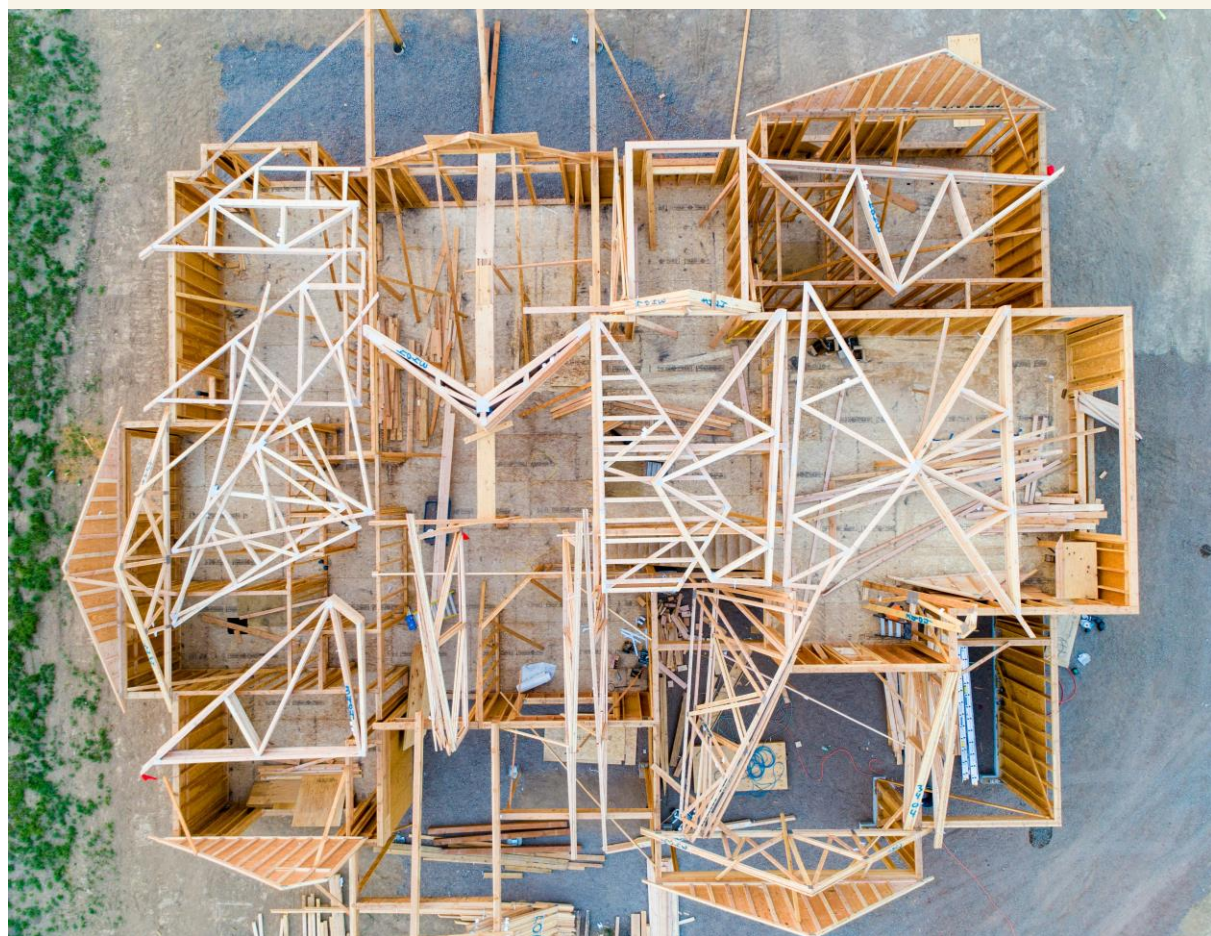




E3G

REPORT JULY 2024

INVESTING IN GREAT BRITISH HOMES DESIGNING A UK HOME UPGRADE LOAN LEO VINCENT





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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.

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SUMMARY

Upgrades that make our homes cheaper and cleaner to run offer tremendous opportunities for British households. Many countries have introduced home upgrade loan schemes to make these retrofits more attractive and accessible. In this report, E3G considers a well-designed and effective government-backed home upgrade loan for the UK.

Upgrading Britain's housing is essential to lower bills, reduce our dependence on fossil gas imports, and get on track to meet carbon targets. Home upgrade loans can form an essential component of the policy mix to help government to get on track.

Countries including Germany, France and Canada have all introduced loan schemes via their national development banks, which have been successful in helping hundreds of thousands of households to cut their energy costs. Comparative analysis of schemes in other countries shows how a UK scheme could be set up and designed, seeking to maximise uptake and value for money.

An attractive, consumer-orientated loan scheme can help the UK turn around its track record on low upgrade delivery rates. Such a scheme should be introduced following consultation and pilots to ensure effective design and deliverability. Supporting measures such as nationwide access to independent energy advice, and regulations to increase energy efficiency standards in the private rented sector, can ensure good awareness and uptake.



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Table 1. E3G recommendations for designing a UK home upgrade loan scheme

| Principle | Recommendation |
|------------------------|---|
| Scheme principles | Treasury to provide the UK Infrastructure Bank with a ringfenced, flexible, long-term draw-down fund for lenders, with loans delivered by a range of lenders (retail banks, credit unions, building societies etc.). |
| | Government must invest in making the retrofit journey consumer-focused and well-advertised, by supporting advice and awareness measures. |
| | Scheme coordinators to implement ongoing data gathering, analysis, evaluation and course-correction to enhance scheme delivery. |
| Design details | Offer zero and/or reduced concessional interest rates to spur consumer uptake and encourage lender participation. |
| | Repayment terms are flexible, favourable to the consumer, and follow international best practices. To include the ability to be spread over a longer period and being substantial enough to enable meaningful retrofit. |
| | Loans offered in tandem with grants fostering a more equitable national retrofit rollout with higher accessibility and uptake. |
| | Government bears risk without absorbing it completely, with UKIB guaranteeing a significant proportion of loans extended. |
| Guiding considerations | An attractive and fair offer to consumers which caters to a range of households, including those with lower incomes, those in rural or off-grid areas, and those who may require or benefit from added flexibility. |
| | Loans introduced in concert with a complimentary and coordinated package of policy and regulation to ensure uptake and participation from lenders, installers and consumers. |



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CHAPTER 1

WHY THE UK NEEDS A HOME UPGRADE LOAN SCHEME

Despite the benefits that energy saving retrofits can offer households, upfront costs can continue to act as a barrier to uptake in the UK. Recent polling found that financing energy efficiency improvements was a key reason given as to why people didn't upgrade their homes' energy efficiency, with over 35% of people stating they couldn't afford the upfront cost.¹

However, finance alone is not a silver bullet: households also need to be convinced of the benefits that retrofits can offer, feel comfortable that they're making the right decisions for their properties, and in some cases – such as in the private rented sector – be spurred to make the right decisions through regulations like minimum energy efficiency standards.

Lenders in the UK are increasingly offering products and services which can help customers upgrade their homes, with nearly 60 different offers on the market.² However, the market has been sluggish; for example, Nationwide's 0% interest home upgrade loan scheme received just 2,000 applications (of which 1,700 were accepted) between 1 June 2023 and 4 April 2024.³ The green finance community is calling for a broader, holistic set of policies to drive consumer interest and demand, as well as support the supply chain.⁴

Thus, while there is a clear need for attractive financial offers, these need to be introduced as part of a coordinated set of policies to drive demand and uptake. A clear opportunity to spur uptake is to link financial incentives to energy efficiency regulations. If the government introduced a new minimum efficiency standard in the private rented sector in England and Wales, around 2.6 million homes would be eligible for upgrades, requiring around £16bn in investment.

¹ Energy UK, February 2023, **New polling reveals the barriers people face to improve energy efficiency and bring down bills**

² Green Finance Institute, **Green Mortgages** (webpage, accessed 10/06/2024)

³ Nationwide, 2024, **Climate-related Financial Disclosures 2024**

⁴ Green Finance Institute, October 2022, **Financing home energy security: How the government can catalyse green homes for growth**



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E3G has previously recommended linking requirements on landlords to upgrade the energy efficiency of private rental properties with concessional lending. This could help give lenders confidence that there will be sufficient interest in financing offers, while also making the policy more affordable and fairer for landlords.



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CHAPTER 2

INTERNATIONAL HOME UPGRADE LOAN SCHEMES

Many countries are supporting loan schemes to help households improve their properties' energy efficiency and reduce their carbon emissions. Below, we examine the design of these policies and consider their successes, challenges, and outcomes. The eight international programmes examined here each offer insights into best practices and potential areas for development in the UK.

Table 2. International green loan scheme examples, at a glance (as of June 2024).

| Geography | Introduced (year) | Interest rate | Upper loan limit (£) | Maximum repayment period (years) | Distinguishing factor |
|---------------|-------------------|--------------------|----------------------|----------------------------------|----------------------------------|
| Germany | 1970s | "Low" | 64,400 | 35 | Long termism |
| S. Korea | 2008 | Low, reduced to 0% | 8,500 | 8 | Data driven course correction |
| Canada | 2022 | 0% | 23,250 | 10 | Consumer focused |
| Belgium | 2008/2012 | 0–1% | 21,500 | 10 | Very well marketed |
| France | 2009 | 0% | 42,500 | 15 | Paired with means tested grants |
| Ireland | 2024 | 3.55% | 64,350 | 10 | Big loans, short repayment |
| Scotland | 2022 | 0% | 30,000 | 12 | Trusted delivery |
| UK Green Deal | 2013–2015 | 7–8% | None | 25 | Repaid through electricity bills |



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Germany: A tried and tested model for success

The best known and arguably most successful home retrofit loan scheme is Germany's Kreditanstalt für Wiederaufbau (KfW) model. KfW has been lending at reduced concessional interest rates to promote energy savings in buildings since the 1970s.⁵ Over 6.5 million homes have improved energy efficiency under the scheme since 2006. The scheme can generate almost as much in tax receipts as it costs in subsidy. In 2021 KfW commitments reached a new high of €34.5bn.⁶

A repayment subsidy reduces the loan amount to be repaid and can thus enable shortening the repayment term or lowering the monthly instalments. Renovation projects can access higher repayment subsidies by achieving higher efficiency, with greater support for the least efficient homes (+10%). For both new builds and renovation, an additional subsidy of 50% is available for the mandatory construction supervision. The programme also allows homeowners to make additional, non-energy improvements to their property. This incentivises upgrades at crucial “trigger points” – like purchase of a new kitchen, loft conversion or removal of physical barriers – or home purchases.

The KfW scheme's success is explained by the long-term nature of the programme, combined with favourable terms, relative ease of application via retail banks, and the ability to link KfW packages with other sources of finance. The integration of the loans with trusted sources of advice and the supply chain has also been key to paving a smooth consumer journey.

South Korea: Seoul's data-driven retrofit revolution

In 2012, Seoul Metropolitan Government launched the Building Retrofit Programme (BRP), boosting energy efficiency by facilitating access to low interest rate loans, with generous repayment and grace periods. The initiative seeks to motivate homeowners to invest in upgrading properties, and has course corrected throughout its lifespan by reducing interest rates to spur uptake.

The scheme leverages data effectively to support the building retrofit programme. The energy saving impacts achieved by retrofitting are monitored by measuring and monitoring energy consumption rates and utility invoices.⁷ The

⁵ Schröder, M., Ekins, P., Power, A., Zulauf, M., Lowe, R., November 2011, **The KfW experience in the reduction of energy use in and CO2 emissions from buildings: operation, impacts and lessons for the UK**, UCL Energy Institute and LSE Housing and Communities

⁶ KfW, **Reporting Portal** (webpage, accessed 10/06/2024)

⁷ Tokyo Metropolitan Government, February 2017, “Case 5: Seoul Building Retrofit Program Loan Scheme”, in **Urban Efficiency II: Seven Innovative City Programmes for Existing Building Energy Efficiency**



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BRP provides customised energy audit services. It will send energy audit specialists to inspect and evaluate the state of energy consumption, and then advise saving plans for a range of properties at no cost to the consumer.⁸

Canada: A consumer-friendly success story

The Canadian Greener Homes Loan offers interest-free financing to help consumers make their homes more energy efficient and comfortable. The government has spent \$4.4 billion to support unsecured personal loans on approved credit.⁹ The programme is administered by Home Energy Advisors working with recipients throughout to support applications and protect against fraud. As well as the excellent consumer journey focus, the pairing of the loan with a \$5,000 grant has been instrumental in boosting uptake.

Individual loans are calculated and capped based on market rates and industry standards. For Canadians living in remote and off-grid communities, retrofit loan offers have been adjusted to provide an additional 30%, reflecting the specific challenges these communities face, including higher equipment and labour costs. The programme has given out 165,000 grants and supported over 76,000 jobs in the retrofit economy, in construction, “made-in-Canada” manufacturing, home energy audits and more. It also achieved an average reduction of 1.2 tonnes of carbon emissions per household per year.¹⁰ The programme has been extended to cover heat pumps in oil heated homes in response to the energy crisis.¹¹

Belgium: A strong design, well marketed

Launched in 2008, the Brussels Green Loan was initiated to tackle carbon emissions from the city’s building stock, aimed at homeowners with very low to medium incomes. The Brussels-Capital Region worked with the credit cooperative CREDAL to offer loans with 0% interest. The Regional Energy Fund subsidises interest rates for loans of up to €25,000, and the Regional Budget pays for the scheme running costs and guarantees. Lenders decide which financial models they choose to offer. Over 10-year repayment periods, a 0% rate is applied to people whose annual income does not exceed €30,000 for a one-person household and €60,000 for two-person households. Beyond these income levels, the interest rate is 1%.¹²

⁸ Seoul Solution, April 2017, **Building Retrofit Program**

⁹ Energy Saving Trust and Green Alliance, June 2023, **Climate policy that cuts cost**

¹⁰ Canada’s National Observer, March 2024, **Feds take heat for cancelling popular Greener Homes Grant program**

¹¹ Energy Saving Trust and Green Alliance, June 2023, **Climate policy that cuts cost**

¹² International Energy Agency, June 2022, **Brussels zero interest green loan for residential sector**



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The scheme's success is due in part to strong political will and partnerships established between public institutions and financial cooperatives – as well as an energy advice centre, which provides technical, administrative and financial advice. Course correction after a 2012 evaluation focused on improving scheme communication and promotion activities, launching a large advertising campaign via several media channels to drive uptake.

France: Egalitarian elegance

France has been successful in boosting heat pump deployment rates.¹³ Since 2009, the French government has offered 0% loans through its Éco-prêt à taux zero scheme.¹⁴ Consumers are able borrow up to €30,000 (set to rise to €50,000 this year) with a maximum repayment period of 15 years. They can access a free helpline to speak to specialist advisors about their planned renovation works.¹⁵

The loan is paired with a means-tested grant, providing a package which offers fairer support and access to all households. Very low-income households can access grants covering up to 90% of the costs, or up to €70,000 under certain conditions.¹⁶ With a slightly different mechanism to the German KfW model, France compensates the loss of bank interest with a tax credit on the commercial activities of banks to facilitate the lending.

This scheme has seen rising levels of uptake, with 35,574 loans granted in 2019, for an average amount of €13,342.¹⁷ By 2021, this rose by over 71% to 61,034.¹⁸ In 2023, over 105,000 projects were financed with the loan – the best year since the launch of the scheme and a quadrupling compared to 2017.¹⁹

Ireland: A new kid on the block

The Irish government has this year launched a €500m low-cost loan scheme, aiming to help accelerate the country's retrofit delivery.²⁰ The Irish Home Energy

¹³ UK Collaborative Centre for Housing Evidence, August 2023, **France versus the UK: the great heat pump contest**

¹⁴ MCS Charitable Foundation, June 2023, **Heat pump rollout in France and the UK**

¹⁵ Service-Public.fr, April 2024, **Éco-prêt à taux zéro (éco-PTZ)**

¹⁶ Beev, April 2024, **Everything you need to know about Ma Prime Renov**

¹⁷ Auvergne Rhône-Alpes, n.d., **The zero-rated eco-loan scheme to encourage renewable energy (ECOPTZ)**

¹⁸ EMF Hypostat, 2022, **EU 27 Country Reports: France**

¹⁹ Ministère de la Transition Écologique et de la Cohésion des Territoires, April 2024, **L'évolution du dispositif éco-prêt à taux zéro (éco-PTZ)**

²⁰ Sustainable Energy Authority of Ireland, April 2024, **New low-cost Home Energy Upgrade Loan Scheme launched**



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Upgrade Loan Scheme offers a short maximum repayment period of just 10 years but allowing unsecured borrowing per property of up to €75,000, with interest rates starting from 3.55%. If borrowing for more than one property, the maximum loan is €225,000 for three properties. The home must be projected to achieve a minimum 20% energy performance uplift to be eligible.

There are sweeteners for households, such as that approved loans can be drawn before works begin for deposits or milestone payments, and homeowners have the flexibility to spend up to 25% of the loan on non-energy related works such as home redecoration.²¹

Scotland: Holistic approach, but complexity hampers uptake

The Home Energy Scotland (HES) Grant and Loan Scheme, launched by the Scottish Government in 2017, offers combined grants and loans with advisory services tailored to meet the diverse needs of homeowners, landlords, and tenants.

Under the Grant and Loan scheme, consumers can apply for up to £30,000 (£33,000 in rural areas) combined grant and interest-free loan towards the cost of energy efficiency upgrades and clean heating systems. The grant is available for up to 75% of the costs of energy efficiency measures up to a maximum of £7,500 (£9,000 in rural areas), with an additional £7,500 interest-free loan available. A grant of up to £7,500 (£9,000 in rural areas) is available towards the cost of clean heating systems, with an additional £7,500 interest-free loan available. Repayment periods vary depending on the size of the loan, from five years for loans under £5,000 to up to 12 years for loans of more than £10,000.²²

HES is a holistic service, providing free impartial and tailored advice, that seeks to enable a whole house approach. The service has high levels of customer satisfaction, though some consumers and suppliers have found elements of the process of accessing funding challenging.²³ For example, the requirement to provide three quotes can be challenging, particularly where PAS2035 (the latest British Standard for retrofitting dwellings) compliance is encouraged. In particular, this has an adverse impact on rural areas with more limited supply chains.

²¹ Sustainable Energy Authority of Ireland, [The Home Energy Upgrade Loan Scheme](#) (webpage, accessed 10/06/2024)

²² Home Energy Scotland, [Home Energy Scotland Grant and Loan](#) (webpage, accessed 10/06/2024)

²³ Scottish Government, December 2023, [Home Energy Scotland Service Level Agreements: EIR release](#)



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Anecdotally, lack of publicity of HES grant and loans has meant that some people assume they are not eligible for funding. The Scottish Government has scaled up awareness raising activity and the funding for the programme has more than doubled over recent years.²⁴

The UK's Green Deal: Have we been here before?

Introduced in 2013, the Green Deal was scrapped just two years after implementation after failing to take off. The first scheme of its kind in the world, the policy attempted to finance home upgrades through loans repaid via energy bills, but fewer than 14,000 loans were offered. The Department for Energy and Climate Change spent £240m on the scheme.²⁵

It was clear before implementation that there were several significant flaws, and at the time many warned government of the risks involved. Firstly, the financial offer to households was simply not good enough. The interest rates offered typically ranged between 7% and 8%, fixed for up to 30 years, at a time when the Bank of England interest rates were 0.5%, and without any complimentary grant scheme.²⁶ The fact that loans were tied to the home, not the borrower, was not attractive enough to offset the unattractiveness of the interest rate, while causing concern over the attractiveness of properties to subsequent owners. Consumer engagement was lacking and awareness of the scheme was low. Complex bureaucracy around application put off many potential consumers and providers.

A decade later, and the collapse of the Green Deal still hampers political confidence in home upgrade loans. In the next two sections, we aim to dispel this with some high-level scheme design principles and recommendations that we believe are a recipe for success.

²⁴ The Scottish Parliament, October 2023, **Chamber and Committee: Question Reference S6W-22211**

²⁵ BBC News, 20 July 2016, **Green Deal energy loans had 'abysmal' take-up: MPs**

²⁶ UK GBC, **Green Deal Finance** (webpage, accessed 10/06/2024)



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Table 3. Key takeaways from international examples

| Geography | High-level analysis |
|---------------|---|
| Germany | Success factors: long-term loans (well over two decades) that are simple to access; low interest rate; complementary grant finance; the involvement of independent energy experts (advisory component, strengthening trust); motivating consumers at key renovation trigger points; delivery route of concessional finance via retail banks; broad political consensus over the years on the necessity for such a scheme and on the main pillars of the programme. |
| S. Korea | Success factors: data analysis and utilisation; course correction to maintain sustained uptake. Other notes: On a smaller scale than the other schemes reviewed. |
| Canada | Success factors: gold standard in consumer advice and support; in-built anti-fraud measures; 0% interest rate. |
| Belgium | Success factors: 0% interest rate; partnerships; well-funded advertising and marketing programme. |
| France | Success factors: 0% interest rate; complementary means-tested grant. Other notes: Shows how public investment can be delivered via lenders to end consumers, without the need to be overly prescriptive. |
| Ireland | Distinguishing features: maximum 10-year repayment period; interest rates starting at a relatively high 3.55%; strict minimum limits for loan size and repayment; large €75,000 allowance per property (€18,750 can be for redecoration). |
| Scotland | Notes: low default rates, but also low uptake despite 0% interest rates and an complementary grant; barriers include scheme complexity and a tough economic environment. |
| UK Green Deal | Lessons to be learnt: unattractive financial offer; no serious consumer engagement strategy; wishful scheme design. |



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CHAPTER 3

SCHEME DESIGN RECOMENDATIONS

To be successful, a new home upgrade loan scheme needs to be well designed and long term, with flexibility to course correct as needed to reflect lessons from the market. It needs to be attractive and simple for consumers, lenders and the supply chain to engage in. Loans need to be introduced as part of a wider suite of measures to ensure high take-up, and provide confidence to the public, financiers and supply chains.

Our key recommendations are grouped as follows:

Scheme principles

- > Treasury to provide the UK Infrastructure Bank with a ringfenced, flexible, long-term draw-down fund for lenders.
- > Invest in making the journey consumer-focused, with supporting advice and awareness measures.
- > Plan for ongoing evaluation and scheme course-correction to enhance delivery.

Design details

- > Offer lower interest rates, ideally a 0% rate, to spur consumer uptake and lender involvement.
- > Offer grants to complement the loan.
- > Set repayment terms that are flexible, favourable to the consumer, and follow international best practices.
- > Government bears risk without absorbing it completely.

Guiding considerations

- > An attractive and fair offer to consumers.
- > Introduce loans in concert with a complementary and coordinated package of policy and regulation.



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Scheme principles

Treasury to provide UKIB with a ringfenced, flexible, long-term draw-down fund

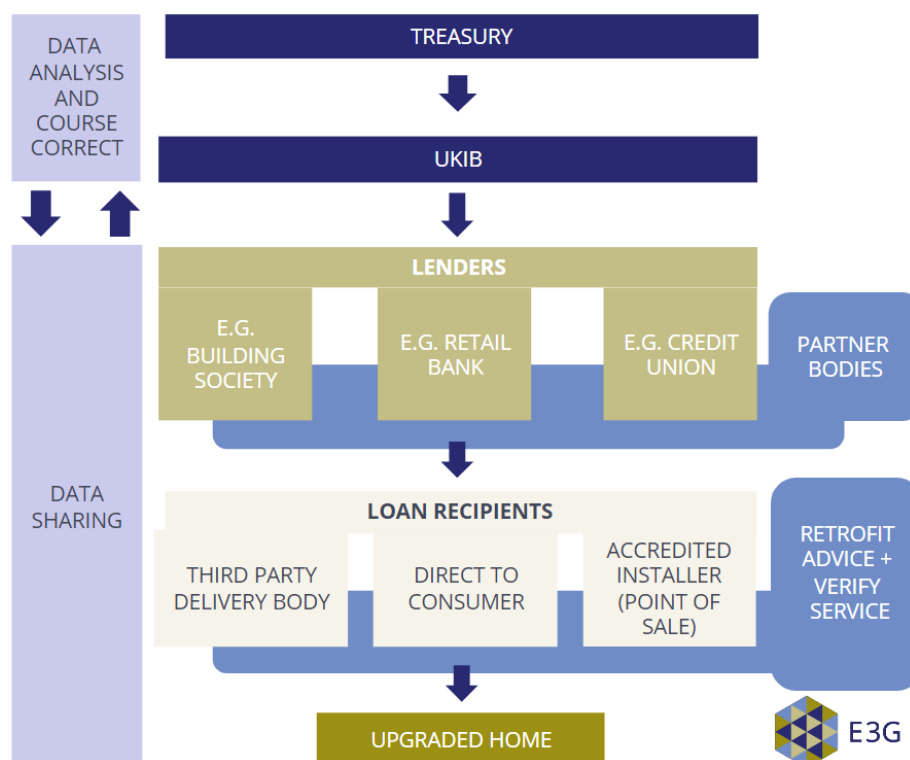


Figure 1. E3G's illustrative and basic proposed policy design architecture for a UK home upgrade scheme, more detail at Annex 1.²⁷

We encourage government to establish a pot of draw-down funding at the UK Infrastructure Bank (UKIB), that lenders can access through a series of predetermined allocation phases, with set values per loan. Set clear lending parameters with flexibility that will allow banks to offer loans in an optimal way.

Grant lenders the freedom to create and improve their own distinct finance packages. The onus is on lenders to find attractive and competitive routes to market and appeal to a broad range of consumers. They could, for example, offer low (or 0%) interest rates, cashback, a grace period for repayment, longer repayment periods, better rates if multiple retrofit measures are made at the same time, etc. This could encourage lenders such as retail banks and building societies to undertake independent advertising and marketing campaigns to capture market share.

²⁷ Available from E3G, July 2024, [Investing in Great British homes - annexes](#)



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Draw-down funding will encourage lenders to proactively engage with potential customers, spurring healthy competition among lenders. This model facilitates partnerships with other companies. For example, an energy company and a retail bank could design a loan whereby the recipient receives a reduced interest rate and three months of no energy bills. Alternatively, a heat pump manufacturer could partner with a building society to offer a cashback offer and a discounted air source heat pump unit.

Invest in making the journey consumer focused

International schemes such as Canada's Greener Homes Loan clearly show that engaging with the consumer before, throughout, and after the process leads to higher uptake, higher consumer satisfaction, and reduced rates of fraud. The UK needs a one-stop shop portal that provides homeowners with simplified access to the process – available online and in person.

Consumers should be able to access impartial information on options available, costs and benefits, and tailored advice on the support available, including grants and loans and how they can be packaged together (e.g. eligibility for a Boiler Upgrade Scheme grant and a government-backed loan). The portal can also link to accredited local installers, home energy assessors and service providers. The portal must be a step-change from previous and existing attempts to bring together elements of the above. It will require public investment to create a consumer-friendly service that can drive engagement.

Piloting, ongoing evaluation and scheme course correction to enhance delivery

From inception to implementation, all relevant delivery partners must be involved in establishing and designing a loan scheme. Lenders and industry have limited faith that government will implement the suite of complementary policy and regulation needed to increase demand for these loan offers. Tests and pilots must be conducted – as well as establishing a long-term and phased approach to releasing funding to UKIB and lenders to allow longer-term financial planning.

As has been successful in South Korea, data can be collected across consumers, installers, accreditation bodies and lenders. Ongoing analysis of this data can help course correction by spotting trends and dynamics in near real time. To enable this, data sharing agreements will need to be formalised proactively and well in advance of introduction.



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Design details

Offer government-backed interest rate relief to spur consumer and lender interest

Lenders can deploy interest rate relief (offering consumers very low or no interest on loans), using capital from the UKIB fund to cover the cost of the interest a consumer would otherwise pay on a loan. UKIB should underwrite / guarantee and account for a considerable proportion of lender risk (e.g. 50%), meaning lenders can extend loans with reduced risk.

UKIB, Treasury and the Department for Energy Security and Net Zero (DESNZ) should agree, and consult lenders, on core parameters for relieving interest rates for consumers. These should include a minimum standards criterion for loans, which could include tenets such as lenders offering stable, clear, or set rates of interest, only to credit checked customers, a reduced rate for early repayment or longer repayment periods than would typically be available.

The loan parameters established by government and UKIB could stipulate interest rate caps, possibly tying them to the Bank of England's base rate, but always 1% lower (with a minimum of 0 or 1%). This would protect public budgets while showing a high degree of government confidence and support. The cost of subsidising a 0% interest rate depends on inflation and demand. Table 4 outlines how different inflation scenarios affect the cost of loan schemes. The demand scenarios referred to in the bottom row are explained in more detail in the Appendix, Section 3.

Table 4. Interest rate scenarios applied to the three demand scenarios outlined in Appendix, Section 3.²⁸

| | 1 | 2 | 3 |
|--|-----------------------------------|------------------|----------------|
| 2025 to 2029 | OBR forecast across all scenarios | | |
| 2029 to 2045 | 2% | 3% | 4% |
| Cost of subsidy (low to high demand scenarios) | £1bn to £1.8bn | £1.5bn to £2.7bn | £2.5 to £4.6bn |

It is worth highlighting that the highly successful KfW bank model in Germany and the Irish scheme do not offer 0% finance. A small amount of interest can

²⁸ Available from E3G, July 2024, [Investing in Great British homes - annexes](#)



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reduce instances of overborrowing, encourage higher upfront payment, nudge consumers towards repaying the loan earlier, and incentivise choosing shorter term loans. A system which sets a 0% interest rate across the board for loans of any size and length can also create an artificial market.

However, there is still a strong case for 0% loans – at least for part of the loan term, up to a specified loan cap, or for loans within a certain repayment period, for example. International examples show that, in general, the lower the interest rate the higher the uptake. Whatever the final interest rate cap, Treasury and UKIB must be sure it is low enough to act as an accelerator of uptake, not just removing a barrier. There are a range of alternate ways Government could tune this policy instrument, some of which are set out at Annex 2 of the report.

Offer grants to complement the loan – a hallmark of the most successful schemes

Government must continue to extend grants, with long-term commitment and funding, complementarily and in tandem with loan offers. Multiple international examples demonstrate that this is a driving force for uptake. Linking the offers together in a straightforward way, as is done in Germany, will be central.

Scheme designs for grants such as the Boiler Upgrade Scheme (BUS) and Great British Insulation Scheme (GBIS) should be adjusted to ensure they are optimally designed to operate in concert with a new home upgrade loan scheme. A complementary grant also offers policymakers other avenues to advance the uptake and impact of the loan – for example, the means tested French grant has boosted uptake and created a more equitable rollout.

Set repayment terms that are flexible, favourable to the consumer, and follow international best practice

The core loan parameters must mandate lenders to offer longer term, higher value loan options than the market would typically extend. E3G recommends longer term repayment periods for retrofit loans to realise the desired higher level of uptake. The ability to spread payments over a long period, reducing the monthly amount paid, coupled with low or no interest is a more attractive consumer offer. In line with international best practice, consumers could have the option to borrow for up to 20–25 years without any minimum loan term.

The upper loan limit should enable, or even encourage, consumers who can afford it to undertake multiple, complimentary measures simultaneously (such as heat pumps and solar; thermal storage and loft insulation). The upper loan limit should aim to move medium-sized homes closer to EPC C, rather than a smaller



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number of larger houses to Passivhaus standards. The upper loan limit must therefore be capped, and should not be so high that it becomes a loophole for the very wealthy to spread the costs of whole-house (or mansion) retrofits.

E3G proposes that significant consultation, testing and analysis will be needed to determine an appropriate figure for an upper loan limit. However, based on market dynamics and international best practice we argue this figure shouldn't be below £20,000, and suspect it will not benefit from being above £50,000. It is highly likely that the average sum borrowed will be significantly less.

Government must bear risk without absorbing it completely.

The scheme should be designed to reduce and mitigate risk, and so that the burden of risk is alleviated from lenders and consumers, and shouldered more by government and, to a lesser extent, industry. UKIB should guarantee/underwrite a significant proportion of the risk that lenders would otherwise be exposed to. The core loan parameters should discourage or outright disqualify high-risk loans, further reducing risk for all involved parties.

Inspection and verification of works completed should be linked to the standards of the accredited installer, ensuring lenders and government that instances of fraud remain low. From a consumer risk perspective, mandating that works are only delivered by accredited installers (as is the case with other government schemes) ensures a low risk of poor installation and establishes an industry-funded course of redress should a poor installation be carried out. The Government-trusted certification schemes also monitor the financial health of an installer business and audit their installer base, reducing the risk of bad-faith cowboys entering the market.

If a consumer consistently defaults on a credit payments then, as with any other unsecured personal loan, their credit score will be downgraded – a long established disincentive for consumer overborrowing, default or re-entry into the finance market. However, lenders' in-built restrictions on excluding riskier customers should greatly reduce instances of default at any rate. The works de-risk themselves as they lower energy bills, freeing up consumer capital. As risk for these types of loan reduces over time through successful implementation, the level of guarantees or interest rate subsidies could fall over time as the market lowers the risk premium as it gains volume and confidence.



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Guiding considerations

An attractive and fair offer to consumers

As well as a public investment from government, the offer must – as has been the case in France – be fair and cater to a range of households. For example, homes in rural areas could receive an uplift to the offer to reflect the added costs they are likely to experience when using a loan. The lowest income households should have home upgrades fully funded by the government, and loans are not necessarily an appropriate vehicle.

Application must be straightforward for all consumers, as with the easy access German KfW model. Cash should be released quickly and smoothly to either the consumer or installer (if point of sale finance). Flexible options such as the ability to top up or extend a loan within, say, two years to accommodate additional measures could also be explored as a means of spurring the uptake of complementary measures. This would also tackle the barrier of product lifespans where, for example, a consumer might not upgrade their gas boiler to a heat pump when installing insulation if the boiler is still functional.

How design and demand affect uptake

For this report, E3G aims to indicate how the size and cost of a green homes loan scheme varies under different scenarios, which depends on a host of factors, consumer demand and inflation rates in the main. The estimates are descriptive, not an attempt to accurately forecast demand. They aim to show how different design criteria and uptake affects costs and outcomes. For a full explanation, see Section 3 of the Appendix.²⁹

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 PRS is a key determinant; for this research E3G assumes all new tenancies must be Minimum Energy Efficiency Standard of Energy Performance Certificate of 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.

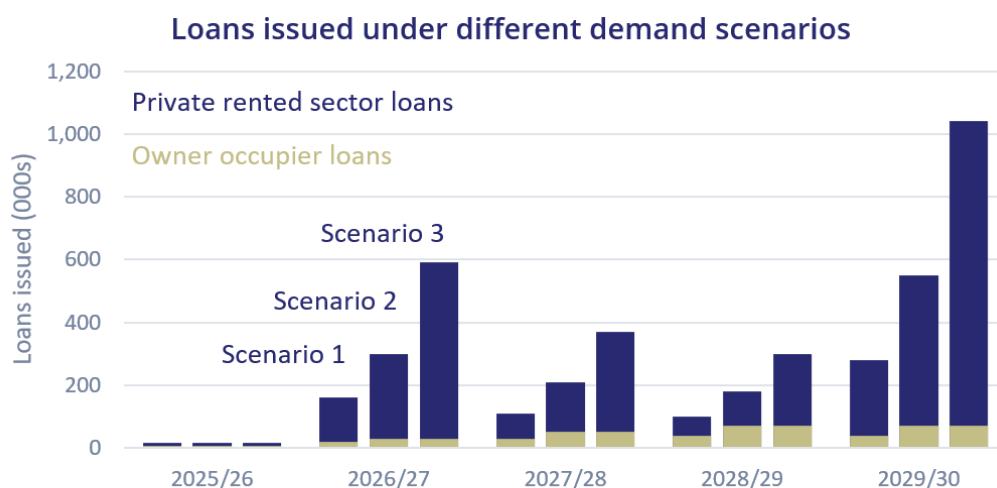
The numbers of loans issued in each of the three scenarios is outlined in Figure 2 below. In scenario 1, 665,000 loans are issued, one fifth of which go to owner occupiers and the remainder to the private landlords. In scenario 2, 18% of all

²⁹ Available from E3G, July 2024, [Investing in Great British homes – annexes](#)



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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.



Source: E3G analysis



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

Offer loans in concert with a complementary and coordinated package of policy and regulation

Regulations, incentives and grants will help drive demand for loans. A clear connection could be made with standards that require landlords to increase minimum energy efficiency in the private rented sector. Loans offered via the scheme could be tailored and marketed to meet the needs of landlords needing to upgrade their properties. There could be opportunities to aggregate demand – for example, if landlords in student rental accommodation “hot spots” were able to access cheaper rates of funding through retrofitting many properties in an area at the same time, likely over the summer when properties are empty. UKIB could work with buy-to-let lenders and others with relevant expertise to design and develop tailored products that help landlords upgrade their properties in time to meet regulatory timelines.

Conclusion

While there are no silver bullets in home upgrade policy, the introduction of a well-designed government-backed loan scheme can play an important role in boosting uptake of measures, as it has in other countries. The UK should look to



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the successes of comparable international policy, learn from our own past attempts, and consult with experts to design robust and fair policy. As well as providing a boost to our vital and valuable energy efficiency and green technology industries, a loan scheme can cut energy bills, reduce national reliance on fossil fuels to bolster our energy security, and create jobs.