

BRIEFING PAPER MAY 2025

THE WARM HOMES PLAN WILL BOOST UK FINANCES

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Investing £13.2bn in the Warm Homes Plan will deliver significant and swift economic returns across the UK, focused in economically deprived areas of cities like Birmingham, Bradford and Hull. E3G's analysis shows that public investment in homes is a competitive infrastructure investment that delivers cobenefits across the government's missions.

E3G's analysis shows that if the UK government delivers on its pledged £13.2bn investment in the Warm Homes Plan, it will be one of the most competitive infrastructure investments available, delivering immediate economic returns and driving activity into local economies. By making homes warmer and more affordable to heat, the plan generates fast, tangible benefits this Parliament.

In this briefing, we assess three investment scenarios to evaluate the economic and social impact of scaling home retrofit. The findings reaffirm the strong case for the government to deliver the full £13.2bn Warm Homes Plan or go further to align with the Committee on Climate Change's (CCC) recommendations:

- > Investing in homes is economically competitive with other infrastructure projects, the analysis shows the £13.2bn Warm Homes Plan supports growth at a rate comparable to London's Elizabeth Line.
- > A £13.2bn investment supports 37,000 skilled and local jobs and gives
 British manufacturers confidence to invest in production of clean tech.
- > The Plan will reduce energy bills in 3 million homes, reaching those most in need of support to stay warm through winter.
- > Reduce our reliance on gas, with a 5% cut by 2030. Electrification is the only route to energy independence in a turbulent geopolitical context.



Basis for our analysis

To assess the impact of retrofit investments, E3G developed three scenarios:

- > **Low ambition:** a £6bn investment reflective of current policy trajectory.
- > Manifesto-aligned pledge: a £13.2bn investment, promised in the 2024 manifesto but currently at risk of being missed.
- > **CCC-aligned:** a £26.4bn investment based on CCC installation rates, meeting the 2030 fuel poverty target and staying within carbon budgets.

For each scenario, we estimated energy savings and wider economic benefits that could be achieved with the stated level of investment. Our assumptions and methodology are detailed in the separate Annex to this briefing. The Annex also includes an outline for how the government could distribute the investment in the Warm Homes Plan.

Investing in homes is a distinctly competitive infrastructure investment

Retrofit investment generates economic benefits in three ways: through direct energy savings, increased local economic activity, and indirectly through improved public health. These gains are delivered at both the national and local level and within this parliamentary term.

Domestic energy efficiency investment is distinct in how it leads to a sustained expansion in GDP.² Growth follows energy efficiency because it is a productivity gain, meaning money which is not spent on energy consumption can be spent – more productively – on higher value goods and services. Based on cited Energy Efficiency Infrastructure Group Study, and the estimated energy savings delivered under the three scenarios examined for this research, E3G finds domestic energy efficiency improvement is highly competitive with successful infrastructure investments, such as, the Elizabeth line.

By going further than the manifesto commitment this Parliament and meeting the CCC's recommended pathway, requiring £26bn of investment to 2030, this would increase annual GDP growth 0.17% (central estimate). For scale, London's

¹ Available from E3G, May 2025, The Warm Homes Plan will boost UK finances

² EEIG, September 2020, From the Green Homes Grant towards a resilient Net Zero economy



£19bn Elizabeth Line is estimated to add 0.2% to annual GDP over 60 years.³ Therefore, investing in warm homes delivers similar added GDP growth per £ spent, but faster and with benefits distributed across the country. The £13.2bn manifesto pledge would deliver a 0.08% increase, while the low ambition scenario delivers just 0.03% increase in GDP respectively.

Unlike other major national infrastructure projects, home upgrades are spread around the UK, focused in the areas of the country which need them most. Economic deprivation and poor energy efficiency are correlated, and the two are concentrated in areas of the North and South West England, and in Wales.

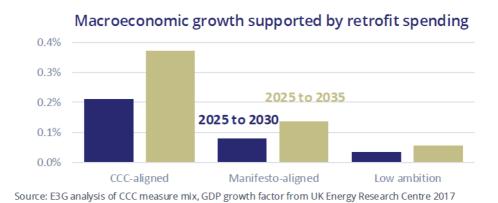


Figure 1. Estimated macroeconomic growth supported retrofit investment

Using HM Treasury's Green Book methodology, investing in home energy efficiency delivers a significant Net Present Value (NPV) for the UK economy. Figure 2 illustrates the full benefits accrued over this parliamentary term across all three investment scenarios, including both standard HMT metrics and additional gains from improved public health.

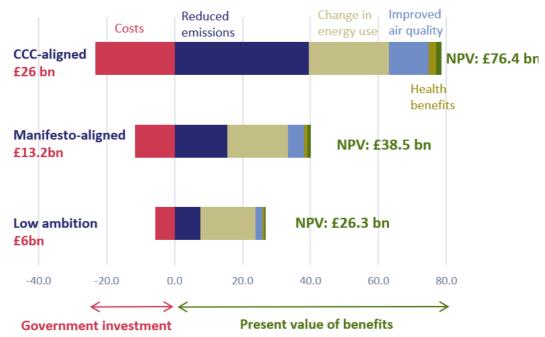
For comparison, Frontier Economics, commissioned by Heathrow, estimate the Third Runway at Heathrow will deliver £24.7bn in bottom-up net benefits (paid for by private finance).⁴ Using the same measure, the £13.2bn Warm Homes Plan outperforms the Third Runway by £2.1bn in less time, crucially within this Parliament, and with benefits spread across the UK.

³ Volterra, 2007, Economic benefits of Cross Rail

⁴ Frontier Economics, 29 January 2025, Heathrow Expansion Benefits







Source: CCC installation rates in the Sixth Carbon Budget underpin the three scenarios, and the HMT Greenbook methodology is used to estimate the benefits

Figure 2. Costs and benefits of retrofit investment under the investment scenarios

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The Warm Homes Plan underpins new skilled jobs in local economies and gives boiler manufacturers confidence to invest in to clean tech production

The Warm Homes Plan supports the creation of skilled jobs across the UK which are associated with installing upgrades and manufacturing low carbon heating. These jobs are distributed widely, particularly in regions with poor housing and higher levels of income deprivation.

E3G estimates 28,000 people are already directly employed in home upgrades associated with government grants. In addition to the existing 28,000 skilled retrofit roles, a further 9,000 full-time skilled workers would be needed under the current manifesto pledge, rising to 47,000 under the CCC-aligned scenario.



Upgrading homes is skilled work and these roles are needed across every region of the UK. Heating engineers earn at least £40,000, but more report significant pay rises after training. A skilled insulation installer working on government schemes earns at least £35,000, with potential to train in project management and design roles earning up to £65,000.

Delivering the manifesto-level Warm Homes Plan would support 37,000 of these well paid and skilled roles every year until 2030. By contrast, scaling back to the low ambition scenario results in a sharp contraction in workforce, leading to 3,000 skilled roles being lost by 2027, missing the opportunity to help this skilled and future proof workforce to grow.

The UK has a proud history of manufacturing boilers. Today, manufacturers are ready to expand their supply chains to make clean and efficient heat pumps. A firm commitment to the £13.2bn Warm Homes Plan would provide the market certainty needed to invest further in domestic production of heat pumps. Without a step-change, there's a growing risk of offshoring, which would hurt regional economies and delay efforts to reduce household energy bills.

The Plan will reduce average annual energy bills in 3 million homes which need the most help to keep their homes warm in winter

Over half of UK households still live in homes rated below an Energy Performance Certificate (EPC) of C meaning on average they pay **£300** a year more on energy than they would in a well-insulated home. The Warm Homes Plan can directly and sustainably lower energy bills in for a quarter of these homes this Parliament.

Beyond energy savings, upgrading homes delivers a wide range of lasting benefits to the economy and society: improved health, better comfort, increased productivity, more skilled employment and reduced investment in electricity networks – all of which are hallmarks of a modern, low carbon energy system.

DESNZ already targets "worst-first" homes, so investing further in the areas most in need is both possible and necessary. With the full £13.2bn budget pledged in

⁵ DESNZ, January 2025, **Heat Training Grant: heat pump scheme review**

⁶ E3G, 2024, Can the UK deliver Green Prosperity?

⁷ ECIU, 2024, Millions of uninsulated, cold homes face £385 bill 'hit' this winter...or switching off



the Labour manifesto, the Warm Homes Plan will deliver average annual energy bill savings averaging £220 a year to 3 million homes. In our analysis, the £13.2bn Warm Homes Plan supports installation of 1.2 million heat pumps and 1 million solar arrays and insulation for a further 1.5 million roofs and 1.2 million walls. Each installation directly lowers bills and simultaneously makes homes warmer and safer to live in. When the additional healthy years lived from warmer and healthier homes are quantified, this shows the £13.2bn investment delivers £8.7bn from gains and value of Quality Adjusted Life Years.

These benefits, alongside reductions in gas imports, job creation, and wider energy savings show why the Warm Homes Plan should be one of this government's investment priorities this parliament. Investing £13.2bn in homes this parliament is an invaluable investment towards this government achieving its broader social and economic objectives, while making UK homes ready for an electric future.

Table 1. Impact of investing in the Warm Homes Plan this Parliament

	Benefits	ссс	Manifesto	Low ambition
D a	Household bill savings	£4.4 billion	£1.8 billion	£1.0 billion
	Homes helped	7.3 million	2.9 million	1.5 million
	"Big" insulation measures	23.3 million	8 million	5.8 million
	Energy reduction measured in "Hinkley Point Cs"	Energy eq. to 3 Hinkley Point Cs	Energy eq. to 1.5 Hinkley Point Cs	Energy eq. to 1 Hinkley Point C
	Heat pumps installed	2.1 million	0.8 million	0.24 million
	Gas import reduction	13%	5%	2%
/	Jobs required	75,000	37,000	17,000



Home upgrades boost UK energy security

Natural gas burnt for domestic heating and cooking accounts for 34% of the UK's total gas demand, making homes the single largest consumer of imported gas, even more than gas imported for electricity generation.

At a time of growing international instability, cutting reliance on foreign gas is critical to national resilience. The Warm Homes Plan is a key pillar of the UK's energy security strategy. Energy efficiency and clean heating reduces our exposure to international gas markets and vulnerability to gas price volatility while improving the UK's balance of trade.

By delivering the full £13.2bn Warm Homes Plan, domestic gas use could fall by 4.7% in 2029. In present value terms, this would save households nearly £1bn a year in energy bills, delivering nearly £10bn in cumulative savings over the decade from 2025 to 2035.

Energy efficiency policy has helped to significantly reduce energy demand

UK homes now use around 40% less energy per household than they did in 1970. Despite there being 10 million more households today, total domestic energy consumption is 10% lower than it was five decades ago.⁸

Sustained reductions in energy demand can be attributed to the results of major publicly backed energy efficiency programmes. Before the 2022 energy crisis, consistent decreases in domestic energy consumption were recorded between 2004 and 2016, which coincide with the introduction of energy efficiency investment that gathered momentum under the Blair government and have continued since.

Between 2008 and 2024, at least 6.5 million households benefited from government schemes to install energy efficiency upgrades (not inclusive of lighting). Over 14 million measures have been installed, including loft and cavity wall insulation and heating system improvements.

⁸ UK government, 30 July 2024, **Digest of UK Energy Statistics**



Looking ahead, the Climate Change Committee's Seventh Carbon Budget calls for at least 5 million more major insulation measures and 30 million smaller upgrades to meet the UK's 2030 fuel poverty target. Simultaneously, annual installations of low carbon heating systems must increase eightfold by 2030. The Warm Homes Plan is the government's principal policy to deliver the recommended upgrades, and it needs HM Treasury's full backing.

The government should treat homes as the nationally significant infrastructure they are, and invest the full £13.2bn manifesto commitment in upgrading and electrifying them. This briefing, and the results of past energy efficiency policy, show home upgrades are a reliable method to grow the economy and increase the UK's energy security.

About E3G

E3G is an independent climate change think tank working to deliver a safe climate for all.

We drive systemic action on climate by identifying barriers and constructing coalitions to advance the solutions needed. We create spaces for honest dialogue, and help guide governments, businesses and the public on how to deliver change at the pace the planet demands.

More information is available at www.e3g.org

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⁹ Committee on Climate Change, 24 February 2025, **Seventh Carbon Budget**