The impacts of energy efficiency policies: meta-analysis

X. Labandeira Villot; J.M. Labeaga Azcona; P. Linares Llamas; X. López-Otero

Abstract-

This paper attempts to quantitatively summarize the existing empirical evidence on the effects of energy efficiency policies on energy demand and on the price of associated durable goods, as well as to identify the main factors that systematically affect the estimated impacts. To this end, a meta-regression analysis of the effects of energy efficiency policies is carried out on the basis of an extensive review of the existing literature, selecting those studies that analyze the impact of energy efficiency policies with respect to a business-as-usual setting. Taking into account the econometric problems associated with this type of analysis (intra-class correlation, cross-sectional dependence, publication bias) in pursuit of robust outcomes, the results show that the studies analyzing the effects of energy efficiency policies estimate a significant impact of these policies on energy demand [-10.5%; -8.8%] and the price of related durable goods [7%; 9.6%]. The main factors that influence results are the policy instrument, the targeted sector, the type of country, the analyzed period, the consideration of free-riders, and the type of analysis, data and publication (energy demand); and the sector and analyzed period (price of durables).

Index Terms- Energy efficiency; meta-Analysis; Energy demand; Price of durables

Due to copyright restriction we cannot distribute this content on the web. However, clicking on the next link, authors will be able to distribute to you the full version of the paper:

Request full paper to the authors

If you institution has a electronic subscription to Energy Policy, you can download the paper from the journal website:

Access to the Journal website

Citation:

Labandeira, X.; Labeaga, J.M.; Linares, P.; López, X. "The impacts of energy efficiency policies: meta-analysis", Energy Policy, vol.147, no.111790, pp.111790-1-111790-27, December, 2020.