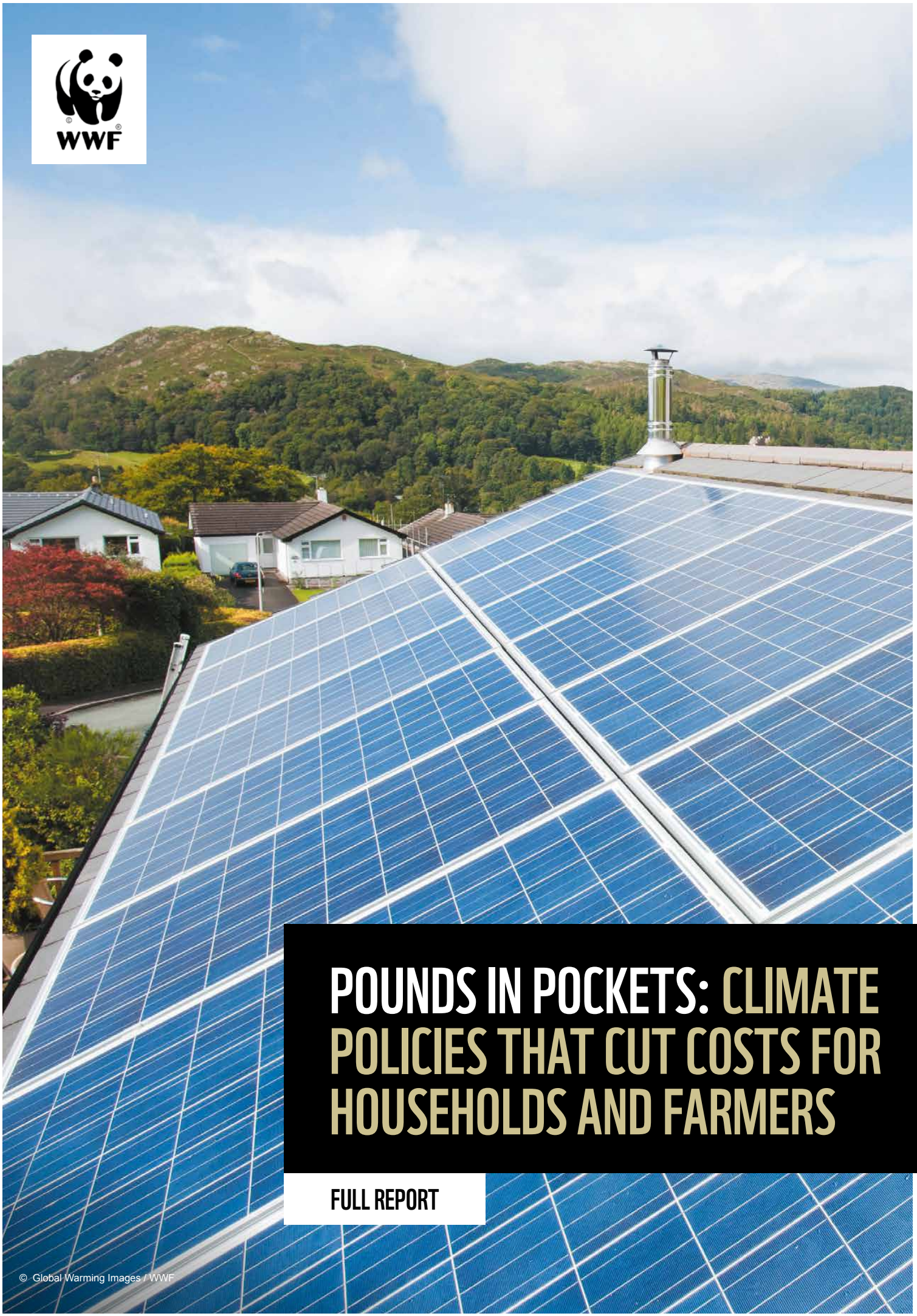

POUNDS IN POCKETS: CLIMATE POLICIES THAT CUT COSTS FOR HOUSEHOLDS AND FARMERS

FULL REPORT

CONTENTS

Publication Date: September 2025

1. EXECUTIVE SUMMARY

THE GOVERNMENT CAME INTO POWER ON A MANIFESTO DEFINED BY ITS GREEN AMBITION. ACTION QUICKLY FOLLOWED: BARRIERS TO THE DEPLOYMENT OF RENEWABLES WERE LIFTED, PLANNING RULES STREAMLINED TO ACCELERATE DELIVERY, AND A FLAGSHIP PUBLIC INVESTMENT VEHICLE, GREAT BRITISH ENERGY, LAUNCHED TO CHANNEL INVESTMENT INTO CLEAN POWER.

While the Government remains committed to its long-term climate goals, the governing environment today is markedly different. The fiscal rules and current economic context are constraining and could force trade-offs. Sluggish economic growth and higher-than-expected borrowing costs have required major action to keep spending within the Government's own fiscal rules.

> **IT IS VITAL THAT THE TANGIBLE ECONOMIC BENEFITS OF THE LOW CARBON TRANSITION ARE FELT IN PEOPLE'S EVERYDAY LIVES AS QUICKLY AS POSSIBLE.**
>
> **THIS REPORT SHOWS THAT IT IS POSSIBLE TO ACCELERATE DELIVERY FOR CLIMATE AND NATURE WHILE UNLOCKING DIRECT BENEFITS FOR HOUSEHOLDS IN THIS PARLIAMENT.**

Despite these challenges, the recent five-year Spending Review demonstrates the Government's continued commitment to achieving net zero, with the Department for Energy Security and Net Zero (DESNZ) securing a significant funding package, equivalent to 16% real-term growth over the spending period. This funding will be critical to unlocking private sector finance and ensuring that the near-term benefits of the transition are felt by those who need it most.

Consumers have been buffeted by waves of economic pressures, of which the current contraction is the latest. Weak growth over the past decade has directly translated into lost growth in wages and income: real wages have flatlined since the global financial crisis, costing the average worker £10,700 a year[1]. Household and regional inequality in the UK remains significantly higher than in other European countries. Inflation has further sharpened the impact of cost-of-living pressures, driving up food, fuel, and energy prices. Elections in the coming years will be largely determined by the extent to which governments are seen to have delivered meaningful improvements in voters' everyday lives.

1. https://economy2030.resolutionfoundation.org/reports/ending-stagnation/

At the same time, the political consensus on net zero is at risk of fracturing, while the type of change needed will increasingly be felt in people's daily lives. The growing impacts of climate change, together with the UK's continued dependence on volatile fossil fuels, pose serious risks to the economy and to household budgets.

All credible analyses reach the same conclusion – the economic benefits of the transition will greatly outweigh the costs in the medium-term, delivering growth and economic resilience while contributing to reducing household costs. In the context of political polarisation driving an increased focus on costs, though, it is vital that the tangible economic benefits of the transition are felt in people's everyday lives as quickly as possible.

This report shows that it is possible to accelerate delivery for climate and nature while unlocking direct benefits for households during this Parliament. To achieve this, policies must be rooted in the reality of delivery and politics (Whitehall and voters), and work for the current challenging fiscal and economic context. Ultimately, this involves putting people at the centre of net zero policymaking. Taking this approach will unlock a range of benefits for households, including alleviating cost-of-living pressures through reduced energy bills, reducing the cost of clean heating and warm homes, as well as supporting farmers to increase their resilience and sustainability.

Designing policy through this lens cuts through the increasingly polarised debate around net zero. It demonstrates that the low-carbon transition can deliver concrete economic benefits to voters before the next general election, despite the challenging economic and fiscal context.

This report focuses on three key sectors for the transition: power, home heating, and agriculture and land use. The following policies could be quickly implemented by the Government and deliver concrete benefits to households within this Parliamentary cycle. It should be noted that this report does not seek to cover the full range of either environmental or economic policies that will be needed to achieve the UK's climate and nature targets or to fully alleviate the cost-of-living crisis.

POLICY RECOMMENDATIONS:

POWER

- **Gradually rebalance policy costs between electricity and gas.** These levies currently account for approximately 16% of a typical electricity bill. Redistributing costs between electricity and gas would decrease electricity prices by 9% and **reduce the average household's electricity bill by almost £70 per year**, while encouraging the switch to clean heating and ensuring that British industry can benefit from cheap, clean power.
- Implement a **social tariff** to lower energy costs for those on means-tested benefits. The auto-enrolment scheme would reduce gas and electricity bills by around £250 per year each, saving eligible households **an estimated total of £500 per year.**
- Provide low-interest loans through the National Wealth Fund (NWF) to **install solar panels and battery storage on social housing.** This could directly reduce energy bills for tenants, delivering annual savings of around **£100 per household.**
- Offer subsidies via GB Energy to **unlock community solar and storage schemes** for residents of low-income blocks of flats. The proposed GB Energy-backed PPA scheme could save low-income households **an average of £130 annually.**

HEATING AND BUILDINGS

- Offer a **stamp duty rebate of up to £3,750** to homebuyers who invest in energy improvements within two years of purchase. This could **cover the full cost of some types of energy efficiency upgrades or cut the cost of a heat pump installation by 31%** (based on an assumed installation cost of £12,000) or by 92% when combined with support from schemes like the Boiler Upgrade Scheme. The policy could result in around 93,000 additional retrofits each year.
- Offer a **government issued guarantee** to suppliers or companies offering heat-as-a-service (HaaS), covering up to 40% of potential net losses. This could reduce HaaS subscription costs and equate to **annual bill savings of around £230,** depending on the extent of retrofit (not including additional bill savings from improved energy efficiency and smart operation).

LAND USE AND AGRICULTURE

- Support a **blended finance model** which enables business to co-invest in sustainable outcomes across food supply chains through insetting, de-risking the adoption of these sustainable practices for farmers. The policy could **mobilise £480 million per year for sustainable agriculture,** on top of current ELM payments.
- Introduce **structured incentives for farmers to adopt low-carbon fertilisers** to reduce their dependency on volatile market prices of synthetic fertilisers. A farmer fully adopting low-carbon fertiliser could expect to save **£60 per hectare,** with 80% greenhouse gas (GHG) emissions savings per kilogram of fertiliser use.
- **Expand permitted development rights** to reduce the cost and complexity for farmers seeking to adopt nature-based solutions on their land, including those required for participation in ELM schemes. Farmers could expect to typically save **£149 per 0.1 hectare** in application fees - a 50% saving and 2 to 5 weeks of planning approval time.

Estimated impacts of the recommended policies are based on independent analysis commissioned by WWF-UK.

2. THE CONTEXT: CLIMATE ACTION IN A CHANGING UK

Climate action and growth are two sides of the same coin, but are often positioned as competing objectives.

The Government is rightly laser-focused on unlocking growth and tackling the cost-of-living crisis. The net zero transition offers unparalleled growth opportunities, including the chance to capture global supply chains across a range of low-carbon technologies, create thousands of well-paid green jobs, and catalyse substantial inward investment in the UK. The net zero economy grew by over 10% between 2023 and 2024, compared to around 1% growth in the wider economy, and employment in the sector grew at a similar rate[2]. A well-managed transition can help address the drivers of the cost-of-living crisis, particularly the UK's dependence on expensive fossil fuel imports.

Despite widespread agreement that decarbonisation and growth are two sides of the same coin, some political actors are seeking to position them as incompatible. This framing seeks to reduce consent for the transition by baselessly blaming net zero for high energy bills and cost-of-living pressures, despite clear evidence to the contrary. In this context, it is important not only to articulate the economic benefits of the transition, but for them to be felt in voters' lives.

Benefits to households will be a key determinant of the success of net zero

Labour's green ambition was a key part of their electoral success in 2024[3]. **It can play a vital role in delivering strong growth, alleviating the cost-of-living crisis, and reducing pressure on public services - the issues that will decide the next election.** Delivered effectively, the transition will mean reduced energy bills, warmer homes, and a more resilient food system.

The changes needed will increasingly be felt close to home. The key changes households will need to make over the next 10-15 years will be to buy heat pumps and electric cars when it is time to replace fossil fuel boilers or petrol and diesel cars, and in some cases to insulate their homes. In a time of political polarisation and attacks on the short-term costs of the transition, Government needs to ensure that green policies deliver concrete economic benefits in people's daily lives. This will be a key determinant of the success of the clean transition in the 2020s and beyond.

2. https://ca1-eci.edcdn.com/250224-ECIU-CBIE-2024-Net-Zero-Economy-FINAL.pdf?v=1740388273
3. https://www.kcl.ac.uk/policy-institute/assets/climate-change-and-political-priorities.pdf

The case for climate action is only growing

The need for climate action has never been more urgent. Each year new climate records are broken, bringing extreme temperatures and devastating natural disasters. With this comes the mounting potential for catastrophic climate breakdown as irreversible tipping points are surpassed. Famine, drought, flooding, air and water pollution, the transfer of disease and the spread of anti-microbial resistance are some, but not all, of the likely impacts.

Evidence clearly demonstrates that the cost of climate inaction is far greater than the costs of action[4]. Decarbonisation will unlock a more efficient and productive UK economy that is able to compete – and lead – globally. Analysis by the CBI states that net zero contributed £83 billion in GVA in 2024, with the sector containing approximately 22,000 businesses across renewable energy, green finance, and related industries[5]. OBR analysis outlines that failing to take early action on net zero could raise public sector debt by 23% by 2050. Short-term political and economic decisions, made at the expense of long-term planning for a resilient economic future, risk leaving the UK economy vulnerable to enduring low productivity, stagnant growth, and substantial missed investment opportunities[6].

The risks from nature and biodiversity loss are only growing. Half of the world's GDP is moderately or highly dependent on nature[7]. Climate breakdown will drive global financial instability, supply chain disruption or destruction, and economic damage at an unparalleled scale. WWF research has warned that the collapse of ecosystem services could lead to an annual decline of $2.7 trillion in global GDP by 2030[8]. Further, an academic study published in Environmental Research Letters indicates that a 4°C increase in global temperatures could reduce average per capita GDP by 40%. Even with a 2°C rise, a 16% reduction is anticipated[9].

4. https://www.cell.com/joule/fulltext/S2542-4351(22)00410-X
5 https://www.cbi.org.uk/articles/growth-and-innovation-in-the-uk-s-net-zero-economy/
6 Office for Budget Responsibility, Fiscal risks and sustainability, 2024
7 WEF, Nature risk rising: Why the crisis engulfing nature matters for business and the economy, 2020
8 https://wwf.panda.org/wwf_news/davos/
9 https://iopscience.iop.org/article/10.1088/1748-9326/adbd58

3. THE APPROACH: DESIGNING PEOPLE-CENTRED POLICIES FOR TODAY'S ECONOMIC CONTEXT

This report explores how to successfully design people-centred policies for today's challenging economic and political context. This means developing policies that demonstrate that accelerating the transition can deliver meaningful consumer benefits in the next four years, at minimal expense to the Treasury.

In practice, this means:

- Policies must **deliver tangible benefits to households** in the near-term, for example by addressing cost-of-living pressures.
- Policies must **work within the current challenging economic and fiscal context.** This might include policies that are revenue neutral, align with institutions with specific funding envelopes for this type of work, have a multiplier effect to crowd in private investment, or include non-spend levers like regulation and planning.
- Policies must **consider the current political context.** The Government has been upfront about its prioritisation of missions, as well as its laser focus on tackling the cost-of-living and supporting businesses to deliver growth. Policies must help deliver against these missions and help maintain public support for the net zero transition.

Policies that can credibly meet these criteria will be critical in overcoming the challenges for net zero policy making.

4. POLICY RECOMMENDATIONS

POWER

The Government has set a clear and ambitious target: to deliver a decarbonised power system by 2030. Achieving this goal demands action at an equally ambitious pace and scale. Rapid infrastructure deployment - from grid upgrades to renewables - is essential to keep up with increased electricity demand, driven by both household consumption and the wider economy's shift toward electrification across sectors including transport and industry.

A clean power future is increasingly seen as a cornerstone of the UK's economic and national security. The current geopolitical context has exposed the vulnerability of relying on volatile international fossil fuel markets, with record gas prices triggering billions of pounds in emergency consumer support. By contrast, domestically generated clean power offers the promise of price stability, reduced exposure to global shocks, and long-term economic resilience.

The success of the UK's clean power transition ultimately hinges on public support. Decarbonising the energy system at the speed required over the next decade will not be possible without widespread consumer buy-in. That means ensuring that households and communities across the country can see and feel the benefits of the transition - not only in cleaner air and reduced emissions, but directly in their energy bills. These benefits must be distributed fairly and equitably across society.

As the Government moves to deliver its 2030 Clean Power mission, it will face growing pressure to demonstrate that clean energy leads to tangible savings for consumers. The public will expect lower bills as a return on public and private investment in clean infrastructure. Policymakers must ensure that the financial benefits of clean power are rapidly and visibly passed through to consumers.

POLICY 1
REBALANCE POLICY COSTS BETWEEN ELECTRICITY AND GAS

This policy **gradually rebalances policy costs between electricity and gas.** While the vast majority of energy bill increases have been driven by the price of gas, these levies also play a role, currently accounting for approximately 16% of a typical electricity bill. Redistributing costs between electricity and gas would decrease electricity prices by 9% and reduce the average household's electricity bills by almost £70 per year, while encouraging the switch to clean heating and ensuring that British industry can benefit from cheap, clean power.

The structure of energy bills in the UK is no longer aligned with the country's decarbonisation ambitions. This imbalance creates a structural barrier to decarbonisation at precisely the moment when electrification must accelerate to meet net zero targets.

Levies support vital programmes that benefit all households, including renewable energy support, energy efficiency programs, and social initiatives. Currently, a disproportionate share of policy and system costs is loaded onto electricity bills. The price volatility of fossil fuels lies behind the majority of energy bill rises, but these policy levies also impose costs on consumers, particularly on the cleanest fuel - electricity. Policy costs account for approximately 16% of a typical UK household's electricity bill, compared to just 6% of a typical gas bill[10]. As a result, households are discouraged from adopting clean technologies and remain reliant on gas heating, despite the volatility of gas prices, which can send heating bills soaring.

There is broad acceptance from policymakers that policy costs should be moved away from electricity bills. Ideally, these policy costs would be funded directly by the Exchequer, paid for via general taxation. This would be the most progressive approach and give Treasury full control over the costs needed. The political and economic context means that this approach is unlikely to be implemented in the short-term, but it should be the lead option for an enduring solution.

Moving all policy costs immediately onto gas bills, while helping incentivise a move to electrification, would be politically difficult, particularly without action to protect vulnerable customers, such as the introduction of a social tariff. Social tariffs are discussed in more detail in the next section.

A gradual rebalancing of policy costs between electricity and gas to lower electricity prices has the potential to incentivise the switch to clean technologies while ensuring that cliff-edge impacts are avoided. This policy would deliver immediate savings to households adopting low-carbon solutions of up to £170[11], while incentivising the shift to a cleaner, more efficient energy system through electrification. Over time, this is likely to result in lower system costs, benefiting billpayers.

10. https://www.nesta.org.uk/report/whats-in-an-energy-bill/policy-costs/
11. Based on Ofgem's F15 archetype, reflecting early adopters and high electricity consumption.

For consumers, the benefits are tangible. By shifting some of the levies currently applied to electricity onto gas, electricity prices will fall. This reduces the cost of running heat pumps, electric vehicles, and other low-carbon technologies. In addition, a particularly vulnerable subset of customers relies on direct electric heating for their homes and would therefore reap above-average benefits. Overall, rebalancing levies would make it easier and cheaper for households to adopt cleaner solutions, helping the UK to meet its net zero commitments more rapidly. Crucially, this shift encourages behaviour change organically, through fairer price signals, rather than through mandates or subsidies alone.

HOW THE POLICY WOULD WORK

Treasury should channel revenue raised from bills, which we estimate would be approximately £12 billion for the levy-funded policy schemes, through a single 'Levy Control'. The Levy Control would comprise of two simple p/kWh rates, one on electricity and one on gas, set at a level deemed appropriate by Ofgem. This would help reduce potential political pressure around levy adjustments. Electricity's natural efficiency – electricity is more efficient than gas in most use cases – would provide the rebalancing signal without raising Exchequer spend or imposing additional bill levies:

1) **Ofgem would publish a forecast of the total amount of revenue required to fund all energy bill policy schemes for the following five years.**
2) **Ofgem would set two different kilowatt hour rates on gas and electricity (providing a rebalancing ratio), to collect funds for policy schemes at a rate that balances priorities on electrification and the cost of gas bills.**
3) **Suppliers would continue to recoup the unit rates from consumer bills, paying revenues to the Treasury, which would act as a guarantor for revenue certainty and adjust rates for under- and overpayments.**

Government could phase this reform in by 2027. This timeline provides sufficient time for necessary legislative and regulatory processes, forecasting the required revenues, and making decisions on the ratio. Importantly it also builds in sufficient time for a public information campaign, and for Government to work with suppliers to ensure consumers understand the nature of the changes. Ofgem would set the tariffs, but Government could outline expectations, including using the policy as a flexible tool to cushion low-income households from volatile energy prices. Introducing features like an automatic levy adjustment could help defuse the recurring political pressures generated by energy price spikes while helping to address their underlying causes.

12. https://www.edfenergy.com/energywise/what-is-the-average-energy-bill-in-the-uk
Assuming average annual electricity use of 2,700kWh. Final average yearly price includes standing charge.
13. Independent analysis commissioned by WWF-UK

THE IMPACT OF THE POLICY

The policy allows for an affordable transition to an electrified household. Gradual rebalancing avoids any cliff-edge impact on shifting policy costs between bills.

Given that the average annual electricity bill for a medium-sized household is £933[12], this translates to roughly £150 per year allocated to policy costs. By shifting some of these policy costs from electricity to gas using a 40/60 ratio between electricity and gas, **electricity prices would decrease by 9%, leading to electricity bill savings of almost £70 per household[13].**

This adjustment would not only lower electricity bills but also encourage a natural transition towards cleaner energy sources, aligning with the UK's broader decarbonisation ambitions. Savings from increased domestic electrification, incentivised by these lower bills, could be increased further through targeted energy efficiency improvements. It should be noted that adopting this policy approach would lead to an increase in gas bills for households remaining on gas heating. This impact could be partially mitigated through a well-designed social tariff, as set out below.

POSSIBLE ALTERNATIVE APPROACH TO REBALANCING

If Government were unwilling to introduce any form of rebalancing that increased gas bills and unable to move policy costs into general taxation due to fiscal constraints, the remaining option would be a targeted approach. This would represent an interim solution, removing levy costs for electric-heated households only. These households are twice as likely to be fuel poor but pay substantially higher levies than gas-heated households.

It is important to note that this approach, while attractive in some ways, would face technical challenges in identifying eligible households and measuring their consumption, and would not help to reduce electricity bills for industrial and commercial users.

If such an approach were adopted, it should be interim and backed by a clear medium-term roadmap for removing levies from all electricity bills, and open to a range of electric heating technologies, to new and existing installations, and to newbuild homes and retrofits. Consumers should receive support automatically, as far as possible, and the approach should be compatible with providing price signals to reward consumer-led flexibility and support smart-readiness. Finally, as with the suggested lead approach above, it should be complemented with targeted bill support for those households who are struggling most with energy costs.

POLICY 2
DEVELOP AND IMPLEMENT A SOCIAL TARIFF

This policy implements a **social tariff** to lower energy costs for those on means-tested benefits. The auto-enrolment scheme would reduce gas and electricity bills by around £250 per year each, **saving eligible households an estimated £500 per year.**

The UK is facing a persistent energy affordability crisis. Despite falling wholesale prices, millions of households remain trapped in fuel poverty, with energy bills still significantly above pre-crisis levels. Government interventions in recent years, such as the Energy Price Guarantee and targeted cost-of-living payments, provided important short-term relief for the most at-risk households. However, these measures have to-date been temporary and largely reactive. Schemes such as the Energy Price Guarantee have been implemented at significant expense, funded by borrowing while delivering little long-term impact.

There remains a structural gap in the energy market: there is no long-term, targeted mechanism to ensure that vulnerable households can afford essential energy. Without reform, millions will continue to face the choice between heating and eating – exacerbating health inequalities, slowing economic recovery, and risking public consent for the transition to net zero.

A social tariff would provide targeted support to those households who need it most, identified as those who are in receipt of means-tested benefits. This captures low-income families, older people on fixed incomes, and individuals with disabilities or health conditions. These groups are disproportionately exposed to unaffordable bills, with many also requiring higher energy usage due to specific needs. National Energy Action (NEA) has estimated that in 2021 4.5 million households were in fuel poverty in the UK (spending more than 10% of their income on energy to provide satisfactory heating)[14]. Government estimated that 9 million households in England could be classed as fuel poor in 2024[15].

Similar approaches to support vulnerable customers already exist in the water and telecommunications sectors, demonstrating that it is both feasible and effective. The policy would address both the immediate cost-of-living crisis and the long-term need for a fair energy system, while also complementing reforms like rebalancing policy costs.

There is strong support across energy businesses, the electorate, and some policymakers for a social tariff. There was a particular upswing in support following the energy price crisis in the wake of Russia's invasion of Ukraine. The Government has expressed a commitment to supporting "working people", and a social tariff aligns with this objective.

Implementing a social tariff is administratively feasible within the existing energy pricing framework. It can be integrated with current billing systems and targeted using existing data on benefit receipt. This would allow for efficient identification and enrolment of eligible households, minimising administrative burdens and costs. A social tariff could also be launched as part of a wider reform package, with complementary cost adjustments delivered through broader policy measures.

HOW THE POLICY WOULD WORK

The starting principle is that the social tariff would need automatic enrolment and to be consistent across all suppliers. This would reduce the risk of postcode lotteries seen with water social tariffs. The design of the tariff would need to carefully consider both elements of an energy bill: the standing charge and the unit rate. The tariff would take the form of a percentage discount on the energy unit rate, paired with a cap on the standing charge. A plausible design is 30% off Ofgem's Default Tariff Cap unit rates, and daily standing charges reduced by 20% for electricity and 10% for gas. Because the discount is expressed as a percentage, the cash saving rises automatically when wholesale prices spike; when markets fall back, the Exchequer's exposure shrinks in tandem.

14. https://www.nea.org.uk/energy-crisis/
15 https://assets.publishing.service.gov.uk/media/67e51e2cbb6002588a90d5d5/annual-fuel-poverty-statistics-report-2025.pdf#page=79

Eligibility could be aligned to existing benefit receipt. Roughly 8 million households are currently on means-tested benefits, around 6 million of which would be in reach via data matching. Alternatively, it could be aligned to a threshold based on disposable household income, though this would be administratively much more difficult, particularly if the aim is for auto enrolment. Government should seek to improve data collection and sharing in time, in order to ensure more precise identification of eligible households.

Settlement should be straightforward. Suppliers apply the discounted rates as soon as a meter appears in the eligibility file. Every month they report the discounted kilowatt-hours and the forgone standing-charge revenue to an administrator or body. The administrator reimburses suppliers from a central fund.

THE IMPACT OF THE POLICY

A social tariff would provide discounted energy rates to low-income households, directly addressing fuel poverty. By lowering energy costs for those receiving means-tested benefits, the tariff would ensure that essential energy needs are met without imposing undue financial strain on vulnerable households. This targeted approach would be more effective than broad-based subsidies, ensuring that assistance reaches those who need it most. Around a quarter of households are in receipt of income-related benefits and would therefore be eligible for the social tariff[16].

The policy would generate an average annual saving for an eligible "typical Ofgem"[17] household of £258 on electricity and £253 on gas[18]. This equates to a saving of 28% and 27% respectively on bills. Modelling suggests that this price reduction would lead to a slight uptick in energy consumption, with lower prices resulting in means-tested households consuming around 3% more energy.

Given that some the most vulnerable households are currently forced to underheat their homes or turn off lighting due to high energy prices, this small increase in consumption is likely to be a net social positive.

There are several ways to fund this policy. If fiscal neutrality were the priority, taking an approach of spreading costs across non-eligible billpayers would result in an average annual increase for a 'Typical Ofgem' household not on means-tested benefits of £77 and £79 for electricity and gas (8% and 9% respectively). It would be critical to carefully design this to ensure different sets of consumers are protected.

By aligning energy costs more closely with consumers' ability to pay, a social tariff would promote greater equity within the energy market. It would help to level the playing field, ensuring that all households have access to the energy they need, regardless of income. This would support the broader goal of a fair and just energy transition.

16 https://www.gov.uk/government/statistics/family-resources-survey-financial-year-2023-to-2024/family-resources-survey-finacial-year-2023-to-2024

17 https://www.ofgem.gov.uk/decision/decision-typical-domestic-consumption-values-2023

18 Independent analysis commissioned by WWF-UK

POLICY 3
PROVIDE LOW-INTEREST LOANS TO INSTALL SOLAR PANELS AND BATTERY STORAGE ON SOCIAL HOUSING VIA THE NATIONAL WEALTH FUND (NWF)

This policy provides low-interest loans through the NWF to **install solar panels and battery storage on social housing properties.** This could directly reduce energy bills for tenants, delivering annual savings of around **£100 per household.**

The UK's social housing sector, comprising approximately 4.5 million homes, represents a significant opportunity for advancing energy efficiency and reducing carbon emissions [19]. However, only about 233,000 of these homes – roughly 5% – currently have solar panels installed [20]. This gap is partially due to the high upfront costs associated with solar installations, which are often prohibitive for low- and middle-income households and typically beyond the financial scope of social housing providers. Existing Government initiatives, such as the Warm Homes: Social Housing Fund, have made strides in improving energy efficiency within the sector. However, these programs have limitations in scale and scope, and they do not fully address the financial barriers to widespread solar adoption in social housing.

To bridge this gap, government should introduce a targeted low-cost loan scheme, funded and operated by the National Wealth Fund (NWF) and DESNZ, specifically designed to facilitate the installation of solar panels and accompanying battery storage on social housing properties. This would incentivise social landlords to invest in renewable energy solutions, thereby reducing energy costs for tenants, contributing to the UK's decarbonisation goals, and enhancing energy security. Implementing this loan scheme is both practical and politically feasible. The NWF has already demonstrated its capacity to support large-scale energy efficiency projects through partnerships with financial institutions, such as the £400 million loan guarantee with NatWest Group aimed at retrofitting social housing [21]. Politically, the scheme aligns with the current Government's commitment to support working people and address the cost-of-living crisis.

As this type of loan crosses the public / private boundary, it nets off for public sector net financial liabilities (PSNFL). **Only the subsidy element would have an upfront fiscal cost. This structure is likely to be acceptable to the Treasury, as it minimises immediate public expenditure while delivering long-term economic and environmental benefits.** The policy dovetails with the Ministry for Housing, Communities and Local Government's (MHCLG) forthcoming higher efficiency standards for social housing, offering low-cost loans as an effective way for providers to meet the new requirements.

19. https://www.gov.uk/government/news/social-landlords-continue-to-build-new-homes-rsh-statistics-show
20. https://datadashboard.mcscertified.com/InstallationInsights
21. https://www.nationalwealthfund.org.uk/news/national-wealth-fund-and-natwest-group-deliver-ps500m-funding-social-housing-retrofit

HOW THE POLICY WOULD WORK

The NWF would establish a dedicated total lending cap to provide low-interest loans to social housing providers for the installation of solar panels and batteries. In conjunction with DESNZ, it would determine a maximum "subsidy" per £ lent i.e. the gap between the loan's interest rate and the government's own cost of borrowing. This subsidy element would be met through departmental spending, while the loan asset would sit on NWF's balance sheet. These loans would be structured to cover the full cost of installation. The repayment terms could be designed to align with the energy bill savings generated, ensuring that the net financial impact on housing providers – and ultimately the billpayers – is positive.

All registered social housing providers would be eligible to apply for the loans. The application process would be streamlined to facilitate quick approval and disbursement, with technical assistance provided to ensure the feasibility and effectiveness of proposed projects.

Approved projects would need to be carried out by certified installers, ensuring compliance with industry standards and maximizing the efficiency and longevity of the solar and battery storage installations. Maintenance contracts would be included in the loan agreements to ensure ongoing performance and reliability. As the private sector partner is bearing the majority of the project's risk in this instance, and has control over the installed assets, the asset itself and the capital spending associated with installing it would be classified as part of the private sector, and therefore "off-balance sheet" for the fiscal accounts. The associated loan would be an asset of the NWF, netting off against the liabilities issued to finance the loan (i.e. government bonds) for the PSNFL fiscal target.

The NWF would implement a robust monitoring and evaluation framework to assess the performance of the installations, the financial impact on housing providers, and the energy savings realised by tenants. This data would inform future iterations of the program and contribute to the broader evidence base for energy efficiency initiatives in social housing.

THE IMPACT OF THE POLICY

The installation of solar panels and batteries on social housing properties has the potential to significantly reduce energy bills for tenants. **Our analysis shows that this could deliver an annual saving of £100 per household**[22]**.**

These savings would have a substantial impact on low-income households, reducing fuel poverty and freeing up income for other essential expenses. Moreover, generating a proportion of their electricity would mean that tenants would be less vulnerable to energy price volatility, enhancing their financial stability. The subsidy element of the loan would result in a total fiscal cost of £1 billion over the 20-year loan period[23].

22. Independent analysis commissioned by WWF-UK
23. Independent analysis commissioned by WWF-UK

POLICY 4
CREATE A GREAT BRITISH ENERGY-BACKED POWER PURCHASE AGREEMENT (PPA) SCHEME TO UNLOCK COMMUNITY SOLAR AND BATTERY FOR TENANTS OF LOW-INCOME BLOCKS OF FLATS

This policy offers subsidies via GB Energy to **unlock community solar and battery storage schemes** for renters in low-income blocks of flats. The proposed GB Energy-backed PPA scheme could save low-income households **an average of £130 annually.**

A Power Purchase Agreement (PPA) can provide a mechanism to unlock community solar and battery schemes for the direct benefit of those living in UK flats. A PPA structure can help overcome upfront cost and financing barriers, making solar more accessible for residents in the private rented sector, who otherwise couldn't install rooftop panels themselves.

In this case, using subsidies from GB Energy, a third-party developer installs and maintains the solar panels and batteries, and residents purchase the generated electricity at a reduced rate. This model has seen success in New York City, where the NY-Sun program [24] has facilitated solar adoption in affordable housing through PPAs, offering zero upfront costs and immediate energy savings to residents.

GB Energy has already allocated £3.3 billion for community projects, including solar installations. Leveraging this existing infrastructure, GB Energy can subsidise partnerships between social housing providers and solar developers, underwriting PPAs to ensure affordability and reliability. There also may be scope for GB Energy to expand beyond its current remit and assume a broader developer role - potentially partnering with community groups and other stakeholders on future projects, as previously envisaged by HM Treasury.

Politically, the scheme aligns with the Government's commitment to tackle the cost-of-living, aiming to reduce energy bills and carbon emissions in underserved communities. Whilst there is a fiscal impact, the PPA model draws on well-established pots of money for subsidies.

24. https://www.nyserda.ny.gov/All-Programs/NY-Sun

HOW THE POLICY WOULD WORK

The GB Energy-backed PPA scheme would be delivered through a structured partnership model between GB Energy, social housing providers, and private solar developers. GB Energy would establish a framework setting out standardised PPA terms, eligibility criteria for low-income blocks of flats, and strong consumer protection standards.

Under a solar PPA, a third-party developer would install, own, and operate a solar array (e.g. on the building's roof or a nearby site). The building's residents (or their management company) would purchase the electricity generated at an agreed-upon per-kWh price (lower than the standard grid tariff). Since the third party finances the installation via GB Energy subsidies, residents (or a management company acting on their behalf) would not need to pay for the panels and batteries or their installation.

The third party would retain ownership of the solar panels and batteries, while the PPA agreement would be between the provider and households. Only the GB Energy subsidies would represent a public fiscal cost, which we estimate would amount to approximately £0.2 billion in aggregate, which if spread over 3 years would reflect an annual cost of £60 million per year to GB Energy's budget [25].

For flats, where individual tenants typically have no direct control over the roof space and may face split incentives with landlords, this arrangement transfers the required capital investment and operational responsibility to the solar provider.

Both tenants and social landlords could identify suitable buildings for solar installations, prioritising properties with high energy costs and suitable rooftop space. Developers would then be selected through a competitive process, ensuring installations are delivered efficiently and at best value. GB Energy could oversee monitoring and evaluation, tracking key outcomes such as household savings, emissions reductions, and tenant satisfaction. As seen in New York City, clear reporting standards and public dashboards can help maintain transparency and support scaling of the programme over time. Through this practical, proven model, the scheme would bring tangible cost-of-living benefits to low-income households while contributing to the UK's net zero and energy security goals.

25. Independent analysis commissioned by WWF-UK

THE IMPACT OF THE POLICY

The GB Energy-backed PPA scheme could offer substantial economic benefits to residents of low-income flats. **Our analysis shows that this could deliver an annual saving of £130 on average to low-income households**[26]**.** However, it is important to note that overall savings are potentially limited by the relatively low number of affordable rented homes[27].

Fixed-rate agreements provide residents with stable and predictable energy expenses, insulating them from market volatility. Most importantly, the PPA model eliminates the need for initial investment, making solar energy accessible to households that would otherwise be unable to afford it.

In the longer-run, solar installations can increase property values and appeal, benefiting both residents and housing providers. Analyses commissioned by WWF-UK and Solar Energy UK both indicated that installation of solar panels can increase the value of properties by up to 2%[28, 29].

© Benjamin Jopen / Unsplash

26. Independent analysis commissioned by WWF-UK
27. Just over 160,000 according to MHCLG housing statistics by tenure.
28. https://www.wwf.org.uk/sites/default/files/2022-08/Better_Home%2C_Cooler_Planet_Report.pdf
29. https://solarenergyuk.org/resource/the-value-of-solar-property-report/

DOMESTIC HEATING

Decarbonising domestic heat is one of the most important elements of the UK's net zero transition. The sector accounts for nearly a fifth of national emissions. Most homes still rely on fossil fuel heating, and the rollout of low-carbon alternatives such as heat pumps and insulation remains slow. Upgrading homes can be capital-intensive, disruptive for consumers, and is difficult to scale without clear market signals and public buy-in.

In March, the government confirmed the launch of its Warm Homes Plan, including a £500 million Local Authority-led scheme starting in 2026 to deliver upgrades to low-income homes. While this is a positive step, wider delivery remains fragmented across multiple schemes, with no overarching national strategy for all tenures. The Future Homes Standard is intended to take effect from 2025 but requires strong follow-through to deliver intended outcomes.

The Government now faces the challenge of accelerating delivery at scale while maintaining affordability and public support. A coherent, consumer-focused approach will be needed to make visible progress, particularly in a tight fiscal context.

Recent initiatives such as the National Wealth Fund and Nationwide's guaranteed loan scheme for social housing retrofit is evidence of the potential for dynamic funding models that draw on close collaboration between the public and private sectors to drive the uptake of clean heat with manageable fiscal impacts. The policies below are illustrative of this principle. These should come in addition to further work to build consumer confidence in low-carbon heating, including improving customer assurance and protections – for example, through the introduction of a 'one-stop shop' advisory service for retrofit in England, similar to Home Energy Scotland.

© Mohamed Nohassi / Unsplash

POLICY 1
OFFER A STAMP DUTY REBATE FOR ENERGY IMPROVEMENTS MADE WITHIN TWO YEARS OF HOUSE PURCHASE

This policy offers a **stamp duty rebate of up to £3,750** to homebuyers who invest in energy improvements within two years of purchase. This could **cover the full cost of some types of energy efficiency upgrades or cut the cost of a heat pump installation by 31%** (based on an assumed installation cost of £12,000), or by 92% when combined with support from schemes like the Boiler Upgrade Scheme. The policy could result in around 93,000 additional retrofits each year.

CONTEXT

The UK's housing stock is among the leakiest in Europe. Energy efficiency upgrades are not matching the pace of home insultation required to meet decarbonisation targets. While residential buildings account for around 20% of the UK's carbon emissions, owner-occupiers and buyers are deterred from retrofit due to high upfront costs and limited financial incentives for completing the work [30]. Stamp duty – a well-known, visible cost at the point of purchase – is a meaningful lever to accelerate the rate of home upgrades.

Introducing an energy saving stamp duty rebate would reward homeowners who invest in energy improvements within a set timeframe after purchase. This expands the pool of households able and motivated to retrofit their homes and unlocks private capital for energy efficiency and clean heating upgrades. It mainstreams retrofitting activity by tying it to a well-understood, visible tax policy with a set window of eligibility to motivate prompt action after purchase. A combination of energy efficiency measures and low-carbon technologies can reduce energy bills and increase property values while accelerating emissions reductions [31].

Stamp duty is already collected by HMRC through a well-established process. Administrative complexity from introducing a linked rebate would be low and mirror existing tax relief schemes in the UK (e.g. first-time buyer discounts) and international examples such as Germany's KfW loan scheme. The rebate would be time-limited (two years, from the date of purchase) and capped to manage fiscal impacts.

30. https://commonslibrary.parliament.uk/research-briefings/cbp-8830/
31. https://www.wwf.org.uk/sites/default/files/2022-08/Better_Home%2C_Cooler_Planet_Report.pdf.

HOW THE POLICY WOULD WORK

A time-limited rebate would apply to homebuyers who complete qualifying energy improvements within two years of purchase. First time buyers would receive a rebate based off rates before first time buyer relief is applied, which could be administered via HMRC or a new grant-making body. Eligibility could be restricted to homes purchased for less than £750,000 by owner-occupiers who are purchasing primary residences.

The rebate could be capped at a maximum of £3,750 to focus the support on low and middle-income groups. This would mean that purchases below £275,000 would be eligible for a rebate of up to 100% of their stamp duty liability. Purchases above £275,000 (and below the £750,000 threshold) would be eligible for a partial rebate of up to £3,750. This means that lower-value homes receive a larger rebate as a proportion of their stamp duty.

Homeowners would need to provide proof of upgrade, for example, a new EPC certificate or an invoice from an accredited installer with a unique job reference code which could be cross-checked in a government database to deter fraud. HMRC would be responsible for administering and validating the rebate, using data already available to the department (via the EPC Database). Only one rebate (which could encompass multiple upgrades) would be permitted per property transaction to prevent repeat claims on the same sale.

THE IMPACT OF THE POLICY

Research suggests that consumers are substantially more willing to change energy behaviours and invest in energy efficiency immediately after moving house, where there is greater focus on property value and future home renovation. An energy saving stamp duty rebate would substantially reduce the costs of installing energy efficiency upgrades. **For example, a rebate of £3,750 would substantially reduce the costs of installing energy efficiency upgrades, or cut the cost of a heat pump installation by 31%** [32] (based on an assumed installation cost of £12,000), or by up to 92% when combined with additional support from schemes like the Boiler Upgrade Scheme.

The rebate would incentivise upgrades which would deliver savings of hundreds of pounds a year on energy bills. It would also stimulate near-term demand for retrofit, helping accelerate the net zero transition. Assuming a 30% uptake on the eligible 310,000 average property sales per year in this band, this could generate around 93,000 additional retrofits each year [33]. Analysis suggests installing an air-source heat pump could increase the sales value of a home by around £5,000 - £8,000 [34].

32. Independent analysis commissioned by WWF-UK
33. Independent analysis commissioned by WWF-UK
34. https://www.wwf.org.uk/sites/default/files/2022-08/Better_Home%2C_Cooler_Planet_Report.pdf

The average yearly fiscal cost to government is £400 million, accounting for potential losses due to fraud, and excluding the increase in tax revenues the Exchequer would receive from a more active energy efficiency market [35]. This is based on an initial take up of 93,000 households, with take up then gradually rising over time.

35. Independent analysis commissioned by WWF-UK

POLICY 2
OFFER GOVERNMENT-ISSUED GUARANTEES TO REDUCE COST OF HEAT-AS-A-SERVICE SUBSCRIPTIONS

This policy offers **government-issued guarantees** to suppliers or companies offering heat-as-a-service (HaaS) covering up to 40% of suppliers' potential net losses. This could reduce HaaS subscription costs by around **£230 per household per year** depending on the extent of retrofit, as well as unlocking additional bill savings from improved energy efficiency and smart operation.

CONTEXT

Heat-as-a-Service is a model for businesses to sell heating. Under HaaS, households pay for home upgrades through a subscription model instead of paying directly for kilowatt-hours of energy or discrete installation costs. This model has the potential to unlock uptake of low-carbon heating solutions by removing upfront costs and providing consumers with fixed, predictable heating bills. However, heat pump providers offering this model face high financing costs of around 9-10% APR[36]. These rates reflect perceived customer credit risks and make HaaS pricing uncompetitive without charging high premiums to consumers. This reduces the scalability and commercial viability of the HaaS model, which is a barrier to heat pump uptake at scale.

Government-issued guarantees to heat pump providers would de-risk the HaaS model by underwriting a portion of potential losses. This would enable suppliers to price HaaS provision more affordably, making it a viable option across a greater number of households which will help to incentivise heat pump adoption among low and middle-income groups. The policy would provide a dual benefit to suppliers and consumers, accelerating heat pump deployment and making the HaaS model more attractive to business.

Guarantee schemes are a proven model that are effective in other sectors, such as the Help to Buy mortgage guarantee scheme. They operate successfully with relatively low fiscal costs because default and early exit rates tend to be low and manageable in most scenarios, with large exposure limited to losses in particularly adverse scenarios. Government's liability is limited because guarantees would cover only a portion of potential losses, not full default risk.

36. See various industry examples (both at 9.9% APR): https://octopus.energy/heat-pump-finance/; https://www.airahome.com/en-gb/costs-and-savings/heat-pump-financing

As a 'standardised guarantee', the portion expected to result in losses would score upfront against public sector borrowing. This modest upfront subsidy would align with Government objectives on energy security and affordability and help to drive home decarbonisation across a wider range of income groups, which is a key element of supporting a just transition to net zero.

HOW THE POLICY WOULD WORK

HM Treasury would issue partial guarantees to suppliers, including accredited heat pump installers and utilities or energy companies offering HaaS models. As a result, suppliers will be able to reduce their margins, which translates into lower monthly subscription costs for consumers.

Guarantees could be monitored and delivered through a dedicated unit in DESNZ or the National Wealth Fund. The policy should be designed to build in performance guarantees – for example, by pre-agreeing standards of service that suppliers would have to meet in order to be eligible for a government-backed guarantee. This could include metrics like efficiency, temperature delivery, heat availability, which could be verified via smart metering.

A partial guarantee would mean government covers a 40%[37] portion of suppliers' net losses if households default or terminate subscriptions early. This limit meaningfully reduces risk pricing while balancing fiscal impacts and limiting public exposure. In contrast, Help to Buy covered up to 20% of property value (but often equated to around 60-70% lender's loss severity)[38].

This reduces expected loss rates for suppliers, which lowers risk weightings and enables access to credit at more competitive rates. Eligible households would need to qualify through basic credit checks to include a broad range of consumers, ensuring a range of income groups are able to access the scheme. The scheme would only be available for HaaS subscriptions in primary residences for owner-occupiers, private landlords, or social housing.

THE IMPACT OF THE POLICY

Without Government risk-sharing, suppliers face financing costs of around 9-10% APR (reflecting current base rates of 4-5% and a 5-7% margin). Partial guarantees minimise financing risks which enables suppliers to access capital at significantly lower rates. With a guarantee in place, effective financing rates could fall to around 7.7% APR, depending on provider structure and risk appetite. This enables suppliers to reduce financing costs and offer cheaper subscription plans to consumers.

37. Independent analysis commissioned by WWF-UK
38. https://assets.publishing.service.gov.uk/media/5bd1995540f0b604de423c96/Evaluation_of_the_Help_to_Buy_equity_loan_scheme_2017.pdf

This translates into tangible economic benefits to households[39]. A HaaS subscription with comprehensive retrofit costs around £150 per month for a three-bedroom semi-detached home, depending on the extent of retrofit. With a guarantee in place, modelling suggests monthly costs could fall by 13%. This could equate to an **annual reduction in subscription costs of £230 compared to current market rates, delivering savings on bills and unlocking the potential for additional bill savings from improved energy efficiency and smart operation.**

Government-backed guarantees offer a route to broadening consumer access to heat pumps through making the HaaS model more affordable. The core benefit of the HaaS structure is that it tackles the primary barrier to heat pump uptake by removing the requirement for a high upfront payment to access low-carbon heating and removing bill uncertainty. Instead of a lump sum of £10,000-£13,000, households pay a stable monthly fee. This makes the pricing of clean heat competitive with fossil-fuel based heating and would help unlock heat pump adoption across middle and lower-income households.

The aggregate fiscal cost over the 15-year contract period is £0.9 billion, reflecting a yearly cost of £60 million[40]. This reflects the guarantee modelled from an initial take up of half a million households, but does not include the potential upside economic benefits resulting from this increased uptake.

39 Independent analysis commissioned by WWF-UK

40. Independent analysis commissioned by WWF-UK

LAND USE AND AGRICULTURE

Farmers play an indispensable role in securing the UK's food supply and protecting its natural capital– they must be at the centre of any discussion about land use and agricultural policy reform. Business as usual, however, is not working – mental health is cited as the number one issue in farming, while many farmers are facing severe financial strain and are particularly exposed to the consequences of climate breakdown and nature degradation.

This situation poses a material threat to the UK's food supply – 5% of dairy farmers stopped production in 2023[41] and a further 33% said that they were unsure of their future post-2025[42]. Recent changes to Agricultural Property Relief and the unexpected pause and review of the Sustainable Farming Incentive have increased the sense for many farmers that their livelihoods are under threat. In this context, action to boost the resilience of the UK farming sector and ensure that farmers' interests are put at the heart of wider land use decisions is vital.

The next five years will see unprecedented demands on land. Labour's headline missions will intensify competition for land, freshwater and the coast. A Living Planet Act would provide a process for aligning and managing demands on land and sea and holding plans together, so the UK government would speak with one voice when it comes to food, climate and nature.

41. https://ahdb.org.uk/dairy/GB-producer-numbers
42. https://www.nfuonline.com/updates-and-information/dairy-producers-braced-for-an-uncertain-future-nfu-survey-reveals/

Although the previous government committed to a Land Use Framework, political disagreements stalled its delivery. Earlier this year, Defra launched a consultation on England's Land Use Framework, intended to coordinate land demands across infrastructure, housing, agriculture, and nature recovery. However, it remains unclear how this framework will align with other critical strategies such as the 10-Year Infrastructure Plan, Green Industrial Strategy, Local Nature Recovery Strategies, Environment Land Management Scheme (ELM) Landscape Recovery projects and Strategic Spatial Energy Plan. Coherence across these frameworks will be vital to delivering the Government's missions while safeguarding the UK's food security and natural environment.

Defra has signalled that the forthcoming framework, due to be published in July, will provide a 'toolkit' for decision-makers, rather than being prescriptive. The wider future of environmental regulation is currently subject to significant scrutiny as sectors including water, planning and farming are likely to see significant change. While it is clear that existing environmental protections have not been sufficient to halt nature's decline, any significant changes to regulation must come with sufficient certainty that they will drive environmental improvement.

Politically these changes must carefully consider how best to manage issues of importance to communities, such as access to local green space. Spatial prioritisation can play an important role in ensuring efficient use of funding and resources to deliver maximised outcomes for people, nature, and climate.

Taking a wholescape [43] approach could provide a framework to underpin regional rollout of the Land Use Frameworks and implementation of the Living Planet Act. Synergies between nature and climate must be harnessed through measures such as nature-based solutions to meet our climate, food, and biodiversity goals. Delivering on these ambitions requires a joined-up land use strategy that balances competing needs in a way that is sustainable, economically viable, and equitable for rural and coastal communities.

In the shorter-term, the following policy proposals seek to enhance farming profitability and resilience in ways that support system-wide benefits, including nature recovery, progress towards net zero, and greater nutrition security. Given the multiple pressures converging on the land use system, it is critical that farmers are seen as foundational partners in policy design.

43. A wholescape is a comprehensive approach that recognises the interconnectedness of natural and human systems across different scales. It supports a systems approach to consider the biological, chemical, and physical connections from land to sea, as well as social and economic factors that impact nature and people. The wholescape strategy is defined by WWF's Triple Challenge, which aims to address climate change, nature loss, and human well-being in an integrated manner.

POLICY 1
LINK ENVIRONMENTAL LAND MANAGEMENT SCHEMES WITH SUPPLY-CHAIN FINANCE TO DE-RISK AND SCALE ACTION FOR CLIMATE AND NATURE

This policy enables businesses to co-invest in sustainable outcomes within agriculture alongside the Environment Land Management (ELM) schemes through insetting, helping de-risk the adoption of these sustainable practices for farmers. The policy could **mobilise £480 million per year for sustainable agriculture,** on top of ELM payments.

This policy seeks to increase profitability, investment access and risk-sharing for farmers delivering environmental outcomes through the Environmental Land Management (ELM) schemes. Ensuring that farm level investment is nested within a wholescape approach would provide a framework to ensure efficient use of resources and measure outcomes. It would surface trade-offs and identify synergies to deliver maximised benefits for people, nature and the climate. Potentially in line with the government's ongoing review of the Sustainable Farming Incentive (SFI), this policy would look to target small-scale farmers and growers.

The broader approach recognises that while schemes like the SFI provide an income stream to encourage adoption of sustainable practices and fund the cost of implementation, these practices often also deliver benefits, such as reduced emissions or improved soil health and resilience, to downstream supply-chain actors. By allowing corporates to co-invest in these outcomes through insetting[44] (rather than offsetting), the policy enables UK farmers to access new, longer-term private revenue streams alongside public support, that co-fund Exchequer spend, multiplying its impact and mutually strengthening the confidence in and durability of the scheme. The aim is to unlock private capital at scale for farm-level climate and nature outcomes and smooth farm cashflow through a "stacked" income model.

44. Insetting refers to interventions within an organisation's value chain that reduce and remove (sequester) Scope 3 greenhouse gas emissions whilst creating positive benefits and improving the resilience of communities, landscapes and ecosystems.

HOW THE POLICY WOULD WORK

Under this policy, Defra would formally enable a mechanism for **Value-Chain Insetting Partnerships (VCIPs),** allowing farmers to blend ELM scheme payments – particularly SFI and Countryside Stewardship – with private insetting finance from food retailers, processors and brands. These corporates would pay farmers for the incremental carbon or biodiversity landscape outcomes associated with practices they're already encouraged to adopt under ELM, provided they go beyond the public baseline (e.g. greater scale, duration or ambition).

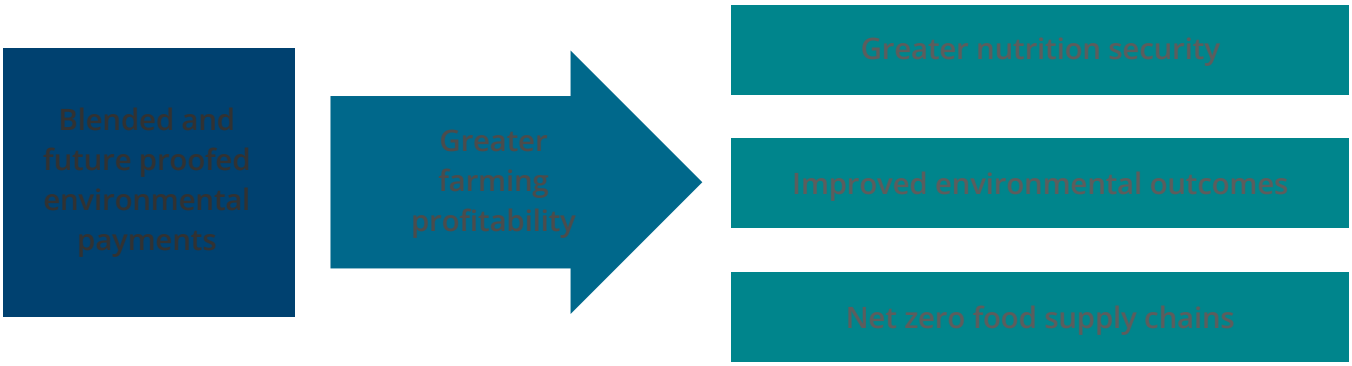

Figure 1:
Benefits of a Blended Sustainable Finance Model for Agriculture

This model is aligned with principles laid out in Defra's ongoing Voluntary Carbon and Nature Markets (VCNM) consultation and could be implemented through Defra's ongoing SFI review, with changes made to guidance rather than legislation. Key features should include:

- **A standardised contract template** to support co-claiming of outcomes developed with Defra, the British Standards Institute, and representatives of farmers' associations including the National Farmers' Union, the Nature Friendly Farming Network, and the Country Land and Business Association.
- **Use of a Land Management Plan / Whole Farm Plan,** aligned with a broader wholescape vision and outcome monitoring, as the single MRV (monitoring, reporting and verification) gateway, reducing administrative burdens.
- **Contracts that reflect the time horizon of private supply-chain investment** (5-10 years), whilst also dealing with the complexity of tenant/contract farming models, complementing policies like SFI's three-year payment structure.
- **Eligibility for farmers acting alone or in landscape-scale groups,** with higher eligibility scores awarded for aggregations of small-scale farmers and where the collective action is contributing to the delivery of tangible wholescape outcomes.

The policy could also align with Defra's broader work on the Land Use Framework and wider spatial planning and mapping initiatives. By taking an integrated wholescape approach, it can be ensured that blended public and private investment is used most effectively to deliver maximised benefits for nature, farmers, and climate. Spatial planning is critical to targeting investment efficiently and de-risking finance, coupled with a strong governance architecture to identify where interventions will deliver greatest impact.

Private finance could be used to reward verified landscape outcomes such as improved biodiversity, reduced flood risk, or enhanced soil health, rather than isolated activities. These outcomes are framed within a Community Landscape Action and Investment Model, which is in development and aims to provide assurance and verification, an assessment framework, and an equitable benefit sharing mechanism. The policy encourages food system actors to de-risk adoption by forward-contracting insetting payments (e.g. through Scope 3 FLAG[45] targets) and investing into the resilience of their sourcing region, giving farmers the confidence to invest in nature-positive practices.

THE IMPACT OF THE POLICY

This policy delivers a **blended income model** for farmers that combines public payments with private revenue. For farmers, this reduces reliance on volatile commodity market prices and boosts the resilience of the sector to extreme weather events, thus improving cashflow. Long-term contracts with the private sector would also significantly increase visibility on revenues for farmers, which is not currently common practice. The increased income predictability would also improve access to credit and enable reinvestment in sustainable systems. It also successfully crowds in private sector finance to a space currently largely reliant on public sector finance. The benefit of the policy is to spread the cost and risk of investment in sustainable agriculture across the supply chain.

Modelling indicates that the policy **could mobilise £480 million per year for sustainable agriculture,** on top of the status quo of current SFI and ELM payments[46]. SFI and ELM would continue to cover income foregone and costs incurred, while the policy will then additionally target increased private and public co-funding for actions such as woodland creation or soil carbon sequestration.

For the private sector, this policy can unlock a range of benefits. Financial returns can be safeguarded through increased supply chain resilience to extreme weather events and external input price shocks, such as spikes in the cost of synthetic fertilisers and pesticides, which are directly linked to volatile fossil fuel prices. For food businesses, evidence that they are derisking their business by increasing supply chain resilience may also lead to a lower cost of capital.

45. Forest, Land and Agriculture (FLAG) sector
46. Independent analysis commissioned by WWF-UK

Finally, the policy can help businesses to make credible Scope 3 insetting claims that support their net zero and nature targets, while investing directly in UK agriculture. Ideally the model would incentivise investment into the resilience of the landscape, supporting interconnectivity and therefore the integrity of the environmental processes on which supply chains rely. Unlike offset markets, this approach keeps value within the food system and strengthens relationships with producers.

This policy can be delivered at no additional cost to government. The assumptions above are based on an an assumption of continuous ELM funding, including sufficient investment in the landscape recovery tier over the 20-year period proposed, and all private contributions then being additional. Public confidence in market integrity is maintained through clear rules and robust, proportionate MRV. Over time, the model will support higher mobilisation ratios and more ambitious farm-level projects, particularly as government progresses work on the VCNM consultation, farmers become more confident navigating the system, and positive trends further attract private financiers in the future.

By enabling a clearer, more stable route to invest in climate and nature outcomes on-farm, this policy supports higher uptake of sustainable practices, can improve resilience and profitability, and begins to shift the burden of transition away from farmers and toward those further along the value chain who also benefit from it.

POLICY 2
INTRODUCE INCENTIVES FOR FARMERS TO ADOPT LOW-CARBON ORGANIC FERTILISERS

This policy introduces **structured incentives for farmers to adopt low carbon fertilisers** to reduce their dependency on volatile market prices of synthetic fertilisers. A farmer fully adopting low-carbon fertiliser could expect to **save £60 per hectare** with a total of 80% GHG savings per kilogram of fertiliser use.

This policy would introduce a structured incentive framework – through Sustainable Farming Incentive (SFI) payments and / or other funding related to enabling a circular economy for the agri-food sector – to encourage farmers to adopt certified low-carbon organic fertilisers such as compost and digestate, significantly reducing dependency on synthetic fertilisers. It could also encourage the use of seaweed biostimulants, which reduce the need for synthetic fertilisers by enabling more effective nutrient uptake and increased drought resilience.

This policy directly responds to the significant environmental footprint of synthetic fertilisers, which contribute extensively to agricultural greenhouse gas emissions (approximately 30% of UK nitrous oxide emissions[47], plus very significant 'scope 3' emissions during manufacture), soil degradation, and pollution of waterbodies. By reducing the financially burdensome dependence of farmers on synthetic fertilisers, whose price is dependent on global gas prices and therefore extremely volatile[48] , this policy can also play a part in increasing the resilience of UK agriculture and helping decouple the price of UK-produced food from global fossil fuel prices.

HOW THE POLICY WOULD WORK

To support a widespread shift away from synthetic fertilisers and promote the use of sustainable alternatives, Defra would first establish a clear certification and standards framework to define what qualifies as a low-carbon organic input. This would include existing specifications such as PAS 100 for compost and PAS 110[49] for digestate – standards that ensure these materials are safe, high-quality, and suitable for agricultural use. Farms adopting these certified inputs, in combination with approved nutrient management plans, would become eligible for direct financial support either through revised SFI payment structures or via other incentives embedded in Defra's Waste Prevention Programme and upcoming UK Circular Economy Strategy. This approach ensures that public funding is directed only to verifiable climate-positive practices.

47. 29.4% of the 2020-22 nitrous oxide emissions were attributed to synthetic fertiliser application and residue (National Atmospheric Emissions Inventory data)
48. WWF-UK analysis showed that the prices of many commonly applied synthetic fertilisers were 280-400% higher in summer 2022 than in 2020. While prices have dropped since, they were all still significantly more expensive in 2024 than in 2020.
49. PAS 100 and PAS 110 are British Publicly Available Specifications (PAS) developed by the British Standards Institution (BSI) to ensure the quality and safety of compost and digestate products derived from biodegradable waste.

The policy would introduce a new SFI action that specifically rewards farms achieving demonstrable reductions in synthetic fertiliser use – especially those currently operating below their agronomic optimum. These rewards would be structured as per-hectare transition payments or tax relief schemes, recognising that shifting to organic inputs can entail short-term yield risk, upfront learning costs, and potentially machinery costs for different application methods. Verification of reduced synthetic fertiliser use would be facilitated through existing record-keeping requirements under farm assurance schemes, such as Red Tractor, which mandate documentation of fertiliser applications, purchases and storage practices.

The successful uptake of low-carbon fertilisers is currently constrained by distorted market signals. For example, government subsidies such as the Green Gas Support Scheme strongly favour anaerobic digestion (AD) for energy generation, unintentionally disincentivising compost production and use, and generating demand for maize grown purely as a feedstock, with its own environmental impacts and opportunity costs. The policy would therefore review and rebalance these subsidy frameworks, reducing the structural bias in favour of AD and redirecting public infrastructure funding toward the expansion and improvement of composting facilities. This would not only increase the volume of compost available but also enhance its quality and reliability for use in agricultural contexts.

Integration with local authority waste management systems is also essential. The policy would support collaboration between Defra, local authorities, and waste contractors to improve the separate collection of household food waste, with a renewed emphasis on routing this waste toward composting, particularly where life cycle assessments suggest better environmental returns than AD. These changes would be embedded in Defra's Waste Prevention Programme and the upcoming UK Circular Economy Strategy, ensuring alignment with existing government objectives around soil health, decarbonisation, and circular resource use.

An emerging low-carbon fertiliser, named in some contexts 'renures', involves generating biogas from sewage or animal manure in a similar manner to AD, but processing the solid fraction as a pelleted fertiliser. This has the advantage of being easy to apply with existing farm machinery and significantly improves the transportability of the recycled nutrients (NPK). Lack of transportability is currently a key barrier to the use of livestock waste (mainly generated in Wales and the West of England) for fertilising arable land (mainly in the East of England and of Scotland). A potential policy, advocated by the Nutrient Management Expert Group [50], would be to require fertilisers used in the UK to be manufactured with a minimum proportion (e.g. 20%) of the nutrients recycled in this way (similar to the E10 petrol standard).

In the short term, policies in this area would be effective in reducing the CO_2 emissions associated with fertiliser manufacture, although nitrous oxide emissions from application and residues may be relatively high, closer to those of synthetic fertilisers, rather than those of manures and slurries.

A further caveat of this approach, to some extent also true of digestate, is that these are associated with intensive agricultural practice, whereas the more regenerative and agroecological practices that need to be expanded in line with meeting the triple challenge, are associated with direct deposition (grazing/animals in arable rotations) and well-managed application of manures and slurry direct to the land. Therefore, a balance needs to be struck, and policies need to avoid unintended consequences, like the distortion for compost described above.

Finally, to enable farmers to confidently transition to organic fertilisers, Defra and its agencies (and organisations such as local Rivers Trusts and Wildlife Trusts) would expand and ensure consistency in farmer-facing advisory and extension services. These would include economic modelling of long-term cost savings and could build from the Nutrient Management Planning option in the Sustainable Farming Incentive, if this is kept in the 2026 revision of the scheme. Case studies and demonstration farms would be used to build trust in the performance of compost and digestate and highlight the co-benefits of improved soil structure, increased resilience, and enhanced carbon sequestration.

THE IMPACT OF THE POLICY

The policy would deliver substantial benefits for farmers who would gain long-term financial savings by reducing their dependency on increasingly expensive and volatile synthetic fertiliser markets. Our analysis shows that a farmer fully adopting low-carbon fertiliser could expect to **save £60 per hectare** with a total of 80% GHG savings per kilogram of fertiliser use [51]. This is also based on 0.3 $kgCo_2e$ estimate for the low carbon fertiliser.

50. Independent experts convened by Defra; report at: https://www.gov.uk/government/publications/nutrient-management-expert-group-nmeg-report
51. Independent analysis commissioned by WWF-UK

Good management practices in organic manure applications would need to be followed to ensure that this happens, however, and the variable and uncertain nutrient content of organic fertilisers makes it more difficult to determine appropriate application rates without appropriate sample analysis. Given the policy is designed to reallocate fiscal costs already embedded in Defra's Departmental Expenditure Limit, **no additional costs to government would be incurred**. The policy would also provide greater resilience to external economic shocks.

In addition to these savings, farmers would also have the opportunity to generate direct income gains through structured financial incentives and by accessing new revenue streams from organic waste valorisation and secondary compost markets. Over time, improved soil health would translate into higher farm productivity, greater crop resilience, and further reductions in input costs, contributing to the long-term sustainability of farm businesses.

Assuming the non-waste fraction of feedstocks are low impact, and good practice in use and handling of the low-carbon alternatives, this policy would also deliver benefits for climate and the environment. By encouraging the substitution of synthetic fertilisers with certified low-carbon organic alternatives, it would lead to a significant reduction in greenhouse gas emissions from agriculture (including its scope 3 footprint)[52].

The anthropogenic disruption of the nitrogen cycle would also start to be remedied by reducing the rate at which we convert inert N2 gas to reactive forms (in fertiliser manufacture), which would represent a systems-level benefit for the environmental impacts of nitrogen pollution. On average, urea emits around 4-6kg of CO_2e/kg N[53], ammonium nitrate emits even more (estimates of up to 9kg of CO_2e/kg N[54]), while low-carbon alternatives are around 0.3kg of CO_2e/kg N[55].

Analysis indicated that **if a target of 1 million tonnes of low-carbon fertiliser were met, this could result in an average carbon emissions saving of 20% from fertiliser use per year at a national level**[56]. This assumes a 25% uptake and a baseline of 4.2million tonnes of non-organic fertiliser used per year[57]. A lower uptake rate of 10% (0.5million tonnes) would achieve an 8% reduction in carbon[58].

Furthermore, the increased application of organic materials (particularly through composting and the use of seaweed biostimulants) would enhance soil carbon storage and boost biodiversity by improving soil organic matter content, strengthening ecosystem resilience, and aligning with the upcoming Circular Economy Strategy and the revised Environment Improvement Plan.

52. Whilst this would result in a reduction in GHG emisions from agriculture, for the purposes of GHG accounting, this would be included in industrial emissions.
53. https://www.theccc.org.uk/publication/land-use-policies-for-a-net-zero-uk/
54. https://ec.europa.eu/research/participants/documents/downloadPublic?appId=PPGMS&documentIds=080166e5b330ee48&
55. https://www.wrap.ngo/resources/report/digestate-and-compost-agriculture-dc-agri-project-reports
56. Independent analysis commissioned by WWF-UK
57. Independent analysis commissioned by WWF-UK
58. Independent analysis commissioned by WWF-UK

POLICY 3
EXPAND PERMITTED DEVELOPMENT RIGHTS TO REDUCE COST AND COMPLEXITY OF ADOPTING SUSTAINABLE PRACTICES

This policy **expands permitted development rights** to reduce the cost and complexity for farmers seeking to adopt sustainable practices on their land. **Farmers could save £149 per 0.1 hectare in application fees - a 50% saving** - and 2-5 weeks planning approval time.

This policy aims to reduce planning burdens and upfront costs for farmers undertaking nature-based solutions and farm efficiency improvements, including actions taken under ELM schemes such as the Sustainable Farming Incentive (SFI). While the planning permission system provides important backstops, particularly core protections such as the Habitats Regulations, obligations for some nature-friendly activities could be streamlined. Farmers often face delays, consultancy fees and inconsistent planning decisions when trying to implement interventions such as ponds, small reservoirs, or wetlands, which can help to deliver soil and water improvements.

Biodiversity Net Gain (BNG) standards, while vital in general, can risk creating duplication and disincentives when applied to certain sets of nature-positive activities. By reforming permitted development rights to remove unnecessary barriers, this policy would enable more farmers to adopt climate and nature-friendly practices without being penalised by the planning system.

HOW THE POLICY WOULD WORK

The policy would revive and build on the previous Government's 2023 consultation on additional flexibilities to support the agricultural sector under the Town and Country Planning (General Permitted Development) Order (GPDO), which included a call for evidence on nature-based solutions and farm diversification. This evidence base would be taken forward into a targeted consultation under the current Government, focusing on expanding PD rights or creating new prior-approval categories for on-farm interventions that deliver clear environmental benefits.

Examples of eligible activities could include:

- **Farm ponds, wetlands and small reservoirs**
- **Slurry stores and covered manure storage**
  (where used to mitigate current risks and impacts, not to expand herd size).
- **On-site composting areas**
- **Farm efficiency infrastructure (e.g. rainwater harvesting)**
- **Rooftop solar PV installations on farm buildings**

To maintain public trust and environmental safeguards, prior-approval routes could be introduced for actions that meet pre-agreed design and location criteria, with standard conditions attached (e.g. size limits, setback distances, biodiversity protection, consideration of Local Nature Recovery Strategy priorities). A national code of good practice could be developed with input from Defra and relevant stakeholders.

For Biodiversity Net Gain (BNG) requirements, the policy would seek to clarify that nature-based interventions supported through ELM schemes, such as the SFI and Countryside Stewardship (CS), should not be subject to duplicative BNG obligations. Overall, the highest environmental standards should be upheld. This approach recognises that these interventions inherently contribute to biodiversity enhancement, where designed and delivered appropriately, and additional BNG requirements may create unnecessary barriers for farmers engaging in sustainable practices.

While the expansion of permitted development rights can be achieved through secondary legislation, the Planning and Infrastructure Bill (PIB) introduces broader reforms that could support the implementation of this policy. Notably, the PIB proposes a national scheme of delegation, which would standardise the decision-making process by specifying which planning applications are determined by planning officers versus elected committees. This measure would reduce instances where applications for environmentally beneficial projects are delayed or rejected by committees, despite professional recommendations. Additionally, the PIB includes provisions for mandatory training for planning committee members, ensuring informed decision-making and potentially reducing arbitrary refusals of projects that align with environmental objectives.

THE IMPACT OF THE POLICY

This reform would significantly reduce the cost and complexity for farmers seeking to adopt sustainable practices on their land. Planning applications can currently take over two months and cost thousands in professional fees, with some applicants facing delays or rejections that ultimately prevent delivery of projects tied to SFI or CS funding. Removing these barriers would accelerate uptake of nature-based solutions such as ponds and wetlands that improve flood resilience, water quality and soil health, directly contributing to the goals of SFI and CS schemes.

Analysis [59] shows that farmers switching from the regular planning system to a PDR could expect to typically **£149 per 0.1 hectare** in application fees - a **50% saving.** On average, PDRs could save between 2 and 5 weeks of planning approval time. For example, a farmer looking to build a 0.2ha pond under this policy could save an equivalent of £298. Assuming an uptake of 50%, this would be a total cost **saving of £30 million for the sector.**

The policy would also increase participation in the ELM scheme by lowering upfront transaction costs and giving farmers greater confidence to proceed with infrastructure that supports long-term environmental outcomes. Reducing the need for full planning applications would also ease burdens on local planning authorities, supporting wider government efforts to modernise the planning system.

Overall, this policy promotes a more integrated approach to land use – one that enables climate, nature and productivity goals to be delivered together – by backing farmers with the tools and flexibility they need to implement change on their land with a reduction in the cost of doing so.

59. Independent analysis commissioned by WWF-UK

CONCLUSION

This report has demonstrated that it is possible to accelerate delivery for climate and nature while unlocking direct benefits for households in this Parliament. Taking a people-centred approach to the transition will be crucial to maintaining the public mandate for climate action and delivering on net zero, particularly in the current socio-economic context.

To support this case, we have set out indicative policy proposals across three key sectors for the transition: power, home heating, and agriculture and land use. These range from proposals on gradually rebalancing policy costs between electricity and gas to offering an energy saving stamp duty to homebuyers and introducing structured incentives for farmers to adopt low-carbon fertilisers, to name but a few.

Collectively, these policies would unlock a range of benefits for households, including alleviating cost-of-living pressures through reduced energy bills, reducing the cost of clean heating and warm homes, and supporting farmers to increase their resilience and sustainability. The Government has a significant opportunity to deliver these concrete benefits to citizens within this Parliamentary cycle, reinforcing its reputation as a Government which takes action for a cleaner, greener, and more prosperous UK.

For a future where people and nature thrive | wwf.org.uk