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## 9. Regulating climate change in the courts

**Joana Setzer and Mook Bangalore**

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### 9.1 INTRODUCTION

The legislative arena and/or the executive branches of governments have been prominent domains for climate change action. This chapter shines a light on another arena for climate-related action – the judiciary. Increasingly, states, businesses, non-governmental organizations and even individuals are involved in climate litigation. But climate litigation is ‘a double-edged sword’ (Gerrard and Wilensky, 2016, p.363). On the one hand, litigation can be used to facilitate climate regulation and hold policy makers accountable – by driving, enforcing, clarifying and, in some cases, substituting absent or insufficient national legislation and policies. On the other hand, litigation can be used to oppose or weaken climate regulation – for example, corporations can use the courts to question what they consider excessively stringent standards or requirements. In such a context, rather than being static, climate legislation and policies can be seen as dynamic instruments, with challenges in the court shaping their evolution.

Existing scholarship investigates the links between climate litigation and regulation by identifying the objectives of court cases. Climate regulation, in this context, is defined as ‘state intervention in the economy and/or civil society, the rules that are enforced and monitored, and situations where climate litigation “influences the flow of events”’ (Peel and Osofsky, 2013, p. 153). Four key jurisdictions, all developed countries, are covered by this scholarship: the USA (Markell and Ruhl, 2012; Colares and Ristovski, 2014), the United Kingdom (Hilson, 2010), Canada and Australia, represented in comparative studies (the USA and Australia by Peel and Osofsky, 2015; Australia, the United Kingdom and Canada by Vanhala, 2013). In these cases, the relationship between climate litigation and regulation is identified as proactive or reactive (Hilson, 2010), pro- or anti-regulatory (Markell and Ruhl, 2012), or direct or indirect (Peel and Osofsky, 2015). Not much is known about the links between climate litigation and regulation in other jurisdictions (Wilensky, 2015). Furthermore,

the understanding of the relationship between climate litigation and regulation is inconclusive with regards to the outcomes: it is as yet unclear whether the outcomes of litigation enhance, hinder or have no impact on climate regulation. As a result, we still lack a broad picture of what are the objectives and outcomes of cases bringing climate change to courts worldwide.

We address this deficit by assessing the rationale and outcomes of climate litigation through a comparative study of an expanded data set of 253 climate litigation cases across 25 jurisdictions. The data was taken from Climate Change Litigation of the World, a companion data set to the Climate Change Legislation of the World database introduced in Chapter 1 of this book. The data includes a sample of all climate court cases identified as to March 2017, excluding cases in the USA (GRI-Sabin, 2017). The goals of this chapter are twofold: (1) to advance the understanding of what is driving climate litigation; and (2) to assess whether climate litigation has enhanced or hindered outcomes on climate regulation – ‘enhancing’ meaning supporting actions to reduce emissions or to increase resilience to climate change, and ‘hindering’ meaning the opposite.

We find that climate litigation enhances climate regulation more than it hinders it. While this relationship differs based on jurisdiction, and is based on the authors’ interpretation of the cases, such a categorization gives an estimate of the direction that climate litigation is moving in. The findings suggest that the courts have a role to play in regulating climate change.

The chapter is organized as follows: in section 9.2 we review debates on climate regulation and litigation, suggesting that while there is a growing literature about the nature and scope of climate litigation, core analytical challenges remain. In section 9.3 we describe the litigation data set, and examine the patterns and trends of climate litigation across the 25 jurisdictions, with a focus on three important case characteristics. In section 9.4 we offer an approach to analyse the functions undertaken by climate litigation cases, and to assess whether climate litigation seems to enhance, hinder or have no influence on climate regulation. Section 9.5 concludes.

## 9.2 LINKING CLIMATE LITIGATION AND REGULATION

Environmental litigation has seen a rather long history, with a large number of environmental conflicts settled by domestic and international courts and tribunals worldwide, constructing a robust body of environmental jurisprudence. One of the judiciary’s important roles is in implementing

the rule of law, providing remedies to environmental harms and upholding constitutional rights to the environment (Nemesio, 2015, p. 325). It has also been argued that the main focus of the courts is to ensure that regulators and economic enterprises obey the law (Martin and Kennedy, 2015). This debate extends to the emerging issue of climate change litigation.

In the last decade, climate litigation, which falls under the larger umbrella of environmental litigation, has established itself as a rising trend both in the courts and in the academic literature. Yet, defining 'climate litigation' is in itself a debated matter. Most commentators agree that lawsuits in courts that raise climate change arguments constitute climate litigation (Hilson, 2010; Markell and Ruhl, 2012). Yet, as Peel and Osofsky (2013, p. 152) argue, the boundaries are hard to establish, with disputes over climate change spanning a wide range of areas of law and judicial and quasi-judicial fora. In addition, climate change may not be explicitly mentioned in environmental lawsuits, or brought as a peripheral issue in litigation. For this reason, if a relatively broad view is adopted of where the boundaries of climate litigation lie, it would extend to climate change-related cases, which reference climate change amid other issues.

In the courts, climate change-related litigation develops on an ad hoc basis at the international, regional, national and sub-national levels. At the regional and international levels, litigation may be initiated against a state before the European Court of Justice (ECJ), the International Court of Justice (ICJ) or the United Nations Convention on the Law of the Sea (UNCLOS) as a result of alleged breaches of states' international climate change or carbon trading commitments (Burns and Osofsky, 2009). At the national and sub-national levels, a rising number of cases are being filed, particularly under environmental or resource management regulation (IBA, 2014; Lord et al., 2012).

Existing scholarship examines the rising trend of climate litigation from three angles (Peel and Osofsky, 2013, 2015). The first consists of examination of individual cases or developments in particular jurisdictions. The *Massachusetts v. Environmental Protection Agency* case in the USA, which implored the federal government to regulate greenhouse gas (GHG) emissions, generated considerable attention in the early days of this scholarship (see Fisher, 2013; Osofsky, 2009; Watts and Wildermuth, 2008). More recently, attention has been given to the *Urgenda* case in the Netherlands, which has similarly called for the government to act on climate change (Cox, 2016; Van Zeven, 2015; de Graaf and Jans, 2015).

The second angle attempts to systematize case law. Markell and Ruhl's (2012) first empirical study of the status of climate litigation in the USA resulted in a listing of five broad categories of claims: mitigation; adaptation; procedural monitoring, impact assessment; rights and

liabilities; and climate-threatened resources. These categories are followed by the identification of the nature and thrust of the plaintiffs' claims in each category. Wilensky's (2015) categorization, which adjusts Markell and Ruhl's work to reflect variation in different legal frameworks and cases outside of the USA, divides cases according to whether the defendant is private or public. Claims against public entities are divided into four broad categories (regulation; environmental impact assessment – EIA; rights and climate science; sub-divided into claim types), and claims against private parties are divided into claims against corporations and against individuals, again sub-divided into claim types.

The third angle investigates litigation's regulatory role. This is also the angle that we focus on in this chapter. One option is that the courts provide support for regulation or increased liability associated with climate change. This was the conclusion of Markell and Ruhl (2012), finding a majority of pro-regulation (161 out of 201), with anti-regulation on the rise.<sup>1</sup> Based on an examination of cases and interviews in Australia and the USA, Peel and Osofsky (2015) further suggest that climate litigation serves as a pathway to improved climate change regulation and, in the process, influences behaviour.<sup>2</sup> It is, in this sense, a bottom-up mechanism or a polycentric governance setting, which directly and indirectly generates legal and behavioural change.

A constructive or positive influence between climate litigation and regulation has been observed in countries that lack comprehensive policies or legislation to address climate change. In this case, plaintiffs hope that their claims will fill a governance gap in the short term and spur legislation and regulation in the long term (Sampson and Kaiser, 2011; Preston, 2016a). A favourable court decision allows national or sub-national government to regulate GHG emissions and implement climate policies, even when there is no specific legislation.<sup>3</sup> To a certain extent, the USA illustrates this situation where litigation is driven by the absence of a comprehensive federal legislation that addresses climate change. The judgement of *Massachusetts v. Environmental Protection Agency* by the Supreme Court in 2007 had a significant impact on US climate policy (in terms of updating the Clean Air Act to include regulation of GHG emissions).<sup>4</sup> This case not only secured the government's position over climate policy, but was the basis for the bilateral deal with China, and for Paris climate commitments (Carnwath, 2016). In this context, court decisions play a supplementary role where there is inadequate or defective executive action by a government agency.

A second option is that climate litigation is a tool used by actors who are opposed to climate laws and policies, most commonly because such instruments affect their commercial interests (Hilson, 2010). Peel and

Osofsky (2015) examine a number of cases where coal companies have strongly opposed efforts to impose regulatory emissions reductions, and got involved in anti-regulatory actions challenging clean energy measures. Corporate actors engaging in such anti-regulatory tactics might also question the science of climate change (Bergkamp and Hanekamp, 2015). Courts have assessed the economic impacts of climate regulation on a case-by-case basis, sometimes ruling in favour of corporations and other times in favour of the state. However, with regards to science, so far the courts have endorsed the consensus approach brought by the Intergovernmental Panel on Climate Change (IPCC), using it as sufficient evidence to justify climate regulation, as well as to create a sufficient indirect causal link between the emitting activities and the alleged injuries of plaintiffs. The Urgenda case in the Netherlands illustrates how courts in civil-law jurisdictions are engaging with climate science and embracing the IPCC assessment reports as evidence of the serious risk posed by climate change.

A third option is that climate litigation has no impact on climate regulation. Wilensky (2015) and Gerrard and Wilensky (2016) in their assessment of jurisdictions other than the USA suggest that, with few exceptions, litigation has neither spurred nor sought to halt climate regulation.<sup>5</sup> Rather than encouraging policy development, climate change litigation outside of the USA has been aimed at specific projects (for example, coal-fired power plants, wind farms or coastal homes, commonly brought under land use and planning laws) or at details regarding implementation of existing climate change policies. Vanhala's (2013) investigation of the interplay between climate policy and levels of climate change litigation in Australia, Canada and the United Kingdom further concludes that there is 'no clear relationship between a lack of national policy and levels or types of litigation' (p. 448). It is worthwhile to mention that this lack of a clear relationship is found in both countries that have a regulatory structure for climate in place (such as the United Kingdom and Australia) as well as those that do not (for example, the USA and Canada).

Based on this literature, it is as yet unclear whether litigation enhances, hinders or has no relation to climate regulation or, more precisely, what factors account for different outcomes in climate litigation. This is especially clear in other contexts outside the four developed countries that have so far received most scholarly attention. As a result, we still lack a broad picture of what are the objectives and outcomes of cases bringing climate change to courts worldwide. Nevertheless, we can test three hypotheses regarding the relationship between climate litigation and climate regulation: (1) climate litigation has the potential to enhance climate regulation (also when it helps in addressing the implementation deficit of

climate laws and policies); (2) climate litigation is mostly an instrument to oppose the realization of more ambitious policies and legislation and, therefore, has the potential to hinder climate regulation; or (3) climate litigation has limited or no effect over climate regulation. In the next sections we take these hypotheses as a starting point, and examine climate-related court cases around the world.

### 9.3 CHARACTERISTICS OF CLIMATE LITIGATION

To test the findings and hypotheses regarding the relationship between climate litigation and regulation, we examine 253 climate-related court cases in 25 jurisdictions for which data exists (other than the USA).<sup>6</sup> The choice of excluding the USA is due to the fact that not only have such cases received far less academic attention, but also the number of lawsuits that have been resolved in the USA alone makes a comparison with other jurisdictions impracticable. Indeed, the existing data set for climate litigation cases in the USA has over 600 entries<sup>7</sup> – owing both to a very active litigation environment, as well as to relative advantages in procuring information about the cases.

The source of our data is the Climate Change Litigation of the World database, jointly produced by the Grantham Research Institute on Climate Change and the Environment (GRI) at the London School of Economics and the Sabin Center for Climate Change Law (Sabin) at Columbia Law School.<sup>8</sup> This data set consists of 225 cases compiled by Sabin, and previously assessed by Gerrard and Wilensky (2016), with a smaller sub-set of cases (28) added from other sources (ECOLEX and ELAW) and from targeted searches for cases from India and Brazil.

Cases included in this database meet several criteria. They have been brought before an administrative, judicial or other investigatory body. They raise issues of law or fact regarding the science of climate change and/or climate change mitigation and adaptation policies or efforts. Most but not all contain keywords such as climate change, global warming, global change, greenhouse gas, GHGs, and sea level rise. Cases that make only passing reference to the fact of climate change, its causes or its effects are excluded if they do not address in direct or meaningful fashion the laws, policies or actions that compel, support or facilitate climate mitigation or adaptation. Cases that seek incidentally to accomplish (or prevent) climate change policy goals without reference to climate change issues are not included. Thus, for example, this database does not include cases in which the parties seek to limit air pollution from coal-fired power plants but do not directly raise issues of fact or law pertaining to climate change.<sup>9</sup>

The fields that we include in the database are: year, case name, parties involved, jurisdiction, principal law, core object, decision(s) or outcome(s), current status, summary.

While this data set is the largest one compiled to date, it is important to note that it cannot be deemed representative or comprehensive. Rather, this compiled data set consists of cases from a limited number of countries, dictated by data accessibility and language considerations. The case list heavily relies on partners of the data providers and on media reports, and is predominantly in English – ultimately meaning we cannot be sure of the full extent of unidentified litigation cases.<sup>10</sup> Moreover, the database is highly uneven, with the majority of the cases attributable to only a few jurisdictions (Australia, the European Union, New Zealand and the United Kingdom); this may be due to information collection gaps, as described above, or alternatively, represent different regulation and litigation cultures. Acknowledging these caveats, we now turn to describe our findings and to draw some insights from them.

Courts are increasingly being seen as an additional arena for climate regulation (Peel and Osofky, 2015). Figure 9.1 shows a rising trend in the number of litigation cases over time.

While the first case in our data set in Figure 9.1 is from 1994, cases are sparse until the mid-2000s. There are fewer cases in our dataset from 2014 onwards, although this may reflect a data collection issue. Next, we turn to examining features of the cases in the database: core objective or rationale

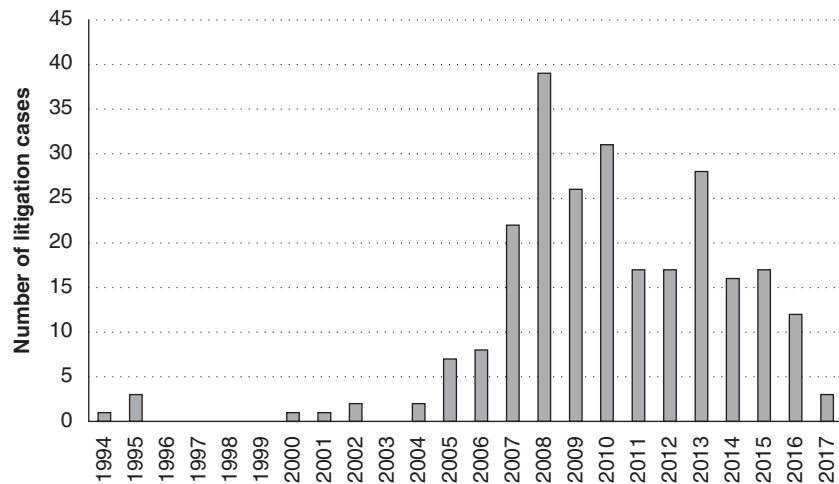


Figure 9.1 Climate litigation cases over time



behind each case; who is the plaintiff; and whether climate change is central to the case.

### 9.3.1 What is the Core Objective or Rationale Behind Each Case?

Court cases can be initiated for a number of reasons. In the early days of climate litigation, plaintiffs used litigation to seek compensation from oil, power and coal companies, using similar strategies learnt from the tobacco and asbestos cases (private law litigation). With most initial efforts unsuccessful, cases were brought against the state, contending that it has failed to comply with its legal obligations (public law litigation). More recently, high-profile cases in the Netherlands and Norway have been geared towards requiring the state to act on climate change in the face of inaction, and a new wave of climate litigation against corporations can also be observed.

Using the existing frameworks developed by Markell and Ruhl (2012) and Wilensky (2015), and supporting them with a bottom-up approach from the data set, we construct a menu of four not mutually exclusive options or objectives: (1) administration; (2) information/disclosure; (3) legislation/policies; and (4) protection/loss and damage. While this categorization follows the broad dominant litigation prototypes identified by previous studies, it adjusts Markell and Ruhl's framework to account for a larger number of jurisdictions, and avoids the government/private divide found in Wilensky's categorization. The four objectives of climate litigation cases are outlined below:

1. **Administration:** lawsuits are classified to this category when the main focus of the litigation is to challenge particular projects or activities. In project-based cases, plaintiffs might question the GHG emissions that result from the licensing of a particular activity or project, for example, in cases that challenge emissions from coal-fired plants in Australia, New Zealand and the United Kingdom. The challenge can also involve the consideration of direct GHG emissions by Environmental Impact Assessments (EIA).<sup>11</sup> Also within this category are included lawsuits challenging the allocation of allowances in the European Union Emissions Trading Scheme (EU-ETS).<sup>12</sup>

The majority of cases in our database fall into this category, consisting of 78 per cent of the total (n=197). This is consistent with Markell and Ruhl's (2012) findings regarding distribution of cases in the USA.

2. **Information/disclosure:** litigation classified to this category involves cases in which the plaintiffs go to courts to require further information from governments or emitting sources. Cases can also involve climate

risk disclosure, or claims for misleading or incomplete information. Although climate risk disclosure is the subject of litigation primarily in the USA,<sup>13</sup> allegations of civil conspiracy and fraudulent misrepresentation have already been brought into courts in other jurisdictions. In *German Federation for the Environment and Nature Conservation (BUND) and Germanwatch v. Federal Republic of Germany* (2006), for example, two non-governmental organizations (NGOs) successfully invoked the German Access to Environmental Information Act to compel the government to release information on the climate change impacts of German export credits.

In our database 7 per cent of the total (n=17) fit into this category, with trends generally consistent over time.

3. **Legislation/policies:** lawsuits are classified in this category when the intention was to call for new laws and policies or halt existing ones. These cases are typically brought against governments in order to drive the course of climate change policies and regulation; a key example is the Urgenda case in the Netherlands (2015). This category also covers cases where lawsuits are used to interpret or enforce existing legislation. An example is the case of *Ashgar Leghari v. Federation of Pakistan* (2015), in which the court ruled that the national government had failed to implement its climate policy. Lawsuits to enforce national commitments to international treaties such as the Kyoto Protocol or the Paris Agreement can also be included in this category. Examples include lawsuits in Canada and Ukraine requiring mitigation action based on the countries' commitments under the Kyoto Protocol.<sup>14</sup>

In our database, this category accounts for 8 per cent (n=20) of the total. These cases tend to be more recent, all of them filed after 2012.

4. **Protection/loss and damage:** lawsuits are classified under this category when they deal with personal property damage or injury cause by climate change-related events. Claims alleging climate change-related damages include cases such as *Ioane Teitiota v. The Chief Executive of the Ministry of Business, Innovation and Employment* (2015), in which a Kiribati citizen appealed to the High Court after being denied refugee status in New Zealand, arguing that the effects of climate change are forcing citizens off the island of Kiribati. In other related cases, such as *Saul Luciano Lliuya v. RWE* (2015), plaintiffs argued that energy producers contributed substantially to climate change, and are therefore responsible for climate change-related injuries suffered by them.<sup>15</sup>

In our database, 8 per cent (n=19) of the total fit into this category, with trends generally consistent over time.

We also assessed, using the court case summaries, whether the case was about climate change mitigation (reduction of emissions) or adaptation to climate change risks. For example, under *Decision C-035/16* (2016) the Colombian Constitutional Court struck down two legal provisions, which threatened high-altitude ecosystems (*paramos*), highlighting the importance of the *paramos* as a carbon-capture system. This case was coded as mitigation. In our analysis, we found that the primary motivation in 78 per cent of the cases was mitigation.<sup>16</sup> This also resonates with the finding that a majority of the cases are regulatory challenges, since most regulations for climate change, for this sample of countries, are for reducing emissions, instead of acting to improve their adaptive capacities.<sup>17</sup>

The underrepresentation of adaptation cases might be related to the fact that those affected by the impacts of climate change are too vulnerable to access courts. As the Climate Change Justice and Human Rights Task Force Report (IBA, 2014) indicates, there are a number of challenges for how individuals and communities can use international and regional human rights bodies and instruments to clarify and vindicate rights. Methodological challenges could also explain the reduced number of adaptation cases. For instance, there are difficulties in separating cases involving climate change adaptation from common law actions to recover damages from property owners and disaster victims; the latter are not framed as climate change actions.

While consisting of a minority of the cases, litigation that involves climate change adaptation can have important impacts, for instance, helping to change planning cultures. In Australia, the case law addresses a variety of adaptation issues from management and planning for coastal hazards in development-related decision making, to resiliency of the electricity grid, to the deterioration of coastal waters and groundwater allocation in conditions of drought (Peel and Osofsky, 2015). Such cases contributed to injecting considerations of climate change risks into planning and infrastructure management decision making under existing regulatory frameworks (*ibid.*, p.166), thus improving climate change resilience. Moreover, directly addressing adaptation capacities and obligations in litigation could also prove to be an important future avenue for climate litigation (van Rensen, 2016; Preston, 2016b). In the *Ashgar Leghari v. Federation of Pakistan* case above mentioned, the Lahore High Court mandated the government to implement its climate adaptation plan. This may indicate how governments might be held liable for delaying or not taking action to reduce vulnerability to climate change.

### 9.3.2 Who are the Plaintiffs and the Defendants in These Cases?

Cases of climate litigation can be initiated by a private or public claimant, and be filed against a private or a public defendant. Plaintiffs and defendants in climate litigation arguably impact the outcomes of cases. For instance, it has been argued that climate change lawsuits in the USA are more likely to be successful when the plaintiff is a governmental actor, as it is easier for them to show legal standing to sue (Gerrard, 2017) and this can also apply to sub-national governments (Peel and Osofsky, 2015). Beyond legal standing, one might hypothesize that plaintiffs differ on the resources they have available to them (for example, corporations might hire more expensive lawyers compared to NGOs), which might influence the outcome of cases.

The largest number of cases (n=102, representing 40 per cent of the sample) were brought by corporations. Claims brought by corporations are mostly filed against governments, and aim at overturning administrative decisions not to grant a licence (for example, for coal power plants, water extraction, housing developments) on the basis of climate change or variability, challenge allocation of allowances under the ETS or governmental schemes (for example, for production of renewable energy). This observation is consistent with the finding that most of these cases are challenges dealing with the Administration. Governments (51 cases) and individuals (56) are next, each with about one-fifth of the cases in the databases. NGOs (33 cases) account for 13 per cent of the cases. Interestingly, the remaining 11 cases feature a combination of plaintiff types (for example, NGO and corporation, individual and NGO). For instance, a 2017 court case in Austria to prevent construction of a third runway at Vienna's airport was brought by both an NGO (Anti-Aircraft Noise Society) and individuals.

When examining the distribution of defendant type in the database, we find that governments are being sought most of the time (79 per cent of the sample). This is consistent with the idea that corporations are taking governments to court regarding specific projects or challenging regulations. However, it is important to note that while a majority of the cases brought against governments are from corporations (86 cases, or 43 per cent of cases brought against governments), individuals (42 cases), other government agencies (22 cases) and NGOs (24 cases) also feature. The second most prominent defendant type is a corporation (at 11 per cent). For 5 cases, no defendant type could be identified since the case was an advisory opinion on a climate change-related issue rather than a litigation battle.

### 9.3.3 Is Climate Change Central to the Court Case?

We also assess whether climate change is central to the court case. As climate change is such a multi-faceted, wide-reaching issue, scholars have taken different views, some very broad, on where the boundaries of climate change litigation lie. Nevertheless, it is important to distinguish when climate change is central to litigation, or when it is only a peripheral issue. We classify cases where climate is central if the main argument of the case is related to climate change. This is the case of a series of class actions in Brazil, brought by the Public Prosecutor Office against air companies flying to and from São Paulo's international airport, which sought reforestation of lands around the airport as compensation for GHG emissions and other pollutants. An example in the same jurisdiction of a case where climate is peripheral is a decision of the Brazilian Superior Court of Justice prohibiting the use of fire as a harvesting method for sugarcane harvest, which considers, among other environmental impacts, the negative effects of carbon emissions.

Here, we examine the distribution of cases, calculating the number of cases where climate change is central to proceedings compared to where it is only on the periphery. For over three-quarters of the cases (77 per cent) climate change is only at the periphery, and not a central argument. On the one hand, this suggests that the majority of what we consider to be climate litigation today is not really climate litigation, but litigation that peripherally acknowledges climate change.

However, our observation that there is an increase in cases where climate change is a peripheral issue already indicates that the judiciary is being more frequently exposed to the likely impact of many activities that, until recently, would probably not be framed in terms of their environmental or climatic impact. For instance, challenges to fossil fuel projects or other GHG-intensive developments have been brought for many years, but it is only in the last decade that a substantial portion of these cases has used climate change as part of the argument or motivation for the case (Peel and Osofsky, 2015, p. 9). Therefore, an examination of this relatively large collection of diverse lawsuits across different countries provides another facet of climate governance beyond the multilateral process: one that involves governments, civil society and businesses under the auspices of the law and of the judiciary.

## 9.4 THE DYNAMICS BETWEEN CLIMATE LITIGATION AND CLIMATE REGULATION

Climate litigation against states or private actors for harms caused by climate change to individuals or communities faces significant obstacles.

In particular, climate litigation cases are challenged on the basis of establishing standing of claimants, proving a causal link between tangible harms and GHG emissions by particular defendants, apportioning and distributing damages, or for determining the propriety of injunctive relief (IBA, 2014, p. 76). Our objective here is not to investigate the obstacles for climate litigation. Instead, we aim to assess if climate court cases so far have enhanced, hindered or had no impact on climate regulation. Broadly speaking, we consider climate regulation as actions, measures or policies that increase resilience to climate risks or reduce GHG emissions. Such an assessment depends on whether the focus is on the drivers of the disputes, or how the disputes are resolved. For instance, an NGO may file a lawsuit in court to make the government act to reduce emissions (here, the driver enhances regulation) but the court may find that the NGO has no standing in court and rule against them (in which case, the outcome is neither enhancing nor hindering). In other cases, the outcome may be enhancing or hindering to regulation.

The assessment is done through an examination of the difference between: (1) whether the *driver* of the court case was to enhance or hinder climate regulation; (2) whether the *decision* of the court case enhanced, hindered or made no difference to climate regulation. While such a categorization is based on the authors' assessment of the case summaries and is far from clear-cut, the exercise provides us with an approach to examine the links between litigation and climate regulation, and gives an estimate of what *direction* climate litigation is moving towards.

To make this more concrete, we take as an example the case of *Charles & Howard Pty Ltd v. Redland Shire Council* in Queensland, Australia. The court case pertains to the Redland Shire Council's denial of a permit to develop land located in a flood zone (this case was classified as (2) Administration). The driver of the case was to obtain the permit (that is, hinder); however, the court decided that the local council's decision was justified (status quo). To examine the direction of climate regulation, we compare the driver to the outcome. Given that the status quo was retained after an effort to weaken climate regulation, we classify this case as 'enhancing'.

For over half of the cases (n=133), the driver was to enhance climate regulation, while the driver for 38 per cent (n=96) was to hinder climate regulation. For the remaining 24 cases, the driver was neutral, including for example cases to clarify methodologies for emissions tracking. In terms of the decision or outcome of the case, a majority can be placed in the 'status quo' category, with 58 per cent of cases (n=146) falling in this category. Status quo cases include cases, for example, where there was an existing wind farm, and the challenge to remove the wind farm was struck down.

Of the remaining 95 cases with outcomes, the majority (n=66) tended towards the 'enhance' category. Finally, several cases (n=12) are ongoing, and therefore do not have an outcome yet.

We then combine the categorization of the driver and outcome to arrive at our metric of whether the case enhanced, hindered or had no impact on climate regulation. For example, if the driver was 'enhancement' but the outcome was 'status quo' or 'hindrance', this would be classified as hindering climate regulation, as in *Wigan Metropolitan Borough Council v. Secretary of State for the Environment Transport & Regions* in 2001 in the United Kingdom. In this case, the plaintiff challenged a permit that was granted for residential development in a flood plain, but this challenge was denied and the development was allowed to continue.

Data gaps described above allowed us to use only 217 cases for this metric (for the remaining 36 cases, 12 were ongoing; for the other 24 cases, both the driver and outcome were categorized as neutral by the authors). Out of these 217 cases, 58 per cent (n=132) were categorized as 'enhancing' climate regulation and the rest (n=85) were categorized as 'hindering' climate regulation. This suggests that, so far, climate litigation has had a 'constructive influence' on regulation in general, including on climate regulation. Subsequent work to assess which factors influence these trends, and how this influence varies across countries, is currently ongoing.

## 9.5 CONCLUDING REMARKS

While the legislature has traditionally been an important arena for climate change action, the judiciary has recently shown an increasing role in policy debates. This chapter aimed to deepen the understanding of this emerging trend across 25 jurisdictions.

We find that the majority of cases have climate change at the periphery of the argument, address climate mitigation, and deal with administrative matters – each one of these three criteria responding for nearly 80 per cent of the sample. Lawsuits oriented towards climate policies and legislation, information and disclosure or loss and damage each represent only approximately 7 per cent of the total court cases. Our results also suggest that courts play an enhancing role in climate regulation. Our assessment should only be considered a first-pass, as more comprehensive data on court cases can provide further insights on the link between litigation and climate regulation.

This chapter outlines four avenues for future research. First, more analysis is warranted for cases that have climate change as a primary objective. While they are still in the minority in our database, in recent years these



types of lawsuits have become more common. Second, future work on climate may want to draw on the experience of other issues that involve high levels of risk, external cost structures and, perhaps, similar power dynamics among actors. For example, lessons can be drawn from developments in anti-tobacco regulation, where powerful companies admitted withholding information and misleading the public regarding impacts on health. Such an effort is likely to rest on the ability to attribute historic pollution to specific companies and on the possibility that companies denied the science behind climate change or misled the public. Third, future research can investigate how these court decisions impact upon action undertaken by non-state and sub-national actors in complement to the multilateral climate regime and the associated contributions made by national governments. Fourth, litigation may play an increasing role in holding governments to account for planned mitigation and adaptation actions, formalized through their official submissions of nationally determined contributions to the UNFCCC regime under the Paris Agreement.

## NOTES

1. In Markell and Ruhl's analysis, 'pro-regulation' cases are those filed by environmental groups seeking judicial interpretations that would require an agency to regulate industry or impose liability more stringently to limit GHG emissions or respond to the effects of climate change. 'Anti-regulation' cases are those in which industry and other interests use litigation in an effort to suppress climate change as a factor in regulation and liability decision making.
2. In Peel and Osofsky's (2015) framework, impacts are 'direct' when 'the litigation leads to a change in the legal regime governing climate change or GHG emissions' (p.154), and 'indirect' when cases provide 'a motivation for action to reduce emissions or adapt to climate change by government, corporations, environmental groups, and/or individuals' (p.155).
3. These related concerns are also critical to discussions on the implementation of the commitments made under the new Paris Agreement, but this international perspective is beyond the scope of this analysis.
4. In *Massachusetts v Environmental Protection Agency*, the Supreme Court held by five to four that the agency's duties to regulate air-pollutants under the existing Clean Air Act included responsibilities for GHGs, such as carbon emissions from motor vehicles, and that the agency's failure to take any action was 'arbitrary and capricious' and therefore unlawful.
5. Based on an assessment of 173 cases of litigation excluding the USA and concentrated in five jurisdictions (Australia, the United Kingdom, the European Union, New Zealand and Spain), collected by the Sabin Center for Climate Change. Wilensky (2015, p.175) notices that less than one-quarter of the cases were substantive climate change regulation cases, and almost all of those were challenging laws and policies controlling GHG emissions; only two claims required a legislature or agency to promulgate a statute or policy establishing new or more stringent limits on emissions.
6. The full list of jurisdictions included in the sample are as follows: Australia (77 cases), Austria (1), Belgium (1), Brazil (11), Canada (12), Colombia (1), Czech Republic (1), Ecuador (1), European Union (42), France (4), Germany (3), India (9), Ireland (1), New



Zealand (16), Netherlands (2), Nigeria (1), Norway (1), Pakistan (2), Philippines (1), South Africa (1), Spain (13), Sweden (1), Switzerland (1), Ukraine (2) and the United Kingdom (49).

7. Sabin Center, and Arnold and Porter Kaye Scholer, maintain a US climate litigation database: <http://wordpress2.ei.columbia.edu/climate-change-litigation/us-climate-change-litigation/>.
8. The database is available at <http://www.lse.ac.uk/GranthamInstitute/legislation/>.
9. Potential climate change cases are collected on a regular basis with the help of attorneys and law professors around the world, and are assessed against the criteria described above by attorneys with experience in energy, environmental and climate change-related law. Those attorneys draft case summaries and categorize cases for entry into the database. Volunteer peer reviewers review those summaries for accuracy and to ensure that they contextualize the case correctly.
10. Efforts to obtain more comprehensive and consistent data are under way.
11. *Gray v. Minister for Planning* [2006] 152 LGERA 258 (Australia); *Xstrata Coal Queensland v. Friends of the Earth* [2012] QLC 013 (Australia); *Bulga Milbrodale Progress Association v Minister for Planning and Infrastructure* [2013] NSWLEC 48 (Australia).
12. Case C-366/10 *Air Transport Association of America v. Secretary of State for Energy and Climate Change* [2011] ECR I-13755, challenging the inclusion of US airline companies in the European Emission Trading Scheme.
13. In the USA, corporations have been taken to courts accused of having misled investors and the public on climate change and failed to disclose the findings of their own climate change research, including their awareness about the risks posed by their emitting activities (*Native Village of Kivalina v. ExxonMobil Corp* and *Comer v. Murphy Oil USA Inc.*).
14. See *Environment-People-Law v. Ministry of Environmental Protection*, Lviv Circuit Admin Court (2009) (Ukraine); *Friends of the Earth Canada v. The Governor in Council* [2008] FC 1183 (Canada).
15. In the North American cases mentioned in the previous note, the Inupiat Eskimo peoples from Alaska alleged that the activities of a group of energy companies were responsible for the transboundary release of GHGs that produced a series of adverse climate change-related impacts in Kivalina (coastal erosion and the melting of Arctic sea ice and permafrost), ultimately leading to their displacement and relocation. Similarly, the residents of Louisiana alleged that the emitting activities of energy companies contributed to climate change and intensified the destructive capacity of Hurricane Katrina.
16. There are a number of cases that relate to both mitigation and adaptation. However, we classified each case based on which was the ‘best fit’ so that it would be mutually exclusive.
17. There are a number of cases; however, for instance in Australia, where regulatory policy mostly relates to adaptation, mostly about coastal planning and risks from climatic hazards.

## REFERENCES

- Bergkamp, L. and J.C. Hanekamp (2015), ‘Climate change litigation against states: the perils of court-made climate policies’, *European Energy and Environmental Law Review*, **24**(5), 102–14.
- Burns, W.C.G. and H.M. Osofsky (eds) (2009), *Adjudicating Climate Change – State, National and International approaches*, Cambridge: Cambridge University Press.

- Carnwath, J.S.C. (2016), 'Climate change adjudication after Paris: a reflection', *Journal of Environmental Law*, **28**(1), 5–9.
- Colares, J.F. and K. Ristovski (2014), 'Pleading patterns and the role of litigation as a driver of federal climate change legislation', *Jurimetrics*, **54**(4), 329.
- Cox, R. (2016), 'A climate change litigation precedent: Urgenda Foundation v The State of the Netherlands', *Journal of Energy & Natural Resources Law*, **34**(2), 143–63.
- de Graaf, K.J. and J.H. Jans (2015), 'The Urgenda decision: Netherlands liable for role in causing dangerous global climate change', *Journal of Environmental Law*, **27**(3), 517–27.
- Fisher, E. (2013), 'Climate change litigation, obsession and expertise: reflecting on the scholarly response to Massachusetts v. EPA', *Law & Policy*, **35**(3), 236–60.
- Gerrard, M.B. (2017), 'Tables are turned as state AGs set their sights on Pruitt', accessed 4 March 2017 at <http://www.eenews.net/stories/1060050763>.
- Gerrard, M.B. and M. Wilensky (2016), 'The role of the national courts in GHG emissions reductions', in D.A. Farber and M. Peeters (eds), *Climate Change Law*, Cheltenham: Edward Elgar, pp. 359–76.
- Hilson, C.J. (2010), 'Climate change litigation: an explanatory approach (or bringing grievance back in)', in F. Fracchia and M. Occhiena (eds), *Climate Change: La Riposta del Diritto. Editoriale Scientifica*, pp. 421–36.
- IBA – International Bar Association (2014), *Achieving Justice and Human Rights in an Era of Climate Disruption. Climate Change Justice and Human Rights Task Force Report*, accessed on 27 February 2017 at <http://www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx>.
- Lord, R., S. Goldberg, L. Rajamani and J. Brunnée (2012), *Climate Change Liability: Transnational Law and Practice*, Cambridge: Cambridge University Press.
- Markell, D.L. and J.B. Ruhl (2012), 'An empirical assessment of climate change in the courts: a new jurisprudence or business as usual?', *Florida Law Review*, **64**(1), 15–86.
- Martin, P. and A. Kennedy (2015), *Implementing Environmental Law*, Cheltenham: Edward Elgar Publishing.
- Nemesio, I.V. (2015), 'Strengthening environmental rule of law: enforcement, combatting corruption, and encouraging citizen suits', *The Georgetown International Environmental Law Review*, **27**, 321–42.
- Osofsky, H.M. (2009), 'The intersection of scale, science, and law in Massachusetts v. EPA', in W.C.G. Burns and H.M. Osofsky (eds), *Adjudicating Climate Change: State, National, and International Approaches*, New York: Cambridge University Press.
- Peel, J. and H.M. Osofsky (2013), 'Climate change litigation's regulatory pathways: a comparative analysis of the United States and Australia', *Law & Policy*, **35**(3), 150–83, doi:10.1111/lapo.12003.
- Peel, J. and H.M. Osofsky (2015), *Climate Change Litigation Regulatory Pathways to Cleaner Energy*, Cambridge: Cambridge University Press.
- Preston, B.J. (2016a), 'The contribution of the courts in tackling climate change', *Journal of Environmental Law*, **28**(1), 11–17.
- Preston, B.J. (2016b), 'The role of the courts in facilitating climate change adaptation', *The Asia-Pacific Centre for Environmental Law Climate Change Adaptation Platform*, accessed 27 February 2017 at <https://ssrn.com/abstract=2829287>.
- Sampson, B. and S. Kaiser (2011), 'Climate Change Litigation – How soon is

- Now?', Shook Hardy & Bacon LLP, accessed 27 February 2017 at <http://whoswho.legal.com/news/features/article/29096/climate-change-litigation-soon-now>.
- Vanhala, L. (2013), 'The comparative politics of courts and climate change', *Journal Environmental Politics*, **22**(3), 447–74.
- Van Renssen, S. (2016), 'Courts take on climate change', *Nature Climate Change*, **6**, 655–6, doi:10.1038/nclimate3067.
- Van Zeben, J. (2015), 'Establishing a governmental duty of care for climate change mitigation: will Urgenda turn the tide?', *Transnational Environmental Law*, **4**(2), 339–57, doi:10.1017/S2047102515000199.
- Watts, K.A. and A.J. Wildermuth (2008), 'Massachusetts v. EPA: breaking new ground on issues other than global warming', *Northwestern University Law Review*, **102**(1), 1029–46.
- Wilensky, M. (2015), 'Climate change in the courts: an assessment of non-U.S. climate litigation', *Duke Environmental Law & Policy Forum*, **XXVI**, 131–79.