

**Induced Energy Saving Innovation:
An Empirical Study Using French Patent Data.
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Abstract:

In this article, we test Hicks induced invention theory for seven efficient energy technologies. Technologies estimated are mainly issue from Popp (2002), but we develop an alternative model less expensive in data. We use French patent data from 1983 to 2005 to estimate the effect of energy prices on innovating activity. We find that prices have a strongly significant effect (elasticities range between 0.6 to 2). Model used enable us to determine a median lag by technology (an average delay of o 3 years), representing the median delay of market response to a rise of prices. At last we control estimates by an improvement of the model with a supply-side factor, taking into account innovation effect knowledge.