Climate Change Resilience and Adaptation in EIA

The forthcoming transposition of the revised EU Environmental Impact Assessment (EIA) Directive (2014/52/EU) into UK law in May 2017 will lead to some changes to EIA practice. A key change will be the requirement to consider climate change resilience and adaptation (CCR&A) in the EIA process. This poses a significant challenge to EIA practitioners, as to date there is limited guidance and experience in addressing the topic. In light of the impetus to make EIA more proportionate, effectively integrating the topic into the EIA process will be particularly challenging. This emerging area of practice is still in its infancy, as confirmed by my research for an MSc dissertation at the University of Manchester. This article outlines the results of this research, which involved a review of 15 environmental statements (ESs) for Nationally Significant Infrastructure Projects, and a survey disseminated to IEMA EIA Quality Mark members from which 27 responses were received.

The ES reviews revealed that CCR&A is acknowledged as an important consideration in the EIA process. With one exception, all ESs reviewed stated that the topic was a key consideration, and referenced climate change policy in the National Planning Policy Framework, Local Plans and National Policy Statements. However, the topic is not sufficiently addressed in relevant technical chapters, such as water environment and flood risk. Many ESs fail to describe how the topic was taken into consideration, and simply state that the assessment included an allowance for climate change. If technical studies that support the ESs do indeed take account for CCR&A, this information is not being captured in ESs.

The survey found that IEMA EIA Quality Mark members have encountered and/or anticipate practical challenges with integrating CCR&A into the EIA process. The foremost challenge identified is the high level of uncertainty associated with climate change projections. The Met Office’s Climate Change Projections published in 2009 are the latest and most comprehensive set of projections currently available in the UK. However, these projections are resolved to a sub-regional level, while EIA typically involves the assessment of impacts at the local level. This introduces a high level of uncertainty, and may render project-level assessments inconclusive.

Adoption of a consistent methodological approach to CCR&A would aid practitioners in dealing with the high level of uncertainty that climate change introduces to EIA. IEMA published their EIA Guide for Climate Change Resilience and Adaptation in 2015, which is a framework for consideration of climate change in line with the revised EIA Directive. The guide is a good first step to improve assessments and provides a broad approach that can aid practitioners in dealing with issues such as uncertainty. However, practitioners surveyed felt that the guide was insufficient and further guidance specific to technical disciplines is required. It is imperative that the development of the second edition of IEMA’s guidance is informed by input from practitioners based on lessons learned from practice to date. As more experience in this area of practice develops, it will also become increasingly important for a wider range of stakeholders to contribute to the knowledge base regarding CCR&A assessment, including consultees, competent authorities and developers.
Another challenge raised by practitioners is data availability. To assess the effects of climate change at the project level, it is necessary to understand specific impacts that may arise. There is a lack of existing information regarding potential climate change impacts on particular species and habitats. However, generating information on specific impacts at the project level is costly, time consuming and perhaps beyond the scope of EIA. Available high-level guidance and data includes the EU Guidance on Integrating Climate Change and Biodiversity into EIA (2013) and the Climate Change Risk Assessment Evidence Report (2016) published by the Committee on Climate Change. It is important these evidence bases are kept up to date as the effects of climate change become more apparent. There also appears to be a lack of awareness of these documents, as only a few of the ESs reviewed reference them. This highlights the need to raise awareness of the existing evidence available to practitioners.

Climate change is a multi-faceted issue that does not lend itself to easy integration into EIA. To ensure that the consideration of CCR&A does not burden the EIA process and leads to better decision making, it is vital that sound evidence base be available to ensure that assessments are robust, and that a standard methodological approach is applied to maintain consistency and proportionality.


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