

# Standard Oriented Environmental Policy: Cost-Effectiveness and Incentives for ‘Green Technology’

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**Abstract.** *In their seminal 1971 paper, W. J. Baumol and W. E. Oates analyzed effluent charges and ‘command and control’ regarding their ability to attain a given standard of environmental quality at minimum cost. In the subsequent literature, transferable discharge permits (TDPs) have been added to the portfolio of standard oriented environmental policy instruments. We place these instruments in a dynamic context. Here, cost minimization is defined in an intertemporal setting allowing for induced technical change. It turns out that the relative performance of alternative policy instruments regarding their ‘dynamic cost-effectiveness’ crucially depends on the information available to the involved agents. Under adverse informational conditions, only a TDP system with future markets is dynamically cost-effective.*

**JEL classification:** Q58, Q55.

**Keywords:** ‘Pricing and standards’ approach; environmental policy; induced technical change; asymmetric information.