

Rt Hon Oliver Dowden MP  
Deputy Prime Minister and Chancellor of the Duchy of Lancaster  
Cabinet Office  
70 Whitehall  
London SW1A 2AS

Date 26<sup>th</sup> April 2023

Dear Deputy Prime Minister and Chancellor of the Duchy of Lancaster

**Improving infrastructure resilience and adapting to the change in climate**

*Cc: Secretary of State for Environment, Food and Rural Affairs; Minister of State for Energy Security and Net Zero; Minister of State for Data and Digital Infrastructure; Minister of State for Decarbonisation and Technology; Minister for Natural Environment and Land Use; Exchequer Secretary.*

Record breaking storms and temperatures in 2022 brought widespread disruption to energy and transport networks, with substantial impacts for people living and working across the UK. As the climate continues to change, these impacts are likely to intensify. We urge you to develop more effective plans to improve the resilience of infrastructure, which is so critical to the UK's economic prosperity.

Our two organisations have presented separate reports to Parliament in recent weeks: the Climate Change Committee's biennial Adaptation Progress Report and the National Infrastructure Commission's annual Infrastructure Progress Review. These reports each highlight significant gaps in delivering climate-resilient infrastructure for the country. The new National Resilience Framework is welcome, but national adaptation planning is falling behind.

We recommend five steps to close the resilience gap:

**Translate the present high-level objectives into delivery plans**, with clear goals and measurable outcomes for resilience. The Climate Change Committee's recent Adaptation Progress Report found very limited evidence of the implementation of adaptation at the scale needed to prepare fully for climate risks facing UK infrastructure, or more broadly for cities, communities, the economy and ecosystems. Credible planning for climate change was only found for five out of the 23 infrastructure and built environment adaptation outcomes examined. The next National Adaptation Programme (NAP3), expected this summer, must set clear goals for resilience and measurable outcomes against which to monitor progress. As part of this, implementation of resilience standards, as the National Infrastructure Committee recommended three years ago in its Resilience Study, should be a priority. A set of annually reported indicators and data sharing across infrastructure providers are needed to monitor progress and ensure whole-system resilience.

**Align policymaking for resilient infrastructure with regulatory cycles.** Between now and 2029 there will be new price controls for electricity, gas, twice for water and a new control period for Network Rail. Adaptation and resilience policy needs to be aligned with these regulatory cycles. Most critically, if new outcome-based resilience standards are not developed until 2030, every single one of those cycles will be missed and the window of opportunity for investment to meet those standards will be pushed back until the 2030s.

**Give essential duties to regulators that presently do not have them.** Ofwat's resilience duty has been central to resilience planning in the water sector and similar duties need to be given to Ofgem, Ofcom and the Office of Rail and Road. This would also be an opportune time to ensure each of these regulators has a duty to support delivery of Net Zero.

**Strengthen resilience coordination between infrastructure systems to head-off cascading impacts.** Interdependencies between infrastructure systems mean that climate impacts in one system cascade and interact with others. There are numerous recent examples of these failures, including power outages during Storm Arwen, which then disrupted water supplies, and the flooding of a gas pipe in Sheffield following a broken water main. The UK requires better mechanisms to identify and track these cascading risks, with clearer accountability for key institutions to mitigate them. Both our organisations have emphasised the need for Cabinet-level oversight of interdependencies, a recommendation supported by the Joint Committee on the National Security Strategy in its recent inquiry into climate adaptation and critical national infrastructure. Common resilience standards, data sharing between infrastructure providers and the type of transparent progress monitoring set out above are also needed to ensure whole-system resilience, including mandatory reporting by infrastructure operators under the Adaptation Reporting Power.

**Embed net zero and climate adaptation in infrastructure planning.** Through the Government's Net Zero strategy, the UK is preparing for a major programme of infrastructure investment. The need for resilient and reliable infrastructure systems must be designed-in from the start, including when building low carbon homes and new networks such as hydrogen. Across the transition, there are also risks that must be monitored and managed, particularly as we electrify the Net Zero economy. As our dependence on the decarbonised electricity system increases, risks like storm damage to overhead wires could become more disruptive. System planning must account for extreme events and weather-related uncertainty such as low wind.

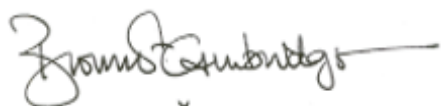
Government has two imminent opportunities to embed better climate adaptation in this way:

- Clarify important delivery milestones for the National Resilience Framework. Last year's publication of the Framework was welcome, but Government must follow it up with clarity on what will be delivered, clear milestone dates and development of common resilience standards as soon as practicable. This will ensure critical opportunities in price review cycles are not missed.

- Show real vision in the Third National Adaptation Programme (NAP3). Government has already recognised that greater ambition is needed in the country's adaptation programme. A new plan must demonstrate how this will be delivered. Recent research for the Climate Change Committee has shown that, across all sectors, additional investment of up to £10 billion per year for climate adaption may be needed this decade. NAP3 is the opportunity to provide clarity and direction on how this will be funded, financed and delivered.

The Climate Change Committee and the National Infrastructure Commission continue to work independently, but our advice on these critical issues is fully aligned. We must not delay improving the resilience of UK infrastructure to protect the country from the well-understood risks of the UK's changing climate.

Yours sincerely,



Baroness Brown of Cambridge

Chair, Adaptation Committee



Sir John Armitt

Chair, National Infrastructure  
Commission