E3G

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Heat pumps could have the ***potential to halve UK heating bills*** – but only if policies change

Chris Galpin

Gas heating bills remain over a third higher than pre-crisis levels, and account for half of the average UK energy bill. The only credible long-term solution is to replace imported fossil gas with cheaper electric alternatives.

With the right reforms, switching from a gas boiler to a heat pump could ***reduce annual bills*** for a typical UK household ***by over £400 per year***.

Four actions can make sure low-carbon heating offers reliably lower bills:

1. **Remove levies** from electric heating
2. **Electricity system reform** to bring down costs – and tackle excess profits
3. **Drive up the performance** of installed heat pumps
4. Ensure consumers can access cheaper **off-peak electricity**

£820

Current average heating bill for a household with a **gas boiler**

~£445

Potential yearly **average saving from switching** from a gas boiler to a heat pump

~£375

Potential average heating bill for a household with a **heat pump**

All figures cited are estimates based on E3G analysis. A full briefing with detail on the proposed policies, and annexes setting out the methodology in detail, are available from: **https://www.e3g.org/publications/heat-pumps-could-have-potential-to-halve-uk-heating-bills/**

How it works

£930

Remove levies from electric heating

~£150

1. Exempt electric heating from the costs of government levies: Introduce an Affordable Electric Heating Tariff and set out a roadmap for removing levies more widely.

Electricity system reform

~£90

2. Maximise savings from a clean power system: Actions include improving Contracts for Difference auctions, and clamping down on excess gas power station profits.

Drive up performance standards

~£140

3. Ensure consumers get the performance they deserve: Monitor in-situ performance and improve installed installed heat pump efficiency by 25% (SCOP 2.8 to SCOP 3.5).

Accessing cheaper off-peak electricity

~£175

4. Unleash the potential of consumer-led flexibility: Ensure all new electric heating systems are "smart ready" by default, and strengthen price signals for flexibility.

~£375

Current heat pump bill on price-capped tariff

Potential heat pump bill

* All figures calculated for households with average heat demand.

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