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Re-energising the UK's approach to domestic energy efficiency

Jan Rosenow

Nick Eyre

eccee Summer Study 2015

A very ambitious policy

- “[It] will be a revolution. [...] The most ambitious energy-saving plan ever put forward. A once-and-for-all retrofit that will make every home in Britain ready for a low-carbon future.” (Huhne 2010)
- “The biggest home improvement programme since World War II” (Huhne 2010)
- “Europe’s most innovative and transformational energy efficiency programme” (Barker 2010)

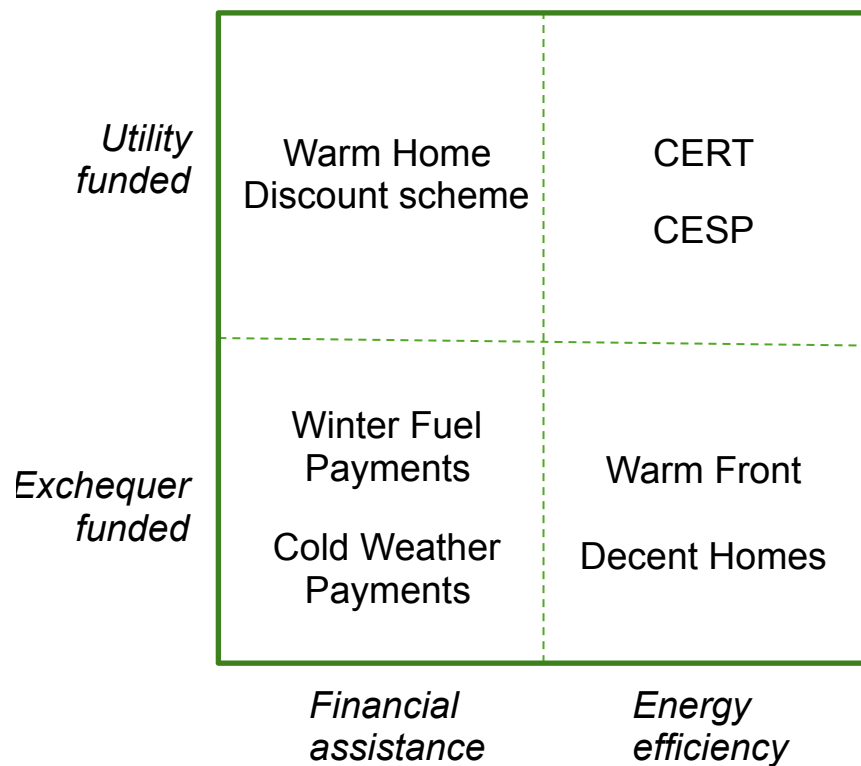
Content of presentation

- 1) A changing policy landscape
- 2) Impact of policy changes
- 3) Roadmap for recovery
- 4) Conclusions

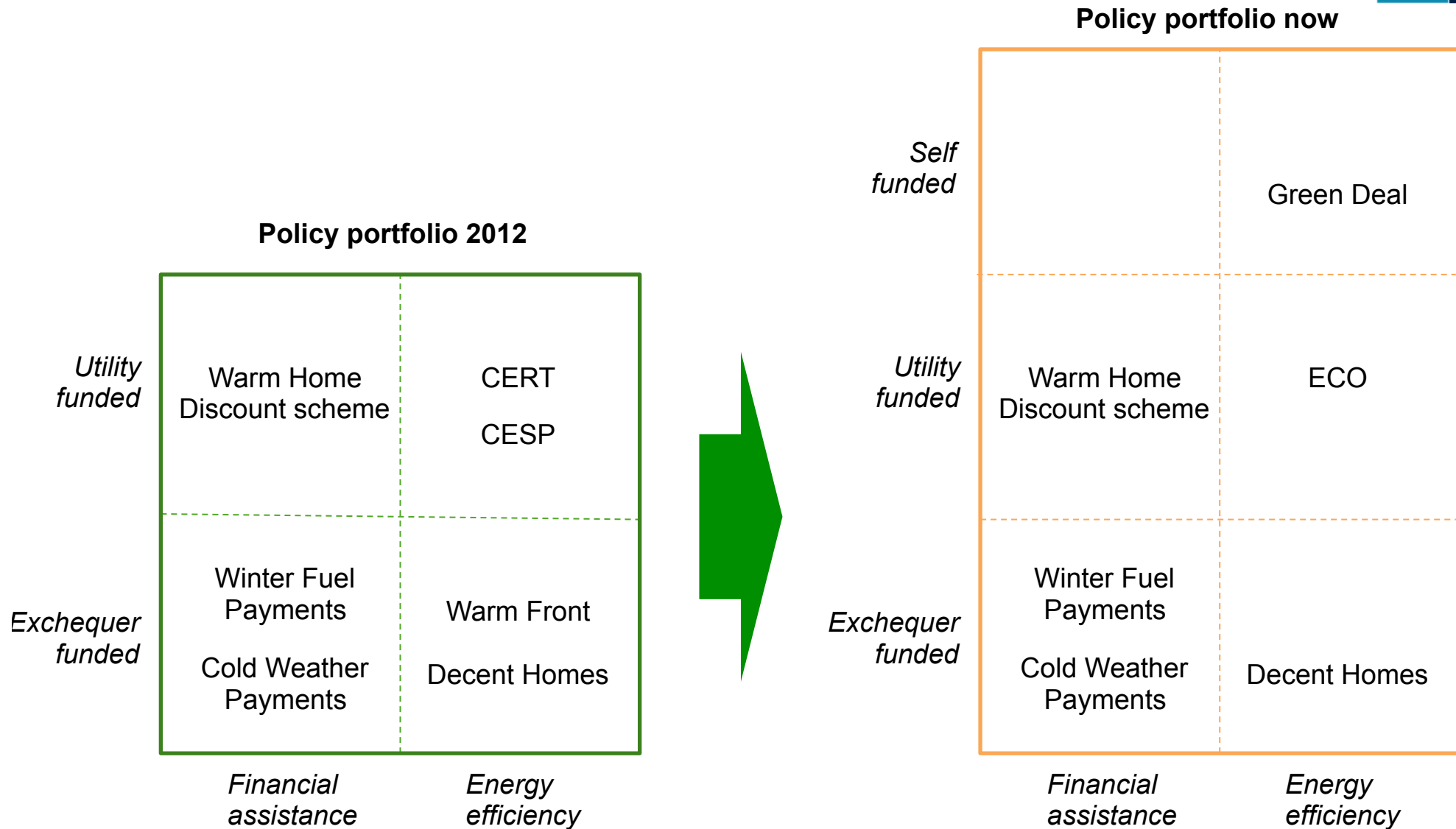
A changing policy landscape

Shift from Exchequer funded and mandated energy efficiency to self funded

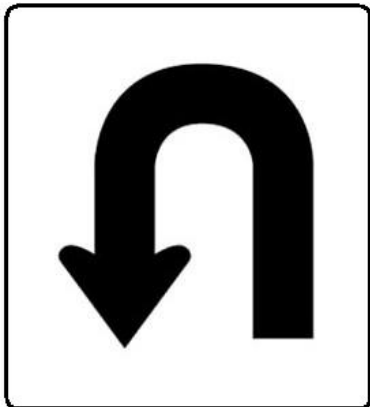
Policy portfolio 2012



Shift from Exchequer funded and mandated energy efficiency to self funded



Green Deal / ECO design turns past experience in energy efficiency policy on its head



	<i>Energy efficiency obligations</i>	<i>Loan schemes</i>
<i>International experience</i>	Low cost measures	High cost measures
<i>Green Deal/ECO</i>	High cost measures	Low cost measures

A recapture of what happened since

Price freeze announced in Sep 2013

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Energy companies blame energy efficiency levies for price increase in Oct 2013

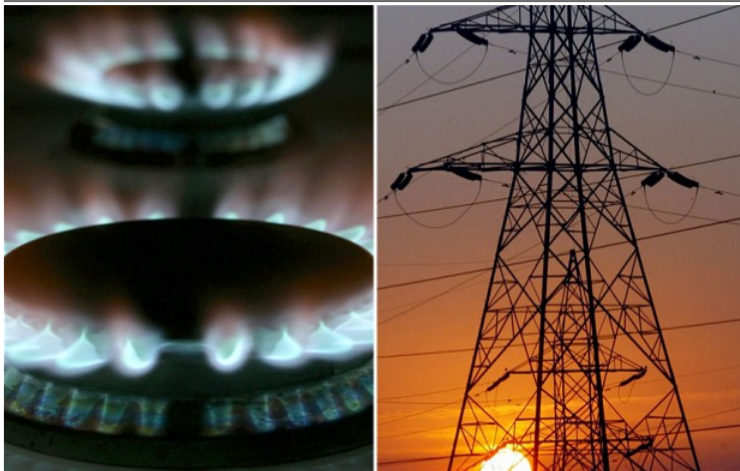
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SSE retail boss blames Government for energy price rise

Retail chief at SSE raises energy prices by 8.2pc and says bills would be £110 a year lower if the Government collected the tax itself and did not get energy firms to do it



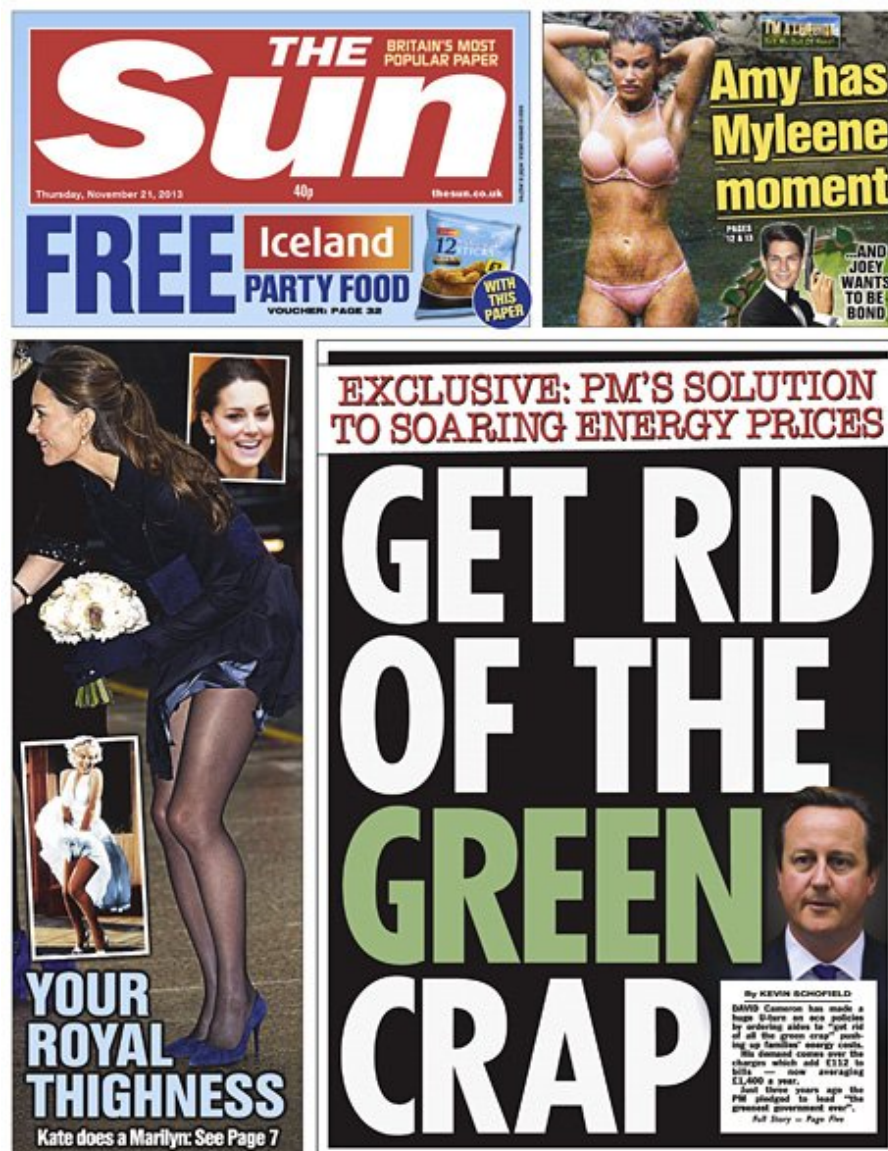
Will Morris, group managing director of retail at the big six energy provider, said the government-imposed levies had left the company with no other option but to hike energy prices by an average of 8.2pc from next month for its 10 million customers. Photo: PA/Reuters

The INDEPENDENT

Government blamed for generous green energy subsidies which leave consumers footing the bill

'Green crap' debate in Nov 2013

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Government response in Dec 2013 – costs of ECO reduced by 2/3

Press release

Government action to help hardworking people with energy bills

From: [Department of Energy & Climate Change and The Rt Hon Edward Davey MP](#)
History: Published 2 December 2013
Part of: [Reducing the UK's greenhouse gas emissions by 80% by 2050, Helping households to cut their energy bills, Climate change, Energy and + others](#)

British households will benefit from proposals that will be worth £50 on average, thanks to government plans to reduce the impact of energy company price rises.



- Households will see an average saving of £50 a year without reducing help to vulnerable households or sacrificing green commitments.
- Plus £1,000 to spend on energy saving measures when you move home – helping people cut their bills through energy efficiency; safeguarding green jobs.

British households will benefit from proposals that will be worth £50 on average, thanks to Government plans to reduce the impact of energy

Green Deal Home Improvement Fund announced in May 2014

The Telegraph

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HOME » FINANCE » PERSONAL FINANCE » **HOUSEHOLD BILLS**

Households to be granted up to £7,600 for energy-efficient home improvements

Government offers to pay homeowners to install energy efficiency measures after low take-up of Green Deal loan scheme



Green Deal Home Improvement Fund closes after just six week in July 2014

theguardian

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Environment > Green deal and energy companies obligation (ECO)

Green deal cashback scheme is shut after surge of applications

Final £70m of money for energy efficiency measures under green deal home improvement fund is taken up in just three days

Damian Carrington

theguardian.com, Friday 25 July 2014 11.13 BST

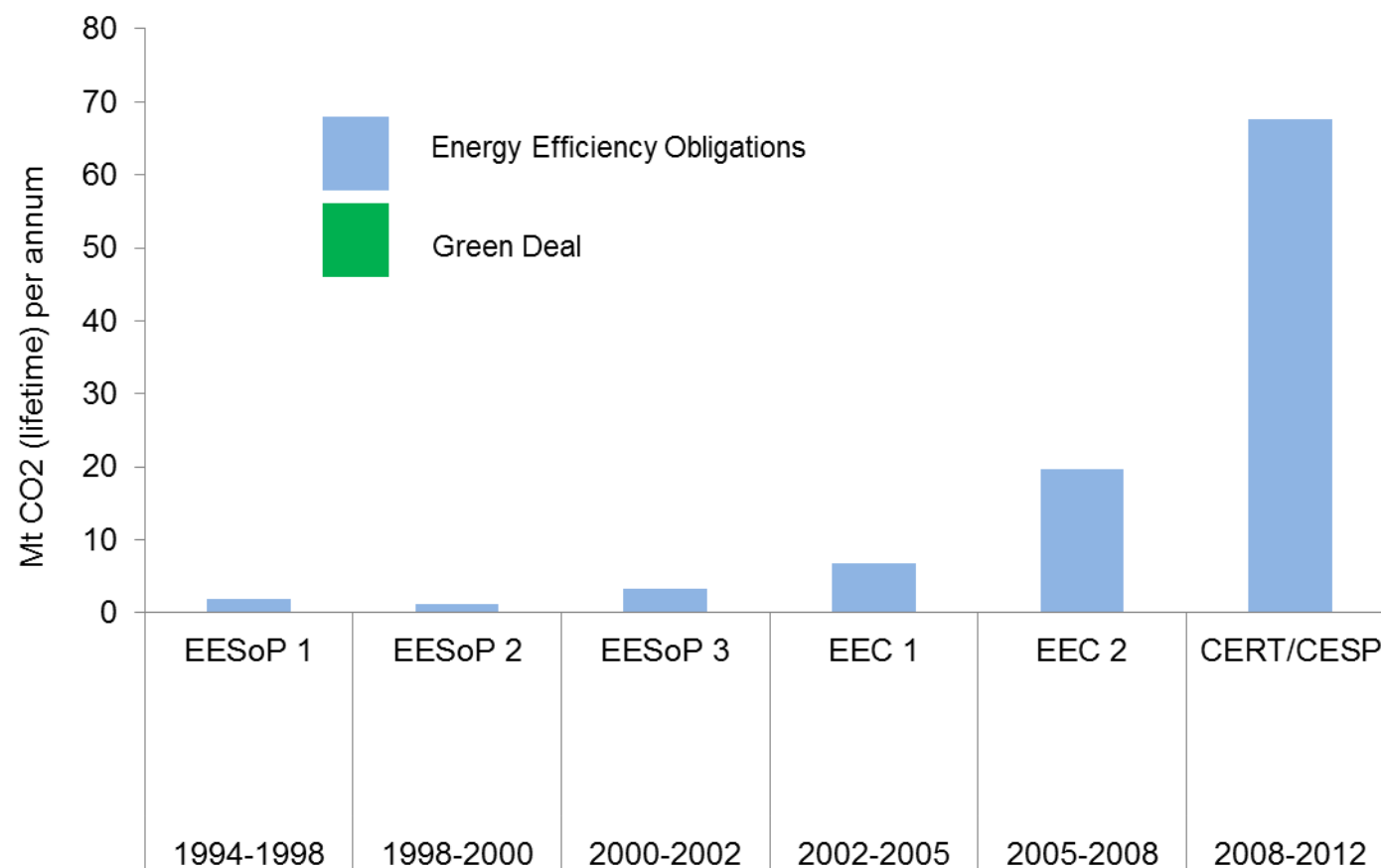
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Impact of policy changes (1)

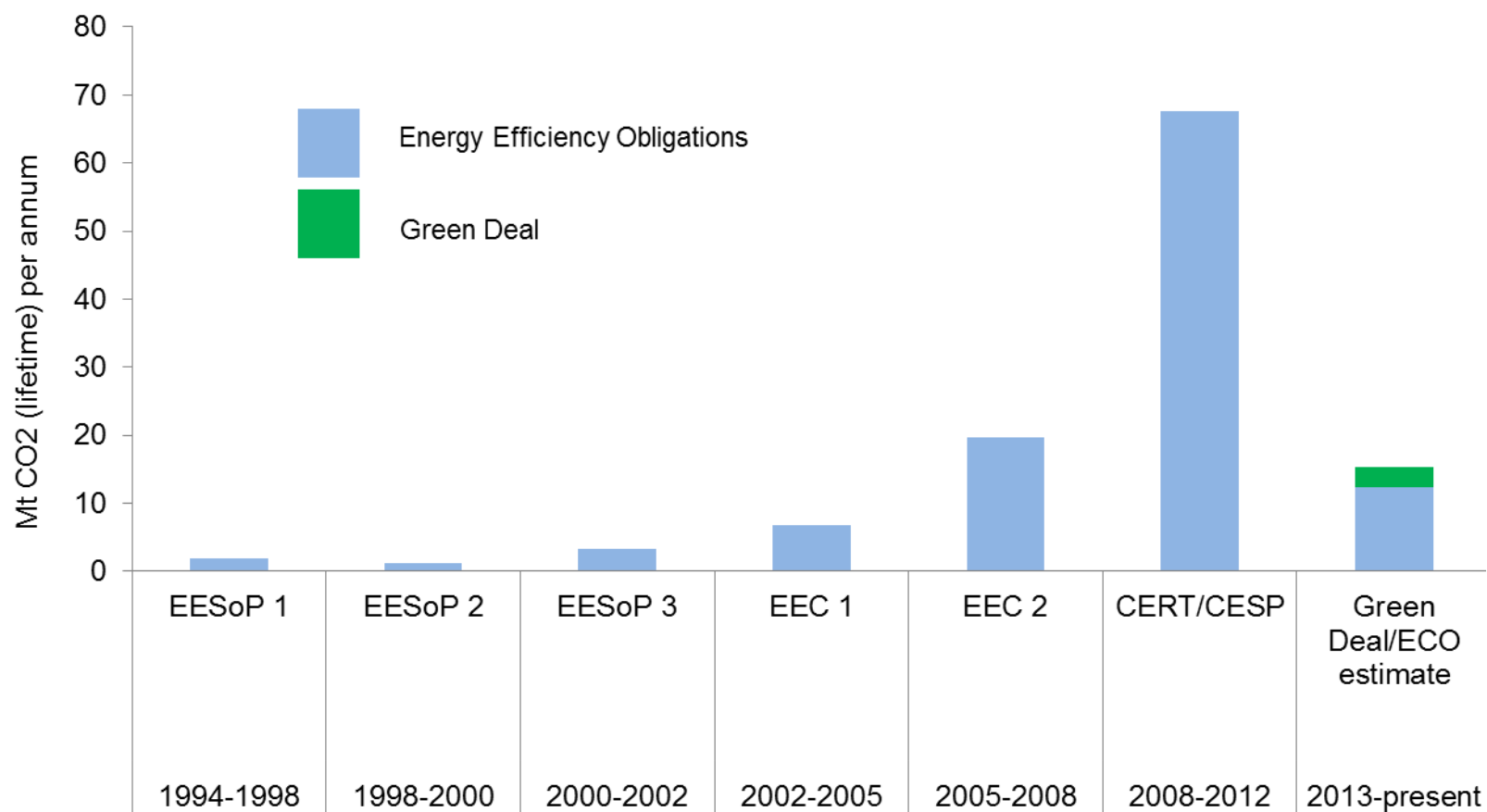
Based on evaluations (ex-ante and ex-post)

Steep increase of energy savings from past energy efficiency obligations



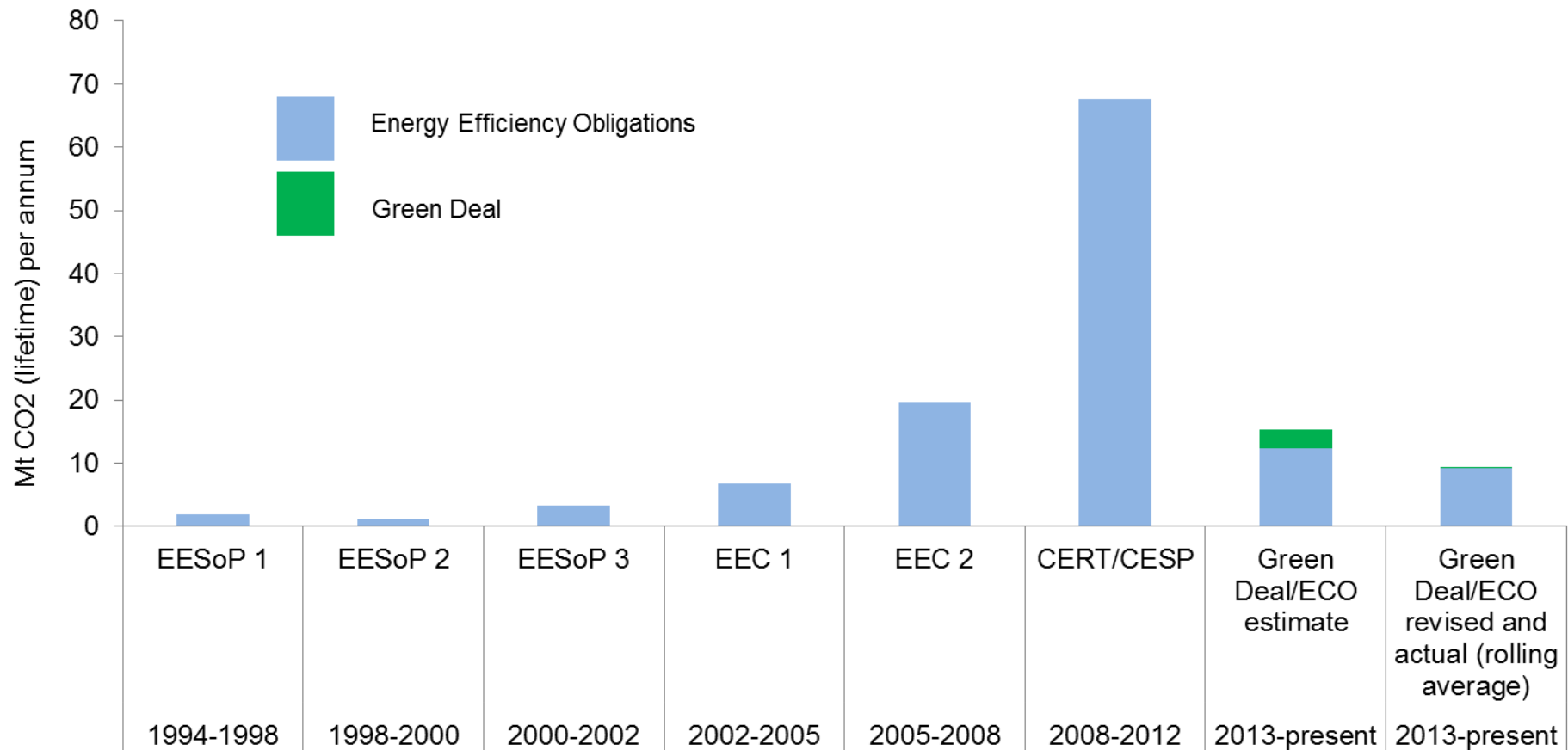
Source: Rosenow 2012

Ex-ante evaluation indicated significant reduction of efforts



Source: Rosenow and Eyre 2012

At current levels the Green Deal and ECO will achieve just 14% of previous energy efficiency programmes



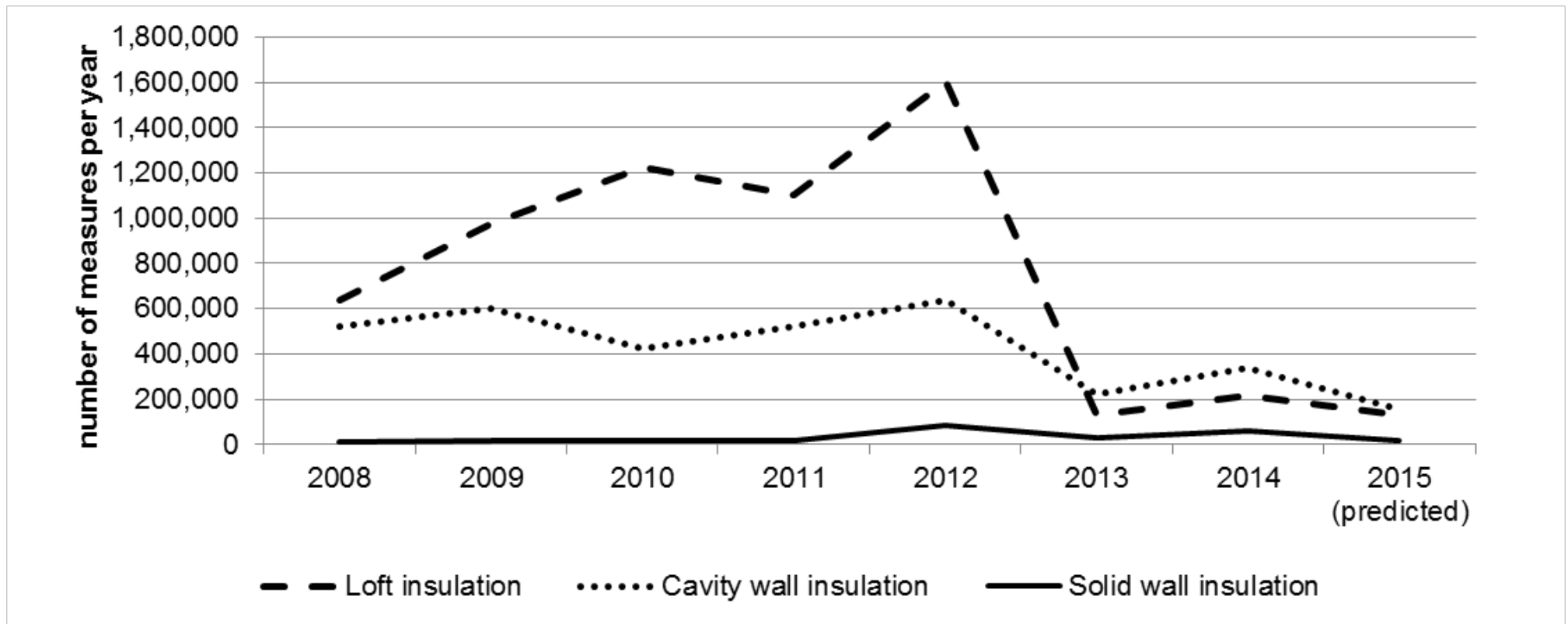
Source: Rosenow and Eyre 2012, 2014, DECC 2015

Impact of policy changes (2)

Based on number of insulation measures

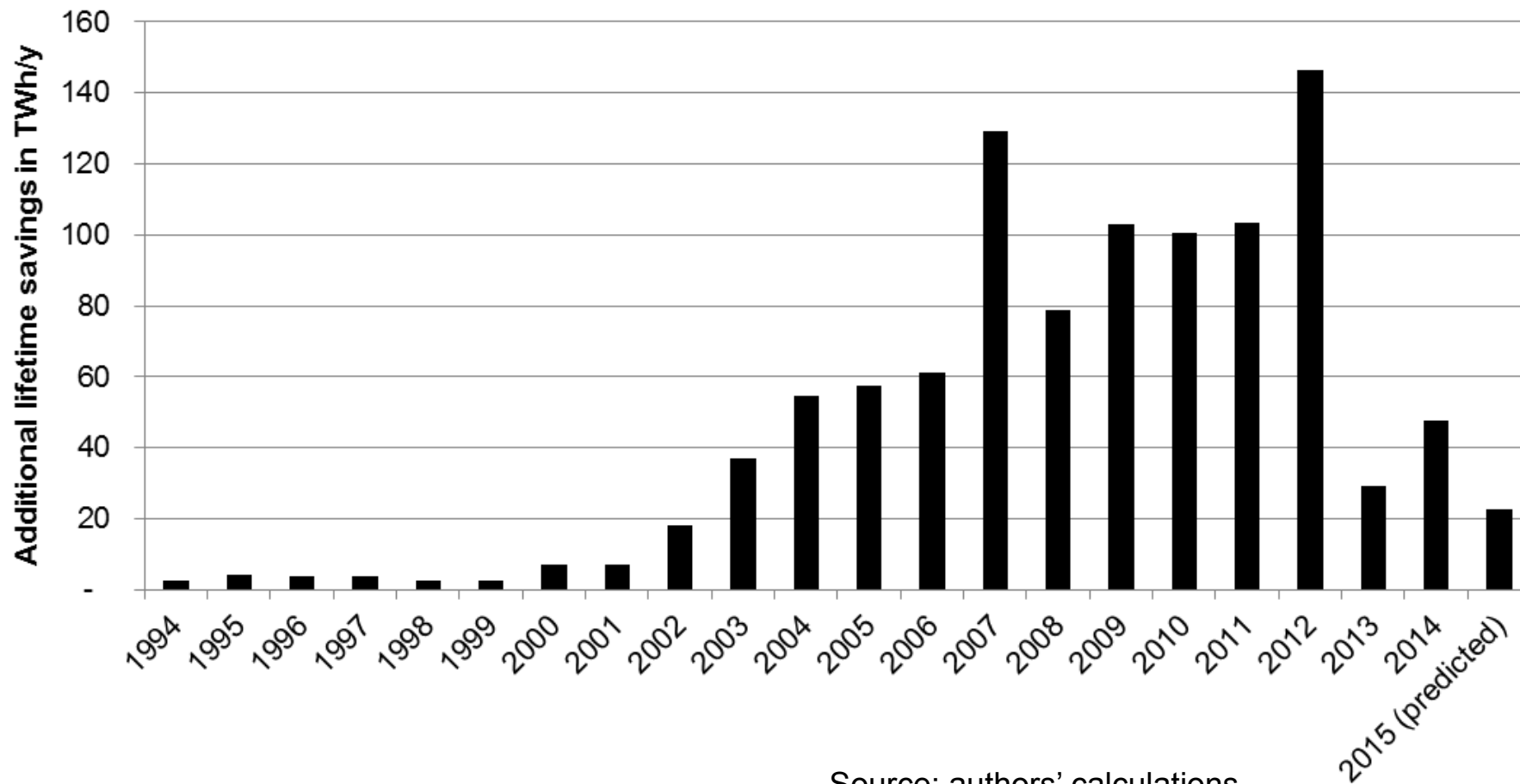
Insulation measures installed since 2008 dropped significantly since 2013

loft: -90%, cavity: -62%, solid: -57% (average per year 2013-2015 compared to 2012)



Source: Climate Change Committee 2014 and DECC 2015

Bottom-up calculated energy savings based on top 3 insulation measures also indicate sharp decrease of energy savings of more than 75%



Roadmap for recovery

Reforming the Green Deal:

1) Modifying the interest rate

- interest rate of a Green Deal loan at 7% is deemed commercially attractive against comparable unsecured loan
- households more likely to compare the Green Deal interest rate to that of their mortgage or to high street loans
- interest rate needs to be set closer to 3% or less in order to appear attractive (see research by Ipsos MORI, 2011)

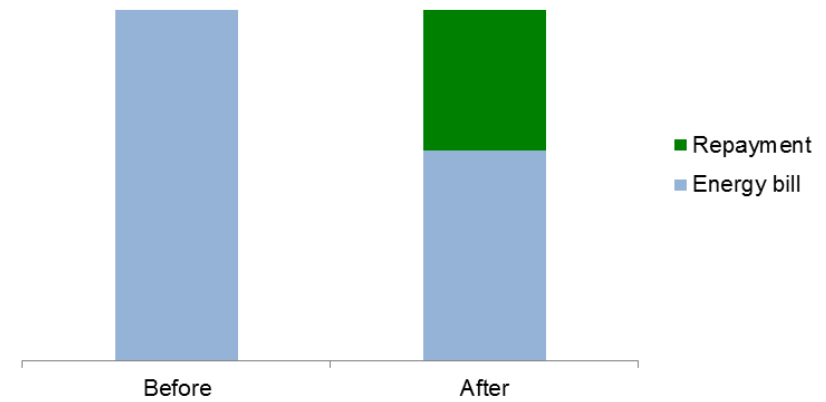


Reforming the Green Deal:

2) Relaxing the golden rule

- Golden Rule limits amount of Green Deal finance:

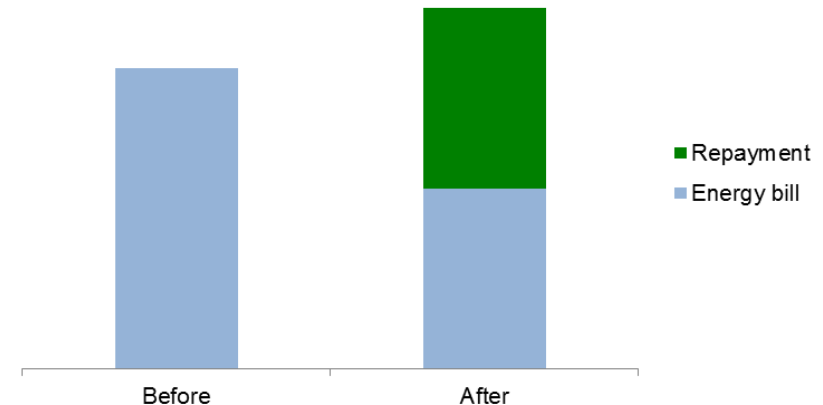
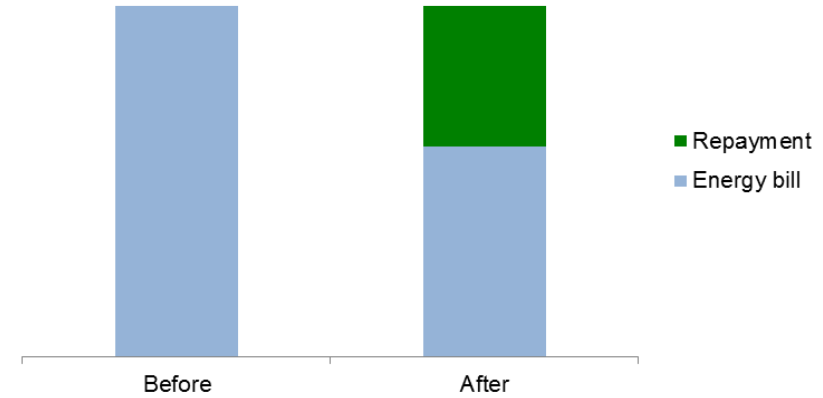
repayments must not be greater than savings



Reforming the Green Deal:

2) Relaxing the golden rule

- Golden Rule limits amount of Green Deal finance:
repayments must not be greater than savings
- Proposal: allow households to take out more Green Deal finance even it costs of repayments exceed energy savings
- DECC already consider this



Reforming the Green Deal:

3) Shifting the emphasis

**HATE RISING
ENERGY COSTS?**

**GREEN
DEAL
WITH IT.**



The Green Deal, set up by Government, is a new way to pay for home improvements like insulation, double glazing or a new boiler. It lets you pay for some or all of the improvements over time through your electricity bill. Repayments will be no more than what a typical household should save in energy costs.

Find out more at
gov.uk/greendeal
or call 0300 123 1234

**UP TO
£1020*
CASHBACK**
(while funds last)

**GREEN DEAL
APPROVED**

*Based on installing solid wall insulation, loft insulation and a new boiler under the Green Deal. The Green Deal is not available in Northern Ireland. A different cashback scheme operates in Scotland. Full details available at gov.uk/greendeal.

Reforming the Green Deal:

3) Shifting the emphasis

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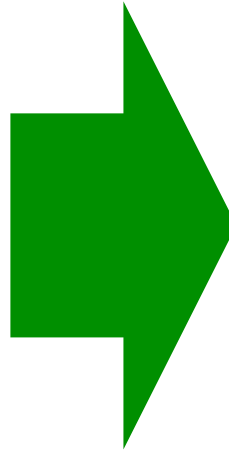
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Bundesministerium für Verkehr, Bau und Stadtentwicklung

CO₂-Gebäudesanierung:
Heute die Energie für morgen sichern.



Mit Wärmedämmung und dem Austausch veralteter Heizungsanlagen und Fenster können Sie Ihre Heizkosten spürbar senken. Darüber hinaus leisten Sie durch CO₂-Gebäudesanierung einen entscheidenden Beitrag für den Klimaschutz. Nutzen Sie deshalb die staatliche Förderung und stellen Sie jetzt Ihre Heizung auf modernere Anlagentechnik um. Nähere Informationen zu unseren Förderprogrammen unter www.energie-fuer-morgen.de

1) Support remaining potential of lower cost insulation measures

- Analysis by Climate Change Committee (2014) shows that:
 - There are still 4.5 million cavity walls of which 1.6 million are easy to treat.
 - >10 million easy-to-treat lofts could benefit from additional top-up.



2) Support non-insulation measures

- Little support for non-insulation measures left, particularly electricity saving technologies (LEDs etc.).
- Energy Efficiency Obligations promoted more than 30 million energy efficient appliances in the past.



3) Low-income households

- Utility-funded programmes generally regressive on the revenue-raising side as every customer pays the same regardless of income.
- Argument for using Energy Efficiency Obligations mainly for low-income customers or even better those in fuel poverty.
- Main fuel poverty programme funded through general taxation has been terminated.
- Energy Efficiency Obligations could fill the gap.



Conclusions

Conclusions

- The policy changes have been significant and represent the most radical shift in the history of energy efficiency policy.
- The impacts of the change have been profound and resulted in a sharp decline of energy savings.
- Cosmetic modifications and additional pots of funding are unlikely to reverse the current trend.
- Substantial policy reform is needed to get back to previous levels of activity.

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