

Be bold: warm homes by 2030 for a green recovery

From the Green Homes Grant to ambitious action on homes

As the government prepares to launch the [Green Homes Grant](#) (GHG), England's first exchequer-funded energy efficiency grant scheme since 2013, we look at how this scheme could be a springboard for an ambitious action on homes.

Energy efficiency has been described 'no brainer' ([Claire Perry](#), energy minister, 2019). It's the stuff that everyone agrees need to be done first, but which governments never get around to. This is why two thirds of England's homes (16 million) are still below adequate.

For a quick illustration of the scale of the problem, see this [chart from Tado](#). It shows that England's homes lose heat at three times the rate of our neighbours. For a fuller explanation, read our view on [why England needs to increase its ambition on home energy efficiency](#).

The £2 billion Green Homes Grant has been described as a [down-payment](#) on the £9.2 billion of energy efficiency investment set out in the 2019 Conservative manifesto. It will fund measures in up to 650,000 homes over a six-month period. To put this in context, 105,000 measures were installed in 2019 – compared with the 865,000 [recommended](#) by the government's independent advisors, the Committee on Climate Change.

As a down-payment, this is an excellent start. The design of the scheme is also encouraging – the eligible measures, use of quality standards, and inclusion of area-based approaches via the [Local Authority Delivery scheme](#) all show serious intent.

However, it is just this – a start. For these jobs to be sustained and to tackle the 16 million thermally inadequate homes, this rate must be maintained (and slightly increased) throughout the 2020s. The Government has [acknowledged](#) that more will be needed and there are encouraging signs on funding and policy announcements for the autumn.

But, will these be bold enough?

These are not normal times. In 2019, [over an eight-month period](#), half of all UK Councils declared a Climate Emergency. Today [90 per cent of the UK population](#) are covered by such declarations.

In 2019, the direct action group Extinction Rebellion blockaded London streets and school children protested. In June 2019, the UK parliament passed legislation to reduce greenhouse gas emissions to net zero by 2050.

In September 2019, we watched as 16-year-old climate activist Greta Thunberg accused world leaders of 'empty words', as Australia's bush burned. In June, at the height of the first global pandemic for 100 years, reports consistently called for a green recovery and to 'build back better', all while Arctic temperatures reached a scorching 38 degrees Celsius.

In August 2020, we learnt that the UK had slipped into [recession](#) for the first time since 2009 – and that part of California had [recorded the highest temperature on Earth ever](#).

Against this, the Government's aspiration ([Clean Growth Strategy](#), 2017) to upgrade homes to Energy Performance Certificate C by 2035 feels increasingly out of step. If there ever was a time for bold, decisive action on a prolonged programme of shovel-ready, labour-intensive work (in every street, up and down the country), it is now.

A bold target

Just as the phase out date for petrol and diesel cars has been pulled forward (from 2040 to 2032/2030), it is time to upgrade our ambition for homes.

Energy Saving Trust recommends a **target to bring as many homes as possible to an adequate standard of energy efficiency by 2030** (a minimum of Energy Performance Certificate level C or equivalent fabric standard). This would align with the existing legislative target for fuel poor households and has strong support across the sector, including the members of the [Energy Efficiency Infrastructure Group](#).

Work could be staggered by proposing an earlier date (such as 2026), for the 1.8 million below-C social rented properties, where the stock is better on average and the sector is well placed to lead. The 3.2 million below-C private-rented homes could follow later (for example, with a date of 2027 for new tenancies, and 2028 for existing tenancies).

Note, we are using EPC C here as a shorthand for adequate thermal efficiency (an alternative metric could be used instead). While there are ongoing debates inside and out of government about the most appropriate metric, our point is that the ambition should be to get most homes to (at least) a minimum standard of energy efficiency by 2030.

A bold approach: regulating to tackle inertia

Our second call for boldness relates to the 'how'. The Green Homes Grant is a short, sharp economic stimulus to channel money quickly to local economies. It is not a feasible approach to financing the retrofit of 16 million homes (a cost of some £80 billion).

Even if it were, it wouldn't address the *primary* barrier: lack of demand.

We don't insulate our homes for a myriad of reasons:

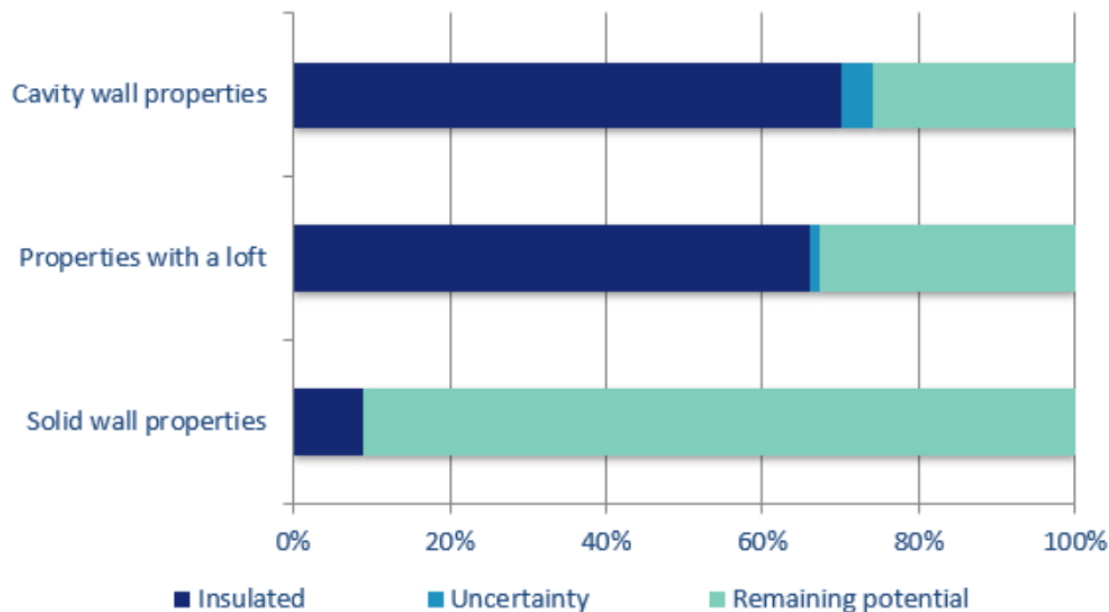
- we're busy enough just keeping up with jobs, family, life
- we're not sure how to go about it
- in case something goes wrong
- we don't want the disruption and don't have time to clear the loft or make space
- a warmer home is unlikely to boost our home's value, unlike a shiny new kitchen

Mainly, we don't because, like successive governments, we'll get round to it at some point.

The 2013 government-backed [Green Deal](#) scheme notably focussed on lack of finance rather than inertia as the key barrier. The role this played in its failure is neatly summarised [here](#): *'The reason is that simply taking away the up-front cost of improving your home isn't enough to get people to do it – given all the attendant hassle – even if it makes financial sense. Put simply, people just have better things to do with their time'*.

The chart below shows that plenty of households haven't installed low-cost, quick pay back measures such as loft insulation to the recommended level or cavity wall insulation.

Remaining potential to insulate the housing stock in Great Britain (end December 2019)



Source: *BEIS HEE Stats (2020)*

In fact, experience shows that even when these have been free, it can be hard to get households to take up installation. The Scottish Government has a [comprehensive package of support for households](#). It has high support and is making a real difference, but the government has [accepted](#) that voluntary action alone will not be sufficient to meet its ambitious climate change targets.

A serious play to tackle inertia would include minimum energy efficiency standards that apply when homes are sold, rented or at major renovation. This would mean, for example, that homes should either meet that standard for sale or should be improved within a reasonable timeframe afterwards (with exemptions for homes that are intrinsically difficult to retrofit).

If set to take effect at some point between 2025 and 2030, it would be close enough to function as a clear market signal, but far enough for households and service providers to mobilise. Supply chain capacity here is key – but in the current context that could vary significantly depending on both the market signals (regulation / hard targets would stimulate investment) and its use as a vehicle for ongoing economic recovery (this underlines the importance of the GHG being a success). For more on the role of minimum standards, see this [overview](#) by the [Regulatory Assistance Project](#).

The impact of regulation here would be that poor energy efficiency would become a risk factor to be priced into mortgage offers. Homeowners would be aware that their investments here in time, money and hassle would be reflected in higher house prices, and companies working in the home improvement sector could offer ‘add-ons’ to improve fabric efficiency alongside related measures (solid wall and floor insulation as part of an extension, solar as part of roof works etc).

While we think minimum standards are *necessary* to overcome the inertia barrier and to speed up deployment (condensing boiler rather than central heating take-up), they are not *sufficient* and need to be part of a wider framework of support including funding (for low-income households), finance and incentives, and technical and practical support.

With the right framework, the standards should act mainly as a backstop with the market driving activity by generating attractive customer propositions (we know bill savings aren't enough of a driver).

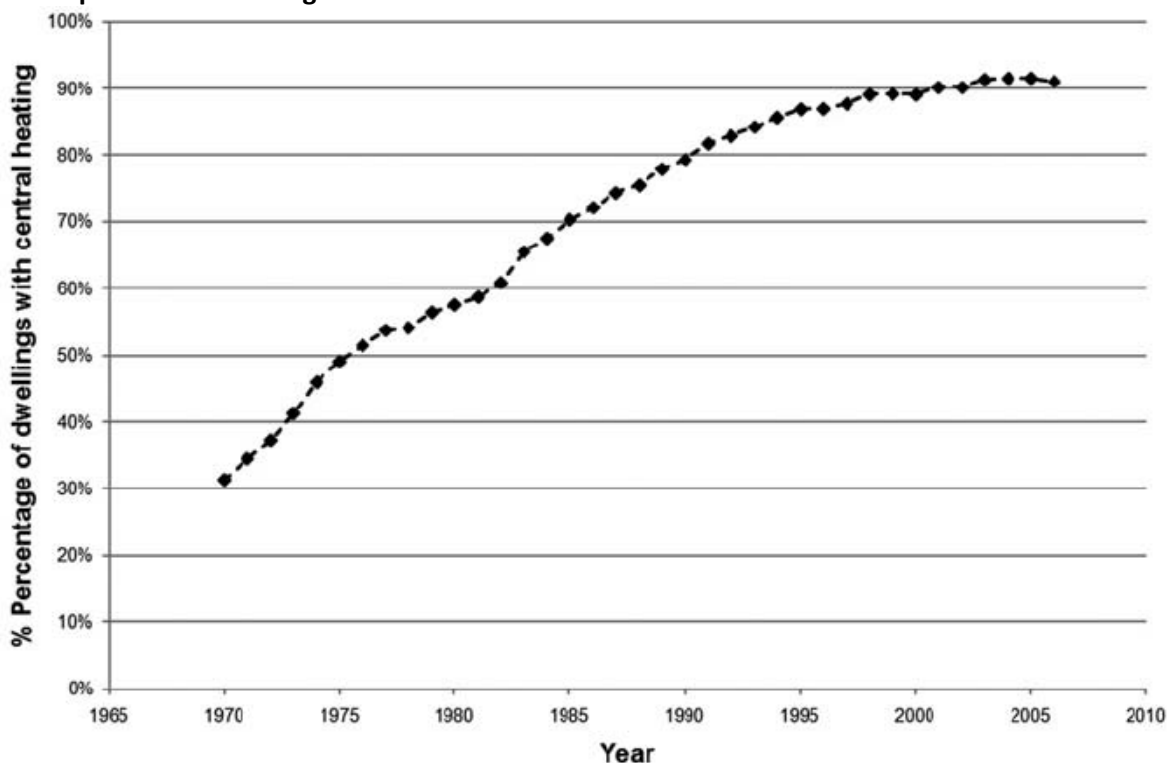
But, we can't tell people what to do with their homes...?

We accept that there are political challenges here. The spectre of the Green Deal looms large and the last time a government tried to regulate for improving insulation alongside renovation (2012), it was dubbed a 'conservatory tax' and easily derailed.

But, post-Covid Britain with a net zero target surely is a very different place. We already have these regulations in place for the private rented sector: landlords can no longer let homes below EPC E without a valid exemption, under the [Minimum Energy Efficiency Standards \(MEES\)](#) legislation. The Government has already signalled intent to increase this to EPC C by 2030. Government has also recently [consulted](#) on requiring non-domestic rental properties to achieve EPC B by 2030.

We are accustomed to standards, including electrical standards, fire safety and energy efficiency, when we change our homes. The [2005 regulations for condensing boilers](#) saw little resistance and today these are widely deployed. In contrast, central heating has taken over [50 years](#) to get to the same level (see graph below), despite being a highly attractive product that increases house prices. EU product and lighting standards have been a real, though unacknowledged, [success](#) in reducing demand and keeping down bills – improving efficiency by 90 per cent for lighting and 75 per cent for appliances.

Take-up of central heating in UK



Source: [Mavrogianni et al \(2013\)](#)

An influential Parliamentary committee last year published a [report](#) into the lack of action on domestic energy efficiency. It referred to energy efficiency as a 'litmus test' for net zero, highlighting not just that this was the 'low hanging fruit' but that, ultimately, both are political rather than

technical challenges around how to effect change, and, in a democratic context, how to make it acceptable. Engagement here then is key.

To date, much of the success in reducing UK emissions has been invisible to the public. Power sector emissions have been more than halved since 2012 by reducing coal-fired generation, increasing renewables and reduced demand through product standards.

The next stage of net zero, however, will require mass engagement (our homes, boilers, cars, diets). While there are different ways of delivering this change (government vs market-led), people need to accept the direction of travel and what is being asked of them. Yet currently there is no government strategy to engage the public.

Culturally we seem to be in a strange place, where we've taken a momentous decision to pass a legal target to tackle climate change but are afraid to discuss the next step. Academic [Rebecca Wills](#), who has spent her career working with MPs on this through the climate think tank Green Alliance, refers to this as '*socially organised denial*.'

Logically we know that 99 per cent of homes will need new heating and fabric improvements, but rather than tackle this directly, a design agency somewhere will be tasked to 'make insulation sexy' while a civil servant contemplates if a council tax rebate could be the trigger that 16 million homeowners were waiting for.

This focus on supply-side changes and 'decarbonisation by stealth' can't take us to net zero – 60 per cent of the changes needed will involve consumers doing things differently ([CCC, 2019](#)) which, in a democratic context, means engaging with people.

As the Committee on Climate Change noted: '*People should understand why and what changes are needed, see a benefit from making low-carbon choices and have access to the information and resources required to make the change happen*'. ([CCC, 2019](#))

A bold approach to engagement

It is on engagement then, more than anywhere, that we need this boldness. This is something that the Covid-19 crisis has bought home. Like pandemics, climate change is a 'collective action problem' that can only be solved by people coming together.

One of the surprises this year has been that public acceptance of lockdown restrictions has less to do with the requirements and more with how this was communicated. There was strong public acceptance and adherence, for example, to New Zealand's severe lockdown, in part down to clear communication of Prime Minister Jacinda Ardern, which built trust and emphasised a sense of fairness ('we're all in it together'). In Germany, the approval ratings of Chancellor Angela Merkel, a scientist by training, increased when she demonstrated transparency and openly acknowledged the gaps in the government's understanding.

This is where we're currently getting it all wrong. Whereas the public are generally supportive of action to tackle climate change, there is widespread confusion on *what* they need to do. This should be the easier part of the equation.

Surveys such as this [one by Energy Systems Catapult](#) for example, suggest that only half of households understand that their gas boiler contributes to climate change. How many then understand what the alternatives are, what would be suitable for their homes, or how to go about finding out?

There is a sense here of not engaging the public in case it backfires. But caution here seems unwarranted. The [recommendations](#) from the [UK Climate Assembly](#) process clearly highlight that the more informed the public are, the more they support taking action. The [CCC](#) recently cited this lack of awareness as *'arguably the single greatest consumer barrier to achieving Net Zero'* and, from an economic perspective, it is counterproductive as it is stopping investment.

Ultimately, getting our homes to net zero rests on persuading people to make or accept changes to their homes – and, given the scale of investment required, on most of us underwriting the cost, ideally as voluntary consumers. While the market can make it attractive (financially or otherwise) to act and the minimum standards can help 'make the market' and require certain sectors to act, there won't be large-scale uptake unless people feel comfortable about moving away from what they know. Delivering transformative change in under than 30 years requires more than just linear knowledge provision.

Energy Saving Trust has over two decades of experience supporting consumers to make decisions on changing their homes. Decisions on incorporating unfamiliar technologies that might require other physical changes or require related behaviour changes can take some time to chew over. Having an impartial expert there at the end of a phone or who can pop out and check the home, or sense-check the arrangements, timescales and costs can speed things up and reduce the risk of such decisions. Where governments in Scotland, Wales, Germany, France and elsewhere in Europe fund such advice, the government in England does not.

Government-backed consumer support in England is limited to the [Simple Energy Advice website](#), which provides an overview of measures and will soon allow people to access their EPC recommended measures, where this exists, and local accredited installers. While this will help those with a fairly good idea about what they want (provided they are happy accessing digital information), it is not likely to be enough for those contemplating unfamiliar technologies or a complex package of measures. Clearly installers and manufacturers have a key role here, but their lack of impartiality will often not be enough to get people on the next stage.

This idea of additional handholding is used in other areas where we want to drive change. In 2015, for example, the UK Government made changes to the pension system meaning that people could cash in their pension pot and invest it elsewhere. To support people with this change (to both encourage them to invest and to protect them from poor decisions), the government [provides an advisory service](#).

It is this sweet spot – tipping customers from knowledge into action – where the Government needs to focus. This is where, if the Government can get it right, it can reduce the cost and speed up the transition by getting customers, driven by the market within a framework of regulation, to invest. It makes sense here for the Government to encourage all households to think about 'C' as a staging post in a longer journey of decarbonisation. An advisory service could promote this approach and advise people on how to integrate it into other planned renovation.

As the Treasury's current [review](#) into the costs of net zero will no doubt be aware, the more private investment from households can be stimulated here, the lower the remaining bill for the Treasury and energy bill payers.

And finally, the money

It's a sign of the strange times that we are in that an £18 billion public investment is perhaps the least bold recommendation in this article.

Public finance: The total cost of getting all homes to an adequate thermal standard (EPC C) is around £80 billion (averaging £4,500 per home and requiring an additional labour force to 2030 of around 100,000). This £80 billion though, is the money that would be spent in the economy rather than the public contribution.

The public contribution would be in the region of £18 billion and is needed to support improvements in low-income homes; to subsidise measures, where there is a public benefit but not a private pay back; and to motivate action (subsidising loan interest rates, tax rebates etc). While clearly a significant amount of money, the public contribution here would stimulate over three times the level of private investment – at a time when we need economic stimulus.

The Government committed to £9.2 billion public funding in its 2019 manifesto. With the European Economic Interest Grouping (EEIG), we call on the UK Government to bring forward the remainder of this investment during this parliament term and then to commit an equivalent amount for 2024-30. For more details on these costs, see the EEIG's recent paper '[Rebuilding for Resilience](#)'¹.

Enabling private finance: Beyond this, there is a need to ensure that homeowners can access the finance they need, via savings or another financial products, such as a loan or mortgage extension. This needs to be straightforward, convenient and attractive. The Green Finance Institute is doing some [excellent work here](#) through its Coalition for the Energy Efficiency of Buildings (CEEB).

The Government has since [committed](#) to consult on requirements for mortgage lenders to help households improve the energy efficiency of the homes they lend on, for example by requiring lenders to get their stock to an increasing average EPC / energy efficiency rating. This could support change in over 50 per cent of the stock. While minimum standards or something similar would still be needed for the 5-6 million owner-occupiers without a mortgage, this would significantly drive the market in this area.

Our recommendations

We call on the Government to use the forthcoming Green Homes Grant as a springboard for a bold new programme on home energy efficiency.

Target:

We call on the Government to upgrade its ambition with a new target **to bring as many homes as possible to an adequate standard of energy efficiency by 2030.**

Framework of support:

Support should be designed to encourage homeowners who are willing to improve their home to a higher standard and to think of the minimum standard as a staging post in a journey of retrofit.

Support should include:

Standards / regulation:

- homes to reach a minimum standard of energy efficiency (EPC C or alternative metric) before sale / rent or major renovation

Engagement:

- for a government-backed communication campaign on net zero

¹ See https://www.theeeig.co.uk/media/1096/eeig_report_rebuilding_for_resilience_pages_01.pdf

- for greater citizen involvement into complex decisions (building on the Climate Assembly initiative) at both a national and local level
- to commission a new low carbon homes advisory service for England

Finance:

- for £7.8 billion to be brought forward in this Parliament, and a further £9 billion committed for 2024-2028
- for homeowners to have access to adequate finance to improve their homes. This should be straightforward, convenient and attractive and designed to support homeowners improve undergo a 'whole house' retrofit (as appropriate)
- for mortgage providers to be required to improve the efficiency of homes they lend on

If not now, then when?

We can't get to net zero emissions without first fixing our leaky homes. From 2030, the focus needs to shift from this preparatory work to rolling out low carbon heat at scale. The pandemic-induced economic crisis now means that this necessary work can support our economic recovery.

One of the overriding messages that emerged from the [Climate Assembly report](#) was a call for greater urgency. Mark, one of the Assembly members summed this up when asked to give a final message to politicians: *"Don't be scared, be bold, aim big. People are willing to change if educated properly and given the facts."*