Building National Resilience to the Climate Crisis

Key Proposition

As a nation we are critically unprepared for the impacts of climate change. This failure is largely about political leadership but it is expressed in practical terms by a failure to organise ourselves to meet the scale of the challenge, witness the recent floods, summer heat and perilous state of some of our older dams.

The result is that as the climate crises intensifies, we will be made poorer and more vulnerable than we need to be. Therefore, our ambition must be:

- To sketch out a framework to secure national resilience to climate impacts;
- To develop the policy, legal and governance instruments to deliver this resilience.

The Climate Crisis

The impacts of climate change are happening faster and with greater intensity than we expected. The nature of these impacts is focused upon increased severe weather including monsoon like rain, heat waves and sea level rise. In practice this means increased tidal, river and surface water flood events along with temperature spikes particularly in our big urban areas.

One indicator of this problem is sea level rise where we are now meant to be planning for 115 cms by 2100 on the east coast of England. Observable sea level rise has been happening faster than anticipated. A working average for sea level rise is now 5mm per annum, with worse to come, as current EA estimates do not include the breakup of west Antarctic ice sheet, so sea level rise will be revised upwards. The best estimate is now 200 cms by 2100. Sea level will go on rising after 2100 so the viability of places needs be seen in this long-term context.

There is limited prospect of stabilising global temperatures at 2 degrees above preindustrial so while we must make radical carbon reduction now, we are locked into multiple and severe climate impacts.

The Adaptation Problem

Radical decarbonisation is complex but because it involves defined sectors that have similar characteristics everywhere, like energy systems, it is more susceptible to a smaller number of nationally organised policy levers. Some of these, such as expansion of offshore wind have limited impacts on communities. In stark contrast adaptation requires the radical remaking of places and its impacts are much more variable and complex for four main reasons:

1. **Place**: One of our problems is that that climate impacts play out very differently across the diverse physical and social geography of the UK. Urban and rural areas, upland and coastal all require different and fine grain responses tailored to the diverse geography of the UK.

- 2. **People**: Climate impacts impact on people in different ways and particularly on those social groups least equipped to be resilient. Adaptation solutions also have direct and lasting impacts on everyday lives so taking action means working with communities and communicating effective narrative for change.
- 3. **Space**: Building resilience requires interlocking measures from big spatial scale coastal realignment to the detail of the way buildings are wired. The interdependence of these decisions is vital in determining long-term solutions and often driven by catchments and coastal systems that do not fit with local government boundaries.
- 4. **Time:** Building resilience requires thinking about the very long term and at least 100-year planning horizons. This implies new ways of thinking and working. Time is also running out to begin building resilience so we need to act now and radically.

What's the problem with our current approach?

We are very badly organised to meet the challenge of climate change. The key areas of dysfunction are:

Institutional Fragmentation: There are multiple national and local agencies with a stake in adaptation but no single entity with oversight of the complete agenda. The Environment Agency has no formal remit to deal with heat stress nor does it have responsibility all aspects of flood risk. Most significantly, there is no single agency for the delivery of the multiple actions that are needed to build national resilience. Local planning authorities are the closest proxy we have with the powers to both plan and control development, yet their boundaries are very poorly aligned with the functional geography of, for example, flood risk. In the absence of any coherent strategic planning framework, cooperation between districts in similar areas of vulnerability is institutionally and politically difficult and, in some cases, non-existent.

Austerity: Since 2010 a lack of resources has impacted severely on the skills and institutional capacity of all the key players relevant to building resilience. However, this is most acutely expressed in local planning authorities on Top tier flood authorities. The resource is to develop and retain staff as well as Commission relevant supporting evidence are inadequate.

Skills: There is a widespread lack of the key relevant adaptation skills, particularly in planning but also in the wider built environment sector in terms of design and construction.

Deregulation: Those on the front line of securing adaptation in local government have much less power of built environment than they did a decade ago. The rapid expansion of Permitted Development is key example where commercial property can be converted to housing units without the need for full planning permission nor the ability to insist on wider range of adaptation measures.

Lessons from the Past

As we are seeking to drive transformative change with the rapidity the science implies¹ we should consider what has worked when we have needed such a response before.

The most successful model we have for delivering the kind of complex change in a very short time scale lays in the wartime and immediate post war experience of managing land and development. A detailed examination of this history illustrates how rapid change was made possible. The most striking example of this experience was the development of the post war new town development corporations. These bodies were designed to manage large-scale demographic change and reconstruction in an era of acute housing shortage. They were designed to both deliver numbers and quality and inclusive communities at the same time.

The record of these corporations is impressive. 32 new towns were built in a designation process that lasted from the mid-1940s to the late 1960s. These places were delivered at scale in a very short time and now house 2.8 million people. They provide rich learning and many mistakes were made but in essence the genius of the development corporations was to create a public body as master developer with a wide range of powers to do everything necessary to deliver the town. This was set in the context of national financial support which because of the ability of the corporations to capture land values proved to be one of the most profitable public interventions in post war history. There continues to be an active debate in government about the application of development corporations to regeneration and housing growth but their potential to deal with environmental crisis has largely been ignored.

What's the core of our solution?

A National Resilience Act, creating Resilience Development Corporations.

The key suggestion of this paper is to take the framework of a Development Corporation and re purpose it to provide a strong planning delivery mechanism for building resilience in specific places. Each Corporation would have a clear founding purpose and legal power to do everything necessary to secure the resilience of a particular locality. Unlike the new towns each designation would be based on an area of functional geography that shared key vulnerabilities and where joint planning and delivery had added benefits. The process of designating such corporations would require parliamentary consent, a public inquiry and the approval of the Secretary of State. Responsibility and backing for the corporations themselves would remain a function of central government.

This would require creating a modified legal framework based on the new town's legislation. This creates an opportunity to modernise these development corporations in order to reflect the importance of community participation, long-term sustainable development and clear and specific goals on climate adaptation and mitigation. Inside each designation the

¹ This proposal is not principally about emergency planning. There is a vital and separate question as to whether our emergency responses are adequate. This proposal is about building medium- and long-term resilience through strategic planning process under effectively delivery mechanism. It would of course, be vital for these proposals to work closely with emergency planning.

Resilience Development Corporation would have powers to plan and control development and compulsory purchase land as well as be able to implement resilience measures in terms of flood defence and building standards. Their scope might include upland land management where this directly related to managing flood or reducing carbon by protecting and enhancing carbon sinks.

It would not be intended to replace all the planning functions of the local government but it would remove a significant element of their power. It is important to note, however, that the corporations are intended as an idea to be layered over the top of existing structures, unifying and coordinating their powers where these are related to climate resilience. Initially there would be 6 resilience development corporations in England:

- the Humber to the Wash (Including the River Don Catchment);
- the Wash to the Thames;
- Portsmouth and Southampton;
- the Somerset levels and the Severn estuary;
- the South Pennines between Manchester and Leeds/Bradford;
- and Blackpool and the Lancashire coast.

The board membership of the resilience Development Corporation would need to reflect existing institutions such as the Environment Agency as well as the voice of communities. Each Corporation would have a fixed life depending on the scale of the challenge in a locality and would eventually be wound up so the planning powers would be returned to local authorities.

The idea of a Resilience Development Corporation acting as master developer working with existing institutions in a coordinating way it's a powerful incentive for local authorities to agree to such a proposal. It would provide a more effective and efficient way of driving change so long as the power of the Development Corporation was balanced with new opportunities for genuine participative governance. Such proposals are not intended to win a popularity contest and would only be acceptable if they could demonstrate how they could secure the long-term future of communities. Above all they would provide the community with certainty about their own future and investors and insurers with the confidence to continue to invest and support vulnerable places over the long term.

The National Resilience Act is would provide for the establishment of resilience development corporations and provide for the detail of their designation, operation and governance. The Act would place duties on Ministers to prepare national policy to support the corporations. It would be accompanied either in law or policy with establishment of Department for Climate Resilience which unify all those functions necessary for national resilience which are currently spread across Government. Finally, the Act would amend the statutory basis of the Envionment Agency to give an overall technical responsibility on climate adaptation including heat stress.