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The Impact of Energy Prices on Product Innovation: Evidence from the UK Refrigerator Market

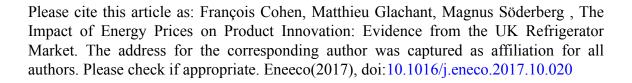
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PII: S0140-9883(17)30361-4

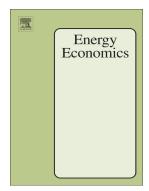
DOI: doi:10.1016/j.eneco.2017.10.020

Reference: ENEECO 3793

To appear in:



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### **ACCEPTED MANUSCRIPT**

# The Impact of Energy Prices on Product Innovation: Evidence from the UK Refrigerator Market

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**Abstract:** This paper uses product-level data from the UK refrigerator market to evaluate the impact of electricity prices on product innovation. Our best estimate is that a 10% increase in the electricity price reduces the average energy consumption of commercialized refrigerator models by 2%. A large share of this reduction is explained by a reduction of freezing space. We also show that the exit of energy-inefficient products contributes more to energy reduction than the launch of new energy-efficient models. These findings suggest that innovation – the development of better technologies embodied in new products – does not respond strongly to energy price variations.

**Keywords**: Induced Innovation; Energy Efficiency; Electricity Prices; Multiple Imputations; Product entry and exit.

JEL Classification: D12, L68, Q41, Q55.

Acknowledgements: This research was funded by the Swiss National Science Foundation under the Sinergia programme, Project "Innovation, Diffusion and Green Growth" No CRSII1\_147612. For useful comments, we would also like to thank Louis Gaëtan Giraudet, Sébastien Houde, Xavier Labandeira, Francesco Vona, three anonymous reviewers and workshop participants at La Toxa 2016. We are also grateful to GfK Retail and Technology for providing the data.

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