



A bottom-up approach to climate governance: the new wave of climate change litigation

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Abstract

Over the recent years, the growing perception that States' policies and planning decisions were not ambitious enough to prevent harmful interferences to the climate system sparked the emergence of a new category of cases of climate change litigation, characterised by the presence of numerous legal innovations. For the first time, these cases are presenting a systematic, bottom-up effort whereby individual citizens or group of citizens are suing States and national bodies, holding them accountable for failing to adequately contrast climate change. This type of effort has significant prospects of becoming a major regulatory force in climate policy, and could give rise to a new form of 'vertical accountability' between the State and its citizens. This reflection will provide a broad overview of six characterising elements that define the new wave of climate change litigation, namely the use of Public Interest Litigation (PIL), of modern climate science, rights-based claims, the 'public negligence' argument, the public trust doctrine, and finally, international law.

Introduction

Since the first recognition of climate change as a global issue more than 20 years ago, nearly every country in the world has approved legislation to address - with various levels of commitment and success - this phenomenon¹. Such a long-standing legislative momentum and the consequent increased presence of climate change laws in national jurisdictions² has gradually led, since 1991, to the emergence of over 800 legal cases³ that are commonly defined as climate change litigation. However, this term can be deceptive as it tends to incorporate a heterogeneous body of lawsuits with limited common traits. At a closer look, the majority of these cases refer to disputes over the application of statutory legislation falling within the macro-area of planning, permitting and environmental impact assessment⁴, hence having, with few exceptions, little political implication⁵.

It was only recently that the perceived lack of effective action to contrast climate change taken at the national level, supported by the building awareness within civil society of the threats that the latter phenomenon may pose, led to the emergence of what could be defined as a 'new wave' of climate change litigation, presenting numerous innovative traits. For the first time since the appearance of climate change in Courts, litigation is systematically used as a form of bottom-up pressure with one overarching goal: influencing national policy or public policy decisions with climate change implications through the obtainment of injunctive reliefs. This goal is pursued through the use of six innovative elements that are used to hold States accountable for their policy decisions on climate change. These elements are: the use of public interest litigation as a means to overcome standing requirements obstacles, the use of climate science to prove the links between GHG emissions to climate change the damages that the latter causes, and, the use of unusual mixes of innovative arguments and sources such as human rights law, public negligence and the public trust doctrine, all accompanied by the support of fundamental principles and treaties of international law.

The beginning of the 'new wave' of climate change litigation can be traced back to the landmark judgement delivered in the *Urgenda Case*⁶ in the Netherlands in 2015, where a class-action brought by 886 Dutch Citizens successfully obtained an injunctive relief commanding the Dutch government to adopt a more ambitious emission reduction target. The momentum created by *Urgenda* led to similar cases emerging in the domestic tribunals of several jurisdictions all over the world, ranging from Belgium to India and the United States. As of today, the number of these cases is still small - between 15 and 20⁷ - but it is rapidly rising. The aim of this reflection will be to carefully analyse each of the six characterising elements that were previously outlined, as to possibly shed some light onto what the new wave of climate change litigation may represent, and onto the future prospects that bottom-up pressure to shape climate policy may bear.

Open Standing Through Public Interest Litigation Class Actions

The concept of 'standing requirements' is used to identify who is allowed to present a claim in front of Court or a Tribunal. Every jurisdiction possesses its own standing rules and jurisprudence to ensure

¹ UN Environment 'The Status of Climate Change Litigation. A Global Review' (2017) <<http://wedocs.unep.org/bitstream/handle/20.500.11822/20767/climate-change-litigation.pdf?sequence=1&isAllowed=y>> Accessed 13 September 2017

² Nachmany M, Frankhauser S, Setzer J, Averchenkova, A 'Global Trends in Climate Change Legislation and Litigation' (2017) <<http://www.ipu.org/pdf/publications/global.pdf>> Accessed 13 September 2017

³ This number is drawn by the Climate Change Litigation Database created by the Columbia's Sabin Centre for Climate Law. This can be found at <<http://climatecasechart.com/>>

⁴ 'Climate Change Litigation Databases - Sabin Center for Climate Change Law' (*Climate Change Litigation*) <<http://climatecasechart.com/>> accessed September 13, 2017

⁵ Burns WCG and Osofsky HM, *Adjudicating climate change: state, national, and international approaches* (Cambridge University Press 2011)

⁶ *Urgenda Foundation v. The State of the Netherlands*, [2015] C/09/456689/HA ZA 13-1396 ('Urgenda')

⁷ For detailed information about the selected cases, see Appendix I.

that claimants have sufficient interests to bring the lawsuits, and these rules vary in openness or restrictiveness according to the jurisdiction under scrutiny⁸. Standing rules have for long been the first - and often greatest - obstacle to bringing a case of climate change litigation to court, as, given the very characteristics of climate change, showing some widely required elements for standing such as causation or injury-in-fact may be quite difficult. For this reason, several high-profile cases have in the past been dismissed at their initial stages for the plaintiffs did not meet standing requirements⁹. Cases belonging to the new wave of climate change litigation propose an innovative way of overcoming the standing obstacle, that is, the use of public interest litigation (PIL). PIL is defined as a lawsuit brought to advance the cause of a minority or disadvantaged groups of individuals, or which raises issues of broad public concerns¹⁰. Two main reasons explain the suitability of PIL in climate change litigation. Firstly, PIL is inherently political, as it is normally used to push for social change. This allows plaintiffs to bring cases against governments, demanding policy changes for the public interest, shielding plaintiffs from being stopped for alleged non-justiciability of the claims or because the claims are of a political nature. Moreover, PIL is by definition representative of the public interest and as such, no injury or causation need to be shown to have access to Court, hence opening the doors to bottom-down lawsuits were citizens demand stronger measures to fight climate change.

The strengths of PIL in overcoming standing requirements are well visible in case law. In the aforementioned *Urgenda* case, the Court admitted that in the Netherlands private citizens normally need to show 'sufficient interest' to gain access to Court, while public interest associations (such as *Urgenda*) only need to prove that they are representative of a collective interest. Similarly, in *Leghari v Pakistan*¹¹, a PIL lawsuits brought by a Pakistani farmer against the State, the Court allowed that having *Leghari* approached the Court through PIL, he must have access to Court, showing how well-established this type of litigation is in the country. Again in *VZW Klimatzaak v Kingdom of Belgium*¹², the Court reasoned that while past jurisprudence did not allow claims for the common interest, the new jurisprudence starting with the adoption of the Aarhus Convention recognises claims " *d'instances publiques*", thus allowing the NGO access to Court. Hence, in legal environments in which PIL is established by either customs or national laws, citizens' organisations have at their avail this powerful instrument to present lawsuits for a social change, overcoming traditional standing requirements. It is noteworthy that all the cases that the author has classified as belonging to the new wave of climate change litigation were presented under the form of public interest litigation.

The Use of Modern Climate Science

Climate science is a critical element in cases of climate change litigation, as plaintiffs are normally required to present scientific evidence to support their arguments in Court. Since the publication of the first Intergovernmental Panel on Climate Change (IPCC) Assessment Report in 1990, climate science has been in continuous evolution. Yet, notwithstanding the constant developments, the latter has often been met with opposition in Court, particularly as a number of interest groups have continuously set out to cast doubts on its reliability.¹³ A significant example of this effort is Judge Scalia's dissenting opinion in *Massachusetts v. EPA*¹⁴, a milestone case of climate change litigation where 12 American States sued the Environmental Protection Agency for its failure to regulate Greenhouse Gases. In his dissenting opinion, Scalia stated that the science was too uncertain for

⁸ See UN Environment, *supra* n.1

⁹ Some notable examples are *Comer v Murphy Oil USA* (2009) 585 F.3d 855 (5th Cir. 2009) and *Amigos Bravos v. United States Bureau of Land Management* (2011) 816 F. Supp. 2d 1118 (D.N.M. 2011)

¹⁰ 'The PILS Project' <<https://www.pilsni.org/>> accessed September 13, 2017

¹¹ *Leghari v Federation of Pakistan* (2015) W.P. No. 25501/2015

¹² *VZW Klimatzaak v Kingdom of Belgium* (2015) Court of First Instance, Brussels (Case Number Not Available)

¹³ Michaels D and Monforton C, 'Manufacturing Uncertainty: Contested Science and the Protection of the Public's Health and Environment' (2005) 95 American Journal of Public Health

¹⁴ *Massachusetts v. EPA* 549 U.S. 497 (2007)

the EPA to take any regulatory measures¹⁵, showing how a solid and flawless - as far as possible - climate science is crucial to avoid opposition in Court.

Today, climate science has reached what could be defined a safety threshold. Scientific understanding of climate change is quite deep, and the latest IPCC Assessment Report published in 2013 acknowledges that men are causing climate change with a confidence level of 95%, hence leaving little room for opposition¹⁶. In the new wave of climate change litigation, plaintiffs are relying on the major developments that climate science has seen in the recent years to prove the causal relationship between anthropogenic GHG emissions and climate change, and also to support their claims about climate change's consequences. It is noteworthy that they do so by presenting a wealth of diversified sources of climate science, as to diminish controversies as much as possible. Two types of climate science findings are normally presented in Court: (i) international climate science and (ii) national and sub-national climate science¹⁷.

International climate science (i) is represented mainly by the IPCC Assessment Reports which cover nearly all aspects of climate science, ranging from mitigation pathways scenarios to temperature increases and sea level rise. Some of the main findings of the latest IPCC report include the need to keep temperatures' increase below 2°C, the need to maintain atmospheric concentration of CO₂eq between 430 and 450ppm CO₂eq, and that delaying mitigation efforts beyond 2030 would make the reaching of the 2°C target extremely challenging, triggering a series of threatening natural phenomena. IPCC findings appear in nearly every case of the new wave of CCL. In *Union of Swiss Senior Women for Climate Protection v. Swiss Federal Parliament*¹⁸, the plaintiffs claim that Switzerland's GHG emission reduction target is inconsistent with what is needed to keep temperatures increase at a non-harmful level according to the IPCC. Similarly, In *Urgenda*, the plaintiffs use IPCC science to prove that the Dutch State is infringing its duty of care by adopting an emissions reduction target that would not allow keeping a temperature increase below 2°C, thus violating citizens' fundamental rights. Further, although minor, sources of international climate science are the reports drafted by UN and non-UN international bodies, which appear on a lesser scale. An example of this emerges from *Pandey v India*¹⁹, where the plaintiffs support their claims on the negative health impacts of climate change relying on the Climate Health Fact Sheet by the World Health Organisation.

National and Subnational climate science (ii) is also often used in national Courts. This refers to research conducted by national climate science research institutes that exist in several countries. Among the cases that rely on domestic and subnational climate science we find *Ali v Federation of Pakistan*²⁰, where the plaintiff, in proving the risks posed by climate change, rely on the data on sea-level rise from the Pakistans' National Institute of Oceanography and on the Environment and Climate Change Outlook of Pakistan (ECCO). Similarly, in *Vienna Schwechat Airport Expansion*²¹ case, the plaintiffs resort to the findings of the Austrian Panel on Climate Change (APCC) to support findings from the IPCC.

The Use of Constitutional and Human Rights Claims

¹⁵ This anecdote is drawn from Oreskes N and Conway EM, *Merchants of doubt: how a handful of scientists obscured the truth on issues from tobacco smoke to global warming* (Bloomsbury 2012)

¹⁶ IPCC, '*Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*' (2013) [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp, doi:10.1017/CBO9781107415324.

¹⁷ de Vilchez Moragues P, 'Broadening The Scope: The Urgenda Case, The Oslo Principles And The Role Of National Courts In Advancing Environmental Protection Concerning Climate Change' (2016) 20 Spanish Yearbook of International Law

¹⁸ *Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council* (2016) Verein KlimaSeniorinnen

¹⁹ *Pandey v India* (2017) National Green Tribunal at Principal Bench, New Delhi

²⁰ *Ali v. Federation of Pakistan* (2016) Supreme Court of Pakistan

²¹ *Vienna Schwechat Airport Expansion* (2017) W109 2000179-1/291E

The extensive use of rights-based claims is amongst the most innovative and characterising elements that emerge from the new wave of CCL. This type of claim is used to allege that States' climate policies that fail to address climate change adequately inherently violate a number of constitutional and fundamental rights of citizens. This type of argument can provide a solid and non-political statutory basis to challenge State policies and decisions. What emerges from an overview of the cases under scrutiny is that rights-based claims emerge through two main avenues: rights enshrined in national constitutions (i) and international human rights law.

A growing number of national constitutions now contain rights-based provisions to protect - directly or indirectly - environmental rights (i). These provisions can take a variety of forms, ranging from rights to a healthy environment, life, property and dignity, to procedural rights such as the right of public involvement in environmental decision making²². These provisions can be a powerful instrument to hold governments accountable for their political decisions, and particularly to challenge statutory legislation that is incompatible with rights that are constitutionally protected. For example, in *Earthlife v Ministry of the Environment*²³, the plaintiff's claims that the construction of a new coal plant would constitute a violation of Art.24 of the Constitution of South Africa which writes that:

"Everyone has a right to (a) an environment that is not harmful to their health or well-being and (b) to have the environment protected for the benefits of present and future generations, through reasonable legislative and other measures..."

The Court accepted the arguments, acknowledging that the South African planning authority decision did not adequately take into account the effects of climate change in the form of rising temperatures, water scarcity and natural disasters. Similarly, in *Urgenda* the plaintiffs claimed that the Netherlands' climate policy violated Art.21 of the Dutch Constitution which establishes that public authorities are competent for keeping the country habitable and improving the environment - a radically different formulation than that contained in the South African Constitution- and the Court found that this article, while not directly enforceable²⁴ should have taken into account in adjudicating the existence of a duty of care.

The second legal source of rights-based claims is international human rights law, which emerges in case law mainly through the European Convention on Human Rights²⁵ (ECHR). In principle, holding States accountable while claiming a violation of the ECHR is difficult as ECHR jurisprudence only allows natural persons do be designed as victims of human rights violations²⁶. Nonetheless, ECHR was used as a supporting argument in numerous European cases. For example, in *Greenpeace Nordic Ass'n and Nature and Youth v. Norway Ministry of Petroleum and Energy*²⁷, the plaintiffs are claiming that Norway's oil and gas licences would violate Art.2 and 8 of the ECHR. In this case, it is foreseeable that the court will hold that Greenpeace, as an NGO, cannot claim to have suffered a human rights violation, but that the ECHR can be used as criteria of interpretation in the case. Other sources of international human rights law exist, including the Universal Declaration of Human Rights and International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights. However as of today, these sources were still not used in cases belonging to the new wave of climate change litigation.

The Use of The Public Negligence Argument

²² Daly E, 'Constitutional Protection for Environmental Rights: The Benefits of Environmental Process.' *International Journal of Peace Studies*, Volume 17, Number 2, Winter 2012 <
https://www.gmu.edu/programs/icar/iips/Vol17_2/Daly%20Constitutional%20Protection.pdf>
Accessed 13 September 2017

²³ *Earthlife Africa Johannesburg v. Minister of Environmental Affairs and Others* (2017) 65662/16

²⁴ As constitutional rights have normally no direct effects but rather regulate laws.

²⁵ Council of Europe, Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as Amended) (ECHR) Art 3, 1950.

²⁶ Cox, 'A Climate Change Litigation Precedent: Urgenda Foundation V The State Of The Netherlands' (2016) 34 *Journal of Energy & Natural Resources Law*.

²⁷ *Greenpeace Nordic Ass'n and Nature and Youth v. Ministry of Petroleum and Energy* (2016) Oslo District Court

A further innovative argument that has been successfully used in the new wave of CCL is the public negligence or State negligence argument. This type of argument is used to argue that the State has a number of written and unwritten duties that it must fulfil - including protecting its citizens from harmful climate change - and whenever it fails to do so, the State itself may be held liable for negligence under tort law.

Liability of public authorities in negligence is a quite unexplored area of tort law, as Courts have often required demanding tests in addition to normal tests to determine negligence as to limit the chances of holding States liable for political choices that fall within their discretionality²⁸. Normally, a negligence claim must show the presence of four elements : a duty, a breach, causation and an injury²⁹. In cases of the new wave of CCL, the most controversial element to show is the presence of a duty, as the most the majority of legal systems do not contain statutory provisions that may support the existence of a States' duty to combat climate change. Hence, the latter must be constructed through multiple arguments. A revolution in this sense was brought by *Urgenda*, where the foundational argument of the lawsuit was that the States under a duty of care towards its citizen, and as such, it was under an obligation to adopt stronger emissions reduction targets. It is noteworthy that in the case, the duty of care was constructed through the use Section 6:162 of the Dutch Civil Code which defines a 'tortuous act', Articles 2 and 8 of the ECHR³⁰, and fundamental principles of international law which will be analysed later in this reflection.

Once a duty is proven, showing the remaining elements is normally less controversial. In *Urgenda* a breach was shown by comparing the Netherlands' emissions reduction target with what is needed to prevent harmful damage according to IPCC and national science, and causation was again showed through science, demonstrating that although in minimal part, the Country's emissions are contributing to climate change. An injury was not requested as the case was presented as a PIL. *Urgenda* was the first CCL lawsuit to ever succeed in bringing a public negligence argument, and similar cases rapidly followed suit. A notable one that is still pending judgement is *PUSHSweden, Nature and Youth Sweden and Others v. Government of Sweden*, where plaintiffs built the argument following *Urgenda*, claiming that:

"The State has a duty of care for its citizens based on the Constitution, the European Convention on Human Rights and general principles of law."

While this type of argument is complex to arise in Court, it is also extremely powerful in yielding clear results, as, if the State is found to be negligent, it can be forced to take stronger measures to combat climate change. It will remain to be seen whether this argument bears the potential of being successful in different legal contexts.

The Use of The Public Trust Doctrine

The Public Trust Doctrine (PTD) is a common law concept derived from property law, and it provides that certain natural resources inherently belong to the people, and are to be administered by the State for their benefit³¹. This concept can adapt well to climate change lawsuits - particularly in common law jurisdictions - as it can be argued that the atmosphere is part of the public trust³², and

²⁸ Bailey S, 'Public Authority Liability In Negligence: The Continued Search For Coherence' (2006) The Journal of the Society of Legal Scholars, volume 26, Issue 2 June 2006 Pages 155–184 <<http://onlinelibrary.wiley.com/doi/10.1111/j.1748-121X.2006.00017.x/abstract>> Accessed 13 September 2017

²⁹ David Hunter, James Salzman and Durwood Zaelke, *International Environmental Law And Policy*(Foundation Press 2016).

³⁰ van Zeben J, 'Establishing A Governmental Duty Of Care For Climate Change Mitigation: Will *Urgenda* Turn The Tide?' (2015) 4 *Transnational Environmental Law*.

³¹ Lin J, 'Climate Change And The Courts' (2011) The Journal of the Society of Legal Scholars Volume 32, Issue 1 March 2012 Pages 35–57 <<http://onlinelibrary.wiley.com/doi/10.1111/j.1748-121X.2011.00206.x/abstract>> Accessed 13 September 2017

³² Wood MC, 'Atmospheric Trust Litigation' (2009) in W.H. Rodgers, Jr. and M. Robinson-Dorn, eds. Carolina Academic Press (forthcoming 2009) <<https://law.uoregon.edu/images/uploads/entries/atmo.pdf>> Accessed 13 September 2017

by not taking adequate care of it, the State is violating a fundamental duty towards its people. This argument was only rarely seen in climate change litigation until 2014, particularly as great uncertainty existed as to whether the PTD can apply to the atmosphere, or whether its scope is only limited to land and waters. The PTD's arrival to public prominence was fostered by a US NGO named Our Children's Trust³³, which in the last 3 years brought several major climate change lawsuits all over the United States, constantly presenting the PTD as a central argument to hold the State liable for not addressing climate change adequately.

The Our Children's Trust lawsuit that gathered the greatest public attention is *Juliana v United States*, a case that is still awaiting judgement, where a group of young citizens brought a case against the United States federal government and the government of Oregon claiming that irrespective of whether any laws were violated, the defendants were, through their actions and inactions, jeopardising future generations' rights to life and liberty. The use of the PTD is however not limited to the United States. In fact, the PTD also appears as a central argument in several common law cases including *Pandey v India*, a climate change lawsuit brought by an Indian citizen against the State where the plaintiff claims that the State is bound under the PTD to protect natural resources and to take decisions based on best available science. This is indeed a very ambitious point, and it will be interesting to see how the Indian Court will address the relationship between the best available science and the PTD.

Finally, as of today the public trust doctrine appears as a potentially innovative and powerful argument to use in Court. However, its use is only a recent phenomenon and it is hence crucial to wait and see what the stance of Courts in different jurisdictions will be, and whether a clear and widely accepted formulation of the PTD will emerge from case law of most common law countries.

The Use of International Law

International law normally has no direct effect in domestic jurisdictions and as such, individuals cannot demand relief for violations of rights and duties derived from international law³⁴. For this reason, international law is not *per se* a central argument in cases of the new wave of CCL but rather, it is used as a supportive - and nonetheless key - argument to reinforce the legal innovations that were previously outlined. International law appears in these cases through two primary sources: (i) international treaties, and (ii) principles of international environmental law.

International climate treaties are often used by plaintiffs in Court to prove the existence of international obligations or commitment to address climate change. The main source of this is the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol and Paris Agreement, all of which spell out commitment to address climate change at the international level. Further sources that are often mentioned are the UNFCCC Conference of Parties (COP) decisions such as those of Copenhagen and Cancun, which are often mentioned to show that a State has committed to certain goals. One significant exception to this is *Thomson v. Minister for Climate Change Issues*³⁵, where the plaintiff grounded her entire claim on the alleged irrationality and illegality of New Zealand's Nationally Determined Contribution (NDC) under the Paris Agreement. This type of argument may open the doors to a new use of international law in CCL, as, it could be derived that NDCs represent an intention, and as such international law may have a reflex effect creating full-fledged obligations to the State. Hence, it will be of primary importance to see how the case will develop, and how the court will interpret the legal validity of NDCs. If the court upholds the enforceability of NDCs in a national jurisdiction, this may turn the tide in the use of international law as a core element in CCL.

Principles of international environmental law (ii) derived from both customary law and treaty law are often used in court as supporting arguments. The most widely used principles in the cases under analysis are the following: The *principle of precaution*, which suggests that "where there are threats

³³ See <https://www.ourchildrenstrust.org/>

³⁴ Noellkamper A. 'The Duality Of Direct Effect Of International Law' (2014) 25 European Journal of International Law.

³⁵ *Thomson v. Minister for Climate Change Issues* (2015) In the High Court of New Zealand Wellington Registry CIV-2015

of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures", the principle of *intergenerational equity*, which demands that resources should be utilised in a fair way that does not prevent future generations to enjoy the same levels of resources that we are enjoying today, the *sustainability principle*, that is, the idea that Earth's resources are limited, and should thus be used in a sustainable way, and *principle of prevention*, a fundamental idea of IEL which suggests that prevention is better than cure, and as such States should act to prevent climate problems rather than solving them later on. These principles are normally used to support the existence some of the States' duties towards their citizens. For example, in *Ali v Federation of Pakistan* the plaintiff is claiming that Pakistan's policy is illegal as, among other reasons, it is violating the principles of sustainable development, intergenerational equity and the precautionary principle.

Conclusion

This reflection set out to provide a broad understanding of the main elements that characterise the new wave of climate change litigation. As it emerges from the analysis, while previous cases of climate change litigation showed only few common elements, these cases bear the traits of a systematic and almost coordinated effort of holding States accountable for their decisions. However, the sample of cases is at present too small to draw clear conclusion, and it will be necessary to wait for further developments in the pending cases. Indeed, the appearance of more sentences similar to *Urgenda* or to *Leghari v Pakistan* would provide this new wave with an ever stronger momentum. Hence, one significant question remains. Will these cases create a breakthrough in climate governance, creating the legal context to systematically force the hands of governments through bottom-up claims, or will they result into a system-specific phenomenon with no significant long-term implications?

Appendix I

Appendix I contains the cases that were considered as belonging to the new wave of climate change litigation. All the cases noted above contain several of the six elements that are listed in the main analysis.

Decided Cases

Urgenda Foundation v. Kingdom of the Netherlands (2015) - a class action lawsuit brought by 886 Dutch citizens represented by an NGO against the Dutch State in 2015. In the case, the plaintiffs claimed that the discrepancy between the Netherlands' mitigation target and what the IPCC deems to be necessary to prevent harmful climate change amounts to a violation of the States' duty of care towards its citizens. The court accepted the claim, and the plaintiffs obtained an injunctive relief commanding the Dutch Government to adopt a more ambitious mitigation target.

Leghari v Federation of Pakistan (2015) - A farmer brought a PIL litigation against the Governments of Punjab and Pakistan to challenge their inaction in climate policy claiming that these amount to a violation of fundamental rights. The court accepted the claim and ordered the government of Pakistan to constitute a Climate Change Commission and to adopt more ambitious adaptation measures.

Vienna Schwechat Airport Expansion (2017) - In the case, several NGOs contested the government of Lower Austria's approval of the Airport expansion because the latter would be contrary to Austria's national and International obligations to mitigate climate change, and would violate the rights enshrined in the European Convention on Human Rights (ECHR). Austria's Federal Administrative Court accepted the claim.

Earthlife Africa Johannesburg v. Minister of Environmental Affairs and Others (2017) - An NGO opposed South Africa's approval of the EIA for building the Thamabetsi Coal Plant on the grounds that 'relevant considerations' should include considerations of climate change, and that not considering it would expose South Africa's citizens to violations of fundamental rights. The court accepted that climate change should be a relevant consideration and invalidated the coal plant's EIA.

Pending Cases

VZW Klimatzaak v Kingdom of Belgium (2015) - A Belgian NGO brought a Public Interest Litigation against the State claiming that Belgium's failure to reduce its GHG emissions amounts to a violation of the human rights doctrine, particularly of the rights enshrined in the ECHR and will jeopardise the well-being of future generations. The petition demands an injunctive relief commanding a more ambitious climate policy

Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council (2016) - An NGO representing senior women of Switzerland argues that Switzerland's insufficient climate policy is, particularly through heatwaves, interfering with the life of senior citizens, hence violating the right to life enshrined in the ECHR, the precautionary principle, and the right to a healthy environment contained in the Swiss Constitution.

PUSH Sweden, Nature and Youth Sweden and Others v. Government of Sweden (2016) - An NGO challenged Sweden's sale of polluting assets to a Czech firm, arguing that it violates States' duty of care and the fundamental rights enshrined in the Swedish Constitution and the ECHR.

Greenpeace Nordic Ass'n and Nature and Youth v. Ministry of Petroleum and Energy (2016) - Greenpeace challenged the States' allocation of oil and gas drilling permits arguing that they infringe the Constitutional Right to a healthy environment, the fundamental rights contained in the ECHR, and fundamental principles such as the no-harm principle and the precautionary principle.

Juliana v United States (2015) - Several young citizens brought a lawsuit against the United States federal government and the government of Oregon, alleging that irrespective of whether any law was violated, the defendants were, through their actions and inactions, violating their fundamental duties to protect the environment under the 'public trust' doctrine, compromising the rights to life and liberty of the plaintiffs.

Pandey v India (2017), - An Indian citizen sued the government holding that India's climate policy is insufficient in both mitigation and adaptation, and this violates the public trust doctrine, the right to a healthy environment contained in the Indian Constitution, and principles such as intergenerational equity and no-harm.

Ali v. Federation of Pakistan (2016) - A citizen sued the government of Pakistan's approval of a new coalfield holding that it would result in increased emissions, which would, in turn, worsen climate change, violating the public trust doctrine and the Constitutional Rights to a healthy environment, dignity and life.

Notre Affair a Tous (2016) - A French NGO presented a preliminary request challenging the government's climate policy and asking for a more ambitious emission target, that is a 25% to 40% GHG emissions reduction by 2020. The petition has not yet reached the trial stage.

Thomson v. Minister for Climate Change Issues (2015) - A law student sued the government of New Zealand alleging that New Zealand's emission target is illegal as it is not sufficient to meet its emission reduction obligations, and also claims the country's NDCs is both unlawful and irrational as it is not enough to prevent harmful consequences of climate change on the population.

Bibliography

Primary Sources

- Ali v. Federation of Pakistan* (2016) Supreme Court of Pakistan
- Amigos Bravos v. United States Bureau of Land Management* (2011) 816 F. Supp. 2d 1118 (D.N.M. 2011)
- Comer v Murphy Oil USA* (2009) 585 F.3d 855 (5th Cir. 2009)
- Council of Europe, Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as Amended) (ECHR) Art 3, 1950.
- Earthlife Africa Johannesburg v. Minister of Environmental Affairs and Others* (2017) 65662/16
- Greenpeace Nordic Ass'n and Nature and Youth v. Ministry of Petroleum and Energy* (2016) Oslo District Court
- Leghari v Federation of Pakistan* (2015) W.P. No. 25501/2015
- Massachusetts v. EPA* 549 U.S. 497 (2007)
- Pandey v India* (2017) National Green Tribunal at Principal Bench, New Delhi
- Thomson v. Minister for Climate Change Issues* (2015) In the High Court of New Zealand Wellington Registry CIV-2015
- Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council* (2016) Verein KlimaSeniorinnen
- Urgenda Foundation v. The State of the Netherlands*, [2015] C/09/456689/HA ZA 13-1396 ('Urgenda')
- Vienna Schwechat Airport Expansion* (2017) W109 2000179-1/291E
- VZW Klimatzaak v Kingdom of Belgium* (2015) Court of First Instance, Brussels (Case Number Not Available)

Secondary Sources

- André Noellkamper, 'The Duality Of Direct Effect Of International Law' (2014) 25 European Journal of International Law.
- 'Climate Change Litigation Databases - Sabin Center for Climate Change Law' (*Climate Change Litigation*) <<http://climatecasechart.com/>> accessed September 13, 2017
- David Hunter, James Salzman and Durwood Zaelke, *International Environmental Law And Policy* (Foundation Press 2016).
- David Michaels and Celeste Monforton, 'Manufacturing Uncertainty: Contested Science and the Protection of the Public's Health and Environment' (2005) 95 American Journal of Public Health
- Erin Daly, 'Constitutional Protection for Environmental Rights: The Benefits of Environmental Process.' International Journal of Peace Studies, Volume 17, Number 2, Winter 2012 <https://www.gmu.edu/programs/icar/ijps/Vol17_2/Daly%20Constitutional%20Protection.pdf> Accessed 13 September 2017
- IPCC, '*Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*' (2013) [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp, doi:10.1017/CBO9781107415324.
- Jolene Lin, 'Climate Change And The Courts' (2011) The Journal of the Society of Legal Scholars Volume 32, Issue 1 March 2012 Pages 35-57 <<http://onlinelibrary.wiley.com/doi/10.1111/j.1748-121X.2011.00206.x/abstract>> Accessed 13 September 2017
- Josephine van Zeven, 'Establishing A Governmental Duty Of Care For Climate Change Mitigation:

Will Urgenda Turn The Tide?' (2015) 4 Transnational Environmental Law.

Mary Wood, 'Atmospheric Trust Litigation' (2009) in W.H. Rodgers, Jr. and M. Robinson-Dorn, eds. Carolina Academic Press (forthcoming 2009) <<https://law.uoregon.edu/images/uploads/entries/atmo.pdf>> Accessed 13 September 2017

Michal Nachmany, Sam Fankhauser, Joana Setzer and Alina Averchenkova, 'Global Trends in Climate Change Legislation and Litigation' (2017) <<http://www.ipu.org/pdf/publications/global.pdf>> Accessed 13 September 2017

Our Children's Trust, 2017<<https://www.ourchildrenstrust.org/>> accessed 20 September 2017

Pau de Vilchez Moragues, 'Broadening The Scope: The Urgenda Case, The Oslo Principles And The Role Of National Courts In Advancing Environmental Protection Concerning Climate Change' (2016) 20 Spanish Yearbook of International Law

Roger Cox, 'A Climate Change Litigation Precedent: Urgenda Foundation V The State Of The Netherlands' (2016) 34 Journal of Energy & Natural Resources Law.

Stephen Bailey, 'Public Authority Liability In Negligence: The Continued Search For Coherence' (2006) The Journal of the Society of Legal Scholars, volume 26, Issue 2 June 2006 Pages 155–184 <<http://onlinelibrary.wiley.com/doi/10.1111/j.1748-121X.2006.00017.x/abstract>> Accessed 13 September 2017

'The PILS Project ' <<https://www.pilsni.org/>> accessed September 13, 2017

United Nations Environment 'The Status of Climate Change Litigation. A Global Review' (2017) <<http://wedocs.unep.org/bitstream/handle/20.500.11822/20767/climate-change-litigation.pdf?sequence=1&isAllowed=y>> Accessed 13 September 2017

William Burns and Hari Osofsky, Adjudicating climate change: state, national, and international approaches (Cambridge University Press 2011)