



Institute for  
Fiscal Studies



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## Energy policy and domestic bills

George Stoye

# Energy is an important component of household spending

## Distribution of energy budget shares, by expenditure decile (2011)



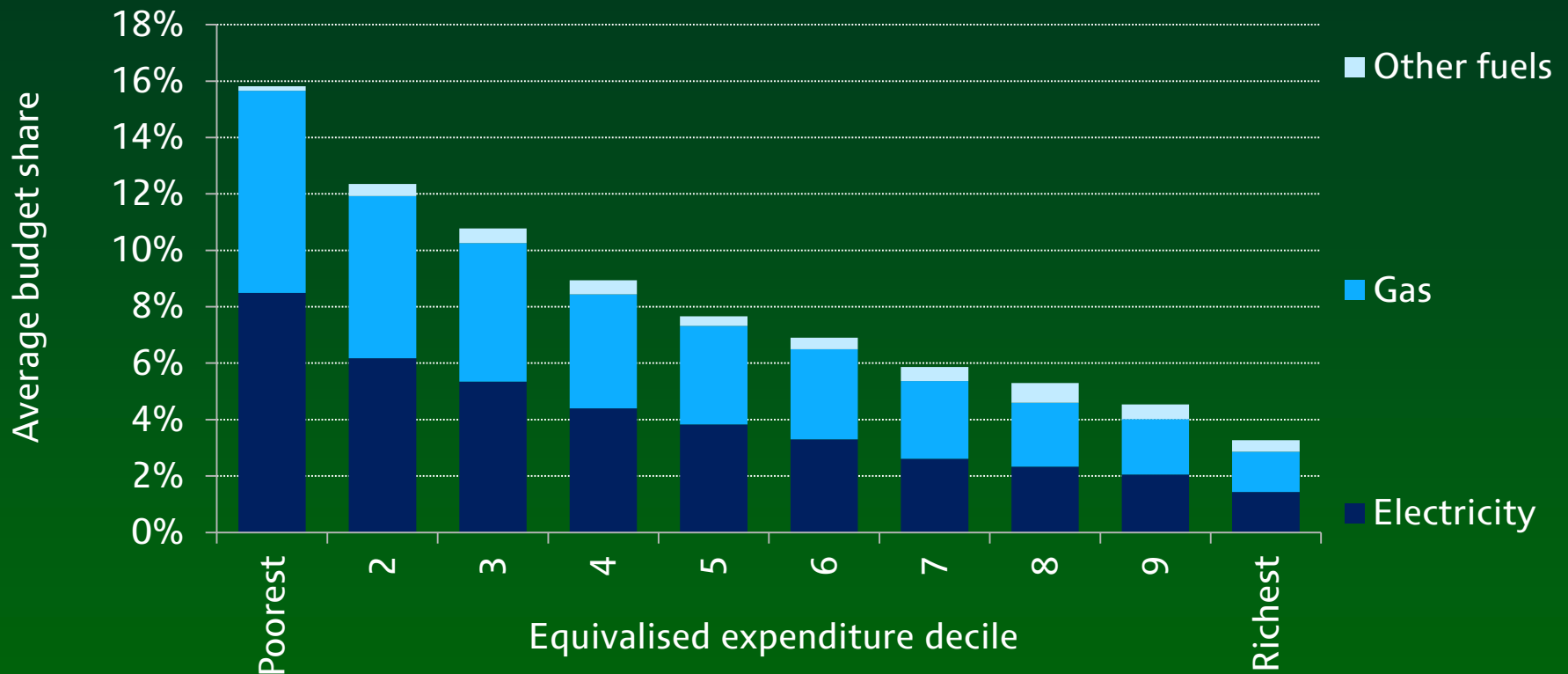
Note: Figures are weighted to account for survey non-response. Deciles are equivalised using the after-housing-costs (AHC) modified OECD scale. Excludes households reporting negative fuel expenditure and households in Northern Ireland.

Source: Advani et al (2013)



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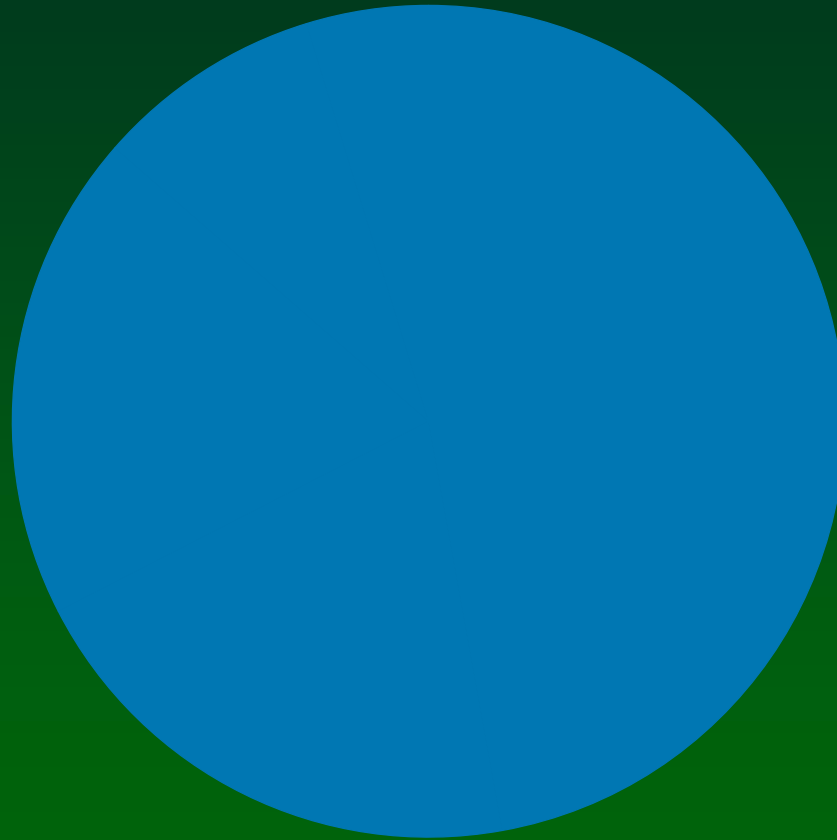
Source: Advani et al (2013)

# Rising energy prices

- Real energy prices have substantially increased since 2000
  - 43% increase in electricity and 100% increase in gas prices relative to non-housing RPI inflation
- Average household energy consumption fell by 20% between 2000 and 2011
- 13% real increase in average bills between 2010 and 2012
  - Rising bills despite falling consumption
- 15% of this increase is due to climate change and energy policies

# Breaking down an average household energy bill

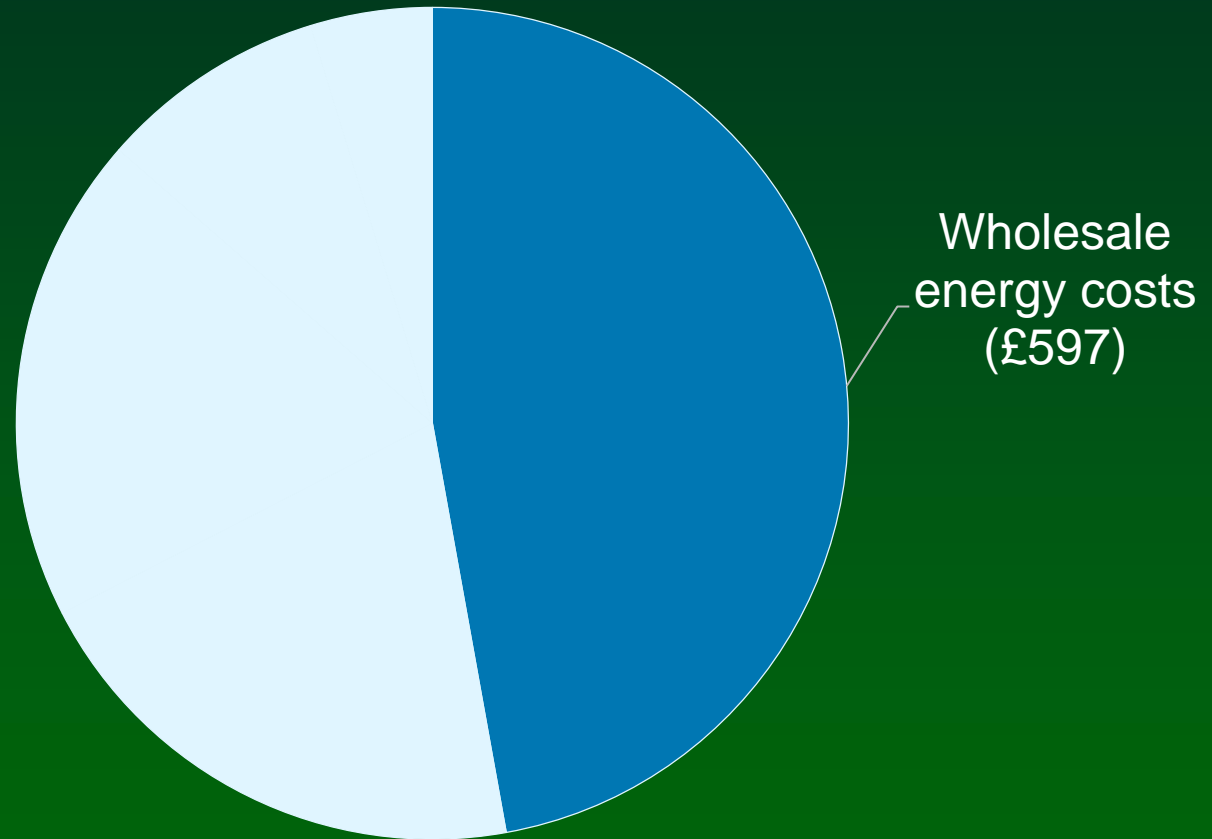
Average household energy bill in 2013 (£1,267)



Source: Department of Energy and Climate Change.

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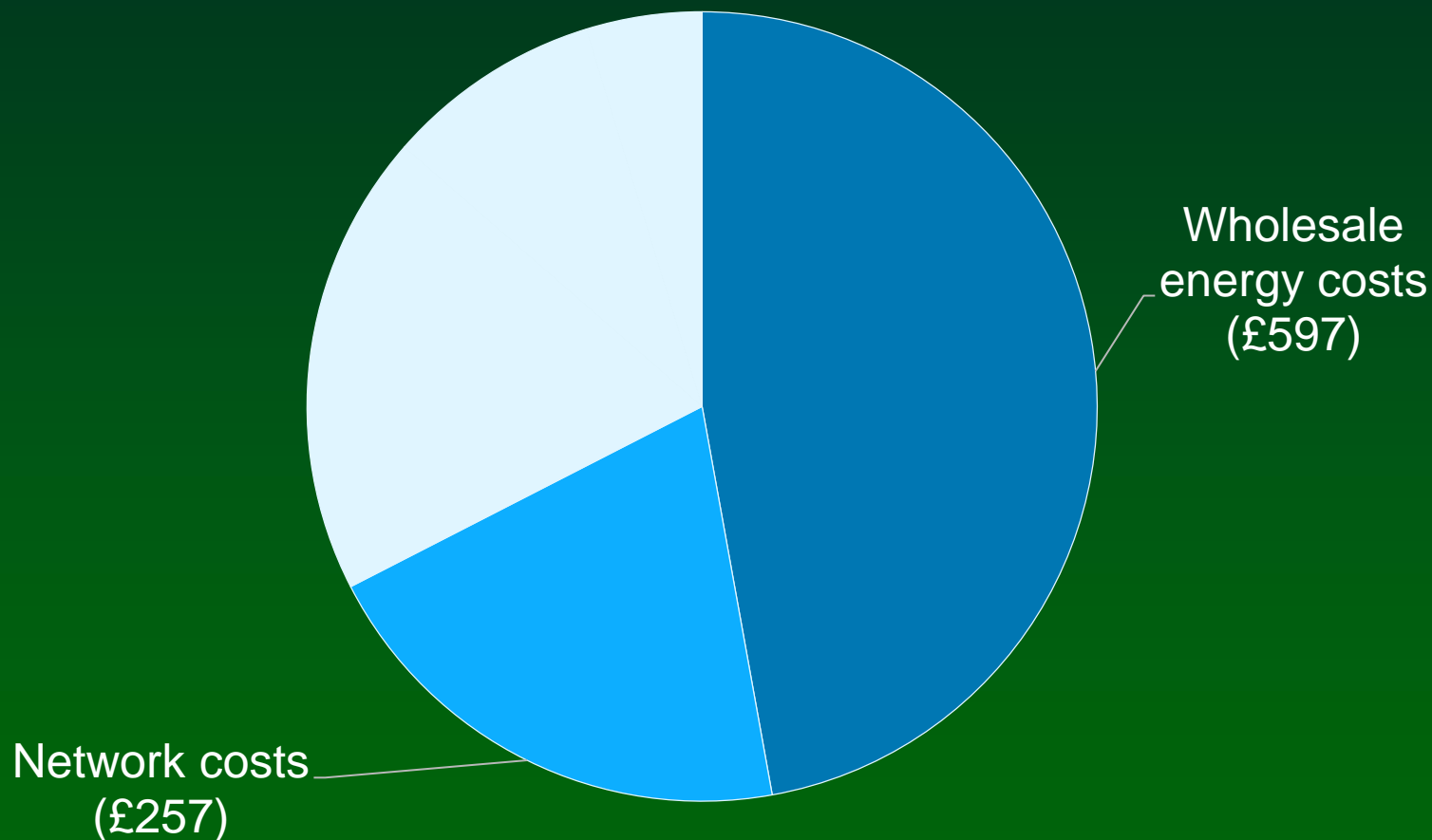
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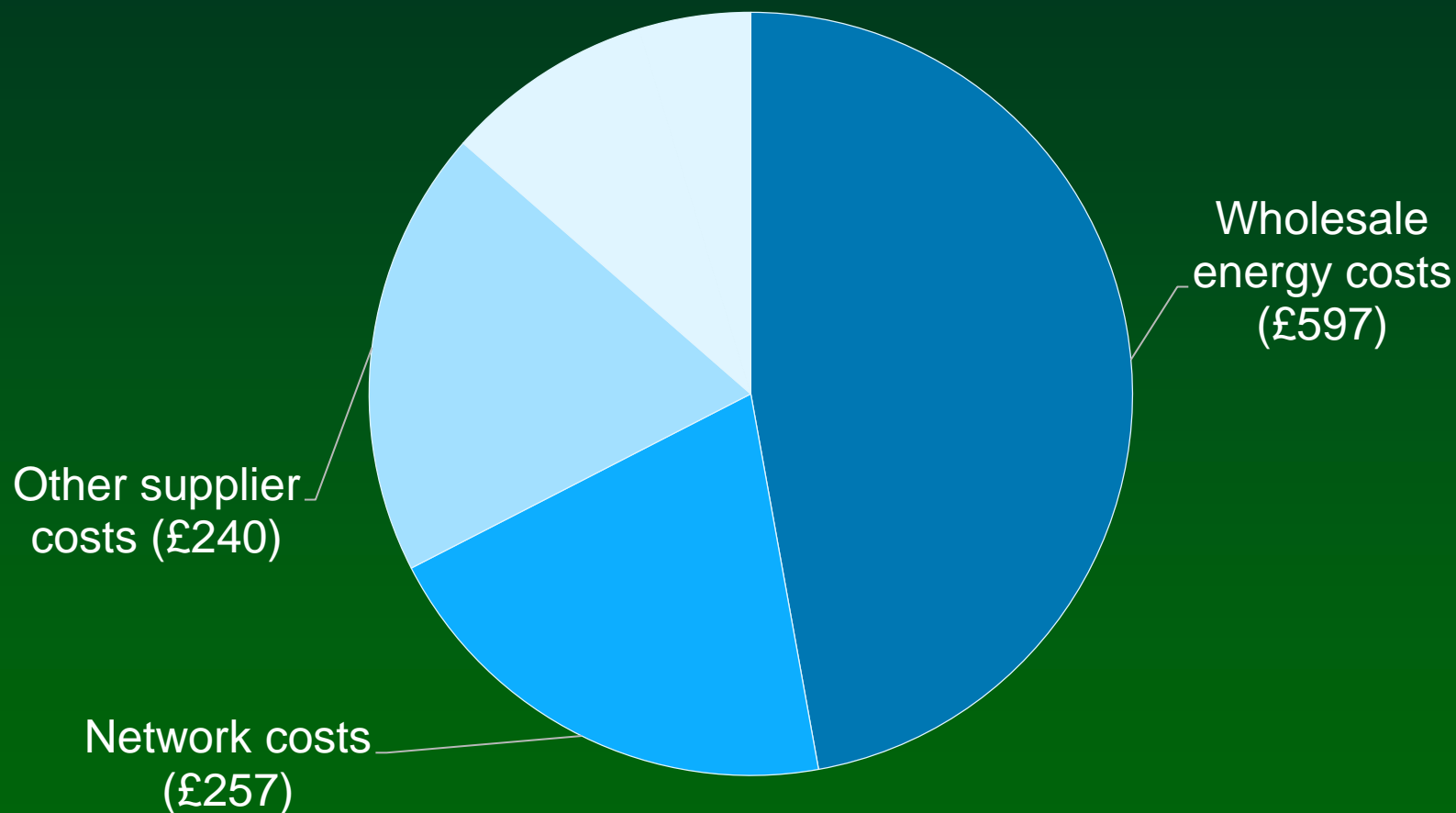
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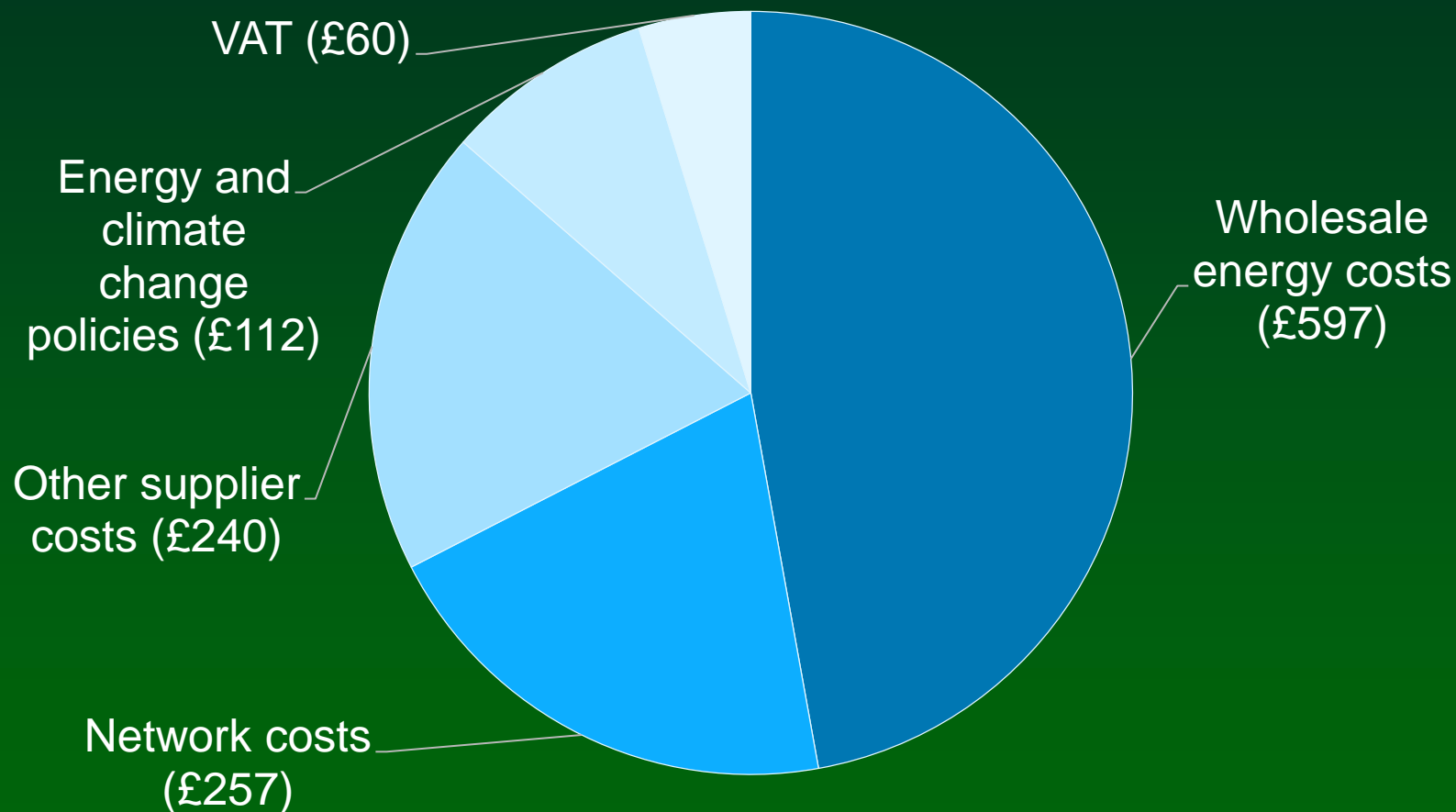


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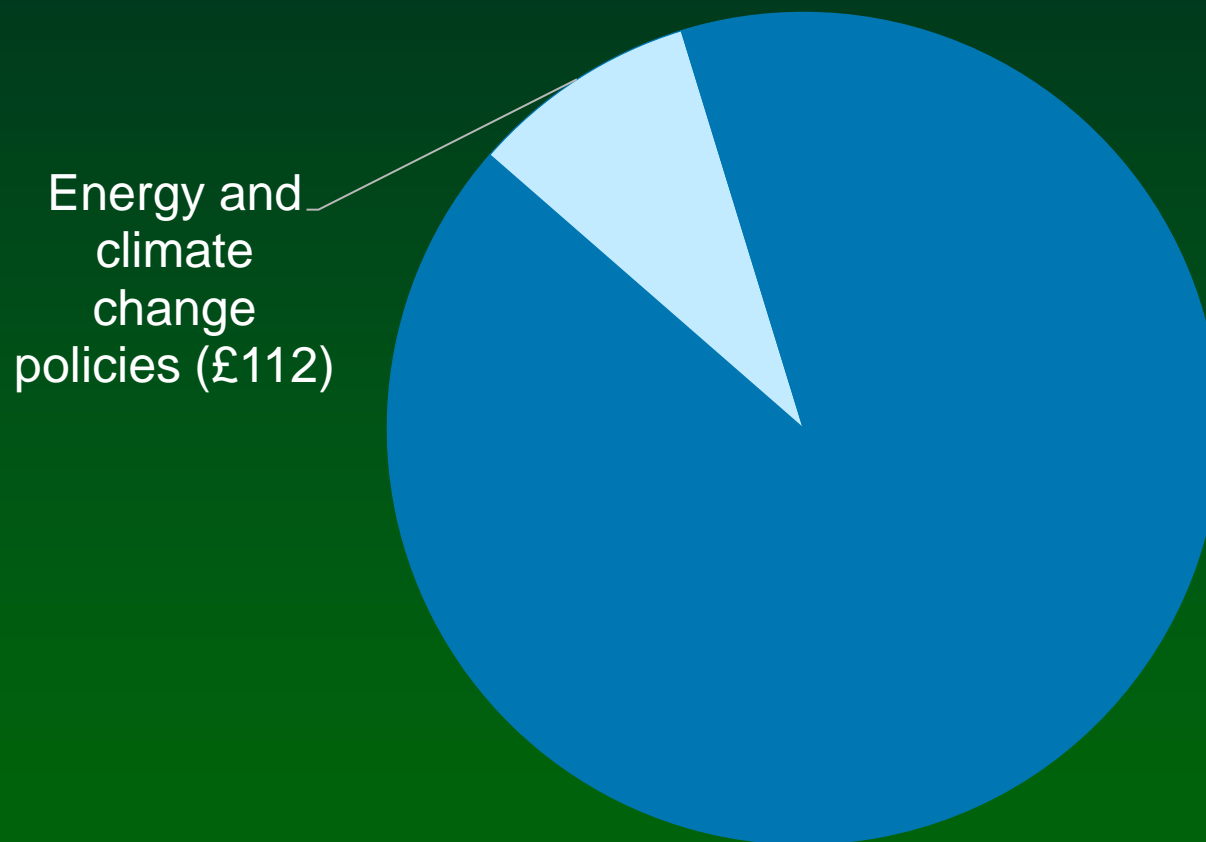


Notes: VAT charged at a 5% rate for all domestic energy use.

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# Breaking down an average household energy bill

Average household energy bill in 2013 (£1,267)



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# Energy and climate change policies

Objective	Policy	Average bill effect (£)
	All policies	112

Notes: Numbers may not sum due to rounding. Excludes VAT. ECO costs include administrative costs for the Green Deal.

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# The Warm Home Discount and the Energy Company Obligation

- Warm Home Discount
  - £135 annual rebate to vulnerable households
  - Households who receive pension credit guarantee
  - Households with individuals aged 75+ and receiving any pension credit
- Energy Company Obligation
  - Requires installation of energy efficiency measures in the domestic housing stock between January 2013 and March 2015
  - Requires £4.2 billion of bill savings, focused on poorer households
  - Requires savings of 21 MtCO<sub>2</sub> through the installation of measures which are unlikely to be financed privately, such as solid wall and hard-to-treat cavity wall insulation

# Policy announcements

- Warm Home Discount will be tax-funded in 2014-15 and 2015-16
  - Estimated bill saving of £12 for the average energy consumer
  - Costs £320 million per year in 2014-15 and 2015-16
- Multiple changes to the Energy Company Obligation
  - Estimated reduction of £30 - £35 in average household energy bills
  - Target period for all components extended to 2017 (from 2015)
  - 33% reduction in the ‘hard-to-treat’ component and a reduced focus on solid wall insulation
- Combined with an one-off £5 reduction in energy distribution costs, policies are estimated to save £50 on the average household dual-fuel energy bill in 2014-15

# Impacts

- The policy announcements are estimated to reduce average household dual-fuel bills by £50
  - 4% reduction on an average household bill of £1,267
- However the costs of policies aimed at supporting renewables remain
  - The Renewables Obligation and Feed-in Tariffs added £37 to the average bill in 2013
- These costs will rise significantly over time with the expansion of existing policies and the launch of the Electricity Market Reform
- Policy changes affect only households, increasing the difference in policy regime faced by households and businesses

# Conclusions

- Policy changes will reduce average bills by £50 in 2014-15
  - Additional cost to HM Treasury of £500 million in 2014-15 and 2015-16, and £180 million in 2016-17.
- Policies to support renewables remain bill-financed.
  - Currently planned to increase substantially
- Increases differences in household and business incentives to reduce energy use
  - Reduced domestic energy prices may increase energy consumption
- Cutting carbon emissions is costly
  - Policy should be set in a coherent way to minimise costs
- Frequent changes to policy prevent this

