

REAL

THE COST OF “CUTTING THE GREEN CRAP”

The impact on
the nation's
energy bills

JUNE 2024

A **GREEN BRITAIN**
FOUNDATION REPORT





Foreword

Ten years ago Conservative Prime minister David Cameron infamously declared he was going to 'cut the green crap' as he set out a series of anti green measures. He did so making the argument that green policies were expensive and needed to be reined in. That we could not afford them.

Ten years later Conservative Prime minister Rishi Sunak is repeating history - setting out last autumn a series of green policy reversals and a renewed anti green rhetoric. At its heart is the argument that we need to slow down the transition to green energy and to net zero, we need to do this to save people money and ease the cost-of-living crisis.

The four 'green crap' cuts that Cameron made were;

- The banning of onshore wind
- The removal of financial support for domestic solar
- Scrapping home insulation support schemes
- Scrapping the Zero Carbon standard for newbuild homes

All four measures are still in place, ten years later.

We've taken a close look at the decade long data in order to find the actual impact on the nation's energy bills as a result of these four measures. Our findings are shocking.

In 2023, the last full calendar year we have energy cost data for - we found that;

The total additional cost on the nation's energy bills for that year was a whopping £5 billion. From 'cutting the green crap'.

The worst affected homes paid £1500 more that year for their energy than they would have if Cameron had not made those cuts.

People in new build homes (built in the last decade) typically paid £700 more for their energy than they would have.

Typical energy bills in 2023 were £2,750. And so the worst affected households saw their energy bills more than double, compared to what they would have been. While those living in new build homes saw a one third increase.



Over the whole decade since Cameron made his cuts - our energy bills have been £15 billion higher than they would otherwise have been.

Our analysis shows very clearly that Cameron's green policy cuts did not save money, in fact the opposite has been the case - we've all paid far more for our energy than we otherwise would have. Rather less surprisingly our analysis also shows that Cameron's cuts led to an increase in carbon emissions too.

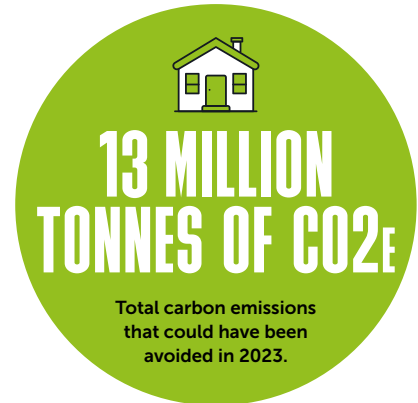
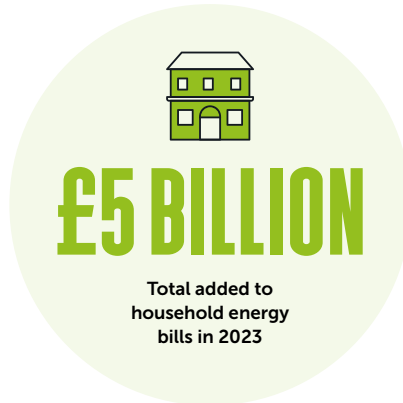
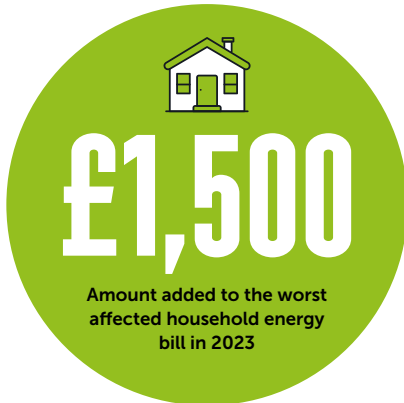
It's vital that we have a properly informed discussion on green policies, the false narrative of a green transition that we cannot afford is harmful. It adds unnecessarily to the cost of living crisis via our energy bills and slows down the vital transition to net zero we need to make. The 'green crap' that we need to cut is this harmful counter factual rhetoric - that we can't afford the transition to green energy.



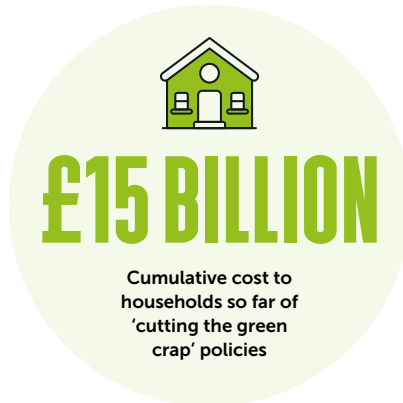
Dale Vince OBE
Founder of Ecotricity

HEADLINE FINDINGS

JUST IN 2023



IN THE WHOLE DECADE



The impact of cutting green polices

Did Cameron's policy moves, his 'cutting of the green crap' save the nation money? That's the question we set out to answer by analysing data across four policy areas affected in the ten years period since implementation. We looked at household energy bills and carbon emissions, as they would have been without the policy changes and what they actually were. We found energy bills were higher as a result of each of the four policy changes, than they would have otherwise been.

These are the additional costs, on energy bills, from each policy area, for 2023 and for the decade long period:

Onshore wind

- **Average household bills** – Were £13 higher in 2023.
- **Total household bills** – Were £360m higher in 2023.
- **Over the Decade** - Energy bills were £1.4bn higher.

Solar

- **Average household bills** – Were £1,265 higher in 2023.
- **Total household bills** – Were £1.4bn higher in 2023.
- **Over the decade** - Energy bills were £4.6bn higher.

Home insulation

- **Average household bills** – Were £252 higher in 2023.
- **Total household bills** – Were £1.5bn higher in 2023.
- **Over the Decade** – Energy bills were £5.5bn higher.

Sustainable homes

- **Average household bills** – For each newbuild were £706 higher in 2023.
- **Total household bills** – For all newbuilds were £1.2bn higher in 2023.
- **Over the Decade** - Energy bills were £3.8bn higher.

The cumulative impact on energy bills over the decade since the policy changes is a whopping £15 billion added to the nations energy bills.

THE BACKGROUND

Onshore wind

In 2008, the Labour government promised a “green revolution” in the UK, with the building of thousands of wind turbines and the UK was steadily increasing its onshore wind capacity.

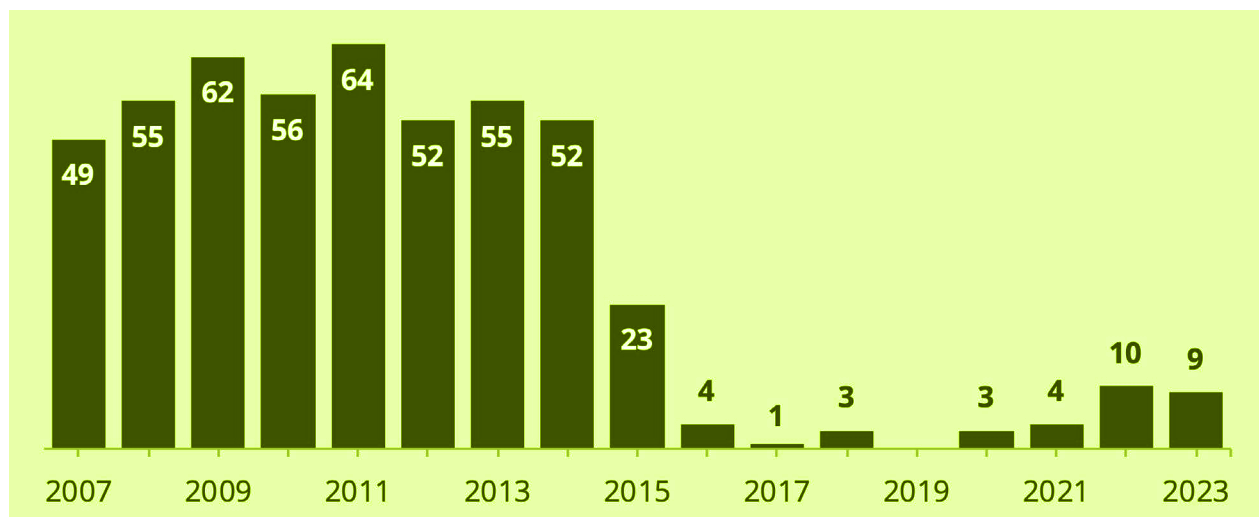
However, under pressure from Conservative MPs, David Cameron entered the 2015 general election on a manifesto promise to remove support for onshore wind.

Once elected, the Conservative government imposed a de facto ban on new onshore wind projects by changing planning laws. This meant that new projects had to be built at a location identified as suitable by a local authority and with the full support of the local community. In practice, this meant that a single objection from the local community could block an entire project.

In 2016, they went even further by removing wind farms above 50MW from being treated as Nationally Significant Infrastructure Projects (NSIPs) through the Energy Act 2016 and the Infrastructure Planning (Onshore Wind Generating Stations) Order 2016, under the Planning Act 2008. This meant that all wind farms, regardless of size, would be subject to Local Planning Authorities (LPAs) and the same local objections.

Both of these decisions meant that onshore wind is treated differently to all other forms of renewable energy projects. This decision had disastrous consequences for the UK’s renewable capacity and energy independence.

Onshore wind planning application decrease following ‘Cut the green crap’ onshore wind policies



Solar feed-in-tariff

The Feed-in-Tariff was introduced in April 2010 by the Labour government to encourage the uptake of renewable and low-carbon electricity generation, including small-scale solar installations on both commercial and residential properties.

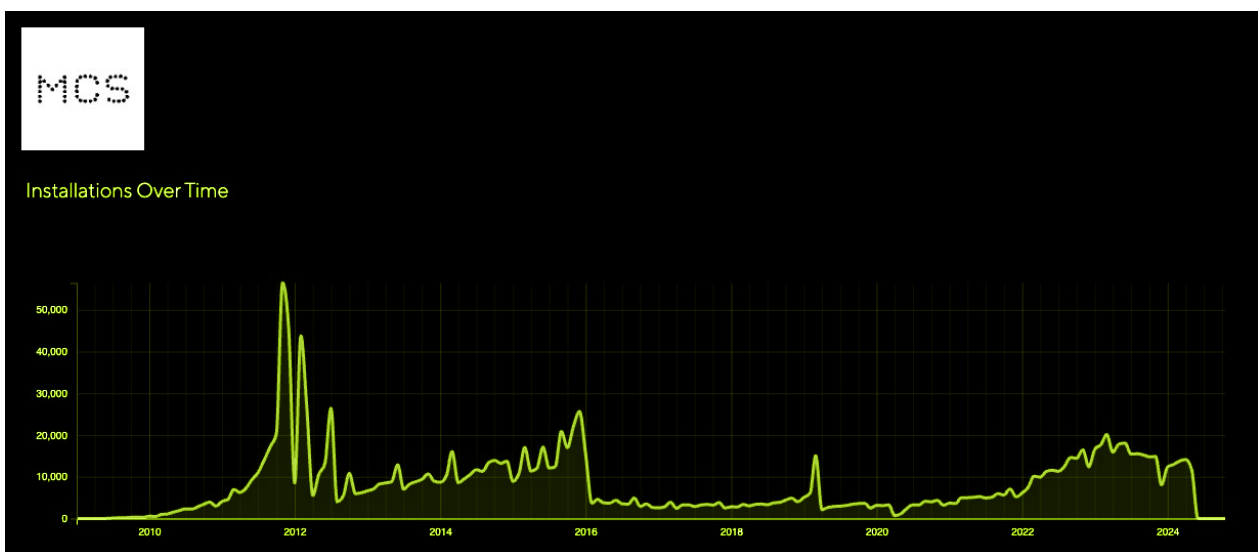
The scheme guaranteed a fixed price for the electricity that businesses and households generated from their solar installations. They also got an additional payment for the electricity that they didn't use and fed into the grid.

Despite a clear correlation between the introduction of the scheme and an uptick in small-scale solar installations, successive Conservative governments consistently cut the scheme before scrapping it altogether in 2019. Each cut led to a clear and substantial cliff edge in the number of installations.

Timeline of cuts

- Apr 2010 – scheme introduced by Labour government
- 2011 – record number of solar installations in first full year of scheme (203,129)
- Dec 2011 – first cut to payment rate of 50% (based on installation cut-off date)
- Dec 2015 – further cut to payment rate of 65% (based on installation cut-off date)
- Apr 2019 – scheme closed to new participants

Solar installation rate decrease following 'Cut the green crap' solar policies



SOURCE: the msc data dashboard, microgeneration certification scheme

Home insulation

New Labour introduced a number of schemes to improve the energy efficiency of the UK's housing stock, which focused on improving home insulation rates.

The primary programme was the Carbon Emissions Reduction Target (CERT), which placed a legal obligation on the six biggest gas and electricity suppliers to meet carbon reduction targets. It essentially meant that the suppliers were responsible for improving the energy efficiency of homes, including through insulation. Customers received grants and discounts on insulation from suppliers, with the cost often reflected in energy bills. According to Ofgem, the scheme delivered professional loft insulation to 3.9m households and cavity wall insulation to 2.6m households¹.

This was supplemented by the Community Energy Savings Programme (CESP) and the Warm Front Scheme. CESP was similar to CERT but targeted at low-income households. It placed an obligation on suppliers and generators to reduce carbon emissions by offering free or very cheap energy efficiency measures to the poorest households. The government estimated that the impact on energy bills was minimal, with the cost £2 out of a typical £660 gas bill, £1 out of a £600 electricity bill and £3 out of a combined £1,260 annual household bill².

The Warm Front Scheme was aimed at tackling fuel poverty by improving energy efficiency. Qualifying households could receive grants for home improvements, including insulation. Over 2.3m households received support under the scheme³.

The government decided to scrap these schemes in 2012 as part of their 'cut the green crap' agenda, replacing them with a 'green deal' insulation programme that the National Audit Office later described as a failure⁴.

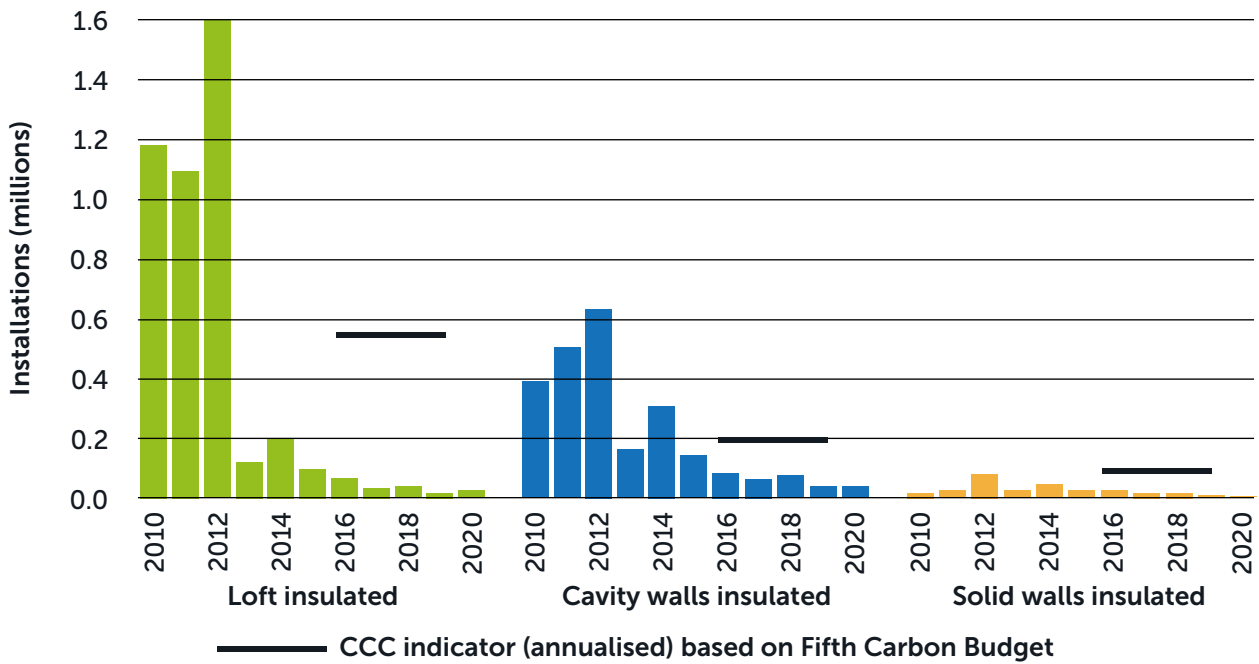
1. [CERT research briefing](#), House of Commons Library, 2013

2. [CESP research briefing](#), House of Commons Library, 2013

3. [Warm Front Scheme research briefing](#), House of Commons Library, 2013

4. [Green Deal and Energy Company Obligation](#), National Audit Office, 2016

Home insulation rate decrease following 'Cut the green crap' insulation policies



SOURCE: DECC (2014) Data tables: Green Deal, ECO and Insulation Levels, up to March 2014, Green Deal, Energy Company Obligation (ECO) and Insulation Levels in Great Britain; BEIS (2021) Household Energy Efficiency Statistics: Headline Tables; CCC analysis.

NOTES: The CCC indicator shown represents the annualised rates of installation based on the Committee's 2015 advice on the Fifth Carbon Budget, which we judged to be a realistic and appropriate annualised installation rate at that time.

The Code for Sustainable Homes

[The Code for Sustainable Homes](#) (the Code) was first launched in 2006 as a voluntary national standard for the design and construction of new homes. It was the intention of the previous Labour Government that by 2016 all homes would be 'zero carbon' homes.

The Code measured the sustainability of homes against nine criteria:

- Energy and CO2 Emissions
- Water
- Materials
- Surface Water Run-off
- Waste
- Pollution
- Health and Well-being
- Management
- Ecology

Homes were then given a rating against these criteria, with Level 6 being the highest and equivalent to a 'zero carbon home'. It introduced a sustainability certificate for new homes similar to the Energy Performance Certificate (EPC) in use today.

In March 2014, the Government announced that the Code would be scrapped from 2015 onwards. This followed the Housing Standards Review, which aimed to loosen building requirements.

METHODOLOGY

Onshore wind

The research analysed the impact of changes in government policy that made the development of onshore wind significantly more challenging.

The onshore wind calculations are based on Ecotricity analysis about their onshore wind project development rates before and after the government's changes. This analysis shows that Ecotricity could have approximately doubled their onshore wind capacity by now without these changes.

This is used as a proxy for the industry as a whole and applied to the latest statistics on total installed capacity for onshore wind to show what this could have been without the ban.

Using an industry load factor, the research calculated what this additional capacity would have meant in terms of generation, and Ofgem figures on typical electricity consumption to calculate how many homes this could have powered.

Cost savings were calculated using the Contracts for Difference (CfD) strike prices and wholesale market prices, assuming that any surplus is passed onto consumers.

Carbon savings were calculated using avoided gas use and government conversion factors on the CO₂e impact of electricity use from the national grid.

Solar feed-in-tariff

The research analysed the number of small-scale residential solar installations made before and after the government started to reduce the level of support available under the Feed-in-Tariff (FiT) scheme

The starting point is the number of installations made under the first full year of the scheme, which was 203,129 installations in 2011. It therefore looks at a 12-year period from 2012-2023.

It assumes that installations would have broadly continued at the rate in 2011, and compares this to the actual number of installations in each year. The cumulative difference gives the total number of 'lost' installations.

To work out the per household saving, it used industry analysis on the average annual electricity generation of a single solar installation and market data on retail energy prices provided by Ecotricity.

The final monetary savings in the report factor in the upfront costs of installing solar panels by accounting for the cost of an average solar installation using figures from the Energy Savings Trust.

Carbon savings were calculated using avoided gas use and government conversion factors on the CO₂e impact of electricity use from the national grid.

Home insulation

The research analysed the impact of government cuts to schemes supporting three types of home insulation, which were loft insulation, cavity wall insulation and solid wall insulation.

Using government statistics on the UK housing stock's suitability for each type of insulation, the research calculated how many more homes would have been insulated without government cuts. This assumed that installation rates would have continued at the same rate as 2012 before the support schemes stopped.

Energy saving figures were calculated using Climate Change Committee figures for how much each insulation type saves in gas use over a year for an average household. This was then turned into a monetary saving using market data on retail energy prices provided by Ecotricity. Upfront costs of insulation are factored into the net household saving.

Carbon savings were calculated using avoided gas use and government conversion factors on the CO₂e impact of gas use from the national grid.

The code for sustainable homes

The research analysed how many homes would have been built to the standard set out in the Code since 2015 if it had remained in place. This uses ONS statistics on housebuilding.

Energy savings figures were calculated by comparing the average energy efficiency of a Level 6 home (i.e. the highest standard under the Code) to the average energy use of a new build home.

Cost savings were calculated using market data on retail energy and gas prices provided by Ecotricity.

Carbon savings were calculated using avoided gas and electricity use, and government conversion factors on the CO₂e impact of supply from the national grid.

SOURCES

- **Household insulation installation rates** – [2021 Progress Report to Parliament](#), Climate Change Committee
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- **Insulation energy savings** - [Analysis work to refine fabric energy efficiency assumptions for use in developing the Sixth Carbon Budget](#), University College London on behalf of the Climate Change Committee
- **Insulation statistics** – [Sixth Carbon Budget \(Buildings\)](#), Climate Change Committee
- **Number of solar installations** - [the MSC Data Dashboard](#), Microgeneration Certification Scheme
- **Average electricity generation for solar installations** - [industry analysis](#), Centre for Alternative Technology
- **Solar panel installation costs** – [Solar panels](#), Energy Savings Trust
- **Onshore wind installed capacity** - [Energy Trends: UK renewables](#), Department for Energy Security & Net Zero
- **Onshore wind load factor** – [Wind energy statistics](#), RenewableUK
- **Contracts for Difference strike prices** – [Contracts for Difference](#), Department for Energy Security & Net Zero
- **Strike price inflation adjustment** - [Inflation calculator](#), Bank of England
- **Housebuilding statistics** - [House building, UK: permanent dwellings started and completed by country](#), Office for National Statistics
- **Average energy efficiency of a Level 6 home** – [Level 6 home case study](#), The Building Services Research and Information Association.
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- **Wholesale electricity prices** – [Wholesale market indicators](#), Ofgem
- **Average retail electricity and gas prices** – internal market data, Ecotricity
- **Electricity and gas CO2e conversion factors** - [Greenhouse gas reporting](#): conversion factors 2023, Department for Energy Security & Net Zero
- **UK electricity demand** - [Electricity statistics](#), Department for Energy Security & Net Zero



Green Britian Foundation
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provide data, insight and
information to enable the
changes that need to be made
— in pursuit of a truly green
Britain.



Carbon Jacked
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