ABSTRACT

Permit trading systems are often the centre of current interest and activity in the creation of market-based environmental instruments as it is assumed that these systems can offer significant advantages over conventional approaches to pollution control. Economic investigation of permit trading systems often focuses on case studies for air pollution control. Such permit trading systems also exist (in theory and practice) for water pollution control, in form of water quality trading systems. The fact that pressure is being put on the quality of water resources in many countries resulting in serious problems means that there is a need to analyse the application of this instrument to control water pollution of rivers in more detail in order to identify its potential. Scientific work on water quality trading systems is rare. This is the starting point for this study. It tries to fill the gap in the literature in several respects. Firstly, a comprehensive analysis shows the particularities of the application of permit trading systems to water, and to rivers, in particular. Ecological and economic criteria are redefined with respect to the specific characteristics of rivers. A comprehensive and standardised evaluation system is developed that allows a comparable examination of the trading systems. Secondly, this study evaluates existing theoretical and practical approaches of water quality trading systems with respect to these same developed criteria. For the first time, an integrated, comprehensive and comparable analysis of different trading systems applies. Thirdly, results of the evaluations are consolidated by linking theoretical and practical approaches.