

Independent advice to government on building a low-carbon economy and preparing for climate change

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Water sector resilience and PR19 methodology

I am writing to suggest we meet to discuss our latest progress report and your plans for resilience of the water sector in PR19. I chair the Adaptation Sub-Committee (ASC) of the Committee on Climate Change.

Under the Climate Change Act, the ASC is required to report to Parliament every other year with its independent assessment of the plans and policies in place to manage the risks, and realise the opportunities, of the changing climate. Our latest report on the Government's National Adaptation Programme was published on 29th June. I enclose a copy of the executive summary.

The report concludes that the water sector has made good progress in managing vulnerability to climate risks in public water supply and demand. We have seen evidence of innovative approaches to climate change adaptation that water companies have documented in response to the Secretary of State's invitation to report under the Adaptation Reporting Power. We are aware of the investments in resilience that have been made since PR14 and in the further adaptations that are being incorporated in the current round of Water Resources Management Plans.

However, the risk from surface water flooding is set to increase. The report highlights that some parts of the public sewer network are already working at or beyond their full capacity, with climate change expected to increase the chance of flooding by one third. We made a recommendation (number 12) that more and better co-ordinated action between Lead Local Flood Authorities and water companies is needed to manage the lack of sewer capacity. We also recommended (number 13) that the Department of Communities and Local Government improve the national standards to ensure that co-benefits of SuDs are taken into account in new developments and responsibilities for maintenance and adoption of SuDs are clear.

I am aware of your current consultation for the PR19 methodology which includes resilience planning principles, resilience metrics and more ambitious leakage targets for water companies. The ASC favours the use of quantified metrics to measure resilience and would therefore like to offer our support with the development of the approaches and metrics identified in the consultation. The Committee also offers its advice on some of the principles identified in Chapter five:

Principle 1, considering resilience in the round for the long term: There should be further emphasis on interdependencies that may bring unexpected threats to water supplies, in particular where there are interdependencies with neighbouring water companies, which may be threatened during the most extreme droughts.

- Principle 2, a naturally resilient water sector: We strongly support the emphasis upon ecosystem resilience, however there are still significant gaps in scientific knowledge of ecosystem resilience. We do not yet know enough about the capacity of ecosystems to cope with climatic shocks. Given these gaps in scientific knowledge, we advise that adaptive approaches are adopted that are precautionary in the short time, can incorporate learning when more scientific understanding becomes available, and are able to adapt to unforeseen conditions.
- Principle 3, customer engagement: it should be recognised that customers may not have the full understanding of the risks of water supply failure or well developed preferences for how those risks should be managed, in particular relating to the most extreme events that customers are likely never to have experienced. The Government should be encouraged to provide input in identifying the level of risk from systemic failures that can be tolerated at national level.
- Principle 5, delivering best value solutions for customers: whilst there are many opportunities for innovation to deliver best value for customers, the trade-off between affordability and resilience is unavoidable. New metrics of resilience will help to make it clear how water companies are navigating this trade-off.

I would be pleased to discuss our report and how we may be able to support you in developing resilience metrics.

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