

**Employment Effects of Ecological Innovations:
An Empirical Analysis**

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Ecological innovations have increasingly been seen as a major response to environmental problems. An important question for both economic research and public policy is whether these innovations also increase employment or not (the question of a double dividend). The purpose of this paper is to investigate empirically the factors affecting direct employment changes due to eco-innovations at the firm level. This analysis has been conducted in the framework of estimating a labor demand function including eco-innovations, the firm's output changes (changes in sales), its labor costs changes and a set of control variables (e.g. firm-specific variables, industry and country dummies). Using data from around 1600 firms in five different countries (Germany, Great Britain, Italy, Holland and Switzerland) we have obtained the following empirical results: firms investing in relatively important (from the firm's perspective) labor cost saving product innovations that have not been subsidized by the state and pursuing a market driven business strategy that leads to increases of their sales in industries in which they have a market power also increase the likelihood of their achieving a positive long term direct employment effect. Firms that deviate - on average - from this ideal portrait do not have positive direct employment effects. (It should, however, be emphasized that neither the indirect microeconomic nor the overall macroeconomic effects of eco-innovations are the subject of this study.)

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