

OWNING OPPORTUNITY

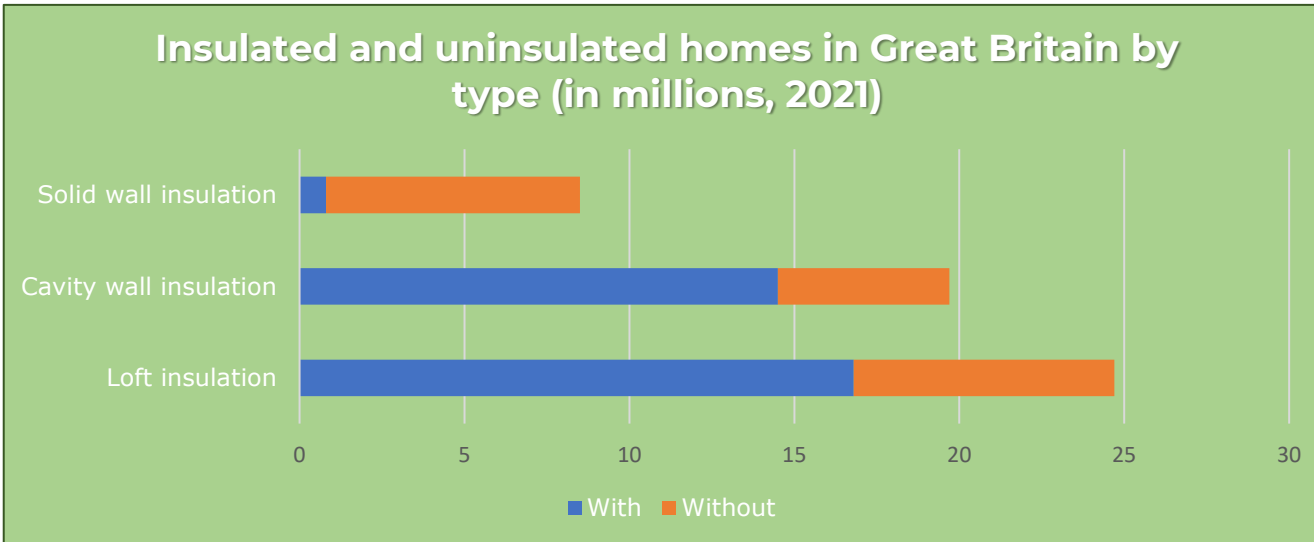
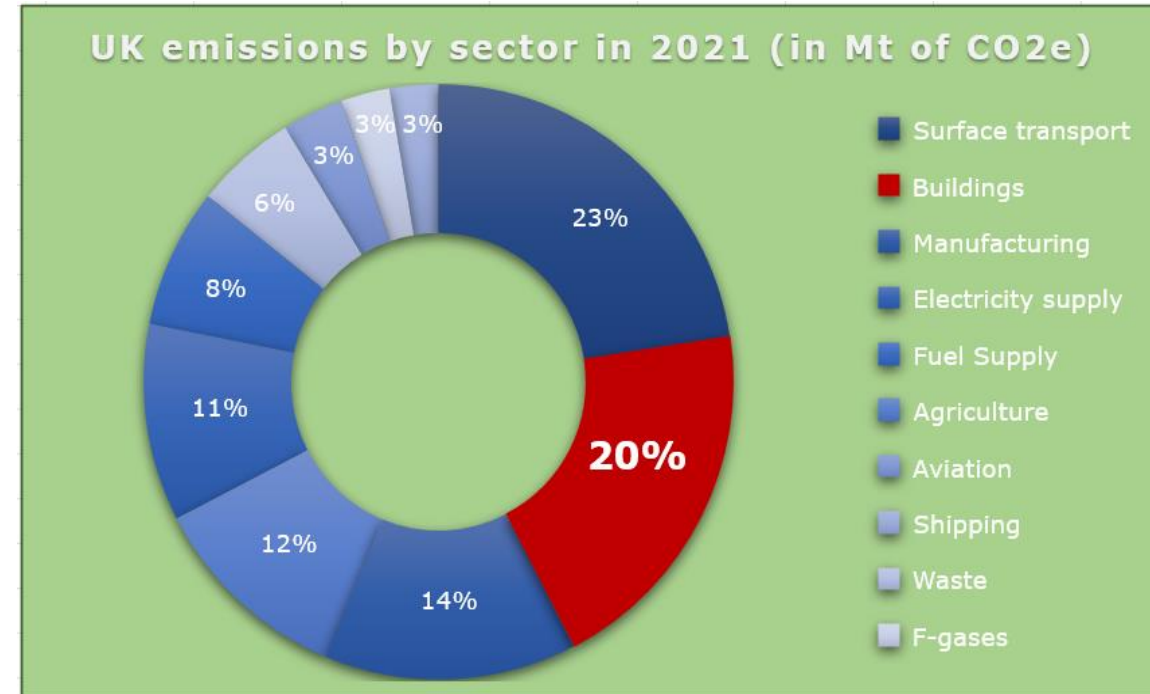
**THE TOOLBOX FOR
FIXING OWNER
OCCUPIER ENERGY
EFFICIENCY**



ENERGY EFFICIENCY POLICY ISN'T WORKING

The Government's Heat and Building Strategy aims for most of the UK's 17 million inefficient homes to be upgraded with energy efficiency by 2035, two-thirds of which are in the owner-occupied sector.

Government subsidy schemes target vulnerable households, but there is currently little policy for boosting and priming the market for energy efficiency for this wider housing market in a similar way to, for example, electric vehicles and efficient light bulbs.



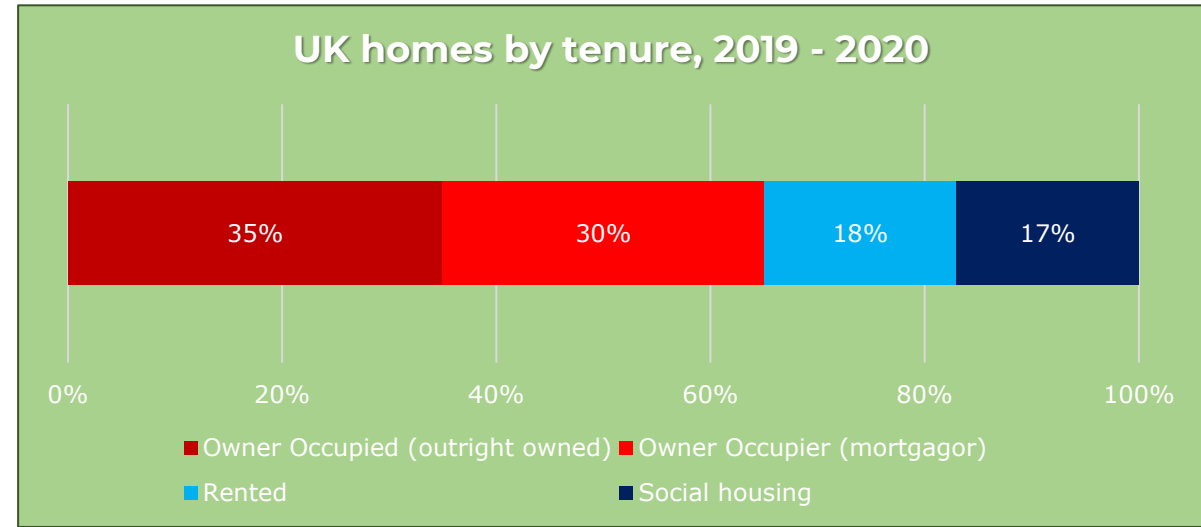
8 million lofts, 5.2 million cavity wall properties, and 7.7 million solid wall properties remain without insulation. So boosting the market through regulatory standards can kick-start investment and growth.

Triple solutions – energy efficiency will;

- *Reduce emissions:* 89 million tonnes of CO₂e comes from heating buildings.
- *Increase energy security:* Insulating all buildings could reduce gas imports approx. 15%.
- *Reduce household bills:* Inefficient households were £400-900 worse off in 2022/23.

INTRODUCING OWNER OCCUPIER STANDARDS

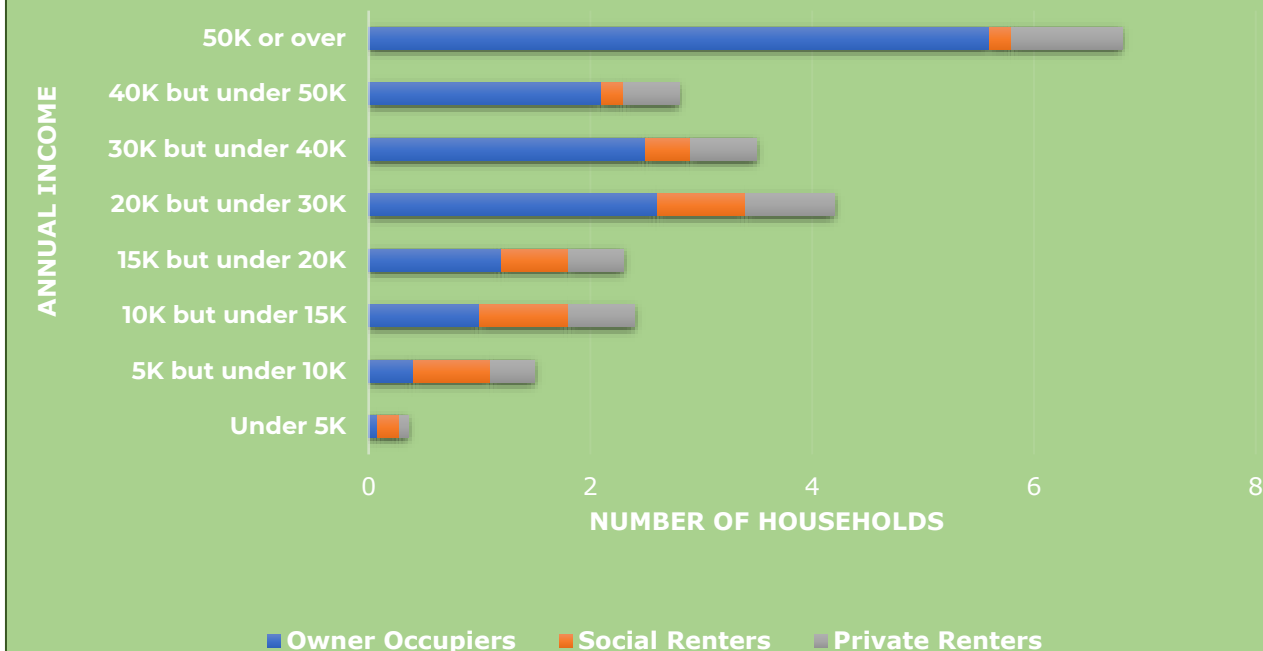
As recommended by the recent Net Zero review, regulatory standards for high efficiency buildings, are known as Owner Occupier Minimum Energy Efficiency Standards (OO MEES). The advantage of regulating for owner occupiers is that they represent two-thirds of UK households.



Done right, regulatory standards for high efficiency buildings in the property market can create the right conditions for the consumer market to take off, in a similar way to other low carbon products such as efficient lightbulbs and electric vehicles.

Many households want to improve their energy efficiency, but are hesitant about funding options. Given the age of owners and their income varies greatly, solutions must be flexible to different needs. Hence the second part of the solution are green finance products.

English household annual income by tenure 2020 - 2021 (in millions)



GREEN FINANCE

An **essential enabler** for minimum standards are green finance products. Without these, the requirements for upfront capital will be too large and unjust for households. With a variety of options available, households can pay nothing up front and recoup investment through time. Options exist for both mortgagors and homes owned outright.

It should be noted that homes in fuel poverty, on low salaries or who have limited savings may not be able to access green finance. Such homes should be supported through an alternative approach; an example could be exemptions frameworks as used in similar schemes.

Green finance is key to a whole cycle of reinforcing the market for energy efficiency.



Green Equity Loans: Loans functioning as a second mortgage based on accrued equity, which is then used for energy efficiency measures. Tied to the owner, not the property.

Green Equity Release: Existing equity is used to fund improvements, with the value paid back when the home changes ownership.

PACE loans: Loan secured against the property and repaid through an additional property tax over 15-25 years. The liability remains with the property, not the owner.

Green mortgages – low interest rates: Preferential, low-interest mortgage rates for energy efficient buildings.

Green mortgages – additional borrowing: Further borrowing made available for mortgage customers for spending on energy efficiency measures.

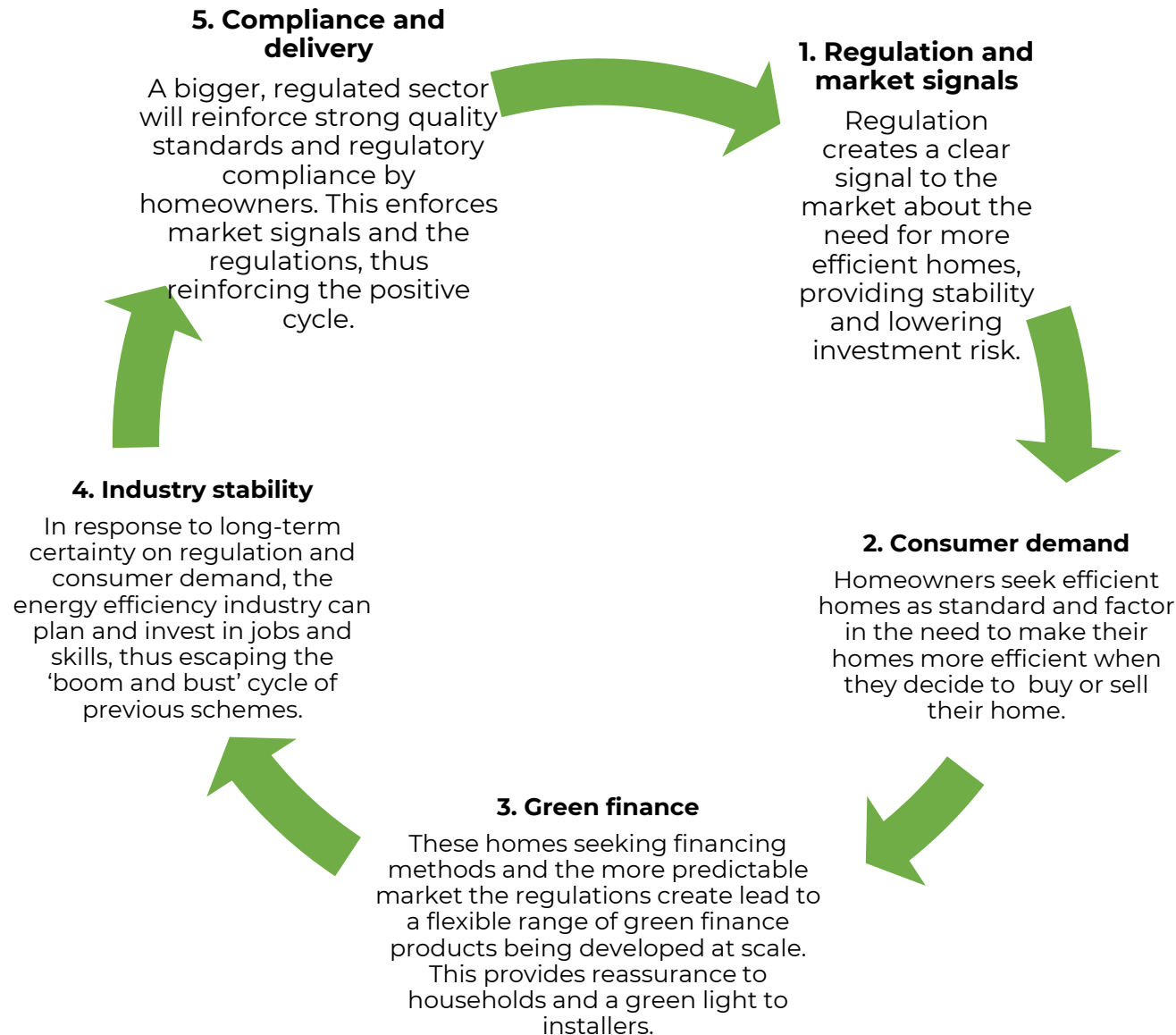
Green mortgages – cashback: Mortgage customers receive cash or a refund off existing spend for energy efficiency measures.

Green bonds. The Government will use the money the consumer and others put into these bonds to help finance green infrastructure projects.

Comfort as a service: Require the homeowner to pay back the cost of the retrofit over a series of monthly increments instead of the higher costs of energy that they would otherwise be paying.

Green Stamp Duty. New buyers would receive a discount through stamp duty for a more energy efficient house. Worse performing properties would see increased stamp duty.

IF DELIVERED SUCCESSFULLY, THESE STANDARDS COULD PROVIDE;



Standards and green finance enable a chain reaction, that reinforce each other through the key five stages on the left.

A big advantage of these standards is they give an approximate idea of turnover, leading to somewhat predictable numbers of homes for financiers and installers.

It also provides an alternative backbone to subsidy schemes, freeing up further public finance.

However, what kind of measures these standards include will also greatly influence its outcomes.

OPTIONS AVAILABLE

Options to create this cycle under these standards will depend on the energy efficiency measures included. Not all measures reduce the amount of heating a house needs for example. While these other measures are important, many of the most urgent measures for reaching nearer term climate goals are more fundamental measures, such as loft, cavity wall and solid wall forms of insulation.

The less regulatory intervention, the less action that can be counted upon, but the more intervention, the greater the challenge of delivering and more costs are involved.



Measuring energy efficiency is done through Energy Performance Certificates (EPCs) producing a rating like this one on the right. However, EPCs are a flawed metric due to inaccuracy and cost saving assumptions. Building Renovation Passports are a more accurate measure, yet to be introduced.

Score	Energy rating
92+	A
81-91	B
69-80	C
55-68	D
39-54	E
21-38	F
1-20	G

We therefore examine five options, based on the need for better consumer advice, no regrets and low-cost insulation measures, more extensive insulation measures, and all potential measures that could be added to a home.

We've chosen these to showcase the level and range of options available, and that many of these are basic measures which can be implemented around existing building regulations on standard requirements for the sale of homes.

Option 1: Detailed and catered energy efficiency advice

Regulations mandate detailed and dedicated energy efficiency advice, including a Building Renovation Passport and green finance options available, for households when buying/selling/renovating. There is no legal requirement to actually install these options however.

COSTS:

Variable, dependent on measures installed and depth of advice given.

Advantages

- Already a need for more detailed advice
- Can be implemented by existing property market
- Easier to regulate

Disadvantages

- Not strong enough to reliably scale up demand
- Doesn't provide sufficient assurance for the supply chain
- Green finance has less stability to expand

Option 2: Loft insulation

A legal requirement is introduced that homes bought/sold/sufficiently renovated require either installation of or top-up loft insulation to 270mm where required and technically possible. The costs of this should be recovered from green financing options. Option 1 is implemented alongside.

COSTS:

Average cost of loft insulation varies from £420-890, dependent on property type (as of October 2022).

Bill savings over one year:
£30-590

Applicable green finance:
All, with Green Mortgages cashback schemes particularly relevant.

Advantages

- Loft insulation is quick, low cost and not disruptive
- With 8mn uninsulated lofts, a significant number of homes would benefit.
- Fits well with existing green finance schemes.

Disadvantages

- Less compatible with current energy efficiency schemes.
- Homeowners might be nervous about costs and quality standards
- Misses the opportunity to ensure other measures are installed at the same time.

Option 3: Loft and cavity wall insulation

Homes bought/sold/sufficiently renovated require installation of both loft insulation to 270mm and/or cavity wall insulation where required and technically possible. The costs of this should be recovered from green financing options, and a cost cap of £2,500 should be implemented. Option 1 is implemented alongside.

COSTS:

Loft insulation average cost:
£590-890

Cavity wall insulation average
cost: £395-1800

Bill savings over one year:

Loft insulation: £30-590

CWI: £180-690

Applicable green finance:

All, with smaller loans
particularly relevant.

Advantages

- Still focuses on easier to install, lower cost efficiency measures
- Warmer homes than option 2 and takes advantage of installing multiple measures at the same time.

Disadvantages

- Previous quality issues with cavity wall could mean homeowners are nervous about standards and cost
- The costs of cavity wall insulation differ more than loft insulation which may make implementation more difficult

Option 4: All forms of building fabric insulation

Homes bought/sold/sufficiently renovated require installation of all insulation measures where technically possible. A cost cap of either £15,000 or 4% of the property value is included, coming into effect with whichever threshold is reached first. Option 1 is implemented alongside.

COSTS:

Loft and cavity wall insulation
average cost: *As above.*
SWI (external): £12,000
SWI (internal): £8,500
Floor insulation: £1600-£8500

Bill savings over one year:

SWI: £240-740

Floor insulation: £60-155

Applicable green finance:

All, with larger loans and service packages more relevant.

Advantages

- Covers all main measures to reduce heat and means each home will be fully insulated in one go.
- Would help older homes.
- Greater industry stability as more measures covered.

Disadvantages

- More expensive option.
- Solid wall insulation is more disruptive and can carry higher risks.
- More challenging to regulate due to broader scope.
- Slower return on investment.

Option 5: Homes to EPC Band C

Homes bought/sold/sufficiently renovated require installation of measures to make them reach a minimum of EPC Band C, or the highest EPC Band possible in that property. The costs of this should be recovered from green financing options. A cost cap of either £15,000 or 4% of the property value is included, coming into effect with whichever threshold is reached first.

COSTS:

Insulation measures: *As above.*
Electric storage heaters: £750-1000 per room
Biomass boiler: £16,000
Air source heat pump: £7,000–13,000
Solar PV: £5,500
Additional measures are available.

Applicable green finance:
All, with relevant finance flexible to the scope of the measures covered.

Advantages

- Covers all aspects of energy efficiency.
- EPC approach compatible with other schemes.
- Emphasis on cost saving.
- Gives households more choice on what they want to improve.

Disadvantages

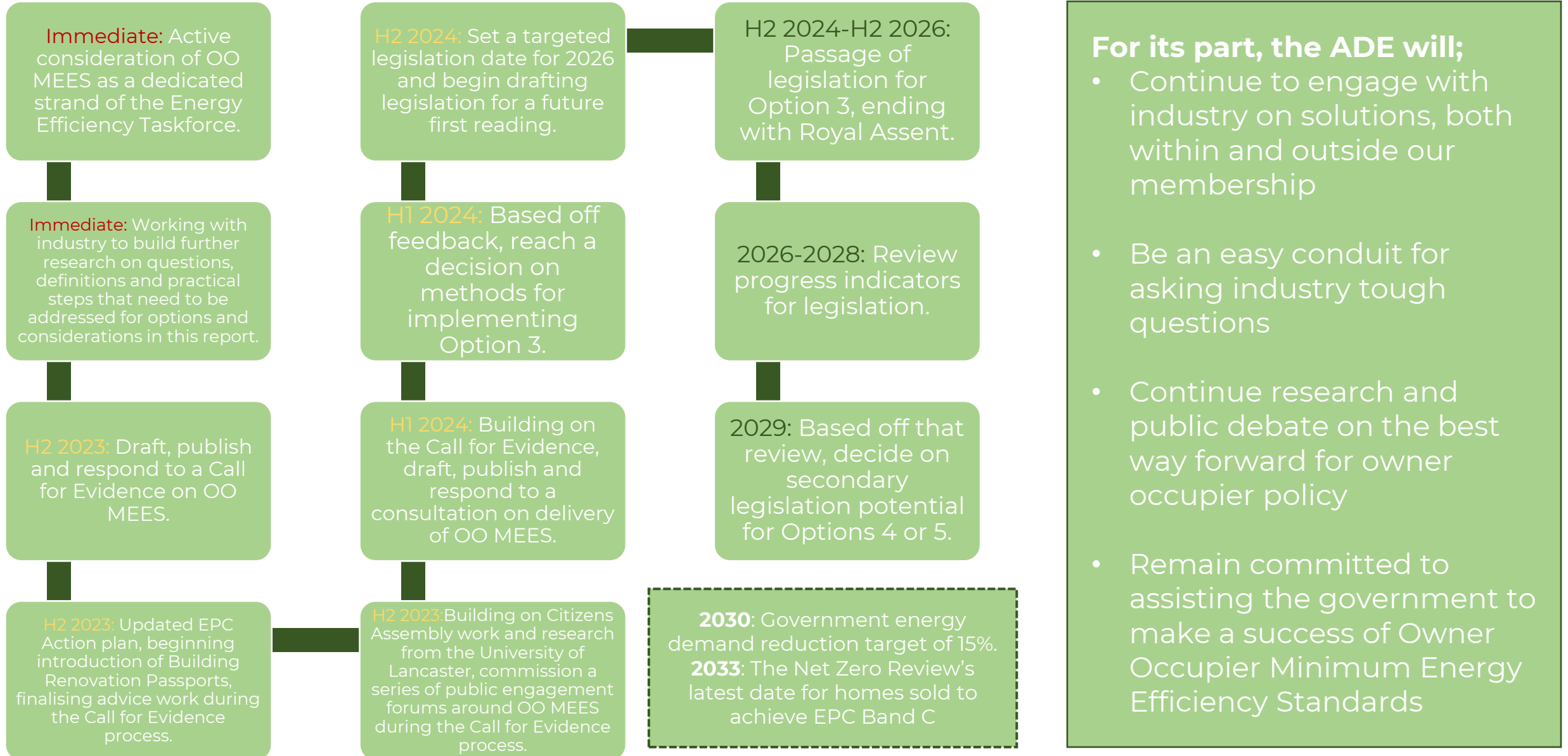
- Implementation more difficult.
- Could be met by e.g., installing solar PV and so may not necessarily improve a home's thermal efficiency.
- Scale of finance may make households more hesitant.

OUR RECOMMENDATIONS







- ④ The ADE recommends a phased approach;
- ④ **Phase 1:** Introduce Option 3 from 2026, requiring loft and cavity wall insulation in a home at point of sale. These are basic, low-regrets, low risk, low-cost measures that are essential to a warm and healthy home.
- ④ **Phase 2:** Review the process of implementing Phase 1, noting how delivering the scheme works best.
- ④ **Phase 3:** Based on the findings of Phase 2, make a decision on implementing secondary legislation for Options 4 or 5 in 2029.



ACTIONS AND NEXT STEPS



FURTHER QUESTIONS

	What about homes in fuel poverty, on low incomes, or with low capital?
	Alternatives to green finance should be provided such as government support schemes, lifting up and covering these households. An exemptions framework for these standards, as exists with other regulation, could be introduced, as well as other future options for assisting vulnerable households. These households may have difficulty in access to green finance and require extra support.
	The cost to homeowners is too high, isn't this just going to add to the cost of buying or selling a house?
	By removing the upfront costs and the return on investment from energy bill savings, this not only pays for itself through time, it also removes the biggest financial barrier of high upfront costs.
	Isn't this going to push house prices up, and therefore slow down the housing market?
	Options 1-3 are smaller investments, usually of less than £1500, and which are therefore unlikely to affect the housing market in this way. The phased approach we are recommending creates time to build the real-world evidence we need to confidently assess the risks, if any, to the housing market from Options 4 and 5.

FURTHER QUESTIONS

Given the complexity of each home's situation, how can these regulations cover the bespoke arrangements of each house? How will cost caps and exemptions be assessed?	Q
Through a combination of measures-based standards, clear exemptions, cost caps, clear definition of what households are eligible for the green finance approach, and Building Renovation Passports.	A
Why do we need this standard? Shouldn't the market already be moving on its own?	Q
The market is moving, but not at a net zero speed. Uncertainty and market risk due to unclear policy are barriers on growth, especially on green finance. OO MEES gives clarity and strategic direction.	A
How can we be confident the supply chain and industry will respond to this new demand?	Q
The retrofit industry is predominantly SMEs who respond to market signals, not policy announcements. OO MEES would represent the biggest market signal the sector has seen, and boost training and demand accordingly.	A

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In additional to the written materials listed above, we have also consulted with our members and wider stakeholders, and their insights and knowledge have also greatly contributed to our findings. We have held multiple workshops, webinars, position papers, and individual interviews on the topic matter.

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The ADE is the leading trade association for
decentralised energy, representing more than 160
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