

Climate resilient legislation

Climate change is creating a new landscape for virtually every aspect of our life. Integration of climate change adaptation is steadily becoming a standard practice in various spheres, from day to day operations to big infrastructure projects to long-term development. But what about legislation? If anything, climate change, affecting ecosystems, businesses and lives, bringing about new conflicts, puts the legislative system under more pressure than ever to deliver. To maintain relevance and force in an unpredictable climate, legislation must be written to be resilient and capable of adapting to changing climate conditions. This briefing note summarises some of the academic views on how legislation should be transformed in the context of climate change.

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The need for transformation

In the context of climate change, legislation needs to satisfy two critical parameters¹:

- facilitate climate resilience of its subject systems, as well as the broader society environment and economy; and
- maintain force in the long-term by automatically adapting to a wide range of possible futures.

Legislation in its current form does not demonstrate the above criteria. Taking environmental and natural resources law as an example, for the purposes of this briefing note, it is clear that there needs to be a significant transformation to account for climate change.^{2,3}

Firstly, environmental legislation is usually predicated on the assumption that underpinning environmental conditions remain constant, with natural systems seen as essentially stationary with limited, predictable variability and known thresholds. However, we are already seeing how climate change is transforming ecosystems, and the body of scientific knowledge suggests that climate change will continue to alter our planet for decades ahead. To further complicate the situation, climate change brings with it what is called “no-analog future” with non-stationary natural systems, high variability, non-linear feedback and feed-forward loops, reducing predictability and creating high uncertainty regarding future climate impacts and the consequences of the actions we take to adapt.⁴

Secondly, environmental law in its current form is often focused on preserving the status quo or

restoring the ecosystem to its historic state, and in the context of climate change such legislation can present barriers for adaptation.² For instance, laws based on historic ecosystem performance might authorise resource extraction subject to restoration to original habitat conditions. The impact of a changing climate may make this no longer viable, resulting in a legal requirement that cannot be fulfilled. With a changing climate the focus of legislation should move from preservation and restoration towards promoting the resilience and adaptive capacity of its subject systems, and a regulatory process that enables controls, duties, obligations and remedies to be fit-for-purpose over time.

The argument that environmental and natural resources law should be transformed is clear. However, we suggest that there is a need to consider climate change in every legislative process. Climate resilience is relevant to more than just environmental legislation. Many different kinds of legislation are predicated, directly or indirectly, upon climatic conditions, though the scope and path of the connection can vary. So how should legislation be drafted in an era of climate change?

Insufficient attention has been given to providing first principles or essential guidelines on how to write legislation that is climate resilient. There is little guidance for lawmakers beyond academic articles providing good practice principles. Here we have attempted to summarise a set of first principles for lawmakers seeking to increase the resilience of their legislation.

Key principles of climate resilient law

The available academic research suggests that an adaptive management approach can provide a useful insight into climate-resilient legislation. “Adaptive management is perhaps the only viable methodology we currently have to meet the uncertainties and transformations of climate change.”⁵

Adaptive management provides principles that can facilitate robust decision making in order to respond to ever changing conditions in the climate change reality:²⁻⁴

- Extensive and continuous use of data in order to establish baseline conditions, monitor the response of the subject system to the applied action, and increase understanding of climate change impacts³.
- Acceptance of high uncertainty and consideration of a range of futures when making a decision, recognising alternative scenarios.
- Internal flexibility with iterative review of decisions. It should be accepted that goals might need to be changed to reflect shifting baseline conditions. Continuous data collection can be used to show that alterations to baselines were caused by climate change processes (e.g. air temperatures, precipitation).³
- Adjustment and recalibration of management actions where necessary, if evidenced by the

collected data. Diversity of instruments should be considered (from prescriptive mandates to incentive and information-based tools).

These same principles may provide assistance in the drafting of legislation to ensure that it is climate resilient.

From theory to practice

Changes in the drafting of legislation on their own are insufficient. There also needs to be a transformational change in administrative law to allow for adaptive management practices and make legislative systems more resilient to climate change.⁶

The cross-cutting nature of climate change and the dynamic approach of adaptive management will require resilient legislation to rely on extensive collaboration between all stakeholders in order to fulfil the feedback function by exchanging information, best practice identification, harmonisation of approaches, and enforcement of overall policy.^{3,6}

It remains to be seen how these theoretical concepts will be translated into real world legislation. Emerging examples from recent legal practice⁵ in the USA and the increasing impacts arising from climate variability and a changing climate suggest we need to take on board the academic suggestions and make a real start in applying these principles to legislative process. If we do not do this we will find that our legislation can no longer meet society’s needs.

References:

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