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REPORT JULY 2024

## INVESTING IN GREAT BRITISH HOMES SCHEME DESIGN, ALTERNATIVES AND ASSUMPTIONS ANNEXES

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This document establishes three annexes to the report ‘Investing in Great British homes’.<sup>1</sup>

- > Annex 1 proposes an illustrative, basic policy architecture for a UK home upgrade loan scheme.
- > Annex 2 sets out some of the key alternative delivery routes to those set out in the report.
- > Annex 3 outlines assumptions for loan delivery, uptake and costs.

### Annex 1: Designing a UK loan scheme

In this section, we set out the basic policy architecture for what could be the design of a UK home upgrade loan scheme, taking from international best practice and conversation with experts across sectors. We recommend that the scheme is consulted upon prior to introduction, with a pilot to improve delivery.

Treasury establishes three funding streams and a governance structure:

- > **Stream A (Subsidy):** The UK Infrastructure Bank (UKIB) to ringfence an aggregate pot of funding to be extended (through grants per loan) to any lender (bank, credit union, building society etc.) to create (or improve existing) unsecured personal loan offers for home energy efficiency retrofit and green technology upgrade loans. Loans are offered in tandem with existing grants.

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<sup>1</sup> Available from E3G, July 2024, [Investing in Great British homes](#)



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- > **Stream B (Guarantee):** UKIB to underwrite a significant (but not total) proportion of the risk lenders would otherwise be exposed to (explored in the next chapter). This risk will shrink over time (as loanees repay their credit) and risk-bearing capital is moved proportionally into Stream A to top-up future phases of the retrofit loan fund to extend more loans.
- > **Stream C (Advice and verification):** Establish an independent, nationwide retrofit advice service offering consumers free information about home upgrades, as well as available grants and loans. This service will also confirm works have been completed.

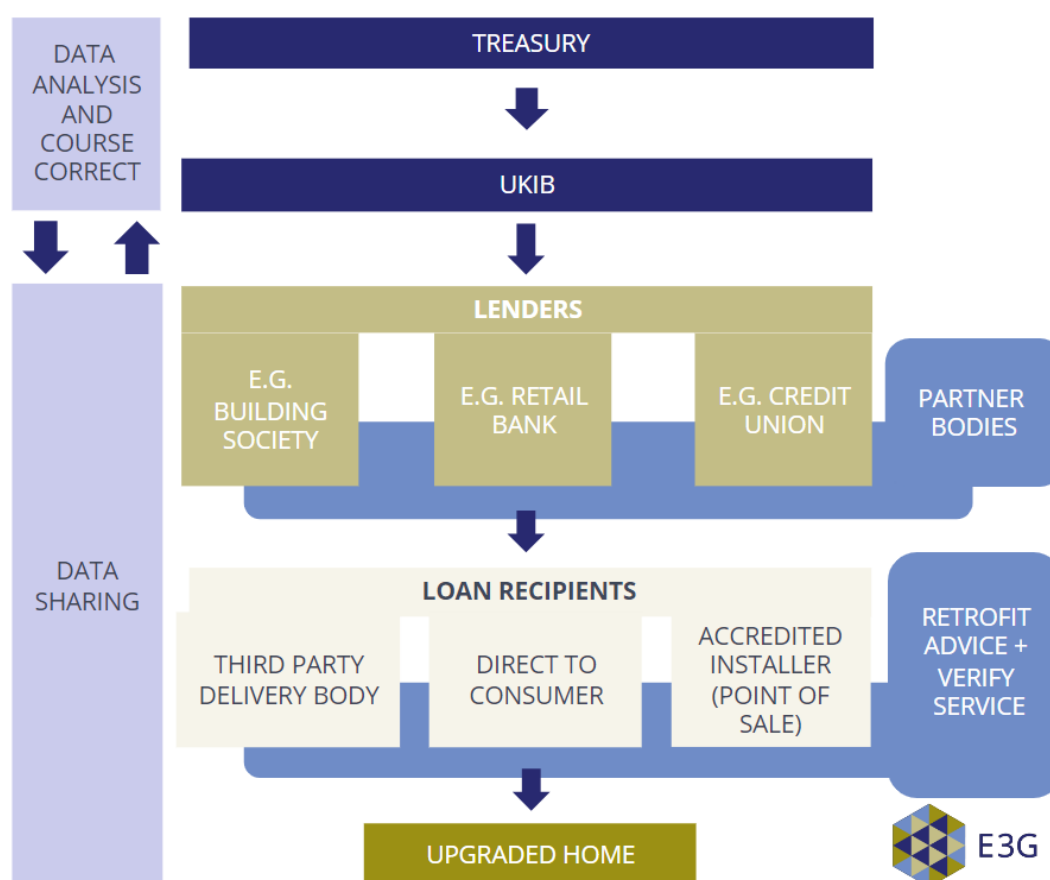


Figure 1. E3G's illustrative and basic proposed policy design architecture for a UK home upgrade scheme.

UKIB, Treasury and the Department for Energy Security and Net Zero (DESNZ) co-agree, and consult lenders, on core parameters for lending, including:

- > A mandate for the loans that will be offered that lenders must show they meet. This would include tenets such as that the loan must be used entirely for pre-determined home energy efficiency or approved green technology



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upgrades, can only be paid to an accredited installation business or third party, and that the cost of such works cannot exceed certain market norms.

- > A minimum standards criteria for loans, which could include tenets such as lenders offering stable, clear, or set interest rates, only to credit-checked customers, reduced-rate early repayment options or longer repayment periods than are typically available.
- > A calculated grant value per loan (e.g. the cost of 0% concessional finance or equivalent) that lenders can claim once credit has been extended to ensure fair play and value for taxpayer money. This grant value must demonstrably be passed on to the consumer.

Following this, lenders will draw-down on phases of funding as and when parameter-meeting loan offers are taken up by consumers. This is implemented by offering a capital grant per loan to lenders. Within the core parameters established by Treasury, DESNZ and UKIB, the loan offers that lenders can extend to consumers will be flexible and varied.

Loans can be extended to either installers (point of sale finance) or consumers (unsecured personal finance) so long as they can:

- > Clear a standard level credit check.
- > Submit a clear proposal for the specified retrofit and/or installation of approved green technologies that the loan will cover.
- > Provide a quote from the loan recipient, service provider or certified installer, including a date when the works will be complete.

Once the installation is complete, the consumer, service provider, or installer must submit a receipt for the works done, and confirmation from an accredited Home Energy Assessor that the installation has been completed, as is done in Canada. This must take place within 6 months of the completion date submitted in the initial application. From then the consumer will pay back the loan as per the terms of their contract.



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## Appendix 2 - Delivery alternatives

- > **Only concessional finance:** The Treasury pays concessional finance to lenders to make all Government-backed loan offers 0% for consumers. This will not cost any more or less than our proposal, would simplify and streamline the process, but lacks the flexibility for lenders to differentiate and create unique consumer offers. Blanket 0% offers may not appeal to all consumers to drive broad uptake, could create an artificial market for industry and lenders, and doesn't invite the expertise of the British financial sector to maximise the value of every pound of taxpayer money Government commits.
- > **Place-based approach:** DESNZ rolls out a loan offer to specific areas first, such as has been done in Seoul and in Brussels by the South Korean and Belgian Governments respectively. DESNZ could perhaps focus on areas which represent 'lowest hanging fruit' first or the geographies most in need or with the most replicable models. Conversely, we believe that the mission to improve energy efficiency and reduce carbon emissions is national, and that access to demand reduction and clean heat are the rights of all British people. Adequate plotting can glean the learnings provided by this approach.
- > **Lower cost coordination:** High accreditation standards for installation, trusted completion verification, a quality advice and information service/portal, and dedicated data gathering and processing - these all cost the taxpayer and the consumers more and could be stripped back to bring costs down. We would strongly argue that what we have set out is the leanest possible operating model that can effectively protect consumers, avoid politicised installation 'horror-stories', allow for meaningful course correction to maximise efficacy of the scheme and ensure uptake to meet scheme goals.
- > **Allowance for general retrofit:** We recognise that Germany and Ireland's models both offer consumers the ability to undertake a degree of general retrofit with their loans. This is a useful sweetener to drive uptake, particularly at key trigger points of home renovation. However, we believe that reduced bills and warmer homes are prizes all households can appreciate and should be able to enjoy, and that the public purse cannot currently stretch to funding kitchen remodelling. There is a wider question to be determined by experts as to what exactly is eligible for the loan, and this could include redecoration or disruption costs if deemed appropriate.



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## Appendix 3 – Loans delivery key assumptions

In this section we indicate how the size and cost of a green homes loan scheme varies under different scenarios, which depends on a host of factors, but predominantly consumer demand and inflation rates. The estimates are descriptive, not an attempt to accurately forecast demand. They aim to show how different design criteria and demand affects costs and outcomes; criteria are outlined in Table 1.

While detailed research on the appetite for green homes loans is not available, existing international and national loan schemes can be used to estimate demand. Whether private landlords need loans to meet new minimum energy efficiency standards in the Private Rented Sector (PRS) is a key determinant; for this research E3G assumes **all new tenancies** must be Minimum Energy Efficiency Standard of Energy Performance Certificate (EPC) C by 2026, and **all tenancies** must be EPC C by 2030. There is no research on landlords' demand for green homes loan, although research shows financial support is important to landlords.<sup>2</sup>

Table 1. Demand scenarios

Scenario	Description
1. Low demand from domestic consumers and private landlords	Uptake of loans by owner occupiers falls below levels achieved in Scotland and France. Consumers predominantly use the scheme to cover the remaining costs to install a heat pump (£5000 on top of a £7500 subsidy) or make basic improvements to the home's insulation. Only 1 in 3 PRS homes require a loan to make upgrades. PRS homes which do require a loan are predominantly those which have more expensive upgrades to meet the new efficiency standard; therefore, the mean value of loans withdrawn is higher.
2. High demand of low to mid value loans	Uptake of loans by owner occupiers reaches levels achieved in Scotland and France. Similar to France, the mean value of loans is around £12,000; while some consumers use the loans to top up grants, others also install microgeneration and more ambitious efficiency upgrades. 2 in 3 inefficient PRS homes require a loan. The mean value of each loan is lower to reflect a higher % of loans for works on homes which are less expensive to upgrade.
3. High demand of low, mid and high value loans	Uptake of owner occupier loans surpasses demand in Scotland and France. Owner occupiers predominantly use the loan to top up government heat and efficiency grants, others also install microgeneration and more ambitious efficiency upgrades. The majority of PRS homes requiring an upgrade take

<sup>2</sup> National Residential Landlords Association, February 2020, **Budget 2020**



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out a loan. Therefore, the average size of loans withdrawn will be low, reflecting the use of loans for a high volume of lower cost upgrades.

Table 2 outlines the different factors across demand scenarios 1, 2 and 3 which are set out in **Error! Reference source not found.1**. The cost to government of subsidising a loans scheme depends on factors which are both beyond and within government’s control. For example, inflation rates are beyond government control, but other factors can be adjusted by government, such as, level of subsidy provided, repayment rates, and the cap on the subsidised finance which consumers.

*Table 2. Key assumptions for loans uptake for owner occupiers and landlords, divided between the three demand scenarios*

Assumption	Owner occupier			Landlords		
	1	2	3	1	2	3
Mean value of loan	£5,000	£12,000	£7,000	£11,600	£8,900	£7,400
Consumer demand	1.5/1000 homes/yr	2.5/1000 homes/yr	4.0/1000 homes/yr	Not applicable		
Threshold for PRS loan	Not applicable			>£10k cost	>£5k cost	>£1k cost
Length of repayment	15 years across scenarios			15 years across scenarios		
Subsidy	0% interest across scenarios			0% interest across scenarios		
Pilot	5,000 loans issued			10,000 loans issued		
Regulation	Not applicable			Minimum standard EPC C for all new tenancies begins mid-2026 and all new properties by mid-2030. Assumes 10% non-compliance across scenarios.		

To show how inflation affects the cost of a loan scheme, different inflation rates are applied to demand scenarios 1, 2 and 3 from Table 1, see **Error! Reference source not found.** for an overview. The same inflation rate is applied for the first 4 years, based on the OBR forecast, after the 4<sup>th</sup> year, inflation rates of 2%, 3%



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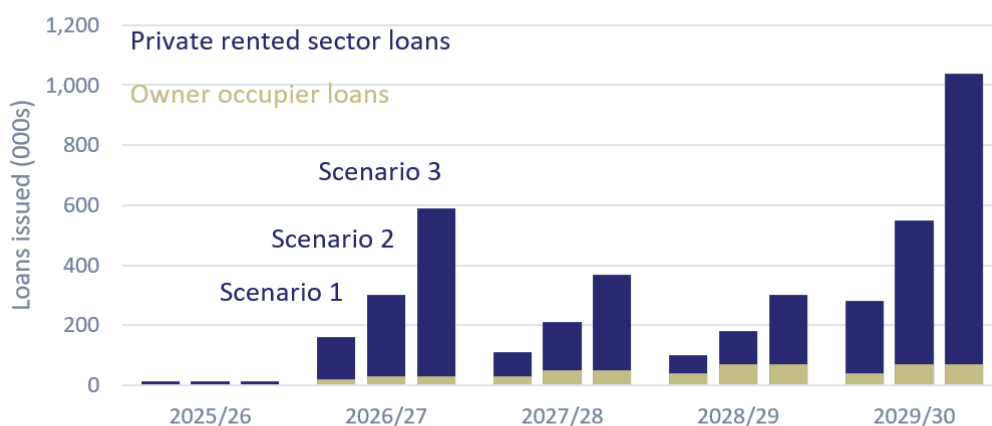
and 4% are applied. around £1bn over 15 years, higher demand and inflation means the scheme costs government £4.6bn over the same period.

Table 3. Interest rates applied to the three demand scenarios in Table 1

	1	2	3
2025 to 2029	OBR forecast across all scenarios		
2029 to 2045	2%	3%	4%
Cost of subsidy over 15 year period	£1bn to £1.8bn	£1.5bn to £2.7bn	£2.5 to £4.6bn

The numbers of loans issued in each of the three scenarios is outlined in Appendix Figure 2 below. In scenario 1, 665,000 loans are issued in total, one fifth of which go to owner occupiers and the remainder to the private landlords. In scenario 2, just under one fifth (18%) of all loans go to owner occupier homes and the remainder to private landlords. In scenario 3, only 10% of loans are borrowed by owner occupiers, and the remainder by private landlords.

### Loans issued under different demand scenarios



Source: E3G analysis



Appendix Figure 2. Thousands of loans issued to private landlords and owner occupiers between 2025/26 and 2029/30.



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## About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

More information is available at [www.e3g.org](http://www.e3g.org)

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