

Stimulating the adoption of energy-efficient technologies in small and medium-sized enterprises

Coordinator:

Prof. dr. R.J.G.M. Florax

Involved organisations:

Vrije Universiteit Amsterdam

Universiteit van Tilburg

Universiteit Utrecht

Energieonderzoek Centrum Nederland

Program term:

2000-2006

Summary of problem definition:

The overall aim of the program is to better understand the adoption of energy-saving technology by small and medium-sized firms. The relevance of energy efficiency for sustainable economic growth is obvious, and receives considerable attention in policy making. It is well known that the adoption of energy-saving technologies is a bottleneck in attaining sustainable growth, because the advantages of existing technology are not fully utilized even although their adoption has been shown to be cost effective.

Subprojects:

- A comparative and case study analysis of barriers to invest in energy-efficient technologies with an application to the light industry and service sector, M. Koetse.
- Energy-efficiency technology for energy-extensive firms: past trends – future prospects, A. Ramírez.
- The adoption of energy-saving technologies in energy-extensive firms, H. Vollebergh and (b) The adoption of energy-saving technologies in energy-extensive firms, various researchers at ECN.

Results:

- Koetse, M.J. (2006), Determinants of investment behaviour: Methods and applications of meta-analysis, PhD thesis. Vrije Universiteit Amsterdam, Tinbergen Institute Research Series, no. 374, Amsterdam.
- Ramírez, C.A. (2005), Monitoring energy efficiency in the food industry. PhD thesis. Department of Science, Technology and Society, Copernicus Institute, Utrecht University.
- Mulder, P. and H.L.F de Groot (2007), Sectoral Energy- and Labour-Productivity Convergence, *Environmental and Resource Economics* 36: 85-112.
- Ramírez, C.A., K. Blok, M. Neelis and M. Patel (2006), Adding apples and oranges: The monitoring of energy efficiency in the Dutch food industry, *Energy Policy* 34: 1720-1735.
- Van Soest, D.P. (2005), The impact of policy instruments on the adoption of energy-saving technologies under uncertainty, *Resource and Energy Economics* 27: 235-247.
- Aalbers, R., Van der Heijden, E., Potters, J., Van Soest, D.P. en Vollebergh, H. (2006), Technology Adoption Subsidies: An Economic Experiment with Students and Managers, Tilburg (draft). Aalbers, R., De Groot, H.L.F., en Vollebergh, H. (2007), Rents from Energy Technology Subsidies (working paper).
- Aalbers, R. et al (2005), Naar een optimaal Design voor Investeringsubsidies in Milieuvriendelijke technieken, Rotterdam.
- See the NWO-website for a full list of publications, www.nwo.nl/energieonderzoek