Carbon Capture and Storage in Forests

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The Paper presents the results of analysis of opportunities for terrestrial CCS in forests to mitigate climate change. Our results are supported by official documentation, including that of DEFRA and the Forestry Commission, and by other literature available on this topic. The paper first presents carbon pools and flows in forests. The ecological perspectives of an increased CCS in forests are then discussed, and the carbon sequestration rates and the potential of carbon sequestration in forests are analysed across several European countries. A general overview of the situation in densely wooded regions of the world is given, along with the analysis of the opportunities and challenges of CCS in forests, including in those in the tropics. The focus then shifts towards the social and economic considerations of terrestrial carbon sink. The importance of proper institutions in the development of conditions for creating carbon offsets from forestry is highlighted. The paper concludes by offering some insights into the feasibility of carbon sequestration in forests and the level of institutional development, as well as by providing some ideas for future research.