Transportation in the UK’s Third Climate Change Risk Assessment

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This paper presents the ongoing work of the United Kingdom’s Third Climate Change Risk Assessment (CCRA). Specifically, it focuses on the work on transportation within the Infrastructure Chapter. Under the 2008 Climate Change Act, the government is required to provide Parliament with a comprehensive assessment of the risks that climate change poses to the UK every 5 years. The 3rd risk assessment, CCRA3, is due to be laid before Parliament by January 2022.

Work on the CCRA3 began in late 2018, and is in the process of collating evidence from the scientific and stakeholder communities on changes in the magnitude of key risks within the areas of natural environment, infrastructure, people and the built environment, and business and industry. The infrastructure component of the most recent CCRA [1] identified several risks directly and indirectly related to transport (e.g. risks to transport, digital and energy infrastructure from extreme heat; risks of cascading failures from interdependent infrastructure networks). The urgency for adaptation work for these risks was assessed using a three step process [2] centred on the questions: 1) What is the current and future level of risk/ opportunity? 2) To what extent is the risk/ opportunity going to be managed, taking into account government commitments and autonomous adaptation? 3) Are there benefits to further action in the next five years, over and above what is already planned? The results of this process set were a key input into the second National Adaptation Programme [3], covering the period 2018-2023.

This paper seeks to present the current work being undertaken to update the urgency assessment for the risks directly and indirectly related to transportation, and will also outline a number of supporting research projects in the areas of interacting risks, flooding, socio-economic scenarios and behavioural change. Discussion will be made on the differences in approach between this programme and the impact and adaptation assessment programmes of other countries including the United States, the Netherlands and Japan.

REFERENCES

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