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LCE > Vol.1 No.2, December 2010

OPEN ACCESS

Technological Change and Carbon Markets*

PDF (Size: 69KB) PP. 80-85 DOI: 10.4236/lce.2010.12010

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ABSTRACT

In this brief note we discuss the innovation impacts of different market-based policy instruments in the climate field, and in particular the case of markets for carbon allowances. The note provides a brief review of the theoretical and empirical literature, and addresses important issues concerning policy instrument choice, the need for multiple policies as well as the timing and commitment strategies of the regulating agency. The analysis suggests that technological progress depends critically on developing and maintaining efficient carbon markets. In the case emissions are under-priced and/or adoption behaviour distorted by, for instance, inefficient plant entrants and closure provisions, any new carbon-free innovation will not be sufficiently exploited. However, for both economic and political reasons other policy instruments-most notably public R & D and technology support-will be needed to complement the price signals provided by carbon markets.

KEYWORDS

Carbon Markets, Innovation, Climate Policy, Environmental Economics

Cite this paper

P. Söderholm, "Technological Change and Carbon Markets*," *Low Carbon Economy*, Vol. 1 No. 2, 2010, pp. 80-85. doi: 10.4236/lce.2010.12010.

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