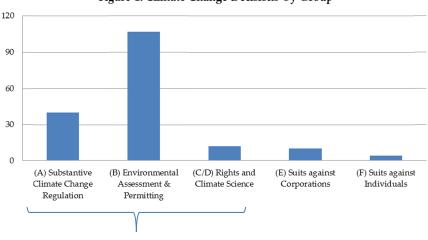


Figure 1. Climate Change Decisions by Group

Suits against Governments

The remaining categories make up a much smaller percent of litigation. The Rights Group accounted for about 7 percent of all cases. While the category was relatively small, this group resulted in a few particularly noteworthy cases. For example, in Nigeria's sole climate change case, Gbemre v. Shell Petroleum, a Nigerian federal court ruled the practice of gas flaring in the Niger Delta unconstitutional because the practice violates the human right of life dignity of human persons guaranteed in the Nigerian Constitution and African Charter on Human and Peoples Rights.²¹ Unfortunately, this case does not seem to have actually halted the practice of gas flaring in Nigeria.22 A handful of cases against governments for failure to reduce emissions have recently occurred. While these cases are excluded from this analysis because they were undecided as of the end of 2013, they warrant mention because of their significance. On June 24, 2015, a Dutch court found that the government's failure to achieve emissions reduction targets was a violation of human rights, and ordered the Dutch state to limit GHG emissions to 25% below 1990 levels by 2020.23 The Lahore High Court

^{21.} Gbemre v. Shell Petroleum Development Company [2005] AHRLR 151 (Nigeria).

^{22.} See Daniel Magnowski, Nigeria Employs Satellite to Chase \$1 Billion Gas Flaring Fines, BLOOMBERG NEWS (Nov. 27, 2014), http://www.bloomberg.com/news/articles/2014-11-27/nigeria-employs-satellite-to-chase-1-billion-gas-flaring-fines (describing new satellite system in Nigeria intended to detect illegal gas flaring).

^{23.} Urgenda Found. v. The Netherlands (2015), available at http://uitspraken.

of Pakistan issued a similar ruling on September 26, 2015, directing several government ministries to take steps to ensure the implementation of the 2012 National Climate Policy and Framework on human rights grounds.²⁴ A similar case has been initiated in Belgium, although the court is yet to rule on the matter.²⁵

Suits against corporations and suits against individuals together only accounted for 8 percent of non-U.S. climate change litigation. Ten suits were brought against corporations, eight of which were enforcement actions. Surprisingly, six of the enforcement claims were initiated through citizen suits for false green advertising, unsubstantiated claims that products are climate-friendly. Only four cases were brought against individuals. Three were criminal suits, two arising out of climate change protests and one out of noncompliance with GHG emissions regulations.

The dominance of the EIA and Permitting Group in non-U.S. litigation demonstrates an emphasis on tactical suits aimed at specific projects, whether they are homes, coal-fired power plants, or wind turbines. In fact, strategic litigation intended to drive climate change policy as a whole is almost absent outside of the U.S. Only two non-U.S. decisions, one in Canada and one in Poland, involved plaintiffs attempting to encourage the government to regulate GHG emissions. In both cases, plaintiff environmental groups aimed to require mitigation action based on commitments under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. The Canadian case was unsuccessful, but the Ukrainian court found for the environmental group. The court ordered Ukraine's environment ministry to implement GHG emissions regulations to comply with Ukraine's international obligations. Nor did many plaintiffs attempt to prevent climate change policies from

rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2015:7196.

^{24.} Ashgar Leghari v. Fed'n of Pakistan, (2015) ELAW DIGEST, http://edigest.elaw.org/pk_Leghari (last visited Oct. 28, 2015).

^{25.} De Rechtszaak, KLIMAATZAAK (Dec. 1, 2014), http://klimaatzaak.eu/nl/rechtzaak/.

^{26.} See Friends of the Earth v. Canada, [2008] F.C. 1183 (Can., Fed. Ct.); Violation of the Legislation on the Right to Information and Public Participation in Climate Change Issues by the Ministry of Environmental Protection in Ukraine, ENV'T PEOPLE LAW, http://epl.org.ua/en/law-en/cases/climate-change/708-violation-of-the-legislation-on-the-right-to-information-and-public-participation-in-climate-change-issues-by-the-ministry-of-environmental-protection-in-ukraine (last visited Oct. 28, 2015) [hereinafter Violation of the Legislation].

^{27.} Friends of the Earth v. Canada, [2008] F.C. 1183 (Can., Fed. Ct.); Violation of the Legislation, supra note 26.

^{28.} Violation of the Legislation, supra note 26.

being enacted. Most of the litigation surrounding the EU ETS took issue with details surrounding National Allocation Plans. There were no challenges to the scheme as a whole and only four challenges to the scheme as it pertained to certain sectors or countries.²⁹

1. Dominant Litigation Categories

Since environmental assessment and permitting cases comprised such a large percentage of climate change litigation, it is unsurprising that 6 of the 7 dominant litigation categories fell within this group. Of these cases, 43 percent addressed adaptation.³⁰ However, only a few cases pertained to proposed adaptation projects, such as the construction of a sea wall or a levee.³¹ Instead, most of the EIA and Permitting Group cases, 40 total, address "reverse EIA," which refers to assessing how climate change will impact a proposed project (*See B9 and B10 in Figure 2*).³² The bulk of EIA and Permitting Group cases considered whether proposed construction on coastal properties consider future sea level rise due to climate change, but a few pertained to other climate change impacts such as increased bushfires.³³

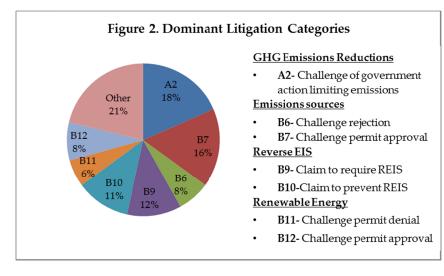
^{29.} See Société Arcelor v. Premier Minister, 2008 E.C.R. I-09895 (dismissing challenge of central provisions of Directive 2003/87/EC, as applied to steel makers, under the principle of equality); Arcelor SA v. Parliament, 2010 E.C.R. II-00211 (dismissing a challenge of Directive 2003/87/EC on the basis that it violated several principles of common law); Poland v. Comm'n, 2009 E.C.R. II-03395 (dismissing challenge of Directive 2003/87/EC as it pertained to Poland); Air Transp. Ass'n of America v. Sec'y of State for Energy & Climate Change, 2011 E.C.R. I-13755 (challenging U.S. airlines' inclusion in EU's Emission Trading Scheme). The tactical nature of non-U.S. litigation contrasts with the U.S. where there has been significant litigation intended to shape climate change regulation by both pro- and anti-climate-change litigants. The most notable suit is Massachusetts v. EPA, in which the U.S. Supreme Court ruled that GHGs fell within the definition of "pollutant" under the Clean Air Act. Massachusetts v. Envtl. Prot. Agency, 549 US 497, 532 (2007). Subsequent rulemakings by the EPA under the Clean Air Act have resulted in numerous challenges, mostly by industry groups and states, but also by environmental groups seeking stricter regulations. See, e.g., Coal. for Responsible Regulation, Inc. v. Envtl. Prot. Agency, 684 F.3d 102, 115 (D.C. Cir. 2012) aff'd in part, rev'd in part sub nom, Util. Air Regulatory Grp. v. Envtl. Prot. Agency, 134 S. Ct. 2427 (2014) (denying the petitions that asked EPA to reconsider its 2009 endangerment finding); Util. Air Regulatory Grp. v. E.P.A., 134 S. Ct. 2427 (2014).

^{30.} Wilensky, supra note 18.

^{31.} *Id*.

^{32.} See infra Figure 2.

^{33.} Wilensky, supra note 18.



Almost 40 percent of the procedural cases and 24 percent of all cases were concerned with the permitting of direct and indirect sources of GHGs (*See B6 and B7 in Figure 2*). Twenty-six of these cases concerned direct sources, mostly power plants and industrial emitters. Fifteen cases concerned indirect sources, primarily challenging the construction or expansion of coal mines. A few of these cases challenged other types of construction, such as the expansion of an airport. In one particularly notable case, the challenge was brought by sovereign state. In 2009, the Federated States of Micronesia (FSM) filed a transboundary EIA request assessing the proposed modernization of a coal-fired power plant in the Czech Republic. This landmark intervention was the first transregional use of Transboundary Environmental Impact Assessment. Although the request was officially rejected,

^{34.} *Id*.

^{35.} Id.

^{36.} Id.

^{37.} Id

^{38.} Letter from Andrew Yatilman on behalf of The Federated States of Micr. to the Ministry of the Env't of the Czech (Dec. 3, 2009).

See id.

^{40.} Climate EIA Precedent, FRANK BOLD (Mar. 29, 2012), http://en.frankbold.org/our-work/campaign/climate-eia-precedent. For further discussion, see Maketo Robert et al., Transboundary Climate Change to Coal: One Small Step against Dirty Energy, One Giant Leap for Climate Justice, in THREATENED ISLAND NATIONS: LEGAL IMPLICATIONS OF RISING SEAS AND A CHANGING CLIMATE 589, 604–11 (Eds. Michael Gerrard & Greg Wannier, 2013) (discussing the FSM's legal basis for requesting an EIA and the development of the case)

an assessment of climate impacts was conducted and resulted in an obligation for the developer to save over 5 million tons of CO₂ emissions over 25 years.⁴¹

Almost 25 percent of the procedural cases and 14 percent of all cases pertained to renewable energy projects, either challenging the permitting of renewable energy projects or challenging their denial (*See B11 and B12 in Figure 2*). While this category was intended to include cases surrounding the siting or permitting of any type of renewable energy, in practice, these cases dealt exclusively with the construction of wind turbines. The size of installations varied from just one or two turbines to wind farms comprised of hundreds of turbines.

The largest category, however, is not a procedural category. Challenges to regulations limiting emissions sources accounted for 18 percent of all climate change cases and over 75 percent of substantive climate change cases (*See A2 in Figure 2*). Of the 31 cases falling in category A2, 22 arose of out Directive 2003/87/EC establishing the European Union Emissions Trading Scheme (EU ETS), which is discussed in more detail in the European Union litigation section. 46

2. Government Enforcement Actions

Despite the relatively large number of climate change laws and regulations that have been enacted across jurisdictions, enforcement actions have been relatively rare. This assessment found only six enforcement cases filed by a governmental agency for alleged noncompliance with a climate change regulation or statute. Three enforcement actions were brought against national governments for failure to fulfill international obligations, two under the EU ETS and the third under the Kyoto Protocol. Two enforcement actions were brought against corporations, one for

[hereinafter Climate EIA Precedent].

^{41.} Climate EIA Precedent, supra note 40.

^{42.} Wilensky, *supra* note 18.

^{43.} Id.

^{44.} *Id*.

^{45.} Id.

^{46.} Id.

^{47.} *Id*.

^{48.} Comm'n v. Finland, [2006] E.C.R. I-00010; Comm'n v. Italy, [2006] E.C.R. I-00065; Non-Compliance Procedure of Greece under The Kyoto Protocol, CC-2007-1/Greece/EB [2008].

providing false information to obtain renewable energy credits and a second for failure to surrender emissions allowances under the EU ETS.⁴⁹ Only one enforcement action was brought against an individual and also arose out of obligations under the EU ETS.⁵⁰

The lack of enforcement cases is consistent with Markell and Ruhl's findings in U.S. litigation. In fact, the U.S. had only one enforcement claim. According to Markell and Ruhl, "[i]t is unsurprising that litigation at the beginning of a regulatory regime would focus primarily on the legitimacy of the regime itself, rather than on its implementation." However, where other nations have not experienced the same obstacles to enacting climate change legislation and thus have more advanced regulatory schemes, one would expect to find more litigation focused on enforcement. While the non-U.S. enforcement cases clearly outnumber the lone U.S. enforcement case, it by no means represents a significant portion of non-U.S. climate litigation.

3. Missing Categories

In surveying the breadth of climate change litigation, it is worth noting the types of claims that have yet to arise. First, there have been no claims to require legislative or agency action to require new or more extensive adaptation actions. This type of case was also absent in U.S. litigation.⁵³ There was one case in which plaintiffs challenged legislation aimed at improving resilience to climate change, but this was the sole piece of substantive litigation aimed at adaptation.⁵⁴ This may be because most adaption efforts to date have been incorporated into planning requirements, and thus litigation is more likely to arise in this context with respect to the permitting of specific proposals. This is consistent with the large number of reverse EIA cases.

Second, non-U.S. climate litigation did not include litigation

^{49.} Clean Energy Regulator v. MT Solar Pty, [2013] FCA 205 (Austl.) (imposing penalties for providing false information regarding the installation of solar panels and Renewable Energy Certificates); Billerud Karlsborg AB v. Naturvardsverket, C-203/12 (denying challenge to penalties imposed for failure to surrender emissions allowances under the EU ETS).

^{50.} Regina v. Dosanjh, [2013] EWCA 2366 (Eng.).

^{51.} Id.

^{52.} Markell & Ruhl, supra note 6, at 41.

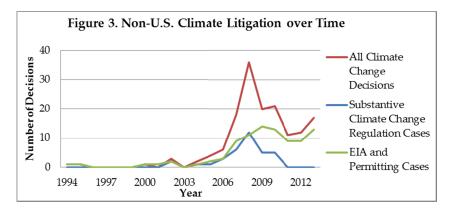
^{53.} Id. at 31.

^{54.} Bard Campaign v. Secretary of State for Communities and Local Government [2009] EWHC 308 (Eng.) (challenging the designation of "Ecotowns," exemplar green developments to serve as models of best practices in urban sustainability and climate change resilience).

to impose liability on emissions sources for inadequate climate change mitigation or adaptation measures. This absence is particularly interesting because the United States has experienced four prominent cases using common law doctrines to impose monetary penalties or injunctive relief on greenhouse gas emitters.⁵⁵ All four lawsuits ultimately failed: three on the grounds that the issues raised were political questions and the remaining on the grounds that the Clean Air Act had displaced federal common law on the issue.⁵⁶

B. Climate Litigation over Time

Climate change litigation has been concentrated in the recent years. As demonstrated by Figure 3, the vast majority of decisions were issued between 2007 and 2013. Decisions addressing climate change were almost non-existent before 2000, only starting to rise slowly in the early 2000's. Litigation peaked in 2008 with 36 decisions and has since experienced a drop with a small peak again in 2013.



When climate change litigation is separated by group, it appears that different types of litigation follow unique trajectories.⁵⁷ Figure 3 compares the Substantive Government

^{55.} Comer v. Murphy Oil USA, 585 F.3d 855, 859–60 (5th Cir. 2009); California v. Gen. Motors Corp., No. C06-05755 MJJ, 2007 WL 2726871, (N.D. Cal. Sept. 17, 2007); Native Village of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 868 (N.D. Cal. 2009); Connecticut v. Am. Elec. Power Co., 582 F.3d 309, 314–15 (2d Cir. 2009).

^{56.} Id.

^{57.} Wilensky, supra note 18.

Group and EIA and Permitting Group to all non-U.S. litigation.⁵⁸ While decisions in both groups slowly increased in the early 2000's, their paths have diverged in the past 5 years.⁵⁹ Substantive mitigation and adaptation cases have completely tapered off since 2008.⁶⁰ Since five Substantive Government Group cases were decided in 2010, there have been no decisions in this category.⁶¹ On the other hand, decisions pertaining to EIA and permitting have only dipped slightly and appear to once again be on the rise.⁶²

The short-lived spike in GHG emissions reductions cases likely reflects the development of new climate change laws, especially the EU ETS. The EU ETS's first implementation period was 2005-2007.⁶³ This new and administratively complex scheme resulted in just over 20 percent of all non-U.S. litigation.⁶⁴ These cases mostly comprised challenges to the scheme itself and the allocation of credits.⁶⁵ Now that the scheme is well into its third trading period, the dust has settled and there is less to be litigated. In contrast, climate change issues in EIA and permitting continue arise as new projects are proposed.⁶⁶ These cases are less likely to be sorted out in the same way as the EU ETS scheme, because each new proposal must be assessed on a case-by-case basis. New legislation or policy documents explicitly requiring the consideration of climate change in assessing proposed projects likely have also contributed to the number of cases.⁶⁷

Comparing the trajectory of non-U.S. climate change litigation over time to that of U.S. litigation reveals interesting points both with respect to their similarities and differences. Cases resolved in the U.S. and non-U.S. litigation decisions increased steadily at almost the same rate from 2006 to 2008 (*See Figure 4*). During this period, U.S. litigation was about equal to all non-U.S.

^{58.} Id.

^{59.} Id.

^{60.} Id.

^{61.} *Id*.

^{62.} Id.

^{63.} The EU Emissions Trading System (EU ETS), EUROPEAN COMMISSION, http://ec.europa.eu/clima/policies/ets/index_en.htm (last visited Nov. 1, 2015) [hereinafter EUROPEAN COMMISSION].

^{64.} Wilensky, supra note 18.

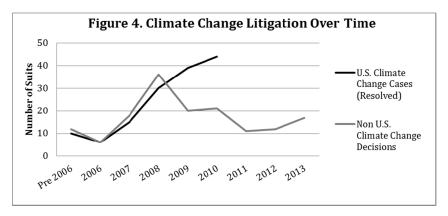
^{65.} *Id*.

^{66.} Id.

^{67.} EUROPEAN COMMISSION, supra note 63.

^{68.} U.S. numbers are based on Markell & Ruhl, *supra* note 6, at 72, fig. 4.

climate change litigation combined (though it is worth noting that the U.S. figure includes settlements, while the non-U.S. figure does not). Where non-U.S. litigation began to taper off after 2008, the U.S. cases continued to increase, totaling 39 in 2009 and 44 cases resolved in 2010. To



It is worth reiterating that these figures portray judicial decisions. Given that litigation is a process that takes years (and in land use case only arises after the relevant local council and other governmental bodies have made their determination), Figures 3 and 4 do not accurately portray when climate change began to appear as a key issue in litigation or consideration of local councils in land use decisions.

C. Non-U.S. Climate Litigation by Jurisdiction

Over 90 percent of non-U.S. cases took place in only five jurisdictions: Australia, the United Kingdom (UK), the European Union (EU), New Zealand, and Spain. Australia is the clear leader with 70 cases, representing about 40 percent of total litigation. The UK and EU each represent approximately 20 percent of cases, with 35 and 30 cases respectively. New Zealand and Spain follow with 16 and 13 cases respectively. One or two cases also arose in Canada, France, Czech Republic, Germany,

^{69.} *Id*.

^{70.} Id.

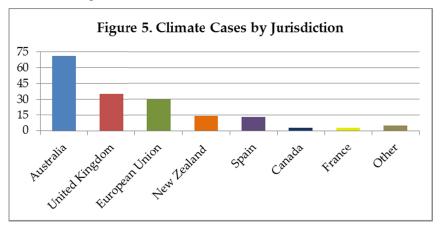
^{71.} Wilensky, supra note 18.

^{72.} *Id*.

^{73.} Id.

^{74.} Id.

Nigeria, and Ukraine.⁷⁵ With the exception of EU ETS, in most jurisdictions, the majority of cases are not brought under substantive climate change laws, although some planning and resource management laws do explicitly require consideration of climate change.⁷⁶



U.S. climate litigation far outnumbers climate change litigation from any jurisdiction. Australia's 70 cases represent only a fraction of the 400+ cases resolved in the U.S. in that period. This imbalance is not unique to climate litigation, but is seen throughout environmental law. Some scholars have argued that this discrepancy is due to the differing provisions for judicial review under relevant laws, such as environmental assessment statutes. Legal fees likely also play a role in limiting climate change litigation outside of the U.S. Most countries followed the English Rule, which shifts some or all of the winner's costs of legal representation to the loser. The U.S., however, follows the "American Rule," under which each side typically bears its own

^{75.} Id.

^{76.} Id.

^{77.} Id.

^{78.} See Nachmany, supra note 1.

^{79.} See Virginia Tice, From Vermont's Maples to Wybong's Olives: Cross-Cultural Lessons from Climate Change Litigation in the United States and Australia, 10 ASIAN-PAC. L. & POL'Y J. 292, 316 (2008) (noting a larger increase in litigation in the United States than Australia).

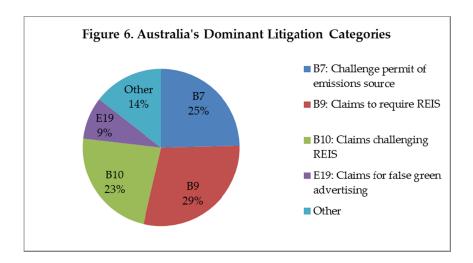
^{80.} Id.

^{81.} Herbert M. Kritzer, Lawyer Fees and Lawyer Behavior in Litigation: What Does the Empirical Literature Really Say?, 80 Tex. L. Rev. 1943, 1946 (2002).

legal fees, ⁸² except that the major federal environmental statutes allow courts to award attorneys' fees for plaintiffs who bring successful citizen suits. ⁸³

1. Australia

Australian climate change litigation is dominated by EIA and permitting cases, which represent about 80 percent of cases within the jurisdiction. EIA and permitting cases comprise three of Australia's four dominant litigation categories. These cases generally arise out of Australia's federal and state EIA and planning laws and state planning policies, particularly the New South Wales Environmental Planning and Assessment Act of 1979 and the Victoria Planning and Environmental Act of 1987.



A quarter of Australia's cases arose out of challenges to the permitting of an emissions source; direct or indirect (*See B7 in Figure 6*). About half of cases addressed how reverse EIA should factor into permitting for proposed construction projects (*See B9 and B10 in Figure 6*). These cases were split among cases to

^{82.} Id.

^{83.} See, e.g., Clean Air Act, 42 U.S.C. § 7604(d) (2012).

^{84.} Wilensky, supra note 18.

^{85.} Kritzer, supra note 81.

^{86.} Id.

^{87.} Id.

^{88.} Id.

require consideration of climate change impacts on a proposed project and cases challenging permit denials based on such considerations. The fourth notable category did not fall under EIA and permitting, but instead were suits against corporations initiated by a consumer advocacy organization for false green advertising (See E19 in Figure 6).⁸⁹

a. Challenges to Emissions Sources (B7)

Seventeen of Australia's 70 cases were challenges to the permitting of direct and indirect emissions sources. These claims were almost exclusively aimed at preventing coal-fired energy production through targeting proposed coal mines and power generation facilities. 1

Plaintiffs trying to prevent direct emissions sources only experienced a few successes among many failures. While Australian state courts generally agree that direct GHG emissions should be considered in the permitting process, ⁹² they did not usually find emissions sufficient to justify rejection of the proposed project.⁹³ Most sympathetic to plaintiffs challenging emissions sources was the New South Wales (NSW) Land and Environment The NSW Land and Environment Court found legal justification to set a limit on GHG emissions in two instances, but the decisions were short-lived. In Hodgson v. Macquarie Generation, the New South Wale Land and Environment Court found that a power station's license to emit CO, included an implied limitation of "reasonable regard and care for people and the environment."94 However, the NSW Court of Appeal reversed the decision, reasoning that interpreting the permit not to allow CO₂ emissions would "deprive the license of sensible operation." 95

In Hunter Environmental Lobby v. Minister for Planning (2011), an environmental advocacy organization challenged the

^{89.} Id.

^{90.} Id.

^{91.} In *Terminals Pty Ltd. v. Greater Geelong City Council*, [2005] VCAT 1988 (Austl.), local residents challenged the permitting of a chemical storage facility. All other cases within the category were challenges to proposed coal mines or coal-fired power plants.

^{92.} See, e.g., Re Austl Conservation Found [2004] VCAT 2029 (Austl.) (holding that the assessment panel must consider the impacts of GHG emissions on the environment).

^{93.} E.g., Greenpeace v. Redbank Power, [1994] 86 LGERA 143, 153–55 (Austl.) (finding that the project should be approved despite climate change impacts).

^{94.} See Gray and Anor v. Macquarie Generation, [2010] NSWLEC 34 (Austl.).

^{95.} Macquarie Generation v. Hodgson, [2011] NSWCA 424 at para. 18 (Austl.).

Minister for Planning's approval of the expansion of a coal mine. The NSW Land and Environment Court affirmed the project approval, but subject to conditions, including requiring offsets for any direct GHG emissions from the mine that exceed projected levels. The court found that these conditions were permissible under the state's primary EIA law, the Environmental Planning and Assessment Act of 1979, which grants the power to impose conditions on planning permits as long as they are reasonable and have a planning purpose consistent with the goals of the Act. The court noted that the condition could be suspended if relevant legislation was subsequently enacted and did so when the Australian Government established a carbon tax in 2012.

While Australian courts have agreed that direct GHG emissions must be considered in EIA, they have diverged in how indirect emissions should factor into environmental permitting. With respect to proposed coal mines, Australian courts were asked to determine whether EIAs should take into account GHG emissions that result from third parties burning coal mined on the site, sometimes referred to as Scope 3 emissions. 100 The Land and Environment Court of NSW found that the Environmental Planning and Assessment Act 1979, does require consideration of Scope 3 emissions. 101 In Gray v. Minister for Planning (2006), the court rejected an EIA for a large coal mine on the grounds that it failed to consider Scope 3 emissions. 102 In contrast, the Queensland Land Court found that indirect emissions need not be considered in EIA. In Xstrata Coal Queensland v. Friends of the Earth, the court held the transport of coal or its end-use fell outside of the state's requirements under the Mineral Resources Act of 1989. 103

Instead of relying on EIA statutes, a few cases challenging the approval of coal mines in Australia invoked Australia's biodiversity statute, the Environment Protection and Biodiversity

^{96.} Hunter Env't Lobby Inc v. Minister for Planning, [2011] NSWLEC 221 (Austl.).

^{97.} *Id.* at ¶ 28 (these conditions were developed in prior discussions between the mining company and the Department of Planning).

^{98.} Id. at ¶ 65.

^{99.} See Hunter Env't Lobby Inc v. Minister for Planning (No 2) [2012] NSWLEC 40 (Austl.).

^{100.} See id.; Gray v Minister for Planning [2006] 152 LGERA 258 (Austl.).

^{101.} Id.

^{102.} See generally Gray, supra note 101.

^{103.} Xstrata Coal Queensland v. Friends of the Earth [2012] QLC 013, 146-48 (Austl.).

Conservation Act of 1999. 104 Citizen groups challenged a number of proposed coal mines arguing that the emissions from the burning of coal would contribute to climate change and further threaten sensitive species. 105 This strategy was unsuccessful in 2006 and again in 2011; however, in 2013 a citizen group finally prevailed when the NSW Land and Environment Court upheld a challenge to a proposed coal mine citing vulnerability to climate change as contributing to biodiversity concerns. 106

b. Reverse EIA (B9 and B10)

About half of climate change cases in Australia focused on whether proposed construction projects took into account future climate change impacts. This category was likely bolstered by the fact that a number of state and local governments around Australia have begun to introduce planning measures and development conditions designed to ensure adaptation to climate change impacts, especially sea level rise, increased storms, and bushfires. 107 For example, in Queensland, the Redland Shire Strategic Plan of 1998 requires urban developments "to take into consideration sea level changes which may result from changes in climatic conditions."108 On this basis, a Queensland court upheld a planning permit that limited construction to only those parts of the property above the 1-in-100-year flood level. Similarly, citing climate change provisions in the state development plan, a South Australia court upheld a local council decision to refuse development consent to a proposed coastal development due to risk of sea level rise. 110

The state of Victoria also adopted planning policies that require consideration of climate change impacts on proposed

^{104.} See generally Lee Godden & Jacqueline Peel, The Environment Protection and Biodiversity Conservation Act 1999 (CTH): Dark Sides of Virtue, 31 MELB. U. L. REV. 106 (2007).

^{105.} See generally Wildlife Preservation Soc'y of Queensland Proserpine v. Minister for the Env't & Heritage [2006] FCA 736 (Austl.); Ironstone Cmty Action Group v. NSW Minister for Planning [2011] NSWLEC 195 (Austl.).

^{106.} Bulga Milbrodale Progress Ass'n v. Minister for Planning and Infrastructure [2013] NSWLEC 48, 31-32 (Austl.).

^{107.} Jacqueline Peel, Climate Change Law: The Emergence of a New Legal Discipline, 32 MELB. U. L. REV. 922, 952 (2008).

^{108.} Charles & Howard Pty Ltd. v. Redland Shire Council [2007] 159 LGERA 349, 358-59 (Austl.).

^{109.} Id. at 359.

^{110.} Northcape Prop v. Dist. Council of Yorke Peninsula [2008] SASC 57 (Austl.).

projects.¹¹¹ A key issue facing the Victorian Civil and Administrative Tribunal was whether to require Coastal Hazard Vulnerability Assessments (CHVA) taking into account sea level rise from climate change prior to approval of a planning permit.¹¹² The court consistently found that a CHVA was required where there was any evidence of vulnerability due to sea level rise.¹¹³ Furthermore, the court ensured that project plans applied necessary adaptation measures based on the findings of CHVAs. In two cases where the CHVA revealed insufficient adaptation to future sea level rise, the court denied planning permits.¹¹⁴

In NSW, the Land and Environment Court once again found for the plaintiff only to be overturned by the Court of Appeal. In *Minister for Planning v. Walker*, applicant challenged the Minister's approval of a residential development project, despite the lack of consideration of increased flooding due to climate change. The NSW Land and Environment Court held that the Minister erred in failing to apply Ecologically Sustainable Development (ESD) principles when approving the project. The NSW Court of Appeals overturned the decision, holding that while the Environmental Planning and Assessment Act 1979 required the Minister to take into account the "public interest," the Minister was under no obligation to consider ESD principles. Without mandatory policies requiring consideration of climate

^{111.} For construction on coastal properties, the State Planning Policy Framework requires planning for an increase of 0.2 meters over current 1 in 100 year flood levels by 2040. DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT OF VICTORIA, GENERAL PRACTICE NOTE MANAGING COASTAL HAZARDS AND THE COASTAL IMPACTS OF CLIMATE CHANGE, Practice Note 53 (July 2012).

^{112.} See generally West Gippsland Catchment Management Authority v. East Gippsland SC [2010] VCAT 1334 (Austl.); Myers v. South Gippsland SC [2009] VCAT 2414 (Austl.).

^{113.} Wade v. Warrnambool [2009] VCAT 2177, para. 15 (Austl.) (citing Owen v Casey CC [2009] VCAT 1946; Myers v. South Gippsland SC [2009] VCAT 1022; Ronchi & Anor v. Wellington SC [2009] VCAT 1206 as case law supporting CHVA prior to planning permit approval). The only B9 Victoria case regarding coastal vulnerability where the Victoria court did not require a CHVA was one in which the proposal did not present any unreasonable coastal vulnerability issues. Campbell v. Mornington Peninsula SC [2010] VCAT 1457 (Austl.).

^{114.} West Gippsland Catchment Management Authority [2010] VCAT 1334, 1334 [Austl.]; Myers [2009] VCAT 2414, 2414 (Austl.).

Minister for Planning v. Walker [2008] 161 LGERA 423, rev'd [2008] NSWCA 224 (Austl.).

^{116.} *Id*.

^{117.} Id.

^{118.} Minister for Planning, supra note 116.

change, citizens challenging proposed development in NSW due to coastal hazards associated with climate change had little success. 119

c. False Green Advertising (E 19)

Suits against corporations for false green advertising accounted for 9 percent of Australia litigation. The Australian Competition and Consumer Commission (ACCC) brought six cases between 2008 and 2010 under the Trade Practices Act of 1974. 120 Most of these cases targeted unsubstantiated promises surrounding carbon offsetting, the process of reducing carbon emissions in order to compensate for emissions made elsewhere.¹²¹ For example, ACCC brought a suit against General Motors for wrongly advertising the Saab vehicles were "carbon neutral" when they were only planting enough trees to offset emissions for one year of driving. 122 In all six lawsuits, the company agreed or was ordered by the court to change their practices. 123

d. Substantive Litigation

Australia experienced very little substantive climate change litigation. Of the 70 cases in Australia, only 2 were in the Substantive Government Group. One claim challenged electricity fees and another challenged a law that restricted clearing of native vegetation on private property. 124

Australia implemented a carbon tax in 2012 that required Australia's top emitters, about 75,000 businesses, to pay a flat fee per ton of GHG emissions. 125 The carbon tax was in effect for two annual terms and raised an estimated \$15.4 billion before it was

^{119.} See Brian J. Preston, The Influence of Climate Change Litigation on Governments and the Private Sector, 4 CLIMATE L. 485, 498-99 (2011).

^{120.} See Non U.S. Climate Litigation Chart, SABIN CENTER FOR CLIMATE CHANGE LAW, 44-45, http://web.law.columbia.edu/climate-change/non-us-climate-changelitigation-chart.

^{121.} Id.at 169-70, 173-74.

^{122.} Australian Competition & Consumer Comm'n v. GM Holden [2008] FCA 1428, 1-2 (Austl.).

^{123.} See, e.g., (General Motors agreed to plant 12,500 native trees to offset all the carbon emissions from by Saab vehicles sold during the marketing campaign).

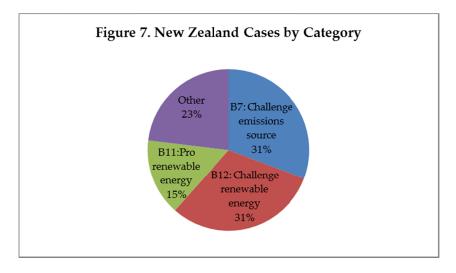
^{124.} See generally Spencer v. Commonwealth [2008] FCA 1256 (Austl.); Phosphate Res. v. Commonwealth [2004] FCA 211 (Austl.).

^{125.} Repeal of the Carbon Tax—How the Carbon Tax Works, AUSTRALIA GOVERNMENT, DEPARTMENT OF THE ENVIRONMENT, at 1, available at http://www.environment.gov. au/system/files/pages/59388d77-a9b5-4e4c-87b7-d732baf7c45b/files/factsheet-how-carbon-taxworks_1.pdf.

abolished in 2014.¹²⁶ Efforts to repeal the tax were led by Prime Minister Tony Abbott, who had made its repeal a centerpiece of his political platform for the 2013 election. ¹²⁷ Surprisingly, there was no litigation surrounding the tax while it was in effect. ¹²⁸

2. New Zealand

Like Australia, New Zealand's climate change cases mostly pertain to EIA and permitting, although it experienced many cases arising out of proposed renewable energy projects as opposed to reverse EIA. ¹²⁹ Within category B, six cases arose out of proposed wind farms (*See B11 and B12 in Figure 7*) and four cases were challenges to the permitting of GHG sources (*See B7 in Figure 7*). The three remaining cases varied with one challenging emissions standards, the second asserting climate rights, and third questioning climate science. ¹³⁰



a. Renewable Energy Cases (B11 and B12)

Almost one-half of New Zealand climate litigation pertained to renewable energy projects. The primary

^{126.} Id. at 2.

^{127.} Australia Votes to Repeal Carbon Tax, BBC NEWS (July 17, 2014), http://www.bbc.com/news/world-asia-28339663.

^{128.} See Non U.S. Climate Litigation Chart, supra note 121, at 21–24.

^{129.} Id. at 56, 59, 61, 70-71, 74, 81, 84, 86.

^{130.} Id.

^{131.} Id.

consideration surrounding the permitting of proposed wind farms was balancing local landscape and aesthetic impacts with the positive impacts of increased renewable energy and reduced greenhouse gas emissions. The permitting of wind turbines is governed by the Resource Management Act of 1991, which was amended in 2004 to require all persons exercising functions and powers under the Act to have particular regard to "the effects of climate change" and "the benefits to be derived from the use and development of renewable energy." Despite this mandate, only two of the six cases resulted in approval of resource consents for the construction of wind turbines. In both of these cases, the Environment Court reasoned that climate change benefits were relevant despite the small size of the proposed installations. In the remaining cases, however, local and aesthetic impacts were deemed to be too severe to warrant approval.

b. Challenges to Emissions Sources (B7)

In the challenges to the permitting of GHG sources, plaintiffs argued that GHG emissions should be considered when granting resources consents for coal mines and power plants. The High Court of New Zealand found that direct GHG emissions should be considered when granting resource consents for direct sources; however, the Supreme Court later clarified that indirect emissions should not. 138

c. Rights Associated with Climate Change (C 13)

Although only one New Zealand case pertained to climate change rights, the case was particularly notable because it

^{132.} See, e.g., Outstanding Landscape Prot. Soc'y v. Hastings DC, [2007] NSWEC 87 (N.Z.).

^{133.} Resource Management (Energy and Climate Change) Amendment Act 2004 § 5 (N.Z.).

^{134.} See Genesis Power Ltd. & the Energy Efficiency Conservation Auth. v. Franklin Dist. Council [2005] NRRMA 541 (N.Z.) (finding that national benefits of a wind farm proposal outweighed negative effects in the surrounding area and granting approval); Meridian Energy Ltd. v. Wellington City Council [2007] W031/07 NZEnvC 128 (N.Z.) (finding relevant the fact that energy production from a wind farm produced no greenhouse gases).

^{135.} Genesis Power, supra note 135; Meridian Energy, supra note 135.

^{136.} See, e.g., Unison Networks Ltd. v. Hastings Dist. Council [2007] NZHC 1435 (N.Z.) (denying a wind farm permit because of significant adverse effects on an outstanding natural landscape).

^{137.} Greenpeace New Zealand v. Northland Reg'l Council, [2007] NZRMA 87, 87-88 (N.Z.).

^{138.} West Coast v. Buller Coal [2013] NZSC 87 (N.Z.).

addressed climate change induced migration. ¹³⁹ In *Ioane Teitiota v* Ministry of Business, Innovation and Employment, a Kiribati citizen sought refugee status, arguing that rising ocean levels and environmental degradation made returning economically unviable. 140 The New Zealand High Court found that the circumstances did not qualify the applicant for refugee status because the applicant was not subjected to persecution required under the 1951 United Nations Convention relating to the Status of Refugees. 141 The court also expressed concern about expanding the scope of the Refugee Convention and opening the door to millions of people who face hardship due to climate change. 142 In dismissing the application, the Court of Appeals noted the gravity of climate change but stated that the Refugee Convention did not appropriately address the issue. 143

3. Spain

Climate change litigation in Spain is consistent with other countries in its focus on EIA and permitting cases. Spain's portfolio is unique, however, because its cases overwhelmingly comprised of challenges to government action limiting emissions from a specific source (See category B6 in Figure 8). Eleven of the fourteen cases arose out of Spain's implementation of the EU ETS. In 2004, Spain passed Royal Decree 1866/2004, approving its National Allocation Plan (NAP) for the 2005-2007 period of the EU ETS. A number of sources challenged their assignment of emissions credits in the NAP and requested an increase in emissions allowances. 144 These cases saw a relatively high success rate. In seven of the eleven cases, the Administrative Litigation Division of Spain's Supreme Court found that the Council of Ministers had not sufficiently supported their reasoning for emissions limits and thus the outcome was potentially arbitrary. 145 The cases were remanded to the Council for further assessment. 146

^{139.} Ioane Teitiota v. Ministry of Bus., Innovation & Emp't [2014] NZCA 173 (N.Z.).

^{140.} Id.

^{141.} Id.

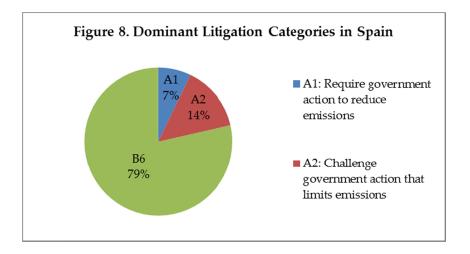
^{142.} *Id*.

^{143.} Id.

^{144.} See, e.g., Judgment No. 5347/2008 of Oct. 6, 2008, Supreme Court of Spain, Administrative Litigation Division (Section 5) Appeal No. 100/2005.

^{145.} Non U.S. Climate Litigation Chart, supra note 121, at 154–58, 160, 166.

^{146.} Id.



4. United Kingdom

Compared to other countries, the United Kingdom's climate change litigation portfolio was relatively varied (*See Figure 9*). About two-thirds of UK cases are EIA and permitting cases. The remaining third shows little consistency. Cases span the remaining categories, with only 1 or 2 cases in each category. Two suits arose against corporations, both pertaining to the sales of emissions credits. Three suits were brought against individuals, two against climate change protesters and another for a violation of the EU ETS. The suits were brought against individuals, two against climate change protesters and another for a violation of the EU ETS.

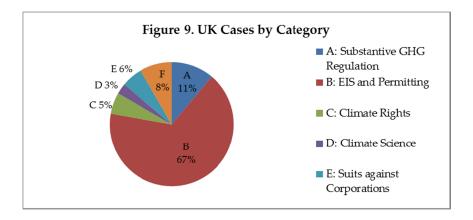
^{147.} *Id.* at 43–44, 46–47, 49–52, 54, 56, 59–60, 62–64, 68–69, 72–73, 76–79, 81–87.

^{148.} Id.

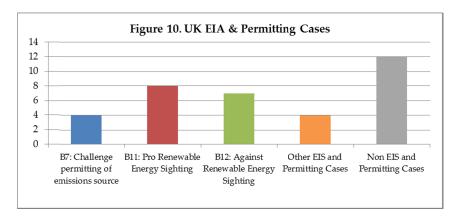
^{149.} Id.

^{150.} Armstrong v. Winnington, [2012] EWHC 10 (Ch), [52] (Eng.) (finding that European Union Allowances (EUAs) are intangible property under English law); Deutsche Bank v. Total Global Steel, [2012] EWHC 1201 (Comm), [1] (Eng.) (breach of contract case for the sale of previously surrendered Certified Emissions Reductions).

^{151.} Heathrow Airport v. Joss Garman, [2007] EWHC 1957 (QB), [116] (Eng.) (granting injunctive relief to control a probable protest in the vicinity of a UK airport); The Kingsnorth Six Trial, Maidstone Crown Court [2008] (Eng.); Regina v. Dosanjh, [2013] EWCA 2366 (Crim), [1] (Eng) (finding defendants guilty of committing VAT fraud related to publicly traded carbon credits).



The UK's EIA and permitting cases were similar to New Zealand in that most cases were challenges to the permitting of emissions sources and cases surrounding proposed renewable energy projects. About 11 percent of UK cases were challenges to the permitting of emissions sources (*See B7 in Figure 10*) and 40 percent of cases arose out of proposed wind energy installations (*See B11 and B12 in Figure 10*).



a. Challenges to Emissions Sources (B7)

Four of the United Kingdom's 35 cases were challenges to the permitting of an emissions source on the basis that the government had failed to consider the impacts of the proposals on climate change. ¹⁵³ Unlike Australia, these claims were not focused on energy production. ¹⁵⁴ Three of the four challenges were against indirect emissions sources; two cases challenged airport expansion projects and a third challenged an urban expansion project. ¹⁵⁵ The direct emissions source challenged was a concrete manufacturing facility. ¹⁵⁶

b. Renewable Energy Cases (B11 and B12)

Fifteen cases in the UK addressed proposed renewable energy projects. The cases were split between those encouraging permitting and those challenging permitting.¹⁵⁷ All but one case dealt with the siting of wind turbines.¹⁵⁸ In the lone renewable energy case not addressing wind power, applicants sought planning permission for an energy-from-waste facility at an existing recycling center.¹⁵⁹

As seen in New Zealand, the primary consideration in permitting wind turbines was balancing the landscape impacts with the positive impacts of increased renewable energy and reduced greenhouse gas emissions. To support giving weight to climate change benefits, a number of pro-renewable cases invoked the UK's renewable energy planning policies. The UK courts were unlikely to question local council's balancing of harms and benefits. Of the 14 wind energy cases, the court only found that a

- 153. Wilensky, *supra* note 18.
- 154. Compare supra Figure 6, with supra Figure 10.

- 157. Wilensky, supra note 18.
- 158. Id.
- 159. Veolia v. Shropshire Council, [2012] P.A.D. [16] (Eng.).

- 161. Wilensky, supra note 18.
- 162. Id.

^{155.} See Barbone & Ross v. Sec'y of State for Transp., [2009] EWHC 463 (Admin), [94] (Eng.) (dismissing a citizen challenge to proposed airport expansion finding the government's consideration of the proposal's impact on climate change to be sufficient); R (on the application of thee London Borough of Hillingdon & Others) v. Sec'y of State for Transp., [2010] EWHC 626 (Admin), [96]–[97] (holding that the government had failed to adequately consider implications of climate change in deciding to expand Heathrow Airport); Hertfordshire CC v. Sec'y of State for Cmtys. & Local Gov't, [2011] EWHC 1572 (Admin), [104]–[108] (Eng.) (upholding challenge planning permissions for urban expansion project).

^{156.} In re Application of Littlewood, [2008] EWHC 1812 (Admin), [67] (Eng.)(upholding the planning permission, finding that the omission of the effect of concrete production on climate change had not been raised in time, and in any case, did not render the Environmental Statement deficient).

^{160.} See, e.g., Allerdale Borough Council v. Cumbria Wind Farms, [2000] 15 P.A.D. 833 (Eng.); Bradford v. West Devon Borough Council [2007] P.A.D. 45 (Eng.).

local council had improperly weighed harms and benefits in two cases. ¹⁶³ In one such case, the High Court of Justice of Northern Ireland found that the commissioner had failed to give significant weight to the environmental benefits, ¹⁶⁴ and in a second, the High Court of Justice of England and Wales found a local council had failed to give significant weight to the harm to quality and character of landscape. ¹⁶⁵

c. Rights Associated with Climate Change (C13)

The only UK case addressing climate change rights was an employment law case in which the court found that belief in climate change is a legally protected right. In Grainger v. Nicholson, Mr. Nicholson filed an employment discrimination claim alleging that he was terminated from Grainger PLC, a British-based residential property business, due to his belief in catastrophic climate change. 167 The plaintiff argued that his belief in climate change was covered under the Employment Equality (Religion or Belief) Regulations of 2003 because his belief affected most aspects of his life, including how he traveled, what he bought and ate, and how he disposed of his waste. 168 The Employment Tribunal agreed and found the company had violated the Employment Equality Regulations. 169 The company appealed, but Employment Appeal Tribunal dismissed the appeal reasoning that a belief is not excluded from coverage just because it is political or based on science rather than religion.¹⁷⁰

5. European Union

Unlike other jurisdictions, EU litigation included very little EIA and permitting litigation.¹⁷¹ Instead, over 80 percent of EU litigation fell within the Substantive Government Group.¹⁷² Emphasis on substantive legislation is to be expected because the

^{163.} Id.

^{164.} In Re an Application by Brian Quinn and Michael Quinn, [2013] NIQB 24 (N. Ir.).

^{165.} Jarrett v. Sec'y of State for Cmtys. & Local Gov't, [2012] EWHC 3642 (Admin), (Eng.).

^{166.} Grainger v. Nicholson, [2010] I.R.L.R. 4 (EAT), (Eng.).

^{167.} Id.

^{168.} Id.

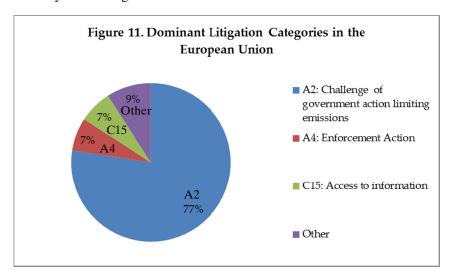
^{169.} Id.

^{170.} Id.

^{171.} Wilensky, supra note 18.

^{172.} Id.

EU is a supranational government. Since land-use is traditionally a local government issue, land-use issues are more likely to be dealt with by national governments.



a. EU ETS Litigation

EU litigation almost exclusively arose out of the EU ETS.¹⁷³ Twenty-seven of the thirty cases arose out of the scheme.¹⁷⁴ The EU ETS established by Directive 2003/87/EC is the world's largest trading scheme, covering almost half of GHG emissions from 31 countries.¹⁷⁵ The majority of EU ETS cases were challenges to the scheme and subsequent regulations (*See category A2 in Figure 7*).¹⁷⁶ The Directive establishing the scheme was challenged unsuccessfully in three suits, two initiated by industry groups and a third by Poland.¹⁷⁷ When legislation was passed in 2008 to incorporate aviation emissions in the EU into the Scheme,

^{173.} *Id*.

^{174.} Id.

^{175.} The EU Emissions Trading System (EU ETS), EUROPEAN COMMISSION, http://ec.europa.eu/clima/policies/ets/index_en.htm (last visited Sept. 27, 2015).

^{176.} Wilensky, supra note 18.

^{177.} Case C-127/07, Société Arcelor v. Premier Minister, 2008 E.C.R. I-09895 (dismissing challenge of Directive 2003/87/EC under the principle of equality); Case T-16/04, Arcelor S.A. v. Parliament, 2010 E.C.R. II-00211, (dismissing a challenge of Directive 2003/87/EC on the basis that it violated several principles of common law); Case T-183/07, Poland v. Comm'n, 2009 E.C.R. II-03395 (dismissing challenge of Directive 2003/87/EC).

another suit was initiated by the aviation industry.¹⁷⁸ While the suit was unsuccessful, international pressure did result in EU suspending application of the scheme for 2012 and limiting the application to flights within the EU for 2013-2016.¹⁷⁹

Before the first two trading periods, Member States were required to develop National Allocation Plans (NAPs) determining the cap on allowances and how allowances would be allocated. 180 The European Commission had to approve each NAP and could require changes to NAPS where they were not in compliance with the Directive. 181 The process of developing and approving NAPs resulted in a substantial portion of EU ETS litigation. Emissions sources, such as cement producers, brought twelve suits challenging the European Commission's rejection of a NAP fearing that a revision of the NAP would result in more stringent emissions limits. None of these challenges were successful, usually because the European Court of Justice (CJEU) found that the plaintiff corporations were not individually affected as required by EU law. 182 Member States initiated five additional cases after the Commission rejected their NAPs. 183 In each case, the Member State sought annulment of the Commission's decision. Unlike the challenges brought by industry, all four challenges by Member States were successful. 184

Administration of the EU ETS resulted in two cases in which applicants sought access to information about emissions credits and trading (*See category C15 in Figure 7*)¹⁸⁵ In one case originating in Germany, the applicant corporation sought

^{178.} Case C-366/10, Air Transp. Ass'n of America v. See'y of State for Energy & Climate Change, 2011 E.C.R. I-13755 (challenging U.S. airlines' inclusion in EU's Emission Trading Scheme).

^{179.} Reducing emissions from aviation, EUROPEAN COMMISSION, http://ec.europa.eu/clima/policies/transport/aviation/index_en.htm (last visited Sept. 27, 2015).

^{180.} National Allocation Plans, EUROPEAN COMMISSION, http://ec.europa.eu/clima/policies/ets/pre2013/nap/index_en.htm (last visited Sept. 27, 2015).

^{181.} Id.

^{182.} *E.g.* Case T-387/04, ENBW Energie, Buzzi Unicem SpA v. Comm'n of the European Cmtys., 2007 E.C.R. II-01195 at para. 127–128; Case T-130/06, Drax Power v. Comm'n, 2007 E.C.R. II-00067.

^{183.} Case C-267/11, Comm'n v. Latvia, 2013 ECLI:EU:C:2013:624; Case T-374/04, Germany v. Comm'n, 2007 E.C.R. II-04431; Case T-178/05, Re Greenhouse Gas Emission Allowance, 2005 E.C.R. II-04807; Case T-263/07, Estonia v. Comm'n 2009 E.C.R. II-03463; Case T-183/07, Poland v. Comm'n, 2009 E.C.R. II-03395.

^{184.} See id.

^{185.} Wilensky, *supra* note 18.

information about the conditions under which Germany's environment agency adopted allocation decisions during the first phase of the EU ETS. 186 The second case arose in France when the city of Lyon requested information on the sales of emissions allowances by the operators of the urban heating sites.¹⁸⁷ In both cases, the Court upheld the agencies' right to withhold the information.¹⁸⁸

The last three suits pertaining to the EU ETS were enforcement actions (See category A4 in Figure 7). 189 Enforcement actions were brought by the Commission of European Communities against Finland and Italy for failure to failure to adopt all laws, regulations, and administrative provisions necessary to comply with Directive 2003/87/EC.¹⁹⁰ In both cases, the Court found for the Commission. 191 The third suit arose when the Swedish environmental protection agency imposed penalties on the Billerud companies for failing to surrender credits under the scheme. 192 The Billerud companies challenged the penalties arguing that the failure was due to an internal error and the companies had a sufficient number of allowances at the time. 193 The CJEU found that failure to surrender credits still applies regardless of whether the company had sufficient allowances.¹⁹

b. Challenges to Other Climate-Related Legislation

The CJEU considered a few challenges to EU climate change policies other than the EU ETS. 195 In one case, applicants unsuccessfully challenged an amendment to an economic support

^{186.} See Case C-204/09, Flachglas Torgau GmbH v. Fed. Republic of Germany, 2012 ECLI:EU:C:2012:71.

^{187.} Case C-524/09, Ville de Lyon v. Caisse des Dépôts & Consignations, 2010 E.C.R. I-14115.

^{188.} Id.; Case C-204/09, Flachglas Torgau GmbH v. Fed'l Republic of Germany, 2012 ECLI:EU:C:2012:71.

^{189.} Case C-107/05, Comm'n v. Finald, 2006 E.C.R. I-00010; Case C-122/05, Comm'n v. Italy, 2006 E.C.R. I-00065; Case C-203/12, Billerud Karlsborg AB v. Naturvardsverket, 2013 ECLI:EU:C:2013:664.

^{190.} Finald, 2006 E.C.R. I-00010; Italy, 2006 E.C.R.I-00065.

^{192.} Billerud, 2013 ECLI:EU:C:2013:664.

^{193.} Id. at ¶19.

^{194.} *Id.* at ¶ 32.

^{195.} See, e.g., Case C-545/11, Agrargenossenschaft Neuelle v. Landrat des Landkreises Oder-Spree, 2013 ECLI:EU:C:2013:169; Case C-343/09, Afton Chem. Ltd. v. Sec'y of State for Transp., 2010 E.C.R. I-07027.

scheme for farmers that set aside a portion of funds previously used for direct payments to address climate change and other challenges faced by the agriculture sector. In a second case, a producer of the metallic fuel additive MMT challenged EU limits and labeling requirements. In the CJEU upheld the law, reasoning that reducing the health and environmental risks associated with MMT use outweighs the economic interests of the MMT producer. In the Interest of the MMT producer.

A challenge to legislation allegedly inhibiting efforts to combat climate change fared no better in the CJEU. Applicants challenged Italian national legislation prohibiting the construction of wind turbines in a national park.¹⁹⁹ The court dismissed the application, holding that the legislation would not obstruct EU's energy policies promoting renewable energy.²⁰⁰

D. Players

Climate change litigation is largely composed of private plaintiffs suing government defendants. In fact, 96 percent of cases were brought against governments.

^{196.} Agrargenossenschaft, 2013 ECLI:EU:C:2013:169.

^{197.} Afton Chem., 2010 E.C.R. I-07027.

^{198.} Id. at 68-69.

^{199.} Case C-2/10, Azienda Agro-Zootecnica Franchini sarl v. Regione Puglia, 2011 E.C.R. I-06561.

^{200.} Id.

Table 4. Non-U.S. Litigation Categorized by Plaintiff and Defendant

	Suit By				
		Citizens	Industry	Governments	Totals
Suit Against	Citizens	X	2	3	5
	Industry	7	8	2	17
	Government	70	64	17	151
	Local	34	18	2	54
	National/Federal	19	27	8	54
	State	16	3	0	19
	Supranational	1	16	7	24
	TOTAL	77	74	22	

Suits by citizens and industry were almost equal, representing 45 percent and 43 percent of total litigation respectively.²⁰¹ citizen Most cases are not specifically environmental groups, but instead community groups and individuals, often property owners. 2012 Only 19 percent of suits by individuals were brought by environmental organizations.²⁰³ primarily organizations brought Environmental challenging specific sources (Category B7) or encouraging new government actions to reduce GHG emissions (Category A1).²⁰⁴ The parity between suits brought by citizen and industry groups

^{201.} Wilensky, supra note 18.

^{202.} Id.

^{203.} Id.

^{204.} Id.

contrasts with the U.S., where Markell and Ruhl found that citizen groups far outnumbered other types of plaintiffs. This portrayal of U.S. litigation may be outdated. The recent implementation of a number of climate change-related regulations has spurred an abundance of legal challenges. Consequently, the U.S. litigation portfolio may now be more consistent with climate change litigation abroad.

Suits brought by governments constitute approximately 13 percent of non-U.S. litigation. ²⁰⁷ Most suits with a government plaintiff were brought against a government defendant.²⁰⁸ Of the 22 cases with government plaintiffs, 17 were against other governments.209 The five remaining cases were civil enforcement and criminal actions against corporations and individuals.²¹⁰ Intergovernmental litigation has been predominant in the U.S.,211 although there is a marked difference in the nature of intergovernmental litigation in the U.S. and abroad. Markell and Ruhl found that U.S. climate change litigation was primarily used "as means of resolving governance scale disputes that are not being managed effectively through legislative institutions."²¹² In this context, intergovernmental litigation was used as a tool to solve federalism issues, determining what level of government was responsible for climate action.²¹³ In non-U.S. climate litigation, however, intergovernmental litigation was largely administrative in nature. Half of the intergovernmental litigation was brought in the EU where the EU ETS was already enacted.²¹⁴ These cases addressed how the scheme should be implemented.²¹⁵ For example. many of the EU ETS cases surrounded the rejection of Member States' NAPs.²¹⁶ Most of the remaining intergovernmental

^{205.} Markell & Ruhl, supra note 6, at 74.

^{206.} See Arnold & Porter, Climate Change Litigation in the U.S., "Statutory Claims: Industry Law Suits: Challenges to Federal Action" 15, available at http://www.arnoldporter.com/resources/documents/ClimateChangeLitigationChart.pdf.

^{207.} Wilensky, supra note 18.

^{208.} Id.

^{209.} Id.

^{210.} Id.

^{211.} Id.

^{212.} Markell & Ruhl, supra note 6 at 75.

^{213.} *Id*.

^{214.} Wilensky, supra note 18.

^{215.} Id.

^{216.} See, e.g., Case T-208/07, BOT Elektrownia Bełchatów v. Comm'n, [2008] E.C.R. II-00225 (seeking annulment of Commission decision rejecting part of the Polish Phase II NAP).

litigation was comprised of land-use cases where one government, usually local, challenged another government's approval of an action without adequate consideration of climate change.²¹⁷

E. Climate Change Objectives

Litigation is being utilized both to encourage and challenge consideration of climate change. Pro and anti cases were almost even, totaling 75 and 83 respectively. While the overall numbers are close, there is a sharp disparity in the type of actions brought by those aiming to encourage consideration of climate change and those working to prevent it (*See Figure 8*). The substantive GHG mitigation and adaptation cases (*Category A*) mostly experienced anti litigation. Within the category, there were 32 anti cases, accounting for 84 percent of litigation (*See Figure 8*). This aligns with the U.S. where most anti litigation has consisted of challenges to agency rulemakings.

Of the EIA and Permitting Group, there were 61 pro cases, accounting for 57percent of the category. The dominance of pro litigation is less dramatic but demonstrates a slight tendency towards initiating land use cases with the intention of promoting consideration of climate change impacts in permitting decisions. Pro litigation was also dominant for EIA and permitting cases in the U.S., but there was very little anti litigation in these cases.

^{217.} See, e.g., Hertfordshire Cnty. Council v. Sec'y of State for Comtys & Local Gov't, [2011] EWHC 1572 (Eng.) (quashing planning permission for urban expansion project due to failure to consider climate change planning policy).

^{218.} The remaining cases were excluded from categorization because they did not fall into either category.

^{219.} Wilensky, *supra* note 18.

^{220.} Id.

^{221.} Id.

^{222.} See Markell & Ruhl, supra note 6, at 67.

^{223.} Wilensky, supra note 18.

^{224.} Id.

^{225.} Id.

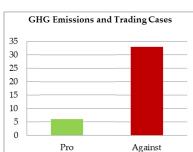
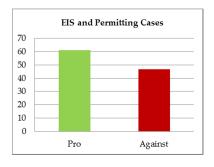


Figure 12. Pro and Anti Cases By Litigation Category



The breakdown of pro and anti litigation also varied by country. Pro cases comprised approximately 2/3 of cases in Australia and the UK.²²⁶ In New Zealand pro and anti litigation is almost equal.²²⁷ Spain experienced mostly anti litigation, but these cases were more concerned with challenging the process of setting limits in Spain's NAP than challenging the implementation of the NAP as a whole.²²⁸

F. Success of Climate Litigation

Non-U.S. climate change litigation has experienced some degree of success, with a success rate just under 40 percent. The EIA and Permitting Group had a higher success rate than substantive mitigation and adaptation cases (*See Category A in Figure 9*).²²⁹ Climate rights cases were also relatively successful, with almost 60 percent success rate.²³⁰ Cases against corporations were the most successful group, boasting close to 90 percent success rate; however, the high percentages correlate with small sample sizes and may not be statistically significant.²³¹ This high success rate may be indicative of the fact that where very few enforcement actions are initiated, those that are brought are particularly strong suits; however, the high percentages correlate with small sample sizes and may not be statistically significant. Cases against individuals, however, did not experience the same

^{226.} Id.

^{227.} Id.

^{228.} Id.

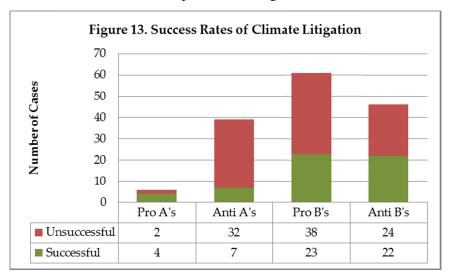
^{229.} Id.

^{230.} Id.

^{231.} Id.

level of success. The two criminal cases against protesters were unsuccessful, although the request for an injunction against protestors was granted.²³² The criminal suit associated with violating the EU ETS was successful, but the defendant successfully challenged the length of his sentence.²³³

With respect to cases against governments, pro climate action cases have a slightly better success rate of 42 percent compared to 35 percent for anti climate action cases.²³⁴ Of the EIA and permitting cases, anti cases were slightly more successful, reaching close to a 50 percent success rate, particularly cases challenging rejection of permits for GHG emissions sources (Category B6) and those challenging rejection of planning permits due to impacts of climate change on the project (Category B10).²³⁵ The variation in success rates is not likely sufficient to indicate that courts were differential to pro or anti litigation.



Also, the success of climate change litigation varied by jurisdiction. Claimants in Australia and Spain experienced the highest success rate, boasting 63 percent and 62 percent

^{232.} Dir. of Pub. Prosecutions v. Fraser, [2008] CLR 244 (Austl.); Heathrow Airport v. Garman, [2007] Q.B. 1957 (Eng.); The Kingsnorth Six Trial, Maidstone Crown Court [2008] (Eng.).

^{233.} Regina v. Dosanjh, [2013] W.L.R. 2366 (Eng).

^{234.} Wilensky, supra note 18.

^{235.} Id.

respectively.²³⁶ Litigation in the United Kingdom fared close to the international average with a 37 percent success rate.²³⁷ European Union and New Zealand litigation was rarely successful, with 17 percent and 14 percent success rates respectively.²³⁸ In the EU, this was mostly due to the fact that challenges to the Commissions rejection of NAPs had little success. Furthermore, pro and antilitigation fared about equally in Australia and the UK. But, in the other jurisdictions there were too few cases to draw a meaningful conclusion.

III. ASSESSING CLIMATE CHANGE JURISPRUDENCE

A. Impact of the Courts on Climate Change Policy

In assessing climate change litigation across jurisdictions, the most glaring difference is the sheer quantity of climate change litigation in the U.S. compared to all other jurisdictions. By the end of 2013, over 420 climate change cases had been resolved in the U.S. alone. By the end of 2013, all other countries combined had only resolved 173 climate change cases. These cases were almost entirely concentrated in five jurisdictions, with no climate change litigation in the vast majority of countries worldwide. Even accounting for potential gaps in this assessment, litigation is not as heavily utilized as a tool to impact climate change policy outside the United States.

Where climate change does arise in non-U.S. litigation, it was rarely utilized to encourage climate change policy development. Less than a quarter of cases were substantive climate change regulation cases, and almost all of those cases were challenging laws and policies controlling GHG emissions. Only two claims aimed to require a legislature or agency to promulgate a statute or policy establishing new or more stringent limits on emissions. This is negligible compared to the U.S., where such

^{236.} Id.

^{237.} Id.

^{238.} Id.

^{239.} Id.

^{240.} This figure includes only settlements that were approved by a court and thus resulted in a judgment by the court. Wilensky, *supra* note 18.

^{241.} Id.

^{242.} Id.

^{243.} Id.

^{244.} Id.

cases accounted for 11percent of climate change litigation as of 2010.²⁴⁵

This difference may be due to differing political landscapes. In the U.S. opposition to climate action has been influential and effectively thwarted legislative efforts. Most other jurisdictions have been able to overcome opposition to climate action and develop flagship climate legislation.²⁴⁶ The EU was early to action in this respect, establishing the EU ETS in 2005.²⁴⁷ Legislative success with respect to climate change outside of the U.S. has likely reduced the need to utilize the courts to encourage government action on climate change.²⁴⁸

B. Judicial Deference to Agency Decision-Making

The majority of climate change litigation to date addresses how agencies and local councils should factor climate change into permitting decisions. These procedural cases dominated litigation in Australia, New Zealand, and the UK. A critical issue in these cases is the extent to which courts are willing to second-guess agency decision-making to ensure climate change is receiving adequate consideration. This study reveals that the courts generally accept the scientific consensus surrounding climate change. There is only one example of a non-U.S. court casting doubt on the science of climate change. Moreover, courts were generally willing to ensure that agencies were taking into account climate change in decision-making, especially where laws or planning policies required such considerations.

^{245.} Markell & Ruhl, *supra* note 6, at 30. This percentage has likely decreased in recent years as challenges to agency regulations have increased.

^{246.} NACHMANY ET AL., supra note 1, at 26.

^{247.} Lucas Merrill Brown, Alex Hanafi, & Annie Petsonk, *The EU Emissions Trading System 5* (2012).

^{248.} Cf. Peel, supra note 108.

^{249.} See, e.g., Environment Defence Society, [2002] NZEnvC 492 at [63] (N.Z.) (accepting the scientific consensus on climate change); see Greenpeace Australia Ltd. v. Redbank Power Co. PTY Ltd., [1994] NSWLR 178 (Austl.) (applying the precautionary principle with respect to future climate change impacts on proposed development).

^{250.} In *Nucifora v. Valuer-General*, the Queensland Land Court noted that climate change "is still a subject of considerable public debate." *See* Nucifora v. Valuer-General, [2013] CLR 19 (Austl.) (holding that applicant had failed to demonstrate devaluation of property due to climate change impacts).

^{251.} See, e.g., Australia Conservation Found. v. Minister for Planning, [2004] CLR 100 (Austl.) (holding that the assessment panel must consider the impacts of GHG emissions on the environment).

The issue of how much weight to give to the impacts of climate change in decision-making was more complicated and was answered rather inconsistently. With permitting decisions, it is necessary for agencies to balance a number of competing considerations. Some courts deferred to agencies and would go no further than ensuring that climate change was considered.²⁵² However, courts often balanced climate change against competing interests. Sometimes a court would find that an agency or local council failed to give climate change sufficient weight. 253 In other instances, a court would find that the competing interests were considerations. 254 significant than climate change Consequently, while courts have played an important role in ensuring that climate change is considered in land use and planning decisions, and have demonstrated a willingness to closely examine agency decision-making, they have not necessarily favored climate change considerations above competing interests.

C. Climate Change Jurisprudence

One of the primary questions posed by Markell and Ruhl in analyzing U.S. climate litigation was whether distinct climate change jurisprudence had evolved. Ultimately, they concluded that courts had addressed climate change no differently than other regulatory questions. Markell and Ruhl noted that "[c]limate change may be an exceptional problem for other institutions, but for the courts it has generally been business as usual."

In general, the same proved true for non-U.S. litigation. While courts occasionally second guessed agency decision-making and balancing, they usually adhered to legislative and regulatory requirements and declined to impose additional requirements.²⁵⁷

^{252.} See, e.g., Haughton v. Minister for Planning & Macquarie Generation [2011] CLR 217 (NSWLEC) (Austl.) (upholding the approval of two coal fired power plants emphasizing the Minister's discretion in weighing competing interests to determine what was in the public interest); Barbone & Ross v. Sec'y of State for Transp. [2009] QB 463 (Eng.) (upholding airport expansion where climate change impacts were giving consideration).

^{253.} See, e.g., Goldfinch v. Nat'l Assembly for Whales [2002] QB1275 (Eng.) (holding that the inspector had given too little weight to flood risks due to climate change).

^{254.} See, e.g., Jarrett v. Sec'y of State for Communities & Local Gov't [2012] QB 3642 (Eng.) (holding that harm to character and quality of the landscape outweighed benefits of renewable energy and mitigation of climate change).

^{255.} Markell & Ruhl, supra note 6, at 77.

^{256.} Id. at 70.

^{257.} See, e.g., Environment Defence Society [2002] NZEnvC492 at [92] (N.Z.) (declining to require a gas fired power station to offset emissions, pointing to the administrative difficulties of

The NSW Land and Environment Court was exceptional in this regard. In two instances, the court found it had legal authority to set limits on GHG emissions of proposed projects. First, in *Macquarie*, the court found an implied CO₂ limitation on a coal-fired power plant based on common law principles. Second, in *Hunter Environmental Lobby*, the court conditioned approval of a coal mine to the offsetting of direct emissions.²⁵⁸ However, these judicial restrictions were short-lived as *Macquarie* was overturned on appeal and the conditions imposed in *Hunter Environmental Lobby* were suspended when the Australian Carbon Tax was enacted.

CONCLUSIONS AND LOOKING AHEAD

Climate change litigation across the world does not lend itself to one consistent narrative. Most litigation surrounding climate change has involved tactical suits aimed at specific projects or details regarding implementation of existing climate policies. Beyond that, jurisdictions vary widely in terms of the amount, nature, and relative success of climate change litigation. The presence or absence of climate change legislation is not indicative of the quantity of litigation. In fact, the vast majority of countries have experienced little or no litigation on the issue. Of the jurisdictions that have experienced a number of climate change cases, dominant litigation categories varied, reflecting each jurisdiction's unique legislative and regulatory frameworks, energy portfolios, and legal systems. For example, reverse environmental impact cases made up over half of Australia climate change litigation but were almost completely absent in other jurisdictions. Proposed wind energy installations motivated substantial litigation in UK and New Zealand, and the majority of litigation in EU courts surrounded the EU ETS.

Although climate change has required novel and innovative policy development, there has been a notable absence of innovation in most non-U.S. climate litigation. Climate change has been treated in the courts much like any other environmental issue and has not resulted in the development of distinct climate change jurisprudence. Courts accept climate science and the need to incorporate consideration of climate change into land-use and

monitoring and enforcing such a condition).

^{258.} Hunter Env't Lobby, Inc. v. Minister for Planning [2011] NSWLEC 221 (Austl.).

planning decisions. Because these decisions require a weighing of competing factors that must be completed on a case-by-case basis, these cases will likely continue to arise. Moreover, reverse EIA cases will likely increase as climate change impacts become more pronounced over time and renewable energy cases will increase as jurisdictions work toward their renewable energy goals. The future of substantive climate change litigation is less certain and will likely depend on future government attitudes towards implementing and enforcing climate change legislation.