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Policy brief

Global trends in climate change legislation and litigation: 2017 snapshot



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Headline issues

- There are approximately 1,400 climate change-relevant laws worldwide, a twentyfold increase since 1997.
- Most countries have the legal basis on which further action can build – the challenge now is to strengthen existing laws.
- Fighting climate change in the courts is increasingly seen as a viable strategy as more cases are initiated.

Summary

Globally, climate change and related laws now cover a large amount of ground and number of jurisdictions. For this reason, the rate at which new laws are passed decreased to around 50 in 2016 from 115–120 per year from 2009–13. The total number of laws is at a high of approximately 1,400, up from around 70 in 1997.

Low-income countries are progressively more active on climate change legislation, focusing on climate resilience rather than emissions. However, only four in 10 have factored climate change explicitly into their development plans. More integration is needed.

The courts are complementing the actions of legislators, ruling on the implementation of existing climate laws or providing a basis for the regulation of greenhouse gas emissions. There have been over 260 court cases in which climate change is a relevant factor, in a sample of 25 countries (excluding the USA). Two-thirds of court cases have either strengthened or maintained climate change regulation.

Policy briefs provide analysis on topical issues, presenting specific recommendations to inform ongoing policy debates. Drawing on the Grantham Research Institute's expertise, they summarise either our research findings or the state of knowledge about a particular issue.

This policy brief has been written by **Michal Nachmany, Sam Fankhauser, Joana Setzer** and **Alina Averchenkova**. It summarises and updates a report published in May 2017 available at www.lse.ac.uk/GranthamInstitute/publications

“In the 20 years since the Kyoto Protocol was agreed, the number of climate change laws has increased by over a factor of 20”

Trends in legislation

The global stock of climate legislation has grown

There are nearly 1,400 climate laws and policies in the 177 countries covered by this brief (see Figure 1),¹ up from around 70 in those countries in 1997. In the 20 years since the Kyoto Protocol was agreed, the number of climate change laws has increased by over a factor of 20. Only a handful of countries currently do not address climate change in national laws or policies.

Countries use various routes to address climate change

In some countries the primary instruments are acts of parliament; in others, it is executive policies. This variation reflects different regulatory traditions and local contexts. For example, in China the executive

branch is the dominant agency and executive policies are the key documents that govern climate change, whereas in countries with strong parliamentary traditions, such as the UK, climate change is governed predominantly by laws passed by the legislative branch. Less legislative and more executive activity may also reflect an early phase in climate policy development, when executive policies have not yet matured into formal legislation, or legislative capacities may be insufficient: in the least developed countries, only 23 per cent of interventions are legislative, whereas in G20 countries, it is over 60 per cent.

The pace of law-making slowed to around 40 new laws in 2016

From 2009 to 2013, a period that included the Copenhagen climate summit, over 100 new climate change laws were passed

Invitation to contribute

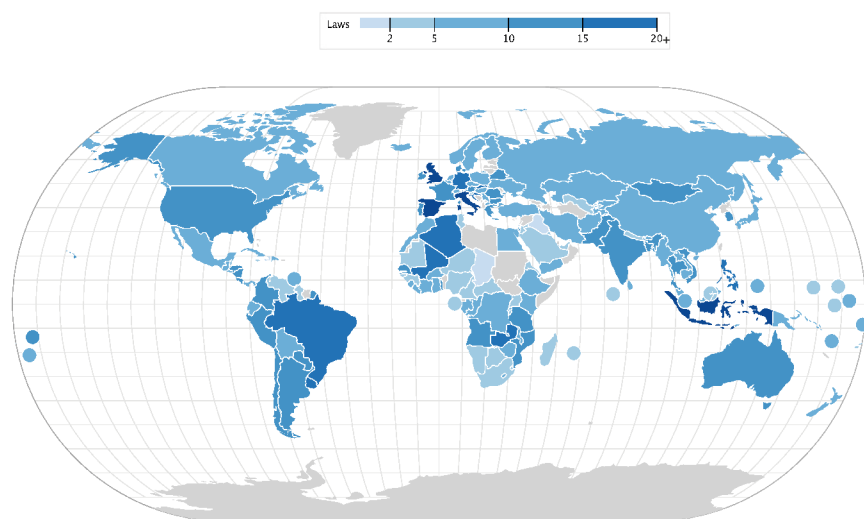
We endeavour to make the datasets as comprehensive and accurate as possible. However, if you believe we may have missed a law, policy or court case, please contact us, including supporting documents if possible, at: gri.cgl@lse.ac.uk

Research scope and data source

Our analysis covers legislative activities in 177 countries with varying economic contexts and income levels. The longer report on which this brief is based (Nachmany, Fankhauser et al., 2017) – the sixth stock-take in a series dating back to 2010 – also includes, for the first time, analysis of climate change litigation cases, in recognition that the judiciary is beginning to play an increasingly important role in national climate policy. These stretch across 25 jurisdictions.

The information comes from **two databases**, one on laws and the other on litigation, maintained by the Grantham Research Institute on Climate Change and the Environment and the Sabin Center on Climate Change Law at the Columbia Law School and available at www.lse.ac.uk/GranthamInstitute/climate-change-laws-of-the-world. Country profiles and selected indicators accompany the data on laws and court cases. This expanded joint platform responds to a need to consolidate the fragmented knowledge base on climate legislation and governance (Böbner et al., 2017).

Figure 1. Climate legislation in 177 countries in 2017



Source: Climate Change Laws of the World database, Grantham Research Institute on Climate Change and the Environment and Sabin Center for Climate Change Law (2017)

Note: 1. The database contains 1,370 laws at the time of writing. Thirteen countries were added to the database between May (when our 2017 update was published) and September 2017, increasing the total number of countries to 177 and adding 74 laws to the dataset from those 13 countries. Several new laws have also been passed in other countries since May.

each year. By 2016, that rate had fallen to around 40 new laws. The slowdown should not be a big surprise: the stock of laws passed previously covers a large amount of ground, reducing the need for further legislation. It is also possible that countries were waiting for the outcomes of the COP 21 Paris climate summit of December 2015 before boosting their national responses.

The Paris Agreement, ratified in November 2016, created an obligation on countries to implement nationally determined contributions and to ratchet up these commitments over time – necessary for keeping the rise in global mean temperature well below 2°C (Rogelj et al., 2016). This means countries will have to adjust their laws to reflect their increased ambitions and thus there may be a return to higher levels of legislative activity over the coming years. But rather than devising new frameworks, today's legislative challenge is different from before, mainly

featuring the need to strengthen existing laws – increasing their ambition, making them more effective, and filling gaps.

Three out of four countries have laws and policies that put climate at centre-stage

Climate change laws cover action in a number of sectors and they interact with other policy priorities such as energy, transport, industrial policy, forestry and land use, air quality, poverty reduction and food security. Enacting climate change policy can be done either by formulating a specific climate change law that addresses some or all of these issues, or by embedding climate change considerations into multiple existing (or new) sectoral laws and policies.

Almost all countries have taken a combined approach. While 75 per cent have at least one climate-specific regulation, these laws represent only a quarter of the dataset. The remaining laws and policies address climate

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change and transitions to low-carbon economies through different prisms.

Climate change is integrated into other policies

Some laws and policies adopt a narrow focus (for example, energy or forestry), while others incorporate climate change into wider frameworks, such as economic development or green growth plans (see Figure 2). In 88 per cent of countries there is at least some integration of climate concerns into energy policy, the most prominent focus yet, despite a decline in the introduction of new energy-focused laws. These laws and policies, concerned with electrification, energy efficiency, conservation, and renewable energy, account for over 40 per cent of laws and policies in the dataset.

On a much smaller scale, climate change is also incorporated into general environmental regulation, as well as into forestry, transport and agriculture legislation and

policies. Many of the contexts in which climate is framed are consistent with meeting the UN’s Sustainable Development Goals.

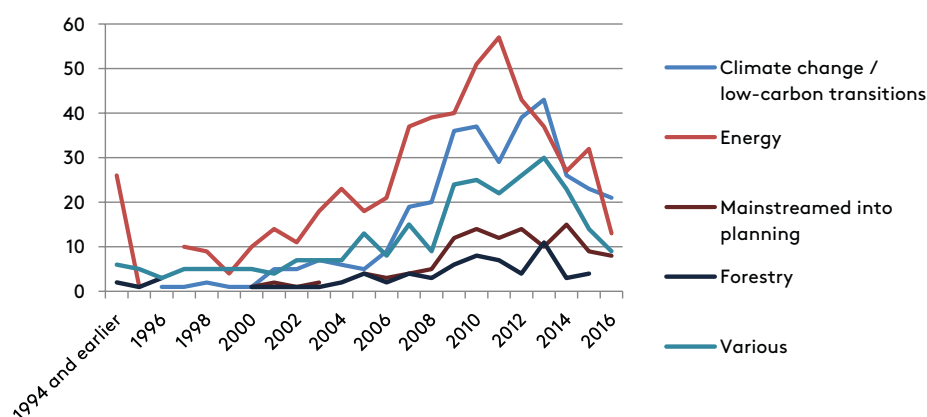
The least developed countries (LDCs) are increasingly active on climate change

LDCs are recognised as particularly vulnerable to the impacts of climate change and as therefore requiring added international assistance. The number of climate laws passed by LDCs increased steadily until 2013, then dropped from 2014, a trend observed worldwide.

Reflecting the small carbon footprint of LDCs and their high vulnerability to climate change, the focus of most laws has been on adaptation, but also on building frameworks for promoting and enabling green growth. The most progressive LDCs have also started to build low-carbon, climate-resilient and sustainable development directly into their development strategies, reaping potential co-benefits in terms

Source: Climate Change Laws of the World database, Grantham Research Institute on Climate Change and the Environment and Sabin Center for Climate Change Law (2017)

Figure 2. Global laws and policies by focus areas, pre-1994 to 2016, showing the dominance of energy for most of the period





Lawsuits in the category ‘protection/loss and damage’ – 8 per cent of the dataset – include those where plaintiffs argue that energy producers contribute substantially to climate change and are therefore responsible for climate change-related injuries and damages. For example, in 2015, Saúl Luciano Lliuya, a Peruvian farmer and mountain guide, brought a case against the German energy company RWE as the largest emitter of carbon dioxide in Europe, for causing flooding from melting glaciers to threaten his Andean home region. The case was, however, dismissed by the German court.

Pictured: RWE power plant (Pixabay)

of green growth, air quality and ecosystem protection (Nachmany, Abeyasingh et al., 2017).

However, legislative gaps remain. Only 20 LDCs, less than half, have factored climate change into their development plans. As a group, LDCs have an average of 5.5 laws and policies per country, compared with the global average of 7.7, and four LDCs – Comoros, Equatorial Guinea, Somalia and Sudan – do not have any legislative or executive acts directly addressing climate change.

With support from the international community, LDCs have an opportunity to consolidate recent progress and ensure these developments mature into new policies, executive orders and legislative acts. In the long term, there is no trade-off between climate protection and sustainable economic development (Fankhauser and Stern, 2017).

Trends in litigation

The number of climate litigation cases has grown

The Climate Change Litigation of the World dataset includes over 250 court cases across 25 jurisdictions for which data exists. (Data for the United States is included in a separate database but an overview of the US is provided on p7.) While the first case in the dataset is from 1994, cases were few and infrequent until the mid-2000s. Since then there have been at least 10 new court cases a year in the jurisdictions covered.

Climate change is not central to all of these cases. In fact, in over three-quarters of the cases (77 per cent) climate change is only at the periphery of the argument, acknowledging the issue as a relevant but not core factor. However, the judiciary is increasingly exposed to climate change arguments in cases where, until recently, the

“The judiciary is increasingly exposed to climate change arguments in cases where, until recently, the environmental argument would not have been framed in those terms”

Lawsuits can be brought as a way to call for new laws, halt existing laws, and interpret or enforce existing legislation. Eight per cent of the cases in our database are classified in this category. An example is the case of *Ashgar Leghari versus Federation of Pakistan* (2015). Using public interest litigation, Leghari, a sugarcane farmer and law student, successfully charged the national government with failing him as a citizen: it was ruled that the government was failing to carry out its climate policy.

Pictured: Sugarcane harvest (Pixabay)



“Mitigation
(reducing emissions)
was the primary
motivation in 78
per cent of cases
and the majority
were regulatory
challenges”

environmental argument would not have been framed in those terms. For instance, challenges to fossil fuel-related projects have been brought for many years, but it is only in the last decade that climate change has been used as part of the argument or as a motivation for those cases. Further, over time there has been an increase in cases that have climate change as a core factor: that is, cases of strategic climate litigation.

Most cases concern specific projects

Court cases can be grouped into different categories depending on their core objective. The overwhelming majority in our dataset are concerned with administrative issues in specific projects. Cases can be concerned with climate change mitigation (reducing emissions) and/or adaptation to climate change risks. An example of a case concerned with mitigation is *Friends of the Earth versus the Governor in Council et al.* (2008), in which Friends of the

Earth sought a declaration from the court that the Canadian government had failed to meet the legal requirements of the Kyoto Protocol by missing deadlines and failing to publish regulations. A case dealing with adaptation is *Ashgar Leghari versus Federation of Pakistan*, in which the Lahore High Court mandated the government to implement its climate adaptation plan (see photo caption above).

Most climate change regulations in the sample concern emission reductions (mitigation was the primary motivation in 78 per cent of cases), but there is some jurisdictional variation. For example, in Australia there are notable cases on adaptation, mostly dealing with coastal planning and risks from climatic hazards.

Most court cases are brought by firms against governments

In terms of plaintiffs, the largest number of cases (102; 40 per cent of the sample) were brought by corporations. These are mostly filed against governments (79 per cent of defendants), and

aim to overturn administrative decisions to not grant a licence (e.g. for a coal-fired power plant or water extraction) on the basis of climate change, or challenge allocation of allowances under an emissions trading scheme or governmental scheme (e.g. for production of renewable energy). This observation is consistent with the finding that most of the cases reviewed are challenges to particular projects or activities.

Governments (51 cases) and individuals (56) are the next most common plaintiffs, each with about a fifth of the cases in the database. Non-governmental organisations (NGOs) (33 cases) account for 13 per cent. The remaining 11 cases feature a combination of plaintiff types (for

example, NGO and corporation, individual and NGO). After governments, the second most prominent defendant type is corporations (13 per cent).

Most court rulings strengthen or preserve climate regulations

Climate litigation is a double-edged sword. On the one hand, it can be used to facilitate climate regulation and hold policymakers to account, by driving, enforcing and clarifying climate policies and legislation – or in some cases substituting for absent or insufficient national legislation. But litigation can also be used to oppose or weaken climate regulation. For example, corporations can use the courts to question what they consider to be

“Climate litigation can be used to facilitate climate regulation and hold policymakers to account – or it can be used to oppose or weaken climate regulation”

Climate litigation in the United States: overview

- **Resisting deregulation:** Multiple lawsuits have been filed to challenge the Trump Administration’s undoing of regulatory efforts to address climate change. Some deal with specific regulations; others focus on rules that apply to regulation more generally.
- **Public trust doctrine:** Plaintiffs have argued to several courts that the sovereign’s responsibility to preserve the integrity of natural resources in its territory – the public trust doctrine – requires it to address climate change. In effect (or explicitly), these plaintiffs are seeking recognition of a right to a stable climate.
- **State-led efforts to decarbonise electricity:** California, Illinois, New York, Connecticut and other states are engaged in creative efforts to push their portions of the electric grid away from fossil fuels. Challengers allege these novel efforts overstep legal bounds.
- **Liability for failure to adapt:** Only a few plaintiffs have brought cases seeking relief for injuries arising from an alleged failure to anticipate and address foreseeable consequences of climate change. However, more cases of this sort are expected, particularly as investors and insurers pay attention to the growing gap between scientific understanding of climate change and sluggish adaptation efforts.

Note: To access data on litigation in the United States, visit <http://wordpress2.ei.columbia.edu/climate-change-litigation/us-climate-change-litigation/>

This database contains more than 700 entries. It is maintained by the Sabin Center and the Arnold and Porter Kaye Scholer law firm.

excessively stringent standards or requirements. Climate legislation and policies then become dynamic instruments, with challenges in the court shaping their evolution.

Two-thirds of court rulings have so far strengthened or preserved climate regulations, and therefore litigation appears to have had a constructive influence so far.

Conclusions

The data informing this brief clearly shows that no country is acting alone on climate change. However, countries differ in their approach to climate policy. Some rely on legislated acts of parliament and others on executive orders or strategic policy documents. Acknowledging and understanding these variations is crucial. It helps to develop a sense of good practice in climate legislation, but more importantly it engenders mutual trust in the individual efforts that each country makes. In time, this will enable the ratcheting up of the nationally determined contributions that countries have pledged to make as part of the Paris Agreement.

We still need to learn more about different policies and institutional designs and how they work in different circumstances. The real difficulty is in the politics of enacting and enforcing the required measures and maintaining that commitment. Understanding the public acceptability of different policy solutions is therefore as important as knowing how they work technically.

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Grantham Research Institute on Climate Change and the Environment

London School of Economics and Political Science

Houghton Street, London, WC2A 2AE

e gri.policy@lse.ac.uk

w lse.ac.uk/granthaminstitute

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