

Integrating carbon management into the Local Air Quality Management Framework

A case study of South West England

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Abstract

Due to the common sources of emissions of both air quality pollutants and greenhouse gases, management measures directed at one category of emissions are likely to impact the other whether positively or negatively. In the United Kingdom, through the local air quality management (LAQM) process, local authorities are required to monitor and measure specified air pollutants, the sources of which are often also a primary sources of carbon emissions at a local level. This research tracks the progression of local authority management of carbon emissions and examines the barriers and opportunities for the integration of carbon emissions into the LAQM process. Results are triangulated from three core research methods deployed in South West England: (1) a time series of local authority questionnaire surveys distributed to over 60 local government officers across 45 local authorities; (2) secondary data analysis of all 12 active Air Quality Action Plans; and (3) case study interviews of 12 local government officers within six local authorities in the region. This analysis demonstrates a common lack of communication between Air Quality Officers and Officers with Carbon Management Responsibilities in the South West. Nonetheless, a framework is proposed to develop communication streams to better link LAQM to carbon management within the existing structures of local government. This co-management approach is designed to overcome the barriers that occur for both parties within the current organisational structure, and enables mutually-beneficial strategic policies to be fed directly into the local authorities' Corporate Plan. Further, it is designed to provide an increased awareness of linkages, increase communications between responsible officers, and to better combine and exploit their respective skill sets. The extension of pollutant inventory development by the Air Quality Officers to also include implications for climate change gases is central to this proposed framework. The research concludes that the absence of statutory targets for carbon emission reductions remains a substantial barrier for local authority led carbon management initiatives.