Interstate liability for climate change-related damage
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4 Liability for Climate Change-Related Damage in Domestic Courts

4.1 Introduction

The past decade has seen a rise in climate change litigation worldwide. The number of climate change-related claims filed in 2010 in the US alone reached as many as 170. Just a few years ago national courts took up only a small number of climate change cases. By 2013, terms like ‘challenges to state action slide,’ ‘challenges to federal action slide,’ and ‘Clean Air Act slide’ have become part of US lawyers’ vocabulary. Climate change litigation has also been spreading to other jurisdictions. However, until today, no GHG emitter has been found liable for climate change-related damage by any domestic court.

Climate change lawsuits, albeit geographically widespread, have been limited to a handful of jurisdictions, predominantly common law systems, with the US and Australia leading the way. This chapter discusses climate change litigation in domestic courts and identifies the legal challenges to establishing liability for climate change-related damage. In its assessment of climate change jurisprudence, the chapter draws mainly on the case law from the US and Australia because those two countries have seen the greatest share of climate change claims litigated to date. It is submitted that domestic litigation insofar as liability principles are concerned may inform international liability principles through the concept of general principles of law. It must be acknowledged that there exist considerable challenges to transposing domestic principles to international law. A general principle of law is a proposition of law so fundamental that it will be found in virtually every legal system and can usually be identified through a comparative law process. It is admitted that, albeit on the rise, domestic litigation of climate change-related claims has not yet permeated many legal systems. At the moment, it is debatable whether the overall number of adjudicated claims in a limited number of jurisdictions can constitute a representative sample to warrant a comparative

324 Columbia Center for Climate Change Law; <www.climatecasechart.com/> (last visited on 11 January 2013).
325 E.g. Climate change-related actions have been launched in the US, Australia, New Zealand, the UK, Canada, the European Union, Germany, France, the Philippines, Nigeria, Ukraine, and the Czech Republic; see Columbia Center for Climate Change Law; <www.climatecasechart.com/> (last visited on 11 January 2013).
approach. The present author has deemed it instructive to consider the existing climate change-related claims, fully aware of the above-mentioned difficulties. A comparative study of climate litigation may merit further scholarly consideration in the future.

Climate change plaintiffs, ranging from environmental groups to federal states and private individuals, have brought actions in domestic courts inculpating corporations, government agencies, oil refineries, motor vehicle manufacturers, power plants, and other public and private entities. *Inter alia*, actions have been brought in tort (*e.g.* public nuisance, negligence, civil conspiracy, misrepresentation), under administrative law (including merits review and judicial review), and constitutional law. One goal of climate change litigation has been “to impose legal liability upon a party that is somehow responsible for the emission of greenhouse gases that contribute to climate change,” albeit in practice, climate change lawsuits have targeted a broader range of issues, such as forcing municipal or federal governments to act or challenging the approval of particular GHG-intensive projects or projects likely to be affected by climate change impacts.

Since most of the cases have been adjudicated in US and Australian courts, the growing public concern with the climate change issue appears to be reinforced by relative non-involvement of the legislative and executive branches of government and the slow pace of regulation on the matter. It must be noted that although Australia has ratified the Kyoto Protocol, it remains one of the largest *per capita* emitters in the world due to its reliance on coal-fired power production. The US has not ratified the Kyoto Protocol and therefore, will not be bound by any emissions reduction commitments under it. To reduce its carbon output, the US has elected to tackle the global climate change challenge through domestic action, which is not based on any international treaty.

The perceived lack of government action has prompted environmental groups and other plaintiffs to resort to the help of the judiciary with a view to fill legislative lacunae with judicial precedent. This upsurge of climate change

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litigation is not only indicative of public demand for legal action but can also be seen as a way ‘to attract public attention and pressure [governments] to reach political solutions, including treaties and domestic laws.’ Peel has described climate change litigation as ‘a promising strategy for raising the profile of the global warming issue and forcing business and governments to change their decision-making practices with regard to GHG emissions.’ Despite the fact that in many countries, adequate legal instruments for adjudicating global warming claims may be lacking, some authors anticipate that climate change litigation will keep spreading to other jurisdictions. Whereas domestic litigation may eventually force the reluctant governments to act, it has been observed that it is unlikely to have any significant effect on the climate change problem. Notwithstanding the fact that the overall general impact of litigation may be quite small, many climate change actions have been brought before national courts in an attempt to test various legal pathways to liability.

The present analysis has been limited to a selection of claims that broadly relate to liability, which is why many climate change-related actions, albeit significant in the global warming context, fall outside the scope of this chapter. For example, the human rights law-based *Shell Nigeria* case, in which the applicants raised concerns about gas-flaring in Nigeria and alleged violations of the right to life (including the right to a healthy environment) and the right to human dignity, is not included in this study. Likewise excluded is the 2006 Inuit people’s ‘Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States.’ Windmill cases are not addressed in the present analysis as plaintiffs’ claims have not been based on climate change concerns. Other examples of

331 Hsu 2008, p. 718.
333 Peel 2007, p. 103.
335 B. Preston, ‘Climate change litigation,’ paper delivered to Climate Change Governance after Copenhagen Conference, Hong Kong, 4 November 2010, p. 1.
climate change-related cases falling outside the scope of the present research include Dimmock v. Secretary of State for Education and Skills,339 which involved an application to declare unlawful a decision by the Secretary of State for Education and Skills to distribute to every state secondary school in the United Kingdom (UK) a copy of Al Gore’s film, ‘An Inconvenient Truth;’ and the German BUND and Germanwatch case, in which the applicants challenged the decision of the Minister for Economy and Labour denying the applicants’ request for information on energy production projects.340

In order to identify some cross-cutting challenges shared by a multitude of climate change actions in different jurisdictions, the methodological approach adopted by this chapter is based on the type of relief sought by the plaintiffs. On that basis, three general categories of climate change liability lawsuits have been analysed: (1) claims related to procedural injury (including challenges to environmental impact assessments (EIAs) and judicial review cases); (2) claims for injunctive and/or declaratory relief; and (3) claims for compensation. This structure echoes the approach used in the analysis of interstate liability in Chapter 3, which is based on various forms of redress involving the obligation to pay compensation; the obligation to ensure prompt, adequate, and effective compensation; the obligation to negotiate a redress settlement; and the obligation to take response measures. It also resonates with the discussion of the content of state responsibility, i.e. the obligations of cessation, and reparation for injury in the form of restitution, compensation or satisfaction. The obligation of cessation and non-repetition is of particular significance as in practice it may be seen to correspond with injunctive relief in municipal legal systems (see Chapters 3 and 5). Within each category, the presentation of cases is chronological, unless stated otherwise.341

It has been the author’s initial aim to cover all cases related to procedural injury, injunctive relief and actions for damages in all jurisdictions, on which information had been published in English before 1 October 2012. However, in the course of the research, the number of procedural injury cases has proliferated.342

341 Where the decision of a lower court is appealed, the year of the decision on appeal is used to date the case for the purposes of the order of presentation.
Consideration of the facts and findings of all these cases would be repetitious and not conducive to a reader-friendly reflection of the research results. For that reason, a selection of procedural injury cases that represent different jurisdictions and different procedural injury issues has been made.

Pursuant to and relying upon the case law analysis, the legal problems associated with climate change liability are identified for each type of legal action. First, procedural injury claims are examined; next, the chapter considers claims for injunctive and/or declaratory relief; and finally, claims for compensation are dealt with, followed by some concluding remarks. Climate change lawsuits brought to date have posed profound challenges to plaintiffs. Legal obstacles to liability have included standing, causation, attribution of an act to the defendant, retroactivity, and other, mostly country-specific, procedural difficulties, such as non-justiciability of political questions.

4.2 Identification of Legal Challenges in Climate Change Claims

4.2.1 Claims Related to Procedural Injury

Claims related to procedural injury, including challenges to EIAs and judicial review cases, can be seen as the most successful category of climate change claims, although procedural justice does not offer any immediate relief to plaintiffs as it is based on procedural, and not actual, injury. Procedural injury complaints do not directly challenge defendants’ actions contributing to global warming, which helps plaintiffs to overcome standing problems and other obstacles inherent in claims for compensation and injunctions (see Sections 4.2.2 and 4.2.3). Legal actions in this category are often brought under administrative law as judicial review cases or cases challenging the competent authority’s non-compliance with certain procedural requirements, such as EIA-related duties. Plaintiffs in such cases may also be challenging the content of certain EIAs insofar as global warming is not considered or is taken into account to an insufficient degree by the relevant agencies.

4.2.1.1 Political Question Doctrine

Rooted in the idea of the separation of powers, the political question doctrine is based on the notion that the judiciary must not intervene in policy issues.

procedural injury cases, see also Columbia Center for Climate Change Law; <www.climatecasechart.com/> (last visited 11 January 2013).

appropriately left to be decided by the government. Generally, procedural injury claims have not been hampered by the political question doctrine to the same degree as claims for compensation or injunctive relief.

In 1994, an Australian court was cautious in deciding the first global warming claim to be filed in Australia – *Greenpeace Australia v. Redbank Power Company*. The case concerned an appeal brought against the decision to grant development consent for the construction of a coal-fired power plant. Greenpeace complained that the proposed development would increase the total quantity of carbon dioxide emitted in New South Wales and thus contribute to the greenhouse effect. The applicant invited the court to apply the precautionary principle and refuse to grant consent to the proposed development. The court held that CO₂ emitted by the project would contribute to the greenhouse effect, which was ‘a matter of national and international concern.’ In reference to the UNFCCC’s work, the court noted that the response to the enhanced greenhouse effect was in the realm of governmental policy. It found that there was uncertainty as to what impact the project’s emissions would have on global warming. The court admitted that the application of the precautionary principle dictated that a cautious approach be adopted and stressed that nonetheless it did not require that the greenhouse issue outweigh all other issues, which is why the development was approved.

The UNFCCC entry into force in 1994 and Australia’s ratification of the KP in 2007 have clarified governmental policy on climate change. This, together with the fact that scientific certainty about the causes and effects of climate change has substantially increased since 1994, undoubtedly affected a ‘greener’ outcome of several cases subsequently decided in Australia.

### 4.2.1.2 Standing

Standing, or *locus standi*, is a threshold requirement that, if proven, enables the court to hear a case. Standing ‘addresses whether a party to a law suit is a proper party to sue, and does not address whether the asserted claim is appropriate;’ it is ‘one factor in determining whether a suit is legitimately justiciable in court.’ If a plaintiff is found to have no standing, their case will not reach the merits stage of the proceedings. Standing in climate change cases has often amounted to a serious

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344 For a detailed discussion of the political question doctrine, see Sections 4.2.2.1 and 4.2.3.1.
hurdle, particularly in US courts; however, claims related to procedural injury have not been hindered to the same degree as claims for injunctive or compensatory relief.

Article III of the US Constitution limiting the power of the courts to hearing cases and as opposed to giving advisory opinions does not contain specific requirements for standing; the so-called Article III standing requirements developed in case law. Referring to its earlier decision in *Lujan v. Defenders of Wildlife*, the US Supreme Court formulated them as follows:

[T]o satisfy Article III’s standing requirements, a plaintiff must show (1) it has suffered an ‘injury in fact’ that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

In establishing these requirements, the onus is on the plaintiff.

As mentioned earlier, standing has not been a major obstacle for plaintiffs in procedural injury claims. For example, in *Friends of the Earth v. Mosbacher*, the court explicitly stated that the standing requirements were less stringent in procedural injury cases. This case was initially known as *Friends of the Earth v. Watson* when non-governmental organizations (NGOs) Friends of the Earth and Greenpeace and the cities of Boulder, Colorado; Arcata, California; and Oakland, California, filed a suit against two government agencies: the Overseas Private Investment Corporation (OPIC) and the Export-Import Bank of the US (Ex-Im). The plaintiffs alleged that the defendants provided financial assistance to projects that contributed to climate change without conducting EIAs required under the National Environmental Policy Act 1969 (NEPA). In their brief, the plaintiffs pointed out that the amount of carbon dioxide attributable to the projects supported by OPIC and Ex-Im was ‘much higher than the entire amount of CO2 that was released from the worldwide consumption of petroleum, natural gas, coal, and the flaring of natural gas in the year 2000.’ The plaintiffs challenged OPIC’s and Ex-Im’s determinations that the projects they supported did not have a significant environmental impact. The court found that the plaintiffs had standing to bring their

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351 2004 WL 5584704 (Trial Pleading) Complaint for Declaratory and Injunctive Relief (Second Amended) Administrative Procedure Act Case (Jan. 16, 2004), *Friends of the Earth, Inc. v. Watson*, para. 151, emphasis in the original.
claim noting the lower threshold for causation in procedural injury cases. It found that the plaintiffs demonstrated an injury in fact by presenting the evidence that the emissions from the projects supported by the defendants would threaten their concrete interests. Given the lower causation and redressability standards in procedural injury cases, the court found the plaintiffs to have sufficiently alleged both. It is significant that under the procedural-right analysis, the redressability and immediacy requirements are relaxed. In other words, in order to establish procedural standing, a plaintiff only has to show that they have a concrete procedural interest that is threatened. As the Supreme Court noted in Lujan v. Defenders of Wildlife, standing as a procedural right has to satisfy the following elements: (1) ‘the plaintiff must be a person ‘accorded a procedural right to protect his concrete interest’’ and (2) ‘the plaintiff must have some concrete interest threatened that is the ultimate foundation of his or her standing.’

Two years later, the court assessed the merits of the case ruling that the plaintiffs were not entitled to an injunction directing the defendants to carry out an Environmental Impact Statement (EIS) for every fossil fuel project they might approve in the future. Under NEPA, only ‘major Federal actions significantly affecting the quality of the human environment’ necessitate an EIS. Therefore, the court found it impossible to conclude as a matter of law that ‘every fossil fuel related project that Ex-Im or OPIC may undertake in the future will trigger NEPA’s requirements.’ Eventually, the case was settled in February 2009. Under the settlement, Ex-Im will begin to take carbon dioxide emissions into consideration when deciding whether or not to approve transactions related to fossil fuel projects. Ex-Im will also develop and implement a carbon policy and promote consideration of climate change issues. According to the settlement, OPIC will adopt a policy of reducing by 20 per cent over the next 10 years GHG emissions associated with projects that emit more than 100 thousand tons of CO₂ equivalents per year.

In another US case, Center for Biological Diversity v. Interior, the petitioners advanced two theories of standing: substantive and procedural. The case concerned a Leasing Program of the US Department of Interior directed at the expansion of

354 Friends of the Earth, Inc. v. Mosbacher, 488 F.Supp. 2d 889 (N.D.Cal. 2007).
358 Center for Biological Diversity v. United States Department of the Interior, 563 F. 3d 466 (D.C.Circ. 2009).
leasing areas within the Outer Continental Shelf. The petitioners challenged the approval of this Leasing Program by the Secretary of the Interior. Among other things, the petitioners argued that the Leasing Program violated both the Outer Continental Shelf Lands Act (OCSLA) and the National Environmental Policy Act (NEPA) because Interior had failed to consider the effects of climate change.359

Distinguishing the case from Massachusetts v. EPA (see Section 4.2.2.2 below), the court found that the petitioners lacked standing on their substantive theory failing to establish the injury and causation. However, the court found that the petitioners did have standing on their procedural theory because they had shown that they possessed ‘a threatened particularized interest, namely their enjoyment of the indigenous animals of the Alaskan areas listed in the Leasing Program.’360

On the merits, the court found that the petitioners’ NEPA challenges were not ripe for review because the plaintiffs’ rights had not been implicated since no lease-sales had yet occurred at the moment they filed their petitions. As regards the plaintiffs’ justiciable OCSLA-based claims, they were found to lack merit and as such had to fail. However, the court concluded that the petitioners’ challenge to the Leasing Program on grounds that the Program’s environmental sensitivity rankings were irrational was meritorious. Thus, the Leasing Program was vacated and remanded to the Secretary of the Interior for reconsideration.

In Australian environmental law, standing depends on the nature of the claim, the relief sought, and any applicable law as well as the court’s assessment of the circumstances of the case. Some statutes, e.g. the Heritage Properties Conservation Act 1983, establish very broad standing requirements: ‘any interested person’ is entitled to bring a claim. Common law principles regarding standing apply in States and Territories that do not have administrative law procedure statutes, and the test of whether a plaintiff has a ‘special interest in the subject matter’ is used.361 The requirements for having a ‘special interest’ have been expressed in Australian Conservation Foundation v. Commonwealth. A person has a ‘special interest’ if:

(1) the person or group will suffer actual or apprehended injury to some material or non-material spiritual or cultural interest(s);

(2) the person or group has been specially affected to a substantially greater degree or a significantly different manner than the general public; and


(3) there exists a relationship of a sufficient proximity between the interest and the plaintiff individual or group.\textsuperscript{362}

Standing has not been at issue in Australian climate change cases because most of Australia’s global warming legal actions have been brought as requests for judicial review under particular statutes and the applicants’ standing has not been challenged.

Thus, in procedural injury cases analysed above, standing cannot be said to inhibit climate change plaintiffs as allegations of procedural injury are aided by a standing threshold lower than when actual injury is alleged.

### 4.2.1.3 Causation

Causation in climate change cases has been described as ‘the greatest obstacle to the majority of plaintiffs.’\textsuperscript{363} In the US climate change litigation, the problem of causation has generally been two-fold. First, causation must be proven as an element of standing: the injury has to be ‘fairly traceable’ to the actions of a defendant (see Section 4.2.1.1 above). Second, causation would have to be proven at the merits stage of the proceedings. It is apparent that the standard of proof in the latter case must be higher than that for establishing standing; yet, few climate change liability cases have been argued on the merits. Causation requirements for demonstrating standing in procedural injury cases are lower than in cases alleging actual injury and ‘environmental plaintiffs need not show that substantive environmental harm is imminent.’\textsuperscript{364}

In \textit{Natural Resources Defense Council v. Kempthorne}, the plaintiffs challenged a 2005 Biological Opinion issued by the US Fish and Wildlife Service pursuant to the Endangered Species Act. In this judicial review case, the plaintiffs did not need to demonstrate Article III standing. This case concerned the effect on a threatened species of fish, the Delta smelt, of the coordinated operation of the federally managed Central Valley Project (CVP) and California’s State Water Project (SWP). CVP and SWP are among the world’s largest water diversion projects.\textsuperscript{365} The plaintiffs moved for summary judgment on the grounds, \textit{inter alia}, that the


\textsuperscript{363} Smith & Shearman 2006, p. 107. Due to differences in approaches to causation between different jurisdictions, claims in the current section are presented in the following way: chronologically organized US claims come first and claims from Australia and New Zealand come second, also organized in the chronological order.

\textsuperscript{364} \textit{Friends of the Earth, Inc. v. Watson}, 35 ELR 20179 (N.D.Cal. 2005).

biological opinion failed to consider the possible effects of climate change on the smelt’s habitat. The plaintiffs argued that despite the evidence that climate change could seriously impact the smelt, the biological opinion had not taken into account its probable effects. The court noted that while the precise magnitude of climate change-related changes was uncertain, ‘judgments about the likely range of impacts [could] and [had] been made.’ The court expressed some doubt as to the precise impacts of climate change, ruling that the likely range of such impacts had nonetheless to be taken into account. The court found in favour of the plaintiffs as to their climate change claim stating that the ‘absence of any discussion in the [biological opinion] of how to deal with any climate change is a failure to analyse a potentially “important aspect of the problem.”’

In *Center for Biological Diversity v. Interior*, causation had to be established as an element of standing. In this case, the plaintiffs were afforded procedural standing whereby the causation and redressability elements of the Article III standing test were relaxed. Meanwhile, in rejecting the plaintiffs’ substantive theory of standing, the court observed:

> In order to reach the conclusion that Petitioners are injured because of Interior’s alleged failure to consider the effects of climate change with respect to the Leasing Program, Petitioners must argue that: adoption of the Leasing Program will bring about drilling; drilling, in turn, will bring about more oil; this oil will be consumed; the consumption of this oil will result in additional carbon dioxide being dispersed into the air; this carbon dioxide will consequently cause climate change; this climate change will adversely affect the animals and their habitat; therefore Petitioners are injured by the adverse effects on the animals they enjoy. *Such a causal chain cannot adequately establish causation because Petitioners rely on the speculation that various different groups of actors not present in this case – namely, oil companies, individuals using oil in their cars, cars actually dispersing carbon dioxide – might act in a certain way in the future.*

Similarly, due to a lower standard of proof, the plaintiffs in *Friends of the Earth v. Watson* were able to establish procedural standing having shown that it was ‘reasonably probable’ that the challenged action would threaten their concrete interests.

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Australian courts have traditionally applied ‘the common sense and experience test encompassing the ‘but for’ test,’ i.e. the court would consider whether or not the plaintiff’s damage would have occurred but for the defendant’s actions. The plaintiff is required to show that the defendant’s acts caused the damage suffered and there must be ‘a more probable inference in favour of what is alleged’ and not just a mere possibility. As regards climate change, it is ‘difficult to identify, on the balance of probabilities, that the greenhouse gas emissions of the defendant caused the harm suffered in the presence of […] scientific doubt.’

For the purposes of clarifying climate change causation in claims related to procedural injury as dealt with in Australian and New Zealand courts, it is also helpful to distinguish between general causation and specific causation. The former ‘requires proof that anthropogenic emissions cause changes in radiative forcing and thus the global climate,’ while the latter ‘requires proof that a particular impact or injury is attributable to (particular) anthropogenic emissions or to the global warming caused by them.’ It is essential to separate (a) the causal link between overall anthropogenic emissions and climate change from (b) climate change damage being caused by emissions from a specific source, if only by way of contribution. General causation can thus be regarded as a prerequisite for specific causation. Albeit application of the precautionary principle by Australian courts, as will be demonstrated below, has in some instances resulted in a lower standard of proof, showing specific causation has posed considerable challenges in a number of Australian procedural injury cases.

In light of new evidence published in the 2007 IPCC AR4, scientific doubt can no longer be used as a ground for rejecting the general causal link between GHG emissions, climate change, and its injurious manifestations (see Chapter 1). Correspondingly, as this section will show, the Australian courts’ view of causation in climate change claims related to procedural injury has gradually evolved.

The Environment Court of New Zealand was liberal in its approach in *Environmental Defence Society v. Auckland Regional Council* and accepted both the general causal connection between GHG emissions and climate change, and the specific link between climate change and emissions from a particular source. This

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373 Durrant 2007.
appeal involved an application for resource consent to construct and operate a 400 megawatt gas fired combined cycle power station at Otahuhu C in South Auckland. Since the air discharge consent granted by the Regional Council included no condition addressing the discharge of any GHGs, the Environmental Defence Society sought an imposition of such a condition ‘to offset all the carbon dioxide emissions by the planting of trees to act as “carbon-sinks.”’\textsuperscript{376} The Environment Court analysed New Zealand’s international commitments under the UNFCCC and the Kyoto Protocol and concluded that New Zealand was under an obligation to reduce its GHG emissions by, \textit{inter alia}, using carbon sinks. On the evidence presented, the court found that

\begin{quote}

the greenhouse effect and the possibility of climate change are a matter of serious concern. It is difficult to assess the degree of concern because there are widely differing opinions as to the likely environmental consequences. However the weight of scientific opinion is such, that on balance, the threat posed by the enhanced greenhouse effect is sufficiently significant for us to conclude that the greenhouse effect is likely to result in significant changes to the global environment, including New Zealand and the Auckland region.\textsuperscript{377}
\end{quote}

The Environment Court dismissed the appeal and did not impose on the air discharge consent the condition requested by the Environmental Defence Society. The court stressed its inability to assess the reasonableness and appropriateness of the proposed condition. However, the court accepted that ‘the present scientific consensus [was] that the cumulative anthropogenic emissions of carbon dioxide on a global basis contribute[d] to climate change.’\textsuperscript{378} It also noted that while it was not possible to definitively quantify, the prognosis was sufficiently serious for the court to find that ‘the proposed emissions from Otahuhu C [would] result, in a cumulative way, in an adverse effect of some consequence.’\textsuperscript{379} In accepting the scientific consensus with regard to anthropogenic emissions contributing to climate change and finding that emissions from a given source would cumulatively result in an adverse effect, the court recognized the specific causal link.

The causal link between future emissions from a particular source and the resultant adverse effects upon the world climate was stressed in \textit{Australian Conservation Foundation v. Minister for Planning}. In this judicial review application, the Victorian Civil and Administrative Tribunal (VCAT) considered the question whether a planning panel could refuse to consider the environmental effects of GHG emissions resulting from continued operation of the Hazelwood

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Power Station. Brown coal reserves resourcing the Hazelwood Power Station were due to run out in 2009 and the owner applied to extend the power station’s operation until 2031. A panel set up to consider the proposal was instructed by the Minister not to consider GHG emissions from the power station. Environmental groups who had made submissions on the issue of GHG emissions brought proceedings to the VCAT challenging the exclusion from the panel’s consideration of GHG-related matters. The court found that the environmental impacts of GHG emissions were relevant and that the panel should have considered ‘submissions to the effect that the continuation of the Hazelwood Power Station may have adverse environmental effects by reason of the generation of greenhouse gases’ as required under the Planning and Environment Act, notwithstanding the Minister’s instructions.\(^{380}\)

In considering the approval of the Hazelwood Power Station’s continued operation, the court found that there was

\[\ldots\] a sufficient nexus between the approval of Amendment C32 and the environmental effect of greenhouse gases that are likely to be produced by the use of the Hazelwood Power Station beyond 2009. \[\ldots\] Put another way, the approval of Amendment C32 will make it more probable that the Hazelwood Power Station will continue to operate beyond 2009; which, in turn, may make it more likely that the atmosphere will receive greater greenhouse gas emissions than would otherwise be the case; which may be an environmental effect of significance.\(^{381}\)

Thus, the court recognized the role of a single GHG-intensive project in causing a significant environmental effect by way of emissions released in the course of its operation.

The two types of causation have been satisfactorily established in *Gray v. Minister for Planning*,\(^{382}\) also known as the Anvil Hill case.\(^{383}\) The applicant challenged an EIA carried out for the construction of a coal mine on Anvil Hill alleging that (1) the assessment did not comply with the environmental assessment requirements and that (2) the Director-General of the Department of Planning failed to take into account the principles of ecologically sustainable development (ESD), *i.e.* the precautionary principle and intergenerational equity. The court noted that the issue of causation arose with regard to the second point of challenge. In finding

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\(^{380}\) *Australian Conservation Foundation v. Minister for Planning* [2004] VCAT 2029, para. 49; the Minister’s issuance of terms of reference to the panel directing it not to consider GHG-related matters was addressed through a separate process.

\(^{381}\) *Australian Conservation Foundation v. Minister for Planning* [2004] VCAT 2029, paras 46-47.

\(^{382}\) *Gray v. Minister for Planning and Ors* [2006] NSWLEC 720.

that there was ‘a sufficiently proximate link between the mining of a very substantial reserve of thermal coal [in New South Wales and] the emission of GHG which contribute[d] to climate change/global warming,’ the court observed:

Climate change/global warming is widely recognised as a significant environmental impact to which there are many contributors worldwide but the extent of the change is not yet certain and is a matter of dispute. The fact there are many contributors globally does not mean that the contribution from a single large source such as the Anvil Hill Project in the context of NSW should be ignored in the environmental assessment process. The coal intended to be mined is clearly a potential major single contributor to GHG emissions deriving from NSW given the large size of the proposed mine. That the impact from burning the coal will be experienced globally as well as in NSW, but in a way that is currently not able to be accurately measured, does not suggest that the link to causation of an environmental impact is insufficient.

Although the assessment was found to have been in conformity with the environmental assessment requirements, the court ruled that the applicant was successful in relation to the second argument because the Director-General had failed to take the precautionary principle into account. Recognizing the anthropogenic character of climate change (general causation), the court found that the Minister had failed to take the precautionary principle into account when carrying out an EIA for a GHG emitting mine. In view of the fact that one emitter was likely to be responsible only for a proportion of CO₂ contributing to climate change, the court stressed the importance of not ignoring a single source of GHG emissions because of its relatively small contribution to the global concentrations of GHGs in the atmosphere (specific causation).

The general causal link as well as specific causation appear to have been implicitly recognized in Greenpeace v. Northland Regional Council & Mighty River Power, an appeal launched against an earlier decision of the New Zealand Environment Court. Mighty River Power applied to the Northland Regional Council for resource consent to commission its facilities at Marsden B, a coal-fired power station, and Greenpeace opposed the application. The application was granted in large part by amending and striking out parts of Greenpeace’s appeal. The appeal in question was brought against that decision and concerned the correct interpretation of a legislative provision relating to discharge of GHGs, which prohibited authorities from considering the effect of GHG emissions on climate change in discharge and coastal permit applications ‘except to the extent that the

384 Gray v. Minister for Planning and Ors [2006] NSWLEC 720, para. 100.
385 Gray v. Minister for Planning and Ors [2006] NSWLEC 720, para. 98, emphasis added.
use and development of renewable energy enables a reduction in the discharge into air of greenhouse gases.’ The High Court of New Zealand ruled in favour of the appellant and held that climate change was a relevant consideration irrespective of whether a permit application concerned renewable or non-renewable energy production.387

Yet, causation in climate change claims related to procedural injury has not uniformly been the subject of progressive interpretation by the judiciary. For example, in Wildlife Whitsunday, an Australian court was sceptical on the specific causation issue. This application for judicial review concerned challenges to the EIAs conducted for proposals for two new coal mines: the Isaac Plains and the Sonoma projects.388 The applicant submitted that climate change was a matter of national environmental significance and that consideration had to be given to the impact on global warming from the coal to be extracted from the two mines. It was alleged by the applicant that the GHGs emitted as a result of the combustion of the coal from the two mines would contribute to global warming that, in turn, would negatively affect the Great Barrier Reef Heritage Area and the Shoalwater and Corio Bays Ramsar site. The applicant invoked the Convention on Biological Diversity, the World Heritage Convention, the Ramsar Convention, and the UNFCCC and, relying heavily on the latter agreement, stressed Australia’s obligations under those treaties. The applicant’s argument was that the respondent failed to take into account the adverse impacts the two projects were likely to have due to the emissions from the mined coal contributing to global warming. The court found that, in approving the applications, the Minister had in fact taken the environmental effects of GHG emissions into account. None of the numerous grounds for review presented by the applicant were established. With regard to specific causation, the court noted that it was ‘far from satisfied that the burning of coal at some unidentified place in the world, the production of greenhouse gases from such combustion, its contribution towards global warming and the impact of global warming upon a protected matter, [could] be so described.’389

Specific causation remained problematic in Re Xstrata Coal Queensland.390 Xstrata, a mining company, applied to the tribunal for a license to extend the surface area of an open cut coal mine and for the grant of the related environmental authority, i.e. a

390 Re Xstrata Coal Queensland Pty Ltd & Ors [2007] QLRT 33.
mining lease. The tribunal was to make a recommendation to the Minister on the application. Objections were filed by the Queensland Conservation Council that an increase in the mining activity would lead to an increase in GHG emissions that contributed to global warming and climate change. Objections were filed by the Queensland Conservation Council that an increase in the mining activity would lead to an increase in GHG emissions that contributed to global warming and climate change. 391 Queensland Conservation Council requested that conditions be imposed on the grant of the mining licence to ‘avoid, reduce or offset the emissions of greenhouse gases that are likely to result from the mining, transport and use of the coal from the mine.’ 392 The tribunal’s presiding member recommended to the Minister that the application be granted as a whole, without any conditions sought by the objectors as he saw no specific causal link between Xstrata’s GHG emissions and harm caused by global warming and climate change. 393 Notably, the Tribunal did not afford much weight to the IPCC Fourth Assessment Report and, particularly, the Stern Review on the Economics of Climate Change dismissing it as ‘biased, selective and unbalanced’ and ‘scientifically flawed,’394 which is indicative of a measure of scepticism also with regard to general causation.

On appeal, although it was not the function of the court to validate the tribunal’s analysis and methodology, the Queensland Court of Appeal nevertheless stated:

The fact that climate change is occurring and that anthropogenic greenhouse gas emissions have contributed to it, was undoubtedly common ground between the parties at the hearing. […] What was in issue was the extent to which the proposed mine would contribute to global warming and whether, in the applicable factual and statutory matrix, the Tribunal should impose conditions on the recommended granting of Xstrata’s applications in response to the mine’s potential contribution to global warming. 395

This inference is significant in that it reaffirms that the general causal link between GHG emissions and climate change was not challenged.

Appreciation of the threat posed by the rising sea levels caused by climate change was at the crux of the court’s decision in Charles & Howard v. Redland Shire Council, whereby the general causal link between climate change and the rising sea levels and the impacts of the latter on the specific proposed development were recognized. The Supreme Court of Queensland upheld a lower court’s

391 Re Xstrata Coal Queensland Pty Ltd & Ors [2007] QLRT 33, objections.
392 Re Xstrata Coal Queensland Pty Ltd & Ors [2007] QLRT 33, para. 8.
393 Re Xstrata Coal Queensland Pty Ltd & Ors [2007] QLRT 33, para. 21; recommendation.
decision that the impact of climate change on sea levels in a flood susceptible area proposed to be filled for residential development justified a condition of relocating the proposed development to an area less prone to tidal inundation. The Council approved the applicant’s development application but imposed several conditions, one of which prohibited siting the proposed development at the applicant’s location of preference citing climate change-related tidal inundation. One of the questions put to the appellate judges was whether the primary judge had erred in considering evidence of climate change when denying the applicant’s appeal. The Court found that

His Honour was entitled, as he did, to take into account […] the impact of climate change on sea levels on the area proposed to be filled by the applicant and on the area proposed by the Council in its disputed condition, and to accept […] that the applicant’s proposed building site may be vulnerable to rising sea levels because of climate change.396

The general causal link between climate change and human GHG emissions was also recognized by the court in *Walker v. Minister for Planning*. In these judicial review proceedings, the applicant challenged the Minister’s approval of a concept plan for a residential development at Sandon Point – a site of ‘significant inherent cultural, ecological and social’ value.397 Importantly, one of the grounds upon which the applicant challenged the Minister’s decision was that the Minister failed to take into consideration ‘the principles of ecologically sustainable development (ESD) and the impact of the proposal upon the environment in several respects, including whether the flooding impacts of the project would be compounded by climate change.’398 After giving careful consideration to the development of the concept of ESD globally and in Australia from the 1972 United Nations Conference on the Human Environment in Stockholm onwards, the court proceeded to review a wide range of ESD cases and addressed ESD in relation to climate change specifically. It noted the IPCC’s four climate change Assessment Reports focusing on Australia’s potential vulnerability to ‘climate change caused by global warming, including increasing coastal vulnerability to storm surges and sea level rises’ addressed in the IPCC Third Assessment Report in 2001.399 The court noted that scientific support for ‘a link between a rise in global temperatures and an increase in the atmosphere in the concentration of greenhouse gases resulting from human activities’ had been recognized by the courts of Australia, the US, and the UK.400 The court extensively analysed climate change litigation in Australia and abroad

and noted a number of academic legal articles focusing on climate change litigation and legislation. It described climate change as a ‘deadly serious issue’ as evidenced by ‘global scientific support’ for its existence and the risks involved.\(^{401}\) The court held that the Minister was under an implied obligation to consider the climate change flood risk when deciding whether to approve the concept plan. The case was subsequently appealed by the Minister, and the Supreme Court of New South Wales set aside the decision of the lower court. It held that although the Minister was required to have regard to the public interest in accordance with the Environmental Planning and Assessment Act, not having regard to the ESD principles did not necessarily breach this obligation.

> [... A] ‘mandatory’ requirement that the Minister have regard to the public interest is [not] necessarily breached in all cases where the Minister does not have regard to the principles of ESD. The ‘mandatory’ requirement that the Minister have regard to the public interest does not of itself make it mandatory (that is, a condition of validity) that the Minister have regard to any particular aspect of the public interest, such as one or more of the principles of ESD. Whether or not it is mandatory to have regard to one or more of the principles of ESD must depend on statutory construction.\(^{402}\)

Yet, \textit{Walker v. Minister for Planning} remains exemplary in terms of the lower courts’ causation analysis as its reversal on appeal was largely rooted in statutory interpretation.

In the \textit{Gippsland Coastal Board v. South Gippsland Red-Dot} case,\(^{403}\) the court did not only recognize the general link between climate change and extreme weather events but went as far as to apply the precautionary principle in deciding that the sea level rise and storm surge would create a risk for the specific proposed development. The claim involved a set of applications for review concerning the decision of the council to grant a permit for a dwelling on land allotments located in a low-lying coastal area. The VCAT found that the land was unsuitable for residential development as it was at risk of inundation due to sea level rises resulting from climate change.\(^{404}\) The tribunal accepted that there was a general consensus that ‘some level of climate change [would] result in extreme weather conditions.’ The VCAT found that ‘sea level rise and risk of coastal inundation


\(^{402}\) \textit{Minister for Planning v. Walker} [2008] NSWCA 224, para. 44.

\(^{403}\) The practice of the Victorian Civil and Administrative Tribunal (VCAT) is to designate cases of interest as ‘Red Dot Decisions’. A summary is published and the reasons why the decision is of interest or significance are identified.

\(^{404}\) \textit{Gippsland Coastal Board v. South Gippsland SC & Ors (No 2) (includes Summary) (Red Dot)} [2008] VCAT 1545, introduction.
[were] relevant matters to consider in appropriate circumstances." Most significantly, the tribunal noted:

47. The relevance of climate change to the planning decision making process is still in an evolutionary phase. Each case concerning the possible effects of climate change will turn on its own facts and circumstances.

48. In the present case, we have applied the precautionary principle. We consider that increases in the severity of storm events coupled with rising sea levels create a reasonably foreseeable risk of inundation of the subject land and the proposed dwellings, which is unacceptable. […]

Thus, the decisions of the responsible authority were set aside and no permits were granted.

4.2.1.4 Attribution

Attribution of a given act to a particular defendant is an issue closely related to causation, which may pose great difficulties to climate change plaintiffs. Generally, domestic courts have not extensively addressed the question of attribution to a defendant of (a proportion of) the harm caused by anthropogenic climate change. However, attribution is relevant to determining the proportion of the harm defendants should be held responsible for and whether and to what extent they should bear the costs. At present, it is not clear how national courts will go about apportioning liability between multiple contributing sources given the historic and geographical dimension of climate change, and in any case those determinations are not to be made in procedural decisions.

It has been emphasized that climate change is an inherently global phenomenon with multiple contributors across space and time. First, anthropogenic emissions have been on the rise since the beginning of the Industrial Revolution in the 1750s. Thus, the current levels of GHG concentration in the atmosphere are a cumulative result of historic emissions. Second, many contributors to global warming have ceased to exist. The third important temporal characteristic of climate change is that not only is there a delay between GHG emissions release and a rise in temperatures. There is also a delay between a rise in temperatures and the impact associated with such a rise, as well as between the impact of the rising temperatures and climate change-related damage. Difficulties with attributing climate change-related damage to a particular emitter additionally complicate proof of causation.

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405 Gippsland Coastal Board v. South Gippsland SC & Ors (No 2) (includes Summary) (Red Dot) [2008] VCAT 1545, para. 46.
As regards the spatial dimension of climate change, it is obvious that every human being contributes to it by driving cars, heating houses or purchasing certain products and yet, not everyone is likely to be sued for it. Admittedly, some entities emit a great deal more GHGs than others but how does one attribute the harm caused by climate change to a given emitter? The fact that emitters are located the world over aggravates the problem. In Environmental Defence Society v. Auckland Regional Council, a New Zealand court approached attribution by focusing on the cumulative effect of GHG emissions from a given source. The court found that the emissions from a power station would ‘result, in a cumulative way, in an adverse effect of some consequence’.\footnote{Environmental Defence Society (Inc) v. Auckland Regional Council [2002] NZRMA 492, para. 88.} Whether the contribution to global climate change attributable to a given emitter is large or small, its effect cannot be disregarded.

From a procedural point of view, an Australian court resolved the issue of attribution by stating that at least as far as EIAs are concerned, the ‘fact that there are many contributors globally does not mean the contribution from a single large source […] should be ignored in the environmental assessment process.’\footnote{Gray v. Minister for Planning and Ors [2006] NSWLEC 720, para. 98.}

### 4.2.2 Actions for Injunctive and/or Declaratory Relief

Actions seeking injunctions constitute another category of climate change cases. Injunctive relief – a court order requiring a party to do, or to refrain from doing, certain acts – is a form of relief ultimately related to climate change mitigation due to its preventive character. Lawsuits involving requests for injunctions are of great importance in terms of identifying hurdles in a potential international claim focusing on prevention. Later on, in Chapter 5, parallels are drawn between actions for injunctive and/or declaratory relief launched domestically and state responsibility claims seeking cessation and declaratory relief launched at the interstate level.

#### 4.2.2.1 Political Question Doctrine

Actions for injunctive relief have been fraught with many more obstacles than claims related to procedural injury. For instance, the doctrine of non-justiciability of political questions has presented a considerable jurisdictional barrier to climate change plaintiffs. The US Supreme Court has indicated that ‘disputes involving
political questions lie outside of Article III jurisdiction of federal courts (see Section 4.2.1.1 above). The political question doctrine aims at limiting judicial interference with the activities of the legislative and executive branches. According to the political question doctrine, the judiciary cannot intervene in policy issues as those are to be decided by the democratically elected branches of the US government. Its genesis lies in the principles of the separation of powers and it was initially articulated by Chief Justice Marshall in the early nineteenth century. The doctrine is grounded in ‘the courts’ reluctance to invade the constitutionally allocated powers of the executive and legislative branches of government and, as a result, it has been at the forefront of the courts’ rejection of a number of climate change claims in the US and Canada. Six categories of non-justiciable suits were specified in *Baker v. Carr*:

Prominent on the surface of any case held to involve a political question is found

[(1)] a textually demonstrable constitutional commitment of the issue to a coordinate political department; or

[(2)] a lack of judicially discoverable and manageable standards for resolving it; or

[(3)] the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or

[(4)] the impossibility of a court’s undertaking independent resolution without expressing lack of respect due coordinate branches of government; or

[(5)] an unusual need for unquestioning adherence to a political decision already made; or

[(6)] the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

It has been noted that the political question doctrine has at times turned into an excuse ‘to evade the courts’ responsibility to decide serious justiciable issues in environmental law,’ which has been used as ‘an unwarranted escape hatch’ thwarting ‘effective judicial redress for environmental harms.’ According to Daly, a more accurate description of the political question doctrine would be ‘an attitude of judicial restraint, adopted by judges when they are asked to review certain categories of sensitive decision.’

Political questions proved to be an insurmountable obstacle in the Canadian *Friends of the Earth v. Minister of the Environment* claim. In this case, the

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applicant brought three applications for judicial review seeking declaratory and mandatory relief attempting to ensure the government’s compliance with the Kyoto Protocol. The first application concerned the Minister’s alleged failure to comply with the duty to prepare an initial Climate Change Plan that fulfilled Canada’s Article 3(1) obligations under the Kyoto Protocol. The second application for judicial review alleged that the Governor in Council failed to publish proposed regulations in the Canada Gazette and to prepare a statement setting out the GHG emissions reduction reasonably expected to result from each proposed regulatory change. The third ground for review alleged that the Governor in Council failed to amend or repeal regulations necessary to ensure Canada’s compliance with its obligations under Article 3(1) of the Kyoto Protocol. The court observed that the Minister’s initial Climate Change Plan made it very clear that the Canadian government had no intention to meet its Kyoto commitments noting that Canada’s emissions had been steadily growing since 1990. The respondents contended that the issues raised by the applicant were not justiciable because they involved public policy and legislative choices that were not up to the court to make. In this case the standing of the applicants was only challenged on the ground of non-justiciability; the court was satisfied that otherwise the applicant had met the requirements of public interest standing in that it had ‘a genuine interest in the subject matter raised,’ that there was ‘a serious issue presented,’ and that there was ‘no other reasonable and effective way to bring these matters before the Court.’ The court noted that the parties agreed about the principles of justiciability; they only differed in their views on the application of those principles. It was agreed that even ‘a largely political question’ could be judicially reviewed if it ‘possess[ed] a sufficient legal component to warrant a decision by a court.’ The court found that the applications in question were policy-laden and did not contain ‘a sufficient legal component to permit judicial review.’

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417 Friends of the Earth – Les Ami(e)s de la Terre v. The Governor in Council and The Minister of the Environment, 2008 FC 1183, 20 October 2008, para. 11.  
Furthermore, if the Court is not permitted by the principles of justiciability to examine the substantive merits of a Climate Change Plan that dubiously claimed Kyoto compliance, it would be incongruous for the Court to be able to order the Minister to prepare a compliant Plan where he has deliberately and transparently declined to do so for reasons of public policy.422

The court dismissed all the applications concluding that it had ‘no role to play reviewing the reasonableness of the government’s response to Canada’s Kyoto commitments.’423

In the US, *Connecticut v. American Electric Power* 2005, too, was rejected in first instance on the grounds of non-justiciability of political questions. In this case, eight states,424 the New York City, and three land trusts425 instituted a public nuisance global warming action against the five largest GHG emitting companies among electricity generators.426 The plaintiffs alleged, *inter alia*, that the defendants’ carbon dioxide emissions contributed to global warming, which caused ‘irreparable harm’ to their property and threatened the ‘health, safety, and well-being of […] citizens, residents, and environment.’427 The plaintiffs asserted that the natural processes that removed GHGs from the atmosphere were ‘unable to keep pace with the level of carbon dioxide emissions’ and that the defendants’ past, present, and future emissions would ‘remain in the atmosphere and contribute to global warming for many decades and, possibly, centuries.’ The plaintiffs anticipated that global warming would have ‘severe adverse impacts in the United States.’428 They asked the court to find the defendants jointly and severally liable for their contribution to the ‘ongoing public nuisance’ of global warming and sought an injunction requiring the defendants to reduce their emissions ‘by a specified percentage each year for at least a decade.’429 The court granted the defendants’ motion to dismiss on the grounds of the non-justiciability-of-political-

424 The states of Connecticut, New York, California, Iowa, New Jersey, Rhode Island, Vermont, and Wisconsin.
425 The Open Space Institute, Inc.; the Open Space Conservancy, Inc.; and the Audubon Society of New Hampshire.
questions doctrine. The court found it impossible to resolve the plaintiffs’ claims without making an initial policy determination, which, it pointed out, was the prerogative of the elected branches of the government. On standing and its causation and redressability elements in particular, the court stated: ‘[t]he extraordinary allegations and relief sought in this case render it one in which an analysis of Plaintiffs’ standing would involve an analysis of the merits of Plaintiffs’ claims.’430 On appeal, the US Court of Appeals for the Second Circuit vacated the judgment of the district court and the case was remanded for further proceedings. The appellate court held that the plaintiffs-appellants’ claims did not present non-justiciable political questions and that the district court had erred in dismissing the complaints on those grounds.431

4.2.2.2 Standing

In injunctive relief claims, the preconditions for plaintiffs’ standing are more rigorous than those in cases involving procedural injury where standing requirements are relaxed (see Section 4.2.1.1). Several actions for injunctions failed because plaintiffs were unable to show that they had standing to bring their claims. Although in Center for Biological Diversity v. Abraham, the court held that the plaintiffs did have standing, its decision was not based on the plaintiffs’ global warming claims. In this case, three environmental organizations432 brought an action against eighteen government agencies433 seeking declaratory and injunctive relief. According to the plaintiffs, the defendants violated the 1992 Energy Policy Act provisions governing acquisition of alternative fuel vehicles (AFV) and publication of compliance reports. The plaintiffs argued that the defendants’ actions contributed to global warming, which, in turn, caused harm to the plaintiffs. To satisfy the constitutional standing requirements, the plaintiffs had to demonstrate that: (1) they had suffered an injury in fact that was (a) concrete and particularized

431 In 2011, the Supreme Court reversed the appellate court’s judgment ruling that the CAA, and the EPA action authorized by it, displaced any federal common-law right to seek abatement of GHG emissions from fossil-fuel fired power plants, see American Electric Power Co., Inc. v. Connecticut, 131 S.Ct. 2527 U.S., 2011.
432 Center for Biological Diversity, Bluewater Network, and Sierra Club.
433 The defendants, all sued in their official capacities, are the secretaries of Energy; Commerce; Defense; Interior; Veteran Affairs; Transportation; Agriculture; Health and Human Services; Housing and Urban Development; Labor; State; and Treasury; the postmaster general of the US Postal Service; the administrators of the National Aeronautics and Space Administration; the US Environmental Protection Agency; and the General Services Administration; the chair of the US Nuclear Regulatory Commission; and the US Attorney General. The plaintiffs later agreed to dismiss the postmaster general and the US Postal Service as defendants.
and (b) actual or imminent; that (2) the injury was fairly traceable to the challenged action of the defendants; and that (3) it was likely that the injury would be addressed by a favourable decision. The court granted plaintiffs standing but for reasons other than their climate change claims. The plaintiffs’ claims regarding aesthetic injuries and the adverse health effects of smog and air pollution caused by the defendants’ conduct were found to satisfy the injury element of standing. The court noted that the concerns presented with regard to global warming were ‘too general, too unsubstantiated, too unlikely to be caused by defendants’ conduct, and/or too unlikely to be redressed by the relief sought to confer standing.’ The court granted declaratory and injunctive relief with regard to Count II (the defendants violated the Energy Policy Act in that they failed to compile and to properly make publicly available the compliance reports required by the Act) and Count III (the defendants violated the Energy Policy Act in that the Department of Energy did not meet the rulemaking deadlines for private and local fleets provided in the Act) and only declaratory relief with regard to Count I (the defendants violated the Energy Policy Act in that several among them did not meet the annual AFV-acquisition requirements set forth in the Act).

In Korsinsky v. EPA, the plaintiff was found to have failed to establish Article III standing. In this case, the plaintiff, Mr Gersh Korsinsky, appearing in court for himself, filed a public nuisance complaint against the US Environmental Protection Agency (EPA), the NYS Department of Environmental Conservation, and the NYC Department of Environmental Protection. The plaintiff alleged that the defendants contributed to global warming by emitting approximately 6500 million tons of carbon dioxide annually and failing to implement measures that would reduce GHG emissions. The plaintiff requested that the defendants be held jointly and severally liable for their contributions to global warming and sought an injunction enjoining each defendant from contributing further to global warming by ‘eliminating its emissions of carbon dioxide,’ and an order requiring the defendants to use a scientific device of his own invention. The plaintiff complained that he was more vulnerable to disease-causing environmental pollution because he had suffered from various allergies all his life and that he had developed a mental sickness from learning of the danger of pollution. The court found that the plaintiff alleged no injury that could be redressed by a favourable decision. Thus, the plaintiff did not fulfil the requirements for standing (an injury in fact, causation, and redressability).

Other plaintiffs have managed to overcome the challenges associated with demonstrating standing. Standing has been successfully established in Northwest

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Environmental Defense Center v. Owens Corning. Environmental organizations\textsuperscript{438} sued the Owens Corning Corporation for building a facility with a potential to emit over 250 tons of GHGs annually without having obtained a preconstruction permit required under the CAA. The plaintiffs alleged that emissions from the defendant’s facility would contribute to global warming, which, in turn, would ‘harm environmental resources in Oregon used or enjoyed by members of the Plaintiff organizations.’\textsuperscript{439} The plaintiffs sought declaratory and injunctive relief. The plaintiffs were found to have standing to sue. In order to establish federal jurisdiction, they had to satisfy the Article III standing requirements and demonstrate: (1) that they suffered or were about to suffer an injury in fact (‘an invasion of a legally protected interest that is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical’); (2) a causal connection between the injury and the conduct; and (3) redressability (the injury would be redressed by a favourable decision).\textsuperscript{440} The court found that the plaintiffs satisfied all the elements of the standing inquiry. It noted that issues such as global warming and ozone depletion may be of ‘wide public significance’ but they are neither ‘abstract questions’ nor mere ‘generalized grievances.’ The court further stated that an injury ‘is not beyond the reach of the courts simply because it is widespread.’\textsuperscript{441} The court also distinguished the case from Connecticut v. American Electric Power Company 2005,\textsuperscript{442} in which the district court declined to resolve the plaintiffs’ claims relying on the political question doctrine, and stated the following:

\begin{quote}
At issue here is nothing more than whether the courts will enforce the Congressional mandate set forth in the Clean Air Act and its enabling regulations. This court is not being asked to make a free-wheeling policy choice and decide whether global warming is, or is not, a serious threat or what measures should be taken to remedy that problem.\textsuperscript{443}
\end{quote}

Thus, the court did not rely on the political question doctrine and made a crucial finding that a global warming plaintiff had standing to sue under the CAA.

\begin{itemize}
  \item \textsuperscript{438} Northwest Environmental Defense Center, Oregon Center for Environmental Health, and Sierra Club.
  \item \textsuperscript{440} Northwest Environmental Defense Center v. Owens Corning Corp., 434 F.Supp. 2d 957 (D.Or. 2006), p. 962.
  \item \textsuperscript{441} Northwest Environmental Defense Center v. Owens Corning Corp., 434 F.Supp. 2d 957 (D.Or. 2006), p. 969.
  \item \textsuperscript{443} Northwest Environmental Defense Center v. Owens Corning Corp., 434 F.Supp. 2d 957 (D.Or. 2006), p. 970.
\end{itemize}
In *Massachusetts v. EPA*, a case that is generally accepted as one of the most important global warming decisions in America and worldwide, the US Supreme Court held that plaintiffs had standing to bring their claim. The case was decided in 2007; however, it goes back to the late 1990s when the International Center for Technology Assessment together with several other private organizations petitioned the Environmental Protection Agency to regulate GHGs from new motor vehicles under the Clean Air Act (CAA). In 2003, the EPA denied the rulemaking petition stating that it had no authority under the CAA to regulate GHGs and that even if it had such an authority, it would not exercise it. The petitioners, now joined by intervener States and local governments, sought review of the EPA’s decision in the US Court of Appeals for the DC Circuit. The Court denied the petition for review. The petitioners appealed the decision, and the Supreme Court entered the climate change debate for the first time. The Supreme Court found in favour of the petitioners holding that the EPA had the authority under the CAA to regulate GHGs and that its refusal to do so was arbitrary and capricious. Notably, the Court found that Massachusetts had standing to challenge the federal agency’s decision. The court noted the ‘special solicitude’ afforded to states regarding their procedural right for standing. Additionally, Massachusetts satisfied the traditional requirements for standing, *i.e.* injury, causation, and redressability. The court determined that climate change had caused Massachusetts a concrete and particularized injury notwithstanding the fact that climate-change risks were ‘widely shared.’ The court recognized that ‘predicted increases in greenhouse gas

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emissions from developing nations, particularly China and India, [were] likely to offset any marginal domestic decrease’ in GHG emissions.\textsuperscript{447} It found, however, that GHG emissions from motor vehicles in the US made a ‘meaningful contribution’ to global warming, which, in turn, affected Massachusetts. The Court held that a ‘reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere.’\textsuperscript{448} Thus, Massachusetts’ injuries caused by global warming would be redressed by the remedy sought by the petitioners.

The Supreme Court’s decision in \textit{Massachusetts v. EPA} has been hailed ground-breaking and a major success for climate change plaintiffs.\textsuperscript{449} Yet, it has been noted that the Court’s reference to the special solicitude afforded to Massachusetts as a state may heighten the standing threshold for private plaintiffs.\textsuperscript{450} The Supreme Court’s analysis of standing has been criticized for creating ‘a two-tiered system separating states from other petitioners for review.’\textsuperscript{451} First, the Court found that states had ‘special solicitude’ to sue due to their quasi-sovereign interest and, second, the Supreme Court also held that Massachusetts had standing under the traditional Article III requirements. Some authors have found this approach perplexing, and the ‘special solicitude’ distinction has been said to grant states a favoured status resulting in negative implications for the standing of individuals in climate change cases.\textsuperscript{452}

Having been found to have the statutory authority to regulate GHGs from new motor vehicles under the CAA, the EPA has been taking steps to regulate GHGs and formulate GHG emissions rules.\textsuperscript{453} In the wake of \textit{Massachusetts v. EPA}, the Agency has also commenced rulemaking to set limits on GHG emissions from new, modified, and existing fossil-fuelled power plants and committed to issuing a final rule by May 2012 (still in progress at the time of writing).

Procedural standing was successfully established in \textit{Center for Biological Diversity v. Brennan}\textsuperscript{454} – an action for declaratory and injunctive relief to declare the defendants in violation of the Global Change Research Act 1990 (GCRA) and to compel them to issue the Research Plan and Scientific Assessment as directed by statute.\textsuperscript{455} The defendants contended that the plaintiffs\textsuperscript{456} lacked standing to sue.

\textsuperscript{449} Pidot 2007; Smith & Shearman 2006, p. 64.
\textsuperscript{450} Abate 2008, pp. 147-148; Stevenson 2007, p. 74; Sugar 2007, pp. 542-544.
\textsuperscript{451} Sugar 2007, p. 541.
\textsuperscript{452} Heinzerling 2008, p. 16; Sugar 2007, p. 544; on the favoured position of states and Attorneys General, see Stevenson 2007.
\textsuperscript{453} See <http://epa.gov/climatechange/EPAactivities/regulatory-initiatives.html> (last visited on 10 July 2012).
\textsuperscript{454} \textit{Center for Biological Diversity v. Brennan}, 571 F.Supp. 2d 1105 (N.D.Cal., 2007).
\textsuperscript{455} \textit{Center for Biological Diversity v. Brennan}, 571 F.Supp. 2d 1105 (N.D.Cal., 2007), pp. 1112-1113.
\textsuperscript{456} Center for Biological Diversity, Greenpeace, Inc., and Friends of the Earth.
The court found that the plaintiffs had adequately alleged a procedural injury with respect to the Scientific Assessment and the Research Plan. The plaintiffs’ concrete interests were also found to fall within the zone of interests protected by the GCRA. As in other cases mentioned before, requirements for procedural standing were relaxed, and the traceability and redressability prongs were likewise found to have been successfully demonstrated. On the merits, the court found that the defendants had unlawfully withheld action required by the GCRA and ordered an injunction requiring the defendants to comply with the statute and to issue a revised Research Plan and Scientific Assessment.

In *Connecticut v. American Electric Power* 2009, the appellate court found that the plaintiff states had *parens patriae* standing (suing on behalf of their citizens) in their quasi-sovereign capacity. The court further held that in their proprietary capacity, they, along with the land trusts, also had Article III standing to bring their claim. The court held that current and future injury-in-fact had been sufficiently alleged. It further held that the injury was fairly traceable to the defendants’ actions, thus finding the causation element sufficiently demonstrated. With regard to the defendants’ argument that they could not be solely responsible for the ‘collective effect of worldwide emissions’ allegedly causing the injury, the court noted that that was an issue ‘best left to the rigors of evidentiary proof at a future stage of the proceedings, rather than dispensed with as a threshold question of constitutional standing.’

As regards the Article III redressability requirement, the judges pointed out the following:

> [In *Massachusetts v. EPA* ] [[the court recognized that regulation of motor vehicle emissions would not ‘by itself reverse global warming,’ but that it was sufficient for the redressability inquiry to show that the requested remedy would ‘slow or reduce it.’ […] In other words, that courts could provide some measure of relief would suffice to show redressability, and the proposed remedy need not address or prevent all harm from a variety of sources.]

### 4.2.2.3 Causation

In injunctive and/or declaratory relief actions, the courts have only explicitly addressed causation as part of the standing analysis, which, as discussed earlier, is characterized by a lower standard of proof. One may speculate, however, that the sheer complexity of the causal chain between climate change-related damage and

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GHG emissions from a particular source would pose a major challenge if the court were to engage in an analysis of the merits of a claim. A link would have to be established between: (1) GHG emissions from a given source; (2) climate change; (3) manifestations of climate change, such as the rising sea levels or extreme weather events; and, ultimately, (4) damage.

Causation challenges have been emphasized in Center for Biological Diversity v. Abraham whereby the court found that the plaintiffs’ global warming claims were ‘too unlikely to be caused by defendants’ conduct.’ It is significant that in finding that the plaintiffs had standing to bring their claim, the court did not base its reasoning on the plaintiffs’ climate change complaints.

In Korsinsky v. EPA, the plaintiff was unable to establish the causation element of standing.

Yet, causation as an element of standing was successfully shown in Northwest Environmental Defense Center v. Owens Corning case. In its standing analysis, the court reasoned that there was a causal link between the emissions from the defendant’s facility and the harm caused to the plaintiffs by the resultant climate change:

While Defendant is not the sole entity allegedly discharging pollutants into the atmosphere that may adversely impact the Plaintiffs, the ‘fairly traceable’ element does not require that a plaintiff show to a scientific certainty that the defendant’s emissions, and only the defendant’s emissions, are the source of the threatened harm. [...] It is sufficient for Plaintiffs to assert that emissions from Defendant’s facility will contribute to the pollution that threatens Plaintiffs’ interests.

The court’s reference to scientific certainty is of interest here as it has been suggested that ‘[e]nhanced certainty regarding the scientific data [...] has made injury and causation determinations easier’ and as scientific certainty keeps growing, proof of causation should become accordingly easier. It is not yet clear whether because of growing scientific certainty determinations of causation would likewise be easier to make on the merits. Since the standard of proof will necessarily be higher at the merits stage, increased scientific certainty concerning the link between anthropogenic emissions and climate change alone will not suffice. Plaintiffs may need to demonstrate to what extent their injury can be considered to have been caused by defendants, in which case apportionment and quantification of liability may present considerable difficulties.

Bearing in mind the relaxed requirements for procedural standing, the plaintiffs in *Massachusetts v. EPA* and *Center for Biological Diversity v. Brennan* were able to satisfy the causation requirement for standing. In *Center for Biological Diversity v. Brennan*, the court found that ‘the plaintiffs’ procedural and informational injuries [could] be directly traced to the defendants’ failure to issue a revised Research Plan and Scientific Assessment.’ In *Massachusetts v. EPA*, the Supreme Court assumed a much-criticized two-tiered approach to standing (see Section 4.2.2.2) whereby Massachusetts was found to have a procedural right for standing due to ‘special solicitude’ afforded to it as a state. Further, the court held that Massachusetts satisfied all the three elements of Article III standing, including causation: GHGs emitted by vehicles that the EPA refused to regulate were found to play a major role in causing global warming, which, in turn, caused harm to Massachusetts.

Accordingly, in the *Connecticut v. American Electric Power* appeal 2009, the Second Circuit also found that the plaintiff-appellants’ harm was ‘fairly traceable’ to the defendants’ actions. The court noted, however, that the defendants’ assertions to the effect that their contribution to the worldwide emissions did not allege causation were ‘best left to the rigors of evidentiary proof at a future stage of the proceedings.’ This seems to suggest that even though causation may be successfully proven as an element of Article III standing, considerable evidentiary challenges are to be expected at the merits stage.

The *Friends of the Earth v. Minister of the Environment* case did not address causation as the Canadian court found it non-justiciable.

## 4.2.2.4 Attribution

It has already been mentioned that the problem of attribution of harm to defendants has not been extensively addressed by domestic courts (see Section 4.2.1.3). Attribution is an issue to be considered on the merits, and injunctive and/or declaratory relief claims discussed in this chapter have not reached that stage of the proceedings.

Yet, in the *Connecticut v. American Electric Power* appeal 2009, the defendants’ contention that ‘many others contribute to global warming in a variety of ways’ and that ‘only the collective effect of worldwide emissions allegedly causes injury’ raised the question of attribution. In leaving this issue for the merits stage, the Second Circuit noted:

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Plaintiffs have sufficiently alleged that their current and future injuries are ‘fairly traceable’ to Defendants’ conduct. For purposes of Article III standing they are not required to pinpoint which specific harms of the many injuries they assert are caused by particular Defendants, nor are they required to show that Defendants’ emissions alone cause their injuries. It is sufficient that they allege that Defendants’ emissions contribute to their injuries.466

As discussed in Section 4.2.1.3, attribution of harm to a particular defendant in view of the cumulative nature of climate change is likely to be problematic.

4.2.3 Claims for Compensation

In some instances, climate change cases have been brought as claims for compensation, or, as they are known in common law, actions for damages. Compensation claims constitute the least numerous category of climate change cases. Although generally unsuccessful regardless of some commentators’ optimism,467 claims for compensation play an important role as, unlike claims related to procedural injury or injunctive relief claims, they are relevant to situations when adaptation to and remediation of the already happening climate change is at stake. All the compensation claims adjudicated thus far worldwide have been brought in the US. The US remains the only developed country without a mitigation policy based on the 1997 Kyoto Protocol and, given its common law tradition, it is not surprising that it is in the US that litigants have resorted to actions for damages. It is also important to note that whether or not climate change defendants are eventually found liable for damages, American practice may provide some important lessons for other jurisdictions.

4.2.3.1 Political Question Doctrine

Legal issues involved in actions for damages have largely been similar to the ones discussed in relation to injunctive relief cases (see Sections 4.2.1.1-4.2.2.4). Non-justiciability of political questions has been particularly problematic. For example, California v. General Motors Corporation, a public nuisance global warming

467 E.g. D.A. Grossman, ‘Warming up to a not-so-radical idea: tort-based climate change litigation,’ 28 Colum. Envtl. L. 1, 3, 2003, p. 58 (it may be possible ‘to establish the basis for a damage award in a public nuisance suit’); Hsu 2008; Posner 2007, p. 1928 (claims made in US domestic courts that GHG emissions leading to climate change violate human rights may result in American courts awarding damages to victims).
The lawsuit for damages, filed by the State of California against several automobile manufacturers\(^{468}\) was rejected on the basis of the political question doctrine. The plaintiff in this case sought declaratory judgment for ‘future monetary expenses and damages incurred by the State of California in connection with the nuisance of global warming.’\(^{469}\) The plaintiff alleged a number of global-warming injuries caused by GHG emissions from motor vehicles manufactured by the defendants. The plaintiff pointed out that the scientific debate over global warming was ‘over’ and that there was ‘a clear scientific consensus’ that global warming had begun and that most of it was caused by GHG emissions, primarily carbon dioxide from fossil fuel combustion. According to the plaintiff, global warming caused an increase in the winter average temperatures in the Sierra Nevada region and thus, a reduction in the snow pack – a major water source in California. The plaintiff noted an increased risk of flooding due to the rising sea levels, increased coastline erosion, increased duration and frequency of heat waves, and increases in the risk and intensity of wildfires.\(^{470}\) The court dismissed the case on the grounds of non-justiciability of political questions. It held that (a) resolution of the plaintiff’s federal common law nuisance claim would require it to make ‘an initial policy decision’ as the claims touched upon public and foreign policy. The court ruled that it could not adjudicate the plaintiff’s claim ‘without making an initial policy determination of a kind clearly for nonjudicial discretion.’ The court noted that (b) the plaintiff’s claim implicated ‘a textually demonstrable constitutional commitment to the political branches.’ It stated that (c) it lacked ‘judicially discoverable or manageable standards’ by which to resolve the plaintiff’s claim.\(^{471}\)

The *Kivalina* claim, too, was found to be non-justiciable. The case involved a suit filed by the residents of the Alaskan Native Village of Kivalina against a number of oil and electric utility industries\(^{472}\) to recover damages from the public nuisance of global warming allegedly caused by the defendants. The plaintiffs claimed that global warming was destroying their village and soon the village would have to be abandoned and its population relocated, the cost of which had been estimated at 400 million US dollars. According to the claimants,

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469 *California v. General Motors Corp.*, 2007 WL 2726871 (N.D.Cal.), p. 2.
471 *California v. General Motors Corp.*, 2007 WL 2726871 (N.D.Cal.), pp. 6-16.
472 ExxonMobil Corporation; BP P.L.C.; BP America, Inc.; BP Products North America, Inc.; Chevron Corporation; Chevron USA, Inc.; Conocophillips Company; Royal Dutch Shell PLC; Shell Oil Company; Peabody Energy Corporation; the AES Corporation; American Electric Power Company, Inc.; American Electric Power Services Corporation; DTE Energy Company; Duke Energy Corporation; Dynegy Holdings, Inc.; Edison International; MidAmerican Energy Holdings Company; Mirant Corporation; NRG Energy; Pinnacle West Capital Corporation; Reliant Energy, Inc.; The Southern Company; and XCEL Energy, Inc.
16. Global warming has severely harmed Kivalina by reducing the sea ice commonly present in the fall, winter and spring at Kivalina. The sea ice – particularly land-fast sea ice – acts as a protective barrier to the coastal storms that batter the coast of the Chukchi Sea. Due to global warming, the sea ice forms later in the year, attaches to the coast later, breaks up earlier, and is less extensive and thinner, thus subjecting Kivalina to coastal storm waves and surges. These storms and waves are destroying the land upon which Kivalina is located.

17. Impacts of global warming have damaged Kivalina to such a grave degree that Kivalina is becoming uninhabitable and must now relocate its entire community.

According to the plaintiffs, the defendants contributed to global warming ‘through their emissions of large quantities of greenhouse gases’ and they had knowingly done so for many years. The plaintiffs also alleged a conspiracy to suppress the awareness of the link between the defendants’ emissions and global warming.\footnote{2008 WL 594713 (N.D.Cal.) (Trial Pleading) Complaint for Damages Demand for Jury Trial (26 February 2008), \textit{Native Village of Kivalina v. ExxonMobil Corp.}, paras 3-5.} The plaintiffs requested the court to hold each defendant ‘jointly and severally liable for creating, contributing to, and maintaining a public nuisance’ of global warming, hold conspiracy defendants ‘jointly and severally liable for civil conspiracy,’ and hold each defendant ‘jointly and severally liable for concert of action.’ On that basis, the plaintiffs requested monetary damages and declaratory relief for ‘future monetary expenses and damages as may be incurred’ by the plaintiffs in connection with global warming.\footnote{Relief requested in 2008 WL 594713 (N.D.Cal.) (Trial Pleading) Complaint for Damages Demand for Jury Trial (26 February 2008), \textit{Native Village of Kivalina v. ExxonMobil Corp.}.} The court found the plaintiffs’ claim non-justiciable under the political question doctrine due to lack of judicially discoverable and manageable standards and absence of an initial policy determination. It noted that ‘allocation of fault – and cost – of global warming [was] a matter appropriately left for determination by the executive or legislative branch in the first instance.’\footnote{\textit{Native Village of Kivalina v. ExxonMobil Corp.}, 663 F.Supp.2d 863 (N.D.Cal. 2009), p. 10; the decision of the district court was confirmed on appeal, see \textit{Native Village of Kivalina v. ExxonMobil Corp.}, 2012 WL 4215921 (9th Cir.(Cal.)) (21 September 2012) (NO. 09-17490).}

Non-justiciability of political questions also proved a contentious point in \textit{Comer}. This global warming public nuisance class action suit was originally filed against US property insurers in the wake of the destruction brought by Hurricane Katrina in August 2005. Before long, the claim was amended as to include petrochemical companies as defendants. The plaintiffs alleged that Hurricane Katrina ‘evolved into a storm of unprecedented strength and destruction’ due to
global warming caused by the activities’ of the defendant oil companies. The district court acknowledged that, in its complexity, the case was unmanageable. It dismissed the plaintiffs’ causes of action against insurance companies and mortgage lenders and permitted to file a third amended complaint. Ned Comer and thirteen other individuals brought an action for damages against public utilities, power companies, and coal-mining and chemical manufacturing companies. The plaintiffs’ causes of action included nuisance, negligence, unjust enrichment, civil conspiracy, fraudulent misrepresentation and concealment, and trespass. The central public nuisance claim was based on the defendants’ alleged contribution to global warming leading to Katrina, a hurricane of unprecedented intensity, which caused damage to the plaintiffs. The plaintiffs’ case was dismissed due to their lack of standing (see Section 4.2.3.2) and on the basis of non-justiciability of political questions. On appeal, the Fifth Circuit reversed the judgment of the district court and remanded the cases for further proceedings. The Fifth Circuit found that, on the contrary, none of the above claims presented non-justiciable political questions stressing that ‘the federal courts [were] not free to invoke the political question doctrine to abstain from deciding politically charged questions like this one, but must exercise their jurisdiction as defined by Congress whenever the question is not exclusively committed to another branch of the federal government.’ The defendants requested a rehearing, which was granted. The decision of the appellate court was vacated but a rehearing never took place due to a loss of quorum. Since the appeal could not be reinstated, in 2011, the plaintiffs filed another lawsuit in the district court against numerous oil, coal, electric, and chemical companies. In addition to concluding that the suit was barred under the doctrines of res judicata and collateral estoppel (i.e. the plaintiffs had already had an opportunity to litigate their claims), the court again found that the plaintiffs’ claims presented non-justiciable political questions. The court stated that it could not decide on whether the defendants’ emissions were ‘unreasonable’ because that would involve making an initial policy determination that ‘had been entrusted to the EPA by Congress.’

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476 2005 WL 2913766 (Trial Pleading) First Amended Complaint (30 September 2005), Comer v. Murphy Oil USA, Inc., paras 30-32.
477 Comer v. Nationwide Mutual Insurance Co., WL 1066645 (S.D.Miss), 23 February 2006; see also 2006 WL 1474089 (Trial Pleading) Third Amended Class Action Complaint (19 April 2006), Comer v. Murphy Oil USA, Inc.
478 Order Granting Defendants’ Motion to Dismiss, Comer v. Murphy Oil USA, Inc., 2007 WL 6942285 (S.D.Miss.), 30 August 2007 (NO. CIVA 1:05-CV436LGRHW), para. 1.
480 Comer v. Murphy Oil USA, Inc., Case 1:11-cv-00220-LG-RHW (S.D.Miss.), 20 March 2012.
4.2.3.2 Standing

Along with the challenges presented by the political question doctrine, standing in compensation claims has not been easy to determine. For instance, in California v. General Motors Corporation, the court explicitly distinguished the case before it from Massachusetts v. EPA, in which a federal state challenged federal agency action. Since the California v. General Motors Corporation action for damages was filed against private parties, Massachusetts v. EPA could not offer to the plaintiff a procedural right for standing because California was not challenging federal rule-making. 481

The outcome of the Kivalina claim reaffirms the challenges posed by the standing threshold. Kivalina attracted a great deal of academic attention even before it was decided and many authors commented extensively on the plaintiffs’ standing. With regard to the injury element of causation, Hsu has noted that ‘the Inuit would be able to use the fact that they are one of the few groups that have already suffered some harm that is ‘concrete and particularized,’ and ‘actual and imminent,’ in the form of sinking villages due to softening permafrost.’ 482 Mank has observed that ‘an Alaska Native already harmed by global warming would have a much stronger case for injury than a plaintiff who can only allege general and common injuries from global warming.’ Without a doubt, ‘an Alaska Native whose village or home is destroyed by melting permafrost or coastal flooding could allege very specific injuries.’ 483 The other two elements of Article III standing were seen as somewhat less clear-cut. And indeed, when finally decided, the claim failed on causation grounds. The court found that the plaintiffs had not established Article III standing failing to prove causation and observed:

Although the ‘traceability’ of a plaintiff’s harm to the defendant’s actions need not rise to the level of proximate causation, Article III does require proof of a substantial likelihood that the defendant’s conduct caused plaintiff’s injury in fact. 484

In Comer v. Murphy Oil, in addition to their claim being non-justiciable, the plaintiffs were found to have no standing to bring their claim because the harm they suffered was not traceable to individual defendants. 485 On appeal, however, the

481 California v. General Motors Corp., 2007 WL 2726871 (N.D.Cal.).
482 Hsu 2008, p. 746.
483 Mank 2005, pp. 80-81.
485 Order Granting Defendants’ Motion to Dismiss, Comer v. Murphy Oil USA, Inc., 2007 WL 6942285 (S.D.Miss.) 30 August 2007 (NO. CIVA 1:05-CV436LGRHW).
court found that the plaintiffs-appellants did have standing ‘to assert their public and private nuisance, trespass, and negligence claims,’ and not only on the basis of Mississippi’s ‘liberal standing requirements,’ but also under Article III. The Fifth Circuit ruled that the plaintiffs had alleged ‘actual, concrete injury in fact to their particular lands and property,’ which could be ‘redressed by the compensatory and punitive damages they [sought] for those injuries.’ When the district court heard the case in 2012, it again concluded that the plaintiffs had not successfully demonstrated Article III standing as they had not alleged injuries that were fairly traceable to the defendants’ conduct. The court also distinguished the case before it from *Massachusetts v. EPA* and *Connecticut v. American Electric Power* discussed earlier. In those cases, the Supreme Court granted to federal states standing due to their sovereign status (‘special solicitude’) – a quality, the district court concluded, private citizens lacked.

4.2.3.3 Causation

As with claims for injunctive and/or declaratory relief, the question of causation in actions for damages has only been addressed insofar as it was relevant for the plaintiffs’ standing to sue.

In the *Kivalina* claim, the plaintiffs were found to have no standing having failed to satisfactorily allege traceability – the causation element of the standing inquiry. The *Kivalina* court was sceptical on causation and in reference to the sequence of events allegedly leading to the plaintiffs’ injury observed:

> [T]he harm from global warming involves a series of events disconnected from the discharge itself. In a global warming scenario, emitted greenhouse gases combine with other gases in the atmosphere which *in turn* results in the planet retaining heat, which *in turn* causes the ice caps to melt and the oceans to rise, which *in turn* causes the Arctic sea ice to melt, which *in turn* allegedly renders Kivalina vulnerable to erosion and deterioration resulting from winter storms.

In *Comer*, standing was initially denied on, inter alia, causation grounds as the ‘fairly traceable’ element was not satisfied. Furthermore, the court noted:

Without in any way expressing an opinion on the merits of the plaintiffs’ claims against these defendants, I will observe that there exists a sharp difference of opinion in the scientific community concerning the causes of global warming, and

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486 *Comer v. Murphy Oil USA, Inc.*, 585 F.3d 855, C.A.5 (Miss.), 2009, p. 2.
487 *Comer v. Murphy Oil USA, Inc.*, 585 F. 3d 855, C.A.5 (Miss.), 2009, p. 5.
I foresee daunting evidentiary problems for anyone who undertakes to prove, by a preponderance of the evidence, the degree to which global warming is caused by the emission of greenhouse gases; the degree to which the actions of any individual oil company, any individual chemical company, or the collective action of these corporations contribute, through the emission of greenhouse gases, to global warming; and the extent to which the emission of greenhouse gases by these defendants, through the phenomenon of global warming, intensified or otherwise affected the weather system that produced Hurricane Katrina.489

This statement indicates enormous evidentiary challenges to establishing a causal link between the defendant’s GHG emissions, climate change, and the harm suffered by the plaintiff. In reversing the ruling of the district court, the Fifth Circuit found the Comer plaintiffs to have satisfied the causation requirement for Article III standing recognizing that the standard of proof for traceability was lower than that for causation on the merits: ‘the Article III traceability requirement need not be as close as the proximate causation needed to succeed on the merits of a tort claim.’490 Relying on Massachusetts v. EPA, the court noted that ‘injuries may be fairly traceable to actions that contribute to, rather than solely or materially cause, greenhouse gas emissions and global warming.’491

In 2012, in its analysis of the ‘fairly traceable’ requirement for Article III standing, the district court was not convinced that ‘the defendants’ emissions caused or contributed to the specific damages [the plaintiffs] suffered during Hurricane Katrina.’492 Yet, it engaged in an analysis of proximate cause ‘[a]ssuming for the sake of the argument only that the plaintiffs have alleged injuries that are fairly traceable to the defendants’ conduct.’ The court noted that proximate cause, defined as the ‘cause which in natural and continuous sequence unbroken by any efficient intervening cause produces the injury and without which the result would not have occurred,’ could not accommodate the plaintiffs’ claims. It held that

[the assertion that the defendants’ emissions combined over a period of decades or centuries with other natural and man-made gases to cause or strengthen a hurricane and damage personal property is precisely the type of remote, improbable, and extraordinary occurrence that is excluded from liability.]493

490 Comer v. Murphy Oil USA, Inc., 585 F.3d 855, C.A.5 (Miss.), 2009, p. 5, citations omitted.
491 Comer v. Murphy Oil USA, Inc., 585 F.3d 855, C.A.5 (Miss.), 2009, p. 6, emphasis in the original.
492 Comer v. Murphy Oil USA, Inc., Case 1:11-cv-00220-LG-RHW (S.D.Miss.), 20 March 2012.
4.2.3.4 Attribution

As we saw earlier, the plaintiffs’ claim in California v. General Motors Corporation did not make it past the early procedural phases and was dismissed on the grounds of non-justiciability of political questions. However, the court indicated that the causal link between the actions of the defendants and the climate change-induced harm caused to the plaintiffs would be difficult to prove and raised a related question of attribution:

The Court is left without guidance in determining what is an unreasonable contribution to the sum of carbon dioxide in the Earth’s atmosphere, or in determining who should bear the costs associated with the global climate change that admittedly result from multiple sources around the globe.494

The court noted the global nature of the climate change phenomenon and seemed to indicate that it would find it difficult to attribute to any particular defendant the harm caused by climate change. On the issue of damages, the court noted that the plaintiff’s global warming nuisance tort claim sought to impose damages on an ‘unprecedented’ scale by ‘grounding the claim in the pollution originating both within, and well beyond, the borders of the State of California.’ The court added that it had no way of discerning the contributors to the alleged nuisance of global warming as there were ‘multiple worldwide sources of atmospheric warming across myriad industries and multiple countries.’495

The Kivalina court made similar observations and admitted that since ‘virtually everyone on Earth [was] responsible’ for GHG emissions, the plaintiffs were in effect asking the court to make ‘judgment that the two dozen Defendants […] should be the only ones to bear the cost of contributing to global warming.’496 The court further noted:

Significantly, the source of the greenhouse gases are [sic] undifferentiated and cannot be traced to any particular source, let alone defendant, given that they rapidly mix in the atmosphere and inevitably merge with the accumulation of emissions in California and the rest of the world. […] It is not plausible to state which emissions – emitted by whom and at what time in the last several centuries and at what place in the world – caused Plaintiffs’ alleged global warming related injuries.497

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494 California v. General Motors Corp., 2007 WL 2726871 (N.D.Cal.), p. 15, emphasis added.
495 California v. General Motors Corp., 2007 WL 2726871 (N.D.Cal.), p. 15.
The court in *Comer*, too, perceived as problematic the fact that the defendants’ emissions were combined with other anthropogenic and natural GHGs released over a significant period of time.

### 4.2.3.5 Retroactivity

Related to the question of attribution is one other important issue that, in compensation claims, would likely be contentious on the merits – that of retroactivity. Retroactivity is likely to pose difficulties because such claims address actual harm, *i.e.* harm that has already occurred. It may be difficult to reconcile the fact that historic emissions from multiple sources have cumulatively led to climate change and its injurious consequences with attaching liability to a particular defendant. To hold a defendant responsible, it may be necessary to take into account past emissions released at the time when little was known about climate change and before the UNFCCC or IPCC came into existence. It is not clear how past emissions should be tackled as indeed it would be unreasonable to hold emitters liable for emissions discharged long before climate change scientists released their findings. In 1992, the UNFCCC – a framework agreement to reduce GHG emissions – was concluded and at least from that point on, climate change and its damaging consequences can be considered as clearly identified from the legal point of view. It has therefore been proposed to consider 1992 as a cut-off date for apportioning responsibility for climate change-related damage.\(^{498}\) Another option would be to use 1994, the date of the UNFCCC’s entry into force, as a cut-off date or the year it entered into force for the party concerned.

The phenomenon of cut-off dates is not new and the US tobacco cases may provide some helpful insights into the matter. In 2006, the Supreme Court of Florida decided *Engle v. Liggett Group*, a case arising from a smokers’ class action lawsuit seeking damages against cigarette companies for smoking-related injuries. The court ruled that since the class could not be open-ended, a cut-off date for class membership was in order and ruled that ‘the date of the trial court’s November 21, 1996, order that recertified a narrower class [was] the appropriate cut-off date.’\(^{499}\)

Regardless of whether or not a cut-off date for climate change liability is established, at least some degree of retroactive liability may be inevitable. It remains to be seen whether and how the courts will resolve those difficulties.


\(^{499}\) *Engle v. Liggett Group, Inc.*, 945 So.2d 1246 (Fla. 2006), p. 1255.
4.3 Concluding Remarks

The present chapter has demonstrated that legal challenges involved in the process of establishing climate change liability are experienced by all plaintiffs regardless of the type of relief they seek, however the extent, and the exact content, of those challenges varies.

In claims related to procedural injury both, standing and causation, have been the subject of extensive judicial discussion. Yet, in claims related to procedural injury those issues have not been as problematic as in the other two categories of cases. For instance, the requirement of causation as an element of procedural standing in American courts has been relaxed and has not posed any significant challenges to plaintiffs. Having been extensively considered by Australian courts and, to some extent, by courts in New Zealand, causation – both general and specific – has been recognized in a number of procedural injury claims. This is indicative of a lower standard of proof involved in procedural cases due to the fact that no actual injury is at stake. It is significant that demonstrating that climate change must be taken into account by the relevant authority in approving a particular project or carrying out an EIA does not require the plaintiffs to meet the rigours of the *causa proxima* or ‘but for’ tests. This finding is particularly relevant for the analysis of interstate liability in the next chapter, particularly Micronesia’s 2010 challenge of a power plant modernization project in the Czech Republic (see Section 5.2.3.3).

On the issue of attribution, the courts’ pronouncements are scarce; yet, they seem to suggest that the multiplicity of emitters has little impact on procedural decisions concerning GHG emissions from a single source. It is noteworthy that unlike claims for compensation or claims for injunctive and/or declaratory relief, procedural justice has not been hampered by the political question doctrine. Actions for injunctive and/or declaratory relief have been somewhat less successful than claims related to procedural injury. The political question doctrine has presented some challenges; however, most difficulties have been associated with demonstrating standing and, particularly, causation as one of the requirements for standing. It is significant that the singular success of *Massachusetts v. EPA* appears to be rooted in the procedural character of the injury alleged by the plaintiffs. In practice, the US Supreme Court’s ruling that the EPA did have the authority to regulate GHGs amounted to an injunction requiring the EPA to take regulatory action.

Since a number of injunctive relief claims have yet to be decided on the merits, it is unclear how the courts will approach certain substantive issues, particularly causation. The courts have indicated that on the merits, the standard of proof for
demonstrating causation between the action complained of and the potential injury is necessarily higher than that for establishing standing.\textsuperscript{500}

Claims for compensation constitute the least successful category of climate change-related claims. To a large extent, compensation claims have been hindered by the political question doctrine, which the courts have relied on to avoid making determinations of a political nature in accordance with the principles of the separation of powers. Standing and, particularly, causation as part of the standing inquiry have presented insurmountable challenges to the plaintiffs. It appears that courts have been more cautious in their approach to claims for compensation for actual damage as opposed to claims seeking injunctive relief to redress potential harm.

Should a compensation claim be decided on the merits, enormous evidentiary challenges to establishing a causal link between the defendant’s GHG emissions and the actual harm suffered by the plaintiff are to be expected.\textsuperscript{501} Attribution of harm to a particular defendant, too, is likely to present difficulties.\textsuperscript{502} And last but not least, retroactivity issues would have to addressed, which may necessitate the introduction of a cut-off date.