3
Climate Change Lawfare*

Siri Gloppen & Asuncion Lera St. Clair

Abstract

Climate change poses unprecedented challenges. No one knows how suitable a planet three or four degrees warmer on average will be for human life. What we do know is that climate change impacts are already changing socio-ecological systems and will lead to profound changes, as well as conflicts over resources. This article looks at how issues concerning the injustice and human rights violations caused by climate change are transformed and manifested in legal conflicts. The role of law in social transformation has been growing and evolving over the last few decades. Law is at the centre of efforts by national, local and international actors – state and non-state – to transform and develop societies. Drawing from literature on social lawfare – which refers to the diverse strategies in which rights and legal institutions are adopted intentionally and strategically with the aim of helping to deliver, or at least catalyse, social transformation – we have coined the term *climate change lawfare*. This term theorises on how emerging rights-related issues around climate change manifest themselves in legal strategies. Climate change lawfare aims to capture the diverse strategies in which rights and legal institutions figure prominently, are adopted intentionally, and are used strategically with the aim of helping to deliver, or at least catalyse, social transformation in relation to climate change. This includes both legal reform strategies and diverse forms of legal activism from 'below'. This article develops the concept of *climate change lawfare* and constructs a typology by systematising emerging material on climate-related legal conflicts. This may, in turn, provide a better starting point for systematic investigations into

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the conditions that place rights and courts at the centre of such disputes, and of the effects and impacts of various legal strategies.

A. Introduction: Climate Change Goes to Court

The aim of this article is to investigate and map climate change discourses in legal spaces. We look at how issues concerning the injustice and human rights violations caused by climate change and by mitigation and adaptation policies and strategies are transformed and manifested in legal conflicts. The article investigates ways in which climate change impacts are legalised, judicialised and debated in relation to concrete conflicts about natural resources and environmental harm, which we refer to as *conflicts over climate justice and sustainability*. Today, the law is in many ways 'the new politics', in the sense that the legal field is expanding in social and political significance, not least in the contexts where other governance structures are weak.[1]

The article starts with an overview of the likely impacts of climate change and the governance problems involved in addressing such impacts. Noting the use of legal strategies by climate justice activists, and drawing on earlier work on the role of law in socio-economic justice, we develop the concept of *climate change lawfare*.[2] This concept refers to various uses of law, including attempts at improving climate governance through legislation and other forms of regulation, as well as strategies that use existing legal norms and structures. We acknowledge that there is significant rights-based mobilisation outside legal institutions ('rights talk'), and that examining this

1 The increasing importance of law in politics – often referred to as the *judicialisation*, *legalisation* or *juridification* of politics – or, more polemically, as the *juristocracy* – is noted by a number of scholars in relation to a wide range of fields and geographical areas; see e.g. Comaroff & Comaroff (2006, 2009, 2011); Couso et al. (2010); Ferejohn (2002); Gauri & Brinks (2008); Hirschl (2004, 2006); Shapiro & Stone Sweet (2002); Sieder et al. (2005); Tate & Vallinder (1995); Yamin & Gloppen (2011). Much of the literature is critical of this development, seeing it as an undemocratic takeover of political decision-making by unelected judges and bureaucrats, and fearing that "the haves always come out ahead in court" – to paraphrase Galanter (1974). Others hold that legal processes also open up space for democratic deliberation and may enable marginalised voices to be heard; thus, they potentially provide an institutional avenue for poor and stigmatised groups; see e.g. Gargarella et al. (2006).

2 Gloppen et al. (2011).

mobilisation and its drivers is important in its own right.[3] However, in this article, we mainly focus on legal mobilisation, and from there we analyse and theorise on climate change lawfare in courts and quasi-judicial bodies.

Our goal in this article is to offer a provisional synthesis of, and a theoretical lens for investigating, the legalisation of climate change impacts using the concept of *lawfare*, rather than provide a comprehensive analysis of climate-change-related legislation and litigation. By summarising and categorising a variety of cases, we develop a typology that offers a better understanding of the increasing legalisation of climate change politics, and what form climate change issues take when formulated as legal claims. This can serve as a starting point for systematic investigations into the conditions and driving forces that place rights and courts at the centre of climate change conflicts, and the effects and impacts – material, symbolic and political – of various legal strategies. The broader ambition is to understand the transformative potential of using the law to address problems of sustainability and social justice in the context of climate change. As such, this article attempts to illustrate what has been done and lays the foundation for further work on how the law can contribute towards responding to the challenges posed by climate change.

B. Climate Change Impacts, Governance, and Justice Challenges

Climate change has impacted both human and natural systems, and will continue to do so substantially in the next few decades. Recent scholarship shows that large parts of Canada, Eurasia and North Africa have a high likelihood of passing the 2°C threshold by 2030, and that the whole planet is likely to do so by 2050.[4] Others consider that we may have to adapt to temperature increases of 4°C or more in the course of the 21st Century.[5] The literature on the likelihood and type of impacts we can expect by 2050, related to overall increases in temperature, was thoroughly assessed in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report.[6] The Report shows that climate change will impact fundamental natural resources, such as water, in a very substantial way. There is a high

3 Dugard et al. (2012).
4 Joshi et al. (2011).
5 New et al. (2011); Stafford Smith et al. (2011).
6 IPCC (2007).

degree of certainty that increased water flows in high latitudes will lead to floods. At the same time, there is a high degree of confidence that less water will be available in dry areas in mid-latitudes, and that there are likely to be more drought-affected areas. Also, water stored in glaciers and snow will decrease and change river-flows downstream – one of the clearest challenges posed by climate change in regions such as Asia. Thus, climate change is likely to lead to substantial water scarcity and water-related damage. Shortages of water will also lead to energy-related scarcity, and compromise the production of hydroelectric power.[7]

Higher-than-average temperatures – along with a higher concentration of carbon dioxide in the atmosphere – affect the onset and end of seasons, change disease vectors, and influence the biological processes that govern ecosystems in most regions of the world. Increases in wildfires, changes in insects' life cycles, changes in the onset and end of seasons, and changes in the structure of ecosystems, which in turn lead to less biodiversity, are all expected results of small overall increases in temperature of about 1.5–2.5°.[8] Along with other global shifts, such as changes in land use, increased urbanisation and deforestation, these changes are likely to have substantial impacts on the availability of agricultural land. Climate change also affects the oceans and sea-level rise. Ocean acidification, destruction of coral reefs, and salination of coastal areas affects fisheries and ecosystems located close to seas and oceans. There is also an increasing amount of evidence showing strong correlations between higher temperatures and mutations (changes) in diseases such as malaria, dengue fever, and cardiovascular problems related to heat. Furthermore, "…climate change affects the fundamental requirements for health, clean air, safe drinking water, sufficient food and secure shelter."[9]

A report released by the IPCC in 2012 shows evidence of increased heat waves and other extreme events such as storms and droughts.[10] The report explores the interactions between human, environmental and climatic factors, and argues that the capacity to respond to such extreme events is determined not only by the magnitude of the natural event, but also – and often perhaps more importantly – by the social and human conditions of the re-

7 Gleick (2010).
8 IPCC (2007).
9 WHO (2012).
10 IPCC (2012).

gions affected.[11] Overcrowded cities, many of which host millions of poor and marginalised people in slums, are much more vulnerable to relatively small weather events because of the poor construction of dwellings and their location, which is often in a high-risk area.[12] Some 90% of all the deaths that have occurred since the 1990s because of extreme weather events occurred in developing countries.

These impacts merge with the following existing factors: socio-economic vulnerabilities, inequalities regarding access to resources and services, lack of power of minorities and marginalised groups, and negative impacts of natural climate variability on societies. The human costs of climate change are already high. A United Nations report quantifies climate-related deaths to around 300 million people per year.[13] If emissions are not drastically reduced, the human costs will be very high in the next decades in terms of water and food security, people displaced from their homes and communities, and protection of basic needs, such as employment, housing and health. Regardless of the obvious scientific uncertainty, if greenhouse gases (GHGs) are not substantially reduced in a short period of time, impacts in the near future are likely to be dramatic and perhaps irreversible.

I. Challenges to Governance

As resources become scarcer, conflicts are likely to increase, but alternative modes of cooperation and alliances may also emerge. A key factor in the design and successful functioning of any solutions to climate change – both to create incentives for mitigation and to regulate adaptation – is the availability of suitable governance structures. Yet political institutions are generally not well equipped to regulate issues that are transboundary, or are fraught with unknowns, or that require long-term thinking. And we are far from overcoming elected politicians' institutional incentives for inaction. Furthermore, we lack conceptual and theoretical tools for thinking about politics in relation to climate change.[14] Until now, global governance structures have not reached the needed international agreements on mitigation policies, and are deadlocked over the impossibility of reconciling the inter-

11 (ibid.).
12 (ibid.).
13 GHF (2009).
14 Gardiner (2010, cited in O'Brien et al. 2010).

ests of advanced economies with those of less-developed countries and emergent economies. At the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties held in Durban, South Africa, in late 2011, states parties were only able to agree on postponing the decision on what to do after the Kyoto Protocol expired.

Governance for adaptation is part of the work done by local-level politics in the vast majority of advanced economies. It merges with existing policies to regulate natural resource use, the construction of protective mechanisms, taxation measures, etc. For developing countries, the governance for adaptation is muddled with existing development and poverty reduction policies and strategies. Despite some progress having been made at the local level, e.g. by municipalities, in general it is clear that governance measures to reduce emissions and prevent dangerous climate change has yet to emerge.

Within the literature addressing the problems related to climate negotiations, there is considerable focus on the role of market tools to regulate and create incentives for decreased GHG pollution.[15] The focus is on carbon only, however, and on markets as key tools for change. Carbon markets, Clean Development Mechanisms, the Special Climate Change Fund, and emerging National Adaptation Plans for Action are all primarily market-driven policy recommendations. They do not address the underlying causes of climate change, which are rooted in conceptions of development and progress that have made consumption the overarching measure of a well-functioning economy and of people's subjective perception of well-being. Nor do these market solutions provide the new institutions needed to fill the major governance gaps required to govern unavoidable climate change impacts. In the case of developing countries, the management of these policy mechanisms is in the hands of global development institutions, which are mainstreaming matters related to climate into their ongoing programmes and, thus, perpetuating existing neoliberal, market-based solutions to both issues.[16]

Thus, governance problems raised by climate change impacts relate not only to transnational relations and claims between countries, but also to internal conflicts over public spending, allocation of resources, costs and responsibilities, and prioritisation of some issues over others. In general terms, one could say that a changing climate adds an extra layer of complexity and

15 Aldy & Stavins (2009); Barrett (2006); Victor (2011).
16 Gasper et al. (2013).

friction to existing transnational relations. Nationally, welfare provisions have to compete with the requirements for coping with climate change impacts, and shifting resources to a transition towards more sustainable economic activities and lifestyles.

Firstly, climate change requires the reduction of GHGs, a process usually referred to as *mitigation*. The mitigation of GHGs requires carbon to be taxed and investments to be made into renewable energy and public infrastructure, such as public transport. *Adaptation* – the process of adjustment to actual or expected climate change and its effects in order to moderate harm or exploit beneficial opportunities – will place further demands on public funds. For example, building protection against sea-level rise, landslides or floods involves costly public works. Equally importantly, adaptation may entail the moving of populations from one area to another, and/or the special protection of poor social sectors. Furthermore, climate change impacts themselves are costly, and are likely to put pressure on human and economic public resources. For example, public funds will partly have to cover damage to public roads and other infrastructure by storms or other severe weather events, or increases in public health costs in cases where new diseases are brought about by increased temperatures. Thus, climate change calls for a serious rethinking of priorities in social policy.[17] In cases where basic needs are still not being met for large numbers of people, climate change challenges and impacts further complicate and pressurise the unequal distribution of and access to resources and services. The complexity of the challenges, and the shortcomings of political bodies and the market to come up with solutions, has brought attention to rights and the possibilities for addressing them by way of law and legal arenas.

II. Climate Justice and Human Rights

Firstly, climate change impacts challenge existing frameworks for rights protection because they most strongly affect sectors of the population that are already vulnerable in ways that compromise their constitutional rights. Socio-economic rights, in particular, are very likely to suffer unless appropriate governance structures and protection systems are put in place. Fundamental rights taken for granted by most countries may also be compro-

17 Gough (2011).

mised; these include property rights, rights to national territorial sovereignty, and the right not to be forcibly displaced. Secondly, climate change is a matter of justice because the regions of the world that are likely to be the most severely affected are those that have contributed the least to increased GHGs and, thus, are the least responsible for the key drivers of climate change, i.e. industrialisation and modernisation. The poorest sectors of all societies are, de facto, paying the price of unfettered consumerism in other countries or by other social classes within their own countries. This double injustice is aggravated by the lack of careful understanding of the context in which market-driven solutions to climate change are being implemented. Neither mitigation polices nor adaptation strategies create win-win solutions. They involve choices regarding the distribution of harms and benefits, and choices between the short- and long-term needs of both humans and the natural environment. For example, mitigation strategies associated with reforestation may negatively affect vulnerable people, who may lose their farmland. And, like other markets, markets created to value the true costs of carbon in the atmosphere and to treat it as a pollutant are vulnerable to problems of externalisation.[18] In addition, existing adaptation plans suffer from the same problems that development aid has suffered from since its inception after World War II, i.e. development planning involves difficult dilemmas and leads to winners and losers; economic resources, although needed, may not protect people, for example, when corruption is rampant.[19]

Thus, mitigating for and adapting to climate change may lead to a more unequal if perhaps more sustainable world, or it may lead to the emergence of authoritarian regimes because of the urgency for change and the lack of democratic governance tools to promote such change. It is a gross simplification to presume that all measures to cope with or prevent climate change will be good for poor people, or will lead to a more equitable and fair world. The opposite is also a possibility; many activists proposing climate justice argue that the opposite is, in fact, more likely. These activists demand a move beyond a scientific framing of climate change and towards a social and human understanding of the problems involved. From this perspective, both climate change impacts and many mitigation and adaptation strategies vio-

18 Bond (2010). *Externalities* in economics generally refer to (positive or negative) effects on third parties who are not involved in an activity or transaction. Here, *externalisation* means that polluting actors are able to avoid (the full cost of) their responsibilities.

19 Petherik (2012).

late widely recognised rights; these include the right to food, health, housing, not being forcibly displaced and – even – life.

Different kinds of rights talk form part of various climate-change-related mobilisation efforts and political strategies; legal mobilisation, more narrowly conceived, is emerging as an important institutional space for contestation over climate chance governance. It is important, therefore, to better understand the evolving role of laws and legal institutions as the default regulators of climate change. Legal mobilisation is intertwined with the emergence and increased relevance of social movements for climate justice, and figures centrally among the strategies adopted by climate justice activists. This reflects a general trend towards legal mobilisation for social justice, including for access and entitlement to natural resources such as water, or to services such as electricity, housing and health.[20] Clearly, legislation is a product of political bodies; but our focus is on the law as a tool and as a space for contestation for other social actors. In the following discussion, we focus on the law and its institutions such as courts as tools – both for preventing harm to vulnerable groups and for transformative change.

C. Climate Change Lawfare

The concept of *climate change lawfare* builds on the concept of *social lawfare.*[21] The role of the law in social transformation has been growing and evolving over the last few decades. An array of diverse factors – operating very differently in different contexts – has combined to increase the importance of rights, courts, and various legal and quasi-legal institutions as sites of political struggle. These include systematic weakness in political systems, with (more or less) democratic institutions marked by elite capture and lack of responsiveness. This has resulted in a consequent unwillingness or in-

20 Gargarella et al. (2006); Gauri & Brinks (2008); Gloppen et al. (2010); Yamin & Gloppen (2011).

21 The notion of *social lawfare* was developed by a group of scholars (including the authors) as part of an effort to create the conceptual foundation for a new collaborative Global Centre for Law and Social Transformation. The main focus of the Centre is to better understand the effects and impacts – desired and undesired – of social lawfare strategies. The Centre is coordinated from the Chr. Michelsen Institute (CMI) in Bergen, Norway. For a semiotic analysis of the concept of *lawfare*, see Tiefenbrun (2011:29).

ability to tackle pressing social problems, from severe poverty and inequality to environmental challenges. Nonetheless, alongside a sometimes-deteriorating political opportunity structure, the legal opportunity structure has, in many cases, improved. Many countries have adopted new rights-rich constitutions, many policy areas see denser national and international regulation, many judiciaries have been reformed, and many places are experiencing a stronger rights consciousness. In some places, of course, the law remains very distant from these debates, but where the debates are present, actors within civil society and the state – nationally and internationally – have turned to legal strategies and arenas to fight battles that, traditionally, had been resolved in the political domain. This battling of legal perspectives and use of the law is what is meant by the concept *lawfare*.[22] Included in this concept is the notion that "…the weak may use the law strategically to thwart the will of the powerful".[23]

Social lawfare refers to the diverse strategies in which rights and legal institutions figure prominently, are adopted intentionally, and are used strategically with the aim of helping deliver, or at least catalyse, social transformation and human development. Visions of social transformation and human development differ, as do views on means for getting there. The concept of *social lawfare* also includes legal strategies for maintaining the status quo in response to pressures for transformation sought by others, and furthering aims that proponents of liberal democracy or human rights would deem reactionary.[24]

Social lawfare, understood as the strategic use of law to bring about or resist social transformation, occurs in two main forms. One set of social lawfare strategies seeks social change by way of changing the law. While legal change normally involves legislators and politicians, it may be motivated or initiated from outside by international actors and institutions, as

22 Gloppen et al. (2011).

23 Scobbie (2006). This use of *lawfare* – where law is potentially a tool for progressive change that may also be used by poor and marginalised people to advance their causes – differs, for example, from the way the term is employed by Comaroff and Comaroff (2006), who use it to describe authorities' use of "the violence inherent in the law" for purposes of dominance and discipline. *Lawfare* is also used by The Lawfare Project to describe "*negative* manipulation of international and national human rights laws" [emphasis in original], with reference to the attempts by non-governmental organisations (NGOs) to use international law to delegitimise Israel; see www.thelawfareproject.org, last accessed 3 May 2013.

24 Gloppen et al. (2011).

well as by rights-based mobilisation for legal change 'from below', i.e. by ordinary citizens and civil society activists, which is the focus of this article.

The other main form of social lawfare seeks social change by mobilising within existing legal structures. This includes litigation before courts and other complaint mechanisms and monitoring bodies, and the judgements arising from such efforts. It also includes strategies which involve the use of rights talk to mobilise public opinion and pressure for compliance and rights realisation.

In both cases, lawfare may, in the first instance, change the operation of what we may call *intermediary mechanisms* of social transformation. It may lead to the establishment of new institutional and organisational structures, or changes to existing structures. It may change the set of actors – and, thus, the type of knowledge and experience – influencing processes and decisions, and the power relations between and among those actors. Lawfare may also lead to changes in discourses and ideas. This, in itself, could constitute important transformation, but might also lead to more lasting and tangible changes in the various dimensions which those engaging in these strategies would generally be aiming to bring about, i.e. lawfare may change the societal goals and values in relevant areas, the processes of decision-making, the conditions of sustainability, and policy outcomes which have a material effect on the ground. Furthermore, in addition to changes that would be intended and wanted by those driving the lawfare, it may also have unintended and unwanted effects.[25]

25 Unintended negative consequences may take different forms. For example, public interest litigation seeking to reduce urban pollution by moving large industrial emitters out of city centres may take away the livelihood of poor urban dwellers who cannot afford the commute. Litigation for medication and health services may skew resources towards high-cost interventions and potentially away from preventive care and basic services that are essential to the health of poor people (Ferraz 2011). Successful litigation for sexual and reproductive rights (e.g. abortion or same-sex marriage) may produce a political backlash. Efforts to hold political leaders accountable for human rights abuses (e.g. convicting the former Liberian President, Charles Taylor, in the Special Court for trying war crimes in Sierra Leone; indicting the incumbent Sudanese President, Omar al-Bashir, at the International Criminal Court) could make dictators and warlords cling to power at all costs, making negotiated deals impossible; and 'shaming' campaigns to free prisoners of conscience could prompt repressive regimes to kill dissidents instead of imprisoning them. Individual titling of land – recommended by Peruvian economist Hernando de Soto as a strategy for development, based on the reasoning that it enabled use of property as collateral for credit – has in some cases been found to exacerbate poverty by facilitating the per-

Table 1: Lawfare Strategies and Effects[26]

Social, institutional and political causes lead to …	**… two strategies …**	**… that work through changes in three intermediate mechanisms, namely –**	**… to produce ultimate changes in three areas, namely –**
	1. rights-based mobilisation for legal reform	a. institutional/ organisational	i. societal goals and values
	2. legal mobilisation within the existing framework, including litigation	b. actors and power relations	ii. processes of decision-making
		c. discourses and ideas	iii. policy outcomes, material changes and sustainability

As climate change enters the domain of contestation for limited resources and conflicts of welfare versus environmental rights, and as the boundaries of environment and the planet lead to a rethinking of the suitability and gaps in existing law and global norms, we see a new form of lawfare emerging, analogous to the discussion outlined above. Drawing from this concept of *social lawfare*, we coined the term *climate change lawfare* to theorise on emerging rights-related issues around climate change that manifest themselves in legal strategies. Like *social lawfare*, the notion *climate change lawfare* aims to capture the diverse strategies in which rights and legal institutions figure prominently, are adopted intentionally, and are used strategically with the aim of helping to deliver, or at least catalyse, social transformation and human development – with the additional dimension of these strategies being related to climate change. In using an analogous distinction to the one used to frame the concept of *social lawfare*, it is useful to distinguish between two distinct climate change lawfare strategies. The first seeks transformation though mobilisation aimed at changing the law, where sustainability and rights protection in the context of climate change are sought though legal reform. The second seeks transformation through mobilisation within existing legal structures, such as courts and various complaint mechanisms and treaty bodies, or through rights-based civil society activism aimed at compliance though shaming and public opinion. Our main focus in this article is on the latter, but we also illustrate what climate change lawfare though the former, i.e. legal reform, may entail.

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manent sale of property by poor people in situations of need, leaving them without a livelihood (Davis 2006). For a discussion of how the use of law intending to protect vulnerable groups may end up turning against them, see also Comaroff and Comaroff (2006, 2009).

26 Gloppen et al. (2011).

I. Climate Change Lawfare by Way of 'Engineering': Altering Legal Regimes

Reform of the regulatory framework, or the rules of the game, in response to climate change may be initiated by national or international governmental actors or may result from lawfare by national or transnational non-governmental organisations (NGOs) and corporate (and other) actors. Such lawfare may aim at different levels, seeking to change –

- the international or regional treaty system
- national constitutions, or
- statutory law and/or administrative regulatory regimes, i.e. regimes affecting regulation and policy affecting the space for climate change mitigation and adaptation in a range of ways.

We are particularly interested in the use of rights in regulating socio-environmental conflicts in the context of climate change.

Arguably, the Andes are showing the most radical and interesting cases of climate change lawfare aiming to change the rules of the game in order to transform the political playing field in a way that simultaneously gives prominence to ecological sustainability and human rights. In Bolivia, temperatures have been rising steadily for 60 years, and an expected 3.5–4°C increase over the next 100 years would turn much of the country into a desert. Bolivians are already struggling to cope with melting glaciers and more frequent extreme weather events such as floods, droughts, frosts and mudslides. A much smaller ice cap will cause a farming crisis and serious water shortages.[27] The election in 2005 of Evo Morales, Latin America's first indigenous president, marked a turn to what can be seen as a form of climate change lawfare. Much of the legal system was restructured, starting with the adoption of a new constitution in 2009, influenced by indigenous Andean worldviews and cosmology, which place the environment and the earth deity at the centre and consider humans equal to all other living entities. This indigenous ontology also has an associated alternative paradigm of development and well-being, called *Buen Vivir* ("living well"). Buen Vivir reframes the conditions for a good life – not in terms of consumerism, but in terms of a balanced relation to one's environment.[28] The source of this paradigm is

27 Vidal (2011).
28 Heinrich Böll Foundation (2011).

the indigenous ontology where being human and having rights as a human being cannot be conceived in isolation from the environment. This eventually translated into an innovative set of laws, namely the Law of Mother Earth, passed in 2012.

The Law of Mother Earth, which declares that humans and all elements of nature have equal rights,[29] was pushed for and drafted in collaboration with indigenous and *campesino*[30] organisations. Initiated by the World People's Conference on Climate Change and the Rights of Mother Earth in Cochabamba in April 2010, the Law redefines the country's rich mineral deposits as 'blessings', and establishes new rights for nature. These include –

- the right of nature to life and to exist
- the right to continue vital cycles and processes free from human alteration
- the right to pure water and clean air
- the right to balance
- the right not to be polluted
- the right not to have cellular structure modified or genetically altered, and
- the right to not be affected by infrastructure and development projects that impact ecosystems and local inhabitant communities.

It is very important to note, that this characterisation of the components of Mother Earth defines *ecosystems* in ways that explicitly include the social, cultural and economic dimensions of human communities. This reflects the ontological view underpinning the law, which sees no dualism between nature and society. In addition, Mother Earth is established as a juridical person, as a collective subject of public interest, and legal action can be brought to defend her rights. The Law also proclaims the creation of an ombudsman for Mother Earth (*Defensoría de la Madre Tierra*) as a counterpart to the human rights ombudsman.[31]

However, the first country to recognise the legally enforceable rights of nature or of ecosystems in its constitution was not Bolivia, but Ecuador. A new Ecuadorian Constitution was adopted by a constitutional referendum in September 2008. Again, powerful indigenous groups were instrumental in the drafting of this supreme law of Ecuador. They pressured for constitutional change to give nature the right to exist, persist, maintain, and regen-

29 Law 071 of the Plurinational State.
30 Peasant.
31 Ley (Corta) de Derechos de Madre Tierra, December 2010, Article 10.

erate its vital cycles, structure, functions and processes in evolution. As in Bolivia, indigenous groups in Ecuador have ontological frameworks that do not make the (Western) distinction between humans and nature.

in the fight for sustainability and climate justice, These examples can be seen as attempts to use and extend the anthropocentric idea of human rights and the force and protection they provide. This philosophy has, in large part, been driven by indigenous organisations that derive power and direction from their ontological worldviews, in conjunction with the increased political recognition of indigenous groups as social actors. However, for cultures that do not have such ontological beliefs, the granting of rights to Mother Earth may be regarded not only with scepticism, but also as an appropriation of the planet, which belongs to others as well. In addition, for those who consider the earth to be a deity, the granting of rights that are anthropocentric in nature to the earth deity can be seen as arrogant. But regardless of these ontological and religious distinctions, the cases of Bolivia and Ecuador represent, in fact, radical forms of climate change lawfare which seek social change in pursuit of sustainability and climate justice though changing constitutional structures. Furthermore, they illustrate that legal reform can result from pressure 'from below', i.e. from civil society and, in these cases, from indigenous organisations and previously marginalised groups. It should also be noted that both Bolivia and Ecuador engage closely with the climate justice movement and are perceived by actors in this increasingly visible global movement as examples of the feasibility of a transition to sustainability that merges socio-economic and environmental claims for justice.[32]

What do we know about the effects of these development models and efforts? If one goes back to the categories outlined in Table 1 and look first at the changes in intermediary mechanisms, one can see how these processes have involved new actors in constitution- and lawmaking, changing the processes and sites through which reforms are drafted and debated, and engaging radically new discourses and ideas around rights, sustainability and justice, including the incorporation of ontologies and cosmologies that had previously been marginalised as being non-scientific. However, so far, the new constitutional rights in Ecuador have not led to new laws to implement them. Nor have they "stopped oil companies from destroying some of the most biologically rich areas of the Amazon".[33] In Bolivia, the Law of Mother

32 Martinez-Alier et al. (2011); Bassey (2012); Bond (2010).
33 Vidal (2011).

Earth was expected to lead to radical conservation and social measures to reduce pollution and control industry, but this has not yet materialised. Nevertheless, the ways in which indigenous peoples, their organisations and cosmology have been engaged in these processes of legal reform alone constitute an instance of climate change transformation. Furthermore, there seem to be transformative outcomes materialising from these processes in the form of changes in societal goals and values. These are embedded in development models such as Buen Vivir. It remains to be seen to what extent these lawfare efforts will effectively change decision-making processes and policy outcomes in the long term, whether they will change conditions for sustainability and climate justice, and whether they will have material effect on the ground.

II. Climate Change Lawfare within Existing Legal Regimes

The second category of climate change lawfare strategies engages existing legal frameworks and bodies in struggles around sustainability and climate justice. This category covers an untidy universe of actions related in various ways to legal structures and bodies at international, national and local levels. The rest of this article seeks to put some order into this universe by developing a typology of these climate change lawfare strategies in order to provide a better basis for subsequent analysis of the phenomenon. We start by outlining the universe of cases and issues at stake, as well as conditions of justiciability. This is not an exhaustive description, but rather a set of cases drawn from jurisdictions on various continents to illustrate the diversity of issues, legal frameworks and bodies involved. A first distinction is made between legal institutions and lawfare strategies that engage international laws and bodies, and climate change lawfare that takes place at the national level, involving domestic laws.

1. International Climate Change Lawfare

At the international level, climate change issues have been argued before the United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Committee, the Kyoto Committee, and the Inter-American Human Rights Commission (IAHRC). While these institutions are not courts, and the cases do not represent litigation in the strict sense,

they represent formal compliance mechanisms and engage legal norms of various kinds. Most importantly, the cases highlight the emergent links between climate change, rights, and the strategic and deliberate use of the law.

Since 2005, several NGOs have submitted petitions to the UNESCO World Heritage Committee demanding that a number of sites be added to the World Heritage Danger List as a result of glacial degradation caused by climate change. These include the Sagarmatha National Park (Everest), the coral reefs off the coast of Belize, the glaciers in Peru, Australia's Blue Mountains and Great Barrier Reef, and the Waterton-Glacier International Peace Park in Canada. The NGOs argued, for example, that melting glaciers could potentially destroy the natural and cultural value of these sites, and place thousands of lives at risk. From the perspective of this article, these efforts are interesting as an example of legal strategies by civil society organisations to create and force commitments to sustainability by making use of established legal mechanisms for protection – in this case, the protection of our natural and cultural heritage – which appeal directly against the existing and future harms brought about by climate change. Although the petitions were rejected in the legal sense, they have led to substantial work within UNESCO and the World Heritage Committee to better integrate scientific evidence of climate change impacts and to produce policy papers and strategic documents highlighting the dangers posed by climate change on World Heritage Sites.

Another example of international climate change lawfare is the legal initiative lodged in October 2006 by Friends of the Earth (FoE) Canada, FoE International, and the Climate Justice Programme to require Canada to comply with the Kyoto Protocol.[34] Claiming that Canada violates the Kyoto Protocol and the UNFCCC, they required action under the Canadian Environmental Protection Act to control GHG emissions. They referred to a report by the Canadian Commissioner of the Environment and Sustainable Development, showing that the gap between Canada's GHG emissions and its Kyoto commitments is growing: the 2004 emissions were 26.6% above the 1990 levels, resulting in a gap of 34.6% from Canada's Kyoto target of a 6% reduction by 2008–2012.[35] Per capita, Canadians are among the highest emitters in the world, with the production and consumption of fossil fuels accounting for 80% of these emissions domestically.[36] This case is an in-

34 FoE (2006).
35 (ibid.).
36 (ibid.).

teresting example of lawfare seeking to enforce compliance with international agreements into which states have voluntarily entered, but where the enforcement mechanisms are weak. Although the petition did not have legal consequences, and while we do not yet see a human-rights-based case emerging from these types of claims, they are powerful in raising awareness of the lack of compliance with international regulations. By naming and shaming they also raise moral awareness of the lack of political leadership.

One of the most striking international climate change lawfare efforts, and one of the first cases directly linking climate change with violations of human rights, is the petition brought before the IAHRC by the Inuit Circumpolar Conference (ICC 2005) against the United States of America (US). On behalf of all Inuit of the Arctic regions of the US and Canada, the ICC – assisted by the Center for International Environmental Law and Earthjustice – sought relief from human rights violations resulting from global warming caused by acts of omission and commission by the US. The case draws from the key conclusions presented by the Arctic Climate Impact Assessment, which documents and projects climate change impacts in the Arctic region.[37] The case pointed to the US as being responsible for 25% of the world's carbon dioxide emissions, and to that country's lack of participation in international efforts to combat climate change through the Kyoto Protocol. Although the IAHRC decisions are not enforceable, it was hoped that a declaration recognising that human-induced climate change has infringed on the human rights of the Inuit would contribute towards creating a new foundation under international law for linking environmental degradation to human rights claims. It was hoped that a ruling establishing the liability of the US for its contributions to climate change might push the country towards international collaboration on climate change issues and raise awareness about the human rights consequences of climate change. The petition pointed to the obligation of the US towards its neighbours, both as a member of the Organisation of American States and as a signatory to the American Declaration of the Rights and Duties of Man, which includes the protection of the rights to life, work, residence and movement, inviolability of the home, preservation of health and well-being, and the benefits of culture.

37 ACIA (2006).

The claim was not for monetary reparation, but was –[38]

> … about encouraging the United States of America to join the world community to agree to deep cuts in greenhouse gas emissions needed to protect the Arctic environment and Inuit culture and, ultimately, the world. We [the Inuit] submit this petition not in a spirit of confrontation, that is not the Inuit way, but as a means of inviting and promoting dialogue … within the context of the Climate Change Convention … I [ICC Chair, Ms Sheila Watt-Cloutier] invite governments and non-governmental organizations worldwide to support our petition and to never forget that, ultimately, climate change is a matter of human rights.

The IAHRC dismissed the petition in November 2006 on the basis that it failed to establish whether the alleged facts would tend to characterise a violation of the rights protected by the American Declaration. The role that scientific uncertainty and limited interpretations of human rights may have had in this ruling is an issue for further analysis, but it is noted here that this petition represents a very significant climate change lawfare effort. Despite its dismissal, the petition succeeded in bringing attention to the relationship between climate change and human rights, the nature of the problem, and the weakness of existing governance mechanisms to control the negative impacts of climate change.

2. National Climate Change Lawfare

Legal mobilisation on climate change issues can also be found at the national level, with cases brought before both courts and quasi-judicial bodies. While the international cases discussed above were unsuccessful in legal terms, a number of domestic cases have been won in court. While a proper analysis of this body of litigation and the remedies provided is beyond the scope of this article, Table 2 shows the emergence of legal mobilisation on climate change issues in a number of countries on all continents.

38 ICC (2005).

Table 2: Climate-change-related Litigation in Domestic Courts

Country	Parties	Matter	Case Decision
Argentina	*Argentine Citizens v State* (2003)	**Government inaction on climate change adaptation** Argentina's Acción Informativa mechanism and Article 6 of the UNFCCC was used to demand access to information on climate change actions (after severe flooding) to force the government to admit failure to adapt	Case revealed that plans to prevent flooding were developed but not implemented
Australia	*Australian Conservation Foundation v Minister for Planning* (2004)	**Government inaction** Greenhouse gas (GHG) emissions have to be considered before approving coal mine expansion	Favourable to plaintiffs
	Peter Gray v Minister for Planning (2006)	**Intergenerational equity** Assessment of greenhouse gas impact and ecologically sustainable development required for new coal mines	Favourable to plaintiffs
	Taralga Landscape Guardians Inc. v Minister for Planning (2007) and similar cases	**Challenging of wind farms** Growing area of litigation; wind farm developments are being challenged by local communities concerned over the amenity, landscape and health effects	Mixed Some proposals were refused, others were approved or modified
Czech Republic	*Micronesia Request to Czech Environment Ministry* (2009)	**Request for a transboundary environmental impact assessment (TEIA)** Micronesia requested the Ministry to conduct a TEIA in respect of a plan to modernise the Prunerov II power plant, which would emit 0.021% of global carbon dioxide for 25 years; there were reasonable grounds to believe that it would affect the territory of Micronesia	The TEIA found that the plans did not entail the "best available techniques"; plans were delayed and modified, but approved
Germany	*Germanwatch & BUND (Friends of the Earth Germany) v Ministry of Economics and Labour* (2004)	**Support of export credit agencies (Hermes) to fossil fuel projects** Contention that financial support for projects overseas contributing to climate change (coal power plants, mining) violates the Kyoto Protocol	Favourable to plaintiffs

Country	Parties	Matter	Case Decision
	Germanwatch v Volkswagen (Complaint to Ministry of Economics and Technology) (2007)	**Violation of Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises** The Volkswagen Corporation (a member of the resource-intensive transport sector) is obliged to aim at a business strategy to avoid climate change and to implement climate protection goals	Complaint rejected; considered beyond the scope of the Guidelines
New Zealand	*Environmental Defence Society Inc. v Auckland Regional Council and Contact Energy Limited* (2002)	**Offsetting conditions on carbon dioxide emissions** Permission to construct and operate a gas-fired combined-cycle power station should be conditioned on the energy company's offsetting of carbon dioxide emissions (planting of trees to act as carbon sinks)	Partially favourable to plaintiffs; accepted scientific consensus on anthropogenic climate change
Nigeria	*Individuals and Communities against Shell, Chevron, Agip and Total* (2005) and other similar cases	**Gas flaring violates human rights** All major multinational oil companies in Nigeria flare gas; this damaging and wasteful practice of carbon dioxide and methane emission contributes to global warming, and the harmful environmental impact in communities violates their constitutional rights to life and dignity	Successful case against Shell in 2005 overturned in 2006 (appeal process – also covers actions of other companies)
United Kingdom	*World Development Movement et al. v United Kingdom (UK) Treasury* (2009)	**Government inaction on investments contributing to climate change** UK Treasury allows public money to be invested (through the Royal Bank of Scotland) in energy companies and projects contributing towards climate change	Favourable to defendants
United States of America	*Inupiat village of Kivalina Alaska v ExxonMobil Corp. et al.* (9 oil companies) (2008)	**Against industry: Federal common law claim of nuisance** The oil company's excessive carbon dioxide emissions contribute to global warming; ice protecting the coast has diminished; erosion and destruction will require Kivalina's residents to be relocated	Favourable to defendants; claim barred by 'political question doctrine' and lack of jurisdiction
	Massachusetts v Environmental Protection Agency (EPA) (2007)	**Regulation of carbon dioxide emission standards under the Clean Air Act** States, local governments and private organisations alleged that the EPA had abdicated its responsibility to regulate GHG emissions	Favourable to plaintiffs; Supreme Court ruled that global warming existed, was caused by humans, was a threat, and had caused the loss of shoreline

Country	Parties	Matter	Case Decision
	Center for Biological Diversity (CBD) petition to *National Marine Fisheries Service* (NMFS) (2005)	**Petition under Endangered Species Act** The CBD petitioned the NMFS to list three species of coral; the listing required a recovery plan, including consideration of sources of GHG emissions and the impact of global warming	Favourable to petitioners; listing to be warranted for two of the coral species
	Friends of the Earth et al. v Export Credit Agencies (Mosbacher) (2007)	**Export credit agencies' obligations under the National Environment Policy Act** Such agencies have to consider the impact of GHGs emitted by projects they support	Favourable to defendants
	Center for Biological Diversity et al. v National Highway Traffic Safety Administration (2007)	**Regulation of fuel-economy standards under** the **Energy Policy and Conservation Act** Poor environmental review of gas-mileage standards; exempting sport utility vehicles and pick-up trucks violated the law	Favourable to plaintiffs
	Comer v Murphy Oil (2007)	**Against industry: Large carbon-dioxide emitters** Victims of Hurricane Katrina sought compensation for loss of private property and use of public property	Favourable to defendants; Supreme Court declined case in 2011
	Alec Loorz et al. v US Government (2011)	**Government inaction violating the Public Trust Doctrine** The state had a duty to protect and preserve the atmosphere, including establishing and enforcing GHG emissions limitations to mitigate climate change caused by humans	Favourable to defendants; failed to establish emergent factors requiring immediate attention

The claims vary enormously in the issues they raise, the way the issues are framed, and how they are treated. The sample cases presented in Table 2 illustrate the range of claims that have been made. They show a landscape of actors and reasons, including –

- citizens suing industry and states for nuisance and carbon dioxide emissions
- governments and/or NGOs suing export credit agencies for funding the fossil fuel industry
- governments suing the power industry for a proposed plant's carbon dioxide emissions
- industry suing governments for lack of scientific evidence on carbon dioxide relations to climate change, and
- communities suing oil companies because their emissions cause global warming.

The largest number of cases is brought in the US, but cases are increasingly emerging in other countries. Based on these cases, Tables 3 and 4 develop an analytical framework aimed at better understanding various climate change lawfare efforts. A first important distinction is made between the lawfare that primarily aims at a judicial decision – in court, or in a court-like environment – and cases primarily aimed at raising awareness, earlier referred to as *rights talk.* These are not mutually exclusive categories. Out-of-court mobilisation may accompany a legal case, and some cases lodged before courts, particularly before other bodies with little or no enforcement powers, primarily aim at shaming as well as strengthening the focus and attention of a broader mobilisation process. As discussed above, lost cases may lead to important gains in a broader perspective; conversely, a court victory may achieve little unless followed up by other efforts.

A second important distinction is between *direct* and *indirect* climate change lawfare. As is shown in Table 2, some cases directly address climate change issues in the form of responsibility for global warming (most commonly, carbon dioxide emissions) and seek to establish accountability for the effects of climate change (e.g. on sea-level rise). Other cases focus on the responsibility for environmental harms associated with climate change, or with mitigation or adaptation efforts (rather than on climate change itself), and of the effect of these. Table 3 draws a typology of climate lawfare cases along these lines.

Table 3: Climate Change Lawfare Typology

Type	Claim	In Court (or quasi-judicial Body)	Out of Court Mobilisation
Direct	Responsibility for climate change		
	Accountability for climate-change-related damages to livelihoods/health/cultural rights…		
Indirect	Responsibility for climate-change-related environmental degradation		
	Accountability for resulting damages		

Table 4: Direct, Court-centred Climate Change Lawfare: Aims, Claims, Issues and Remedies

Aims	Climate change Claims	Counter-claims	Core issues	Remedies
Establish **responsibility** for climate change/global warming → mitigation	Regulatory failure (weak mitigation measures fail precautionary principle)	Regulatory failure (too harsh, not scientifically supported)	• Precautionary principle, extent, onus of proof • Scientific knowledge, validity, relevance • Responsibility	Declaratory Mandatory Structural
	Compliance failure			
Accountability for damages (human rights violations) from climate change → and from climate policy	Adaptation measures, compensation		• Causal links • **Attribution** of responsibility	
		Remedies for negative (human rights) effects of mitigation and adaptation measures	• Trade-offs of social/environmental rights v climate	

In the following discussion, we focus on the direct, court-centred climate lawfare (the dark area in Table 3). While the cases are diverse in nature, Table 4 shows how the aim is either to establish *responsibility* for climate change in order to strengthen mitigation efforts, or to establish *accountability* for damages and human rights violations resulting from climate change. The latter category includes violations arising from mitigation or adaptation efforts that have negative consequences for some groups, or for nature (the dark cell). In Table 2, this type is represented by windmill cases from Australia, where individuals and communities have sought – and to varying degrees have succeeded – to stop the construction of windmills due

to the harm caused to individuals, communities or nature. An issue here is how significant the climate mitigation effects have to be in order to outweigh the inconvenience caused. In a similar case in New Zealand, the court ruled that even very small mitigation effects (arising from windmills) should be taken into account. Similar, more or less legalised conflicts are found, for example, around hydropower stations and reforestation projects.

Cases aiming to establish responsibility for climate change have, to a large extent, focused on carbon dioxide emissions. In Table 2, these are represented by two main types of cases: the first focuses on governmental failure to set emission standards, particularly related to the establishment of a new high-emission industry such as fossil fuel plants, or in relation to the granting of export credits to fund high-emission projects. The second focuses on failures by industry or government to comply with existing commitments; this type of case includes one from Canada related to the Kyoto Protocol. Core issues in both types of cases are –

- the extent to which sufficiently strong scientific knowledge exists to support the regulation in question
- the responsibility laid on individual emitters, and
- in cases of uncertainty, how the precautionary principle should weigh in, i.e. who should bear the onus of proof?

Similarly, in cases related to accountability for human rights violations and other damages caused, the core issues relate to the scientific bases for establishing the required causal links, i.e. how clear is it that the concrete damages in question – e.g. for the Inuit who risk losing their village after the decrease of protective ice – are a result of climate change and not a result of normal weather variability? Furthermore, even if accountability can be sufficiently established, how sound is the basis for attributing responsibility to particular companies or governments (large carbon dioxide emitters)? In the 'grey cell' in Table 4, cases of damages arising from mitigation or adaptation measures, what should the trade-offs be between concern for climate change and other rights?

As Table 2 shows, much of the climate lawfare to date has failed in legal terms – although to varying degrees it has still contributed towards advancing the cause out of court. Nonetheless, some cases have succeeded. Judges in the US and elsewhere have confirmed the scientific consensus on anthropogenic climate change, and have found sufficient proof of causal links to order regulatory measures and attribute responsibility. In most of the cases represented here, the remedies provided by the court have been quite simple

declaratory ('fix this') or mandatory ('do that') orders, directed at regulatory authorities or industry. However, based on legal developments in other areas, we could expect courts to adopt more structural approaches, such as that taken by the Argentine Supreme Court in the Mantaza-Riachuelo case.[39] The problem presented in this case related to the century-long pollution of the Mantaza-Riachuelo River Basin in Buenos Aires, threatening the life and health of hundreds of thousands of poor people living on the banks of the river. Solutions were complicated by the fact that a dozen municipalities shared jurisdiction, and there were many hundreds of polluters involved. The court ordered, and continues to supervise, a process of devising and implementing a coordinated plan involving all major stakeholders. While end results have been sluggish, the judgment has resulted in increased awareness and understanding, as well as institutional and organisational reform that, over time, may bring more sustainable solutions.[40] Climate change cases present similar problems related to jurisdiction and coordination. It will be interesting to see whether more sophisticated structural remedies are developed.

D. Concluding Remarks

Our aim in this article was to offer a theoretical perspective that would allow an investigation of the legalisation of climate change conflicts. Using the concept of *climate change lawfare*, we have shown how, in the context of impotent governance structures, the law may develop into a powerful arena for transformative change. Among activists and decision-makers, and to some extent the public, rights talk and legal challenges are already changing understandings of climate change problems, responsibilities and accountability, and are transforming legal structures – old and new. While few of the cases have thus far been won in court, they have raised awareness and, in some cases, achieved at least some of their aims out of court. Moreover, as an increasing number of cases serve to familiarise the judicial community with such issues, and as new principles and remedies are developed, the law and the courts are likely to become a major arena of contestation over climate justice.

39 Staveland-Sæter (2011).
40 (ibid.).

This article does not aim to provide a comprehensive analysis of climate-change-related legislation and litigation; yet it is hoped that the summary of cases presented, and the climate change lawfare typology developed herein, may offer a starting point for systematic investigations into the conditions and driving forces that place rights and courts at the centre of climate change conflicts, as well as of the effects and impacts – material, symbolic and political – of various legal strategies. The broader ambition is, ultimately, to understand the transformative potential of the law to address problems of sustainability and social justice in the context of climate change. As such, this article illustrates and lays the foundation for further work on the contributions the law can make in responding to the challenges posed by climate change.

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