

**A GREEN BRITAIN
FOUNDATION REPORT**



THE ROAD TO ENERGY INDEPENDENCE

**Energy and Planning Policy recommendations
to accelerate us to a Greener Britain**

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SEPTEMBER 2024

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FOREWORD

The Road to Energy Independence

For me, this election was always the 'Battle for a Green Britain' - a battle of ideas, ideology perhaps - between the old way of doing things and the new, and for the opportunity to kickstart Britain's green economy. With that battle won, it's about getting on with it. This document sets out a series of policy changes that will enable Britain to achieve Energy Independence - which itself sits at the heart of the green economy we need to build.

Because it's still relatively new and news to many people - it's worth saying that renewable energy is first and foremost an economic policy, not an environmental one. It offers enormous economic benefits that will endure for all time - because renewable energy is a forever fuel, making the jobs and GDP growth that come with it - also forever. The economic differences between a Britain powered by fossils and one powered by renewables are stark.

It's not just that renewable energy will give us true energy security and permanently low energy bills. It's about sustainable economic growth which itself is the key to solving the funding needs our country faces. The green economy is the biggest economic opportunity since the Industrial Revolution began, led by Britain.

The advantages aren't theoretical, they're rooted in data. Our research shows that we get twice the jobs and GDP growth from investing in renewable energy that we get from investing the same sum in fossil fuels. We can also see the vast economic loss our dependence on fossil fuels causes - £78 billion of emergency subsidies in the last 2 years, because of the fossil fuel energy crisis, and £100 billion spent this year bringing fossil fuels here just to burn them.

The green economy is the key to the next election, in five years time. It's how we get the jobs, economic growth and cost of living improvements we need. It's how we get permanently low energy bills, and true energy security, as well as take a big step towards Net Zero.



We have an abundance of green energy available to us, Britain has long been the Saudi Arabia of wind energy - we can become a clean energy superpower and lead this new industrial revolution. We can be powered entirely by our own wind, sun, sea and grass.

We have the technology, the economics are on our side, as are the people. We've just needed a government that gets it - and now we have that.

Having led the world's first green energy company since the beginning of the renewable energy industry three decades ago, I know what needs to be done. I know how the energy market works, I understand the barriers to renewable energy and the economics, as well as the emerging opportunities. I want to see these harnessed for the benefit of the whole country.

From reforming the planning system for onshore wind and sun projects to using grass to make a new kind of gas - green gas, to how we can reduce energy poverty from day one through progressive energy bill pricing, to energy market reform that could knock £10 billion a year from energy bills.

This report sets out policies our new Labour government could put in place, including:

Energy bills — progressive energy bill pricing

Onshore wind — unleash the UK's onshore wind potential

GB Energy — Energy Independent Homes

A stake in new renewable energy projects - a 'Golden Green Share' for the GBE

Green gas — a Great British Green Gas Programme

Planning — renewable energy projects

Wholesale energy markets — 'Breaking the link'

Wholesale gas — cap the price of North Sea gas

Distribution Network Operators — grid investment requirements

Privatised utilities — no dividends before required investment

This is a once in a generation opportunity to fix our economy, secure Energy Independence and build a Green Britain.

Dale Vince OBE
Founder of Ecotricity

Section 1

POLICY: ENERGY BILLS

Progressive energy bill pricing

The new Labour government should restructure energy tariffs to create a tax-free zone for those with the lowest levels of consumption and income. It should do this by directly linking green levies and VAT to consumption.

It would be more progressive while maintaining the same level of tax revenue, alleviating fuel poverty and supporting the UK's Net Zero objectives by incentivising lower levels of consumption.

Role in achieving Energy Independence

In order to reach Energy Independence, we need to balance our clean energy supply with demand. By incentivising lower energy consumption in a progressive and fair way, it will be easier, faster and cheaper to become energy independent.

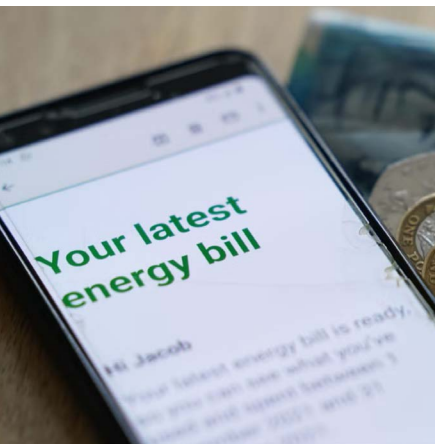
Policy considerations

Principles

Access to clean affordable energy for every citizen is an essential part of a modern society.

To ensure a progressive approach to energy bills, those with the lowest levels of income and consumption should be exempted from green levies and VAT.

Energy bills should be structured so that the overall income from green levies and VAT remain the same.



Section 1

Recommendations

Budget

- o Include the new approach to energy bill pricing in the first budget of the new government, as well as subsequent fiscal events as needed.

Ofgem

- o Instruct Ofgem to work up proposals on the new tariff pricing, including plans to implement the policy as quickly as possible.

Public information campaign

- o Alongside the launch of the new tariff, launch a public information campaign explaining how much this will save and how many consumers will be helped.
- o Ensure this also includes information on energy saving measures to further reduce consumption.

Further detail on this proposal, including example tariffs and banding, can be found in the Appendix A.

Section 2

POLICY: ONSHORE WIND

Unleash the UK's onshore wind potential

Following the decision to lift the ban on onshore wind, the Labour government should do all that it can to accelerate the deployment of new onshore wind capacity and undo the damage of the previous government.

Role in achieving Energy Independence

Onshore wind is a proven and cost-effective clean energy technology that doesn't need public money. If we can harness the UK's onshore wind potential, we can reduce our reliance on foreign fossil fuels at a much quicker pace.

Policy considerations

Principles

Planning permission for onshore wind should be simplified and brought back into line with other renewable energy projects.

Developing the UK's onshore wind capacity should be put on a par with targets for offshore wind and solar.

Project developers should have long-term certainty about the status of onshore wind.

There should be a presumption in favour for the planning approval of new onshore wind projects.



Section 2

Recommendations

Business certainty

- o The Labour government was right to rapidly issue a statement lifting the ban on onshore wind and to bring this into force immediately, which provides business certainty.
- o Labour should continue to do all it can to provide business certainty, including by chairing an event with energy companies and onshore wind developers to understand what more can be done to unleash the UK's onshore wind potential.

Legislative change

- o The Labour Government was right to issue a policy statement immediately lifting the ban on onshore wind by removing footnotes 57 & 58 from the National Planning Policy Framework (NPPF).
- o In addition to lifting the ban on onshore wind, Labour should bring approval for large onshore wind developments (over 50MW) back into the Nationally Significant Infrastructure Project system, rather than subject to local authorities, which would be the same as other renewable energy projects. We welcome the news that the Labour government is consulting on this point.

Blocked projects

- o Carry out an immediate audit of previously blocked projects to assess the pipeline of future UK onshore wind projects.

Long-term

- o Labour has said its ambition is to double onshore wind energy by 2030. It should use the newly created Onshore Wind Industry Taskforce to develop a roadmap for the rapid deployment of onshore wind to reach this target.
- o See the planning policy section for further long-term changes to support onshore wind development in the UK.

Section 3

POLICY: GB ENERGY

Energy Independent Homes programme

Labour's plan to set up GB Energy a publicly owned clean energy company, has enormous potential. With restricted capital and limited time to meet their Clean Energy Mission, the Labour government will need to implement creative policies quickly.

As such, GB Energy should be used to deliver a national programme to create Energy Independent Homes across the UK. This would be delivered through a combination of rooftop solar, battery installations and energy efficiency measures in households.

GB Energy would be the funder and owner of the equipment, with the economic benefits shared between tenants/households through lower bills and the state through GB Energy.

This would enable a new frontier for GB Energy that goes beyond conventional investing alongside the private sector in large-scale renewable projects. It could also be rolled out alongside Local Authorities to enable more to be done.

A national programme like this would give millions of people a stake in the green economy through direct benefits, which would also be very powerful politically.

Role in achieving Energy Independence

GB Energy is fundamental to achieving Energy Independence in a way that provides the greatest long-term value for the British people.

This programme would reduce energy consumption, provide on-site energy and create a nationally significant battery resource to support moving the grid to 100% green energy.



Section 3

There are over 14 million homes in the UK that could accommodate rooftop solar, which could deliver 13% of the electricity needs of the entire country. Given we have roughly 50% green energy on the grid and need to build 50%, this would translate to approx. 25% of what we need to build by 2030.

This policy would essentially create a large-scale, distributed generator and balancing facility. It would reduce demand, produce power and enable flexibility.

Without creative and rapid solutions such as this, the issue of grid capacity will mean Labour will not meet – or even get close to – their 2030 Clean Power Mission. Rooftop solar and batteries circumvent this issue while producing energy at source.

Policy considerations

Principles

All suitable UK homes should be supported to become Energy Independent in a way that saves households money on their energy bills while generating returns for GB Energy, which could then be reinvested in Labour's Green Prosperity Plan.

At its heart this policy should be about rapidly scaling up clean energy and lowering household bills to allow Labour to meet its manifesto commitments.

The policy should be carefully costed and designed to ensure GB Energy makes a financial return for the British people, including a genuine assessment of market risk.

This could be trialled through social housing. There are millions of properties, housing some of the poorest among us - for whom such a program could lift them out of energy poverty and more.

Section 3

Recommendations

Rooftop solar

- o Labour should develop a scheme whereby GB Energy supports households to install rooftop solar. GB Energy covers the installation costs and ongoing maintenance.
- o GB Energy would own the equipment and the economic benefits would be shared between the tenants/households through lower bills and the state through GBE. This model has been proven to work in the private sector.
- o Rooftop solar can be built without grid delays and there is a readily available workforce with the necessary skills.
- o Generating power where it is used is also more efficient than delivering it through the grid where there are losses from transmission and distribution. We estimate this could save 4-5% in efficiency savings.

Battery storage

- o Alongside rooftop solar, GB Energy could also ensure each household is equipped with battery storage to save excess electricity. This would help better manage grid capacity and periods of peak demand.
- o This form of distributed storage would create a vast network of additional energy storage capacity, reducing the burden on the national grid.
- o Using home batteries in this way would allow the UK to meet peak demand without needing to use gas-fired power stations. Installing 10kWh batteries in 3 million homes would allow the UK to handle typical peak demand without the need for gas. Batteries in 6 million homes would allow the UK to meet the maximum peak demand.

Energy efficiency

- o Energy efficiency measures deliver the biggest return per £ spent of any other measure.
- o Ensuring all homes are retrofitted with the necessary insulation will be crucial to reducing demand, lowering bills and making energy independence easier.
- o GB Energy's Energy Independent Homes programme should be run in close conjunction with Labour's Warm Homes Plan.
- o Labour should also look at reintroducing the Code for Sustainable Homes to ensure all new homes must be built to a zero-carbon standard. This was originally introduced by the last Labour government but was scrapped by the Conservative Party adding as much as £700 to the energy bills of newbuild homes.

Section 4

POLICY: A STAKE IN NEW RENEWABLE ENERGY

a 'Golden Green Share' for the Government

Labour should introduce the principle of a 'Golden Green Share' in all new major private sector energy projects.

In order for private sector energy generation projects to receive approval there would be a legal requirement to provide the government with a percentage of their revenue through a 'Golden Green Share'. This would be a revenue share, not profit or dividend share, to ensure simplicity and avoid administrative or accounting complexity, as well as ensuring companies are unable to game the system.

Role in achieving Energy Independence

Provide additional capital for the government to support the transition to net zero and secure the economic opportunities it brings.

The transition to net zero is the least expensive course of action vs inaction. However, it still requires capital to achieve, therefore government needs to ensure capital is raised fairly, including via those who stand to benefit most financially from the transition.

Policy considerations

Principles

Britain's renewable energy is a shared national resource, so the British people should share in the economic benefit it brings.

This should be done in the most fair and simple way to ensure trust, transparency and efficiency.



Section 4

Recommendations

Provide business certainty

- o Communicate the plan as early as possible so that private sector organisations can factor this into their business cases.

Competitiveness

- o Structure the policy with special consideration for the competitiveness of new projects versus existing projects

Green Prosperity Plan and Clean Energy Mission

- o Revenues raised could be put into Labour's Green Prosperity Plan and Clean Energy Mission, including the further capitalisation of GB Energy.

GB Energy

- o Part of the revenue raised could further support the capitalisation and mission of GB Energy.

POLICY: GREEN GAS

Launch a Great British Green Gas Programme

- The Labour government should reassess the current plans for a wholesale heat pump rollout to avoid a ULEZ-style political backlash across the nation.
- They should establish the role a national green gas programme can play in decarbonising our heating in a more practical, realistic and cost-effective way.

Role in achieving Energy Independence

- Green gas allows us to decarbonise how we heat our homes and reduce our reliance on imported fossil fuel gas to meet demand. It does so more cost effectively and without the need to retrofit and scrap current home heating systems.

Policy considerations

Principles

- o Reaching clean gas independence by creating a fossil fuel free gas alternative that avoids a ULEZ-style political backlash.

Recommendations

UK housing stock

- o Commission a study into the UK's housing stock to get an accurate and realistic picture of exactly how many homes are suitable for heat pumps. Current government analysis does not establish cost and suitability sufficiently to inform the heat pump rollout.

Planning reform

- o Simplify the planning application process for green gasmills.
- o In line with Labour's commitment to overhaul the planning regime, update the renewable energy National Policy Statement to make green gasmill development easier by:



Section 5

- Ensuring that green gasmills only require a 'prior notification' rather than a full planning application when they meet the following criteria:
 - up to 6MW thermal in size;
 - the feedstock is 100% grass/herbal leys sourced within 10km of the facility;
 - no new road access is required;
 - the facility is not within 300m of any third-party property, within a National Park or on protected land such as a nature conservation area, or within the curtilage of a listed building.

Financial support scheme

- o Task DESNZ with assessing the most effective way to provide long-term pricing certainty to green gas project developers, including using the Contracts for Difference (CfDs) mechanism.

GB Energy

- o In line with its mandate to support emerging technologies, GB Energy should be used to support the rollout of the Great British Green Gas programme.

Context

- The current government strategy relies on replacing gas boilers with heat pumps. While a heat pump rollout is an important part of the solution, there are serious issues with solely relying on this approach.
- Heat pumps won't work in 20% of our homes without significant home upgrades, and for another 20% they won't work full stop.
- There are very high costs associated with both upgrading homes to make them suitable for heat pumps and for the installation of the heat pump itself. These costs fall on consumers and can lead to a political backlash if they're forced to upgrade their gas boilers in favour of heat pumps.
- This would also significantly increase electricity demand, which is more expensive than gas.
- Mandating heat pumps as an alternative to gas boilers is becoming increasingly unpopular, and risks a political backlash seen in Scotland and other European countries. There is a high-risk current heat pump plans will lead to a ULEZ style backlash across the entire country. This risk is best alleviated by green gas.
- We don't need to throw away our national gas grid to achieve energy independence and reach Net Zero. We simply need to change the gas we put into it.
- Green gasmills are a way to make sustainable, low carbon gas that can be used by the existing gas grid and the boilers we already have in our homes and businesses. Using anaerobic digestion, gasmills are fed with grass from herbal leys that produces biomethane, which is captured and fed into the grid as green gas.
- Ecotricity have a live and functioning case study in Reading which pumps enough green gas into the grid to power over 4000 homes a year, saving in excess of 4000 tonnes of carbon dioxide in the process.
- The UK has the potential to grow enough green gas to meet current domestic consumption and achieve energy independence, without taking any land out of food production. In the process we could create some 160,000 jobs and contribute £15 billion to rural economies.
- By 2050 we could be harvesting nearly twice as much gas from grassland as we currently extract from the North Sea. This could realise a 99% reduction in emissions.

POLICY: PLANNING

Renewable energy projects

In line with Labour's commitment to overhaul the planning system, the planning regime should be modernised so that it's easier to build new renewable energy projects.

Role in achieving Energy Independence

In order to achieve Labour's Clean Energy Mission and Energy Independence, barriers to planning have to be rapidly removed. The current system is archaic, complex and often intentionally designed - by the Conservative government - to stymie clean energy. Setting out a new approach to planning will significantly speed up the development of renewable energy projects.

Policy considerations

Principles

To 'Get Britain Building Again' and to do so quickly, supporting the clean energy infrastructure that will underpin the green economy.

Put in place a planning regime that is fit for the times, removing unnecessary barriers to new renewable energy projects receiving approval, while maintaining necessary safeguards.

There should be a presumption in favour of renewable energy projects wherever sensible.

Recommendations

Local authorities

- o **Process, funding, training & targets** - Local authorities should be better equipped to assess and process renewable energy planning applications, including better funding, resources and training, with clear targets for project approval. To take just one example, any scheme up to 50MW which the local authority fails to take a decision on within the statutory timeframe should be approved automatically.



Section 6

Environmental Impact Assessments

- o Remove Environmental Impact assessment criteria for onshore wind schemes (below 10MW) and solar schemes (below 50MW).

Prior Notification

- o Move to a prior notification process for onshore wind schemes (below 2MW) and solar schemes (below 5MW).

Policy framework

- o The threshold at which solar projects are classed as Nationally Significant Infrastructure Projects (NSIP) should be lifted from 50MW to 250MW.
- o The National Planning Policy Framework should be amended to support solar and wind projects below 25MW within National Parks, Green Belts and AONBs.
- o Policy support for solar on agricultural land should be revised to provide support for solar on Grade 3a land as well as 3b, 4 and 5.

Wind turbines and radar interference

- o The Ministry of Defence should be tasked with delivering a solution to radar interference and wind turbines within 36 months.

Household solar and wind

- o Make it easier for households to install wind and solar by amending the General Permitted Development Order to allow:
 - Solar on rooftops fronting the highway within Conservation Areas;
 - Rooftop solar on buildings within the curtilage of a listed building;
 - Solar on rooftops of Grade II listed buildings (not Grade 1 or II*);
 - For ground mounted solar, increase the square metreage of permitted solar from 9sqm to 50sqm (as long as not covering more than 50% of garden);
 - Standalone wind turbines within the curtilage of houses, subject to set criteria.

Linked proposals

- o See policies on green gas and reversing the onshore wind ban for further planning recommendations.

POLICY: WHOLESALE GAS

Cap the price of North Sea gas

- In the same way that there's a price cap on retail energy, Labour should put a price cap on the wholesale energy price of North Sea gas.
- The UK currently has a price cap on retail energy sales to homes, but not on North Sea gas. This creates an unbalanced and unfair market which should be rectified.
- The North Sea gas price should be capped at cost of production plus 2% as a profit margin. This would replicate the same 2% profit margin retail energy companies can make.

Role in achieving Energy Independence

- Securing a fair price for gas is a key part of achieving Energy Independence.
- During the energy crisis the government spent £40 billion on energy support schemes to keep energy prices down, while North Sea gas producers profited and energy retail companies collapsed.
- This put a major strain on both the economy and government finances, hampering the government's ability to invest in the transition to Energy Independence.

Policy considerations

Principles

- Secure a fair price for North Sea gas to reduce volatility and price spikes for households and businesses.
- Stop North Sea gas producers from profiting excessively at the expense of households and businesses.
- Simplify the tax regime by removing the need for a windfall tax and provide business certainty to gas producers. Currently the tax regime on North Sea gas is extremely complex.



Section 7

Recommendations

Energy Market Reform Taskforce

- o Create an Energy Market Reform Taskforce to look at how energy markets can be reformed to protect consumers and improve the UK's energy security.
- o This taskforce should look at how to cap the price of North Sea gas, how to 'break the link' between wholesale gas and electricity pricing, and the oversight of DNOs/GDNs.

North Sea gas pricing

- o Look at how the price of North Sea gas can be pegged to the cost of production and controls on profit margins put in place.

Section 8

POLICY: WHOLESALE ENERGY MARKETS

'Breaking the link'

Labour should start the process of reforming wholesale energy markets by 'breaking the link' between wholesale gas prices and electricity to reduce consumer costs/energy bills and stop foreign fossil fuels dictating the price we pay for our own energy.

Role in achieving Energy Independence

Remove our dependence on the wholesale market for gas, which can be manipulated by dictators, petrostates and cartels like OPEC.

Benefit from the cheap and abundant clean energy we can generate here in the UK.

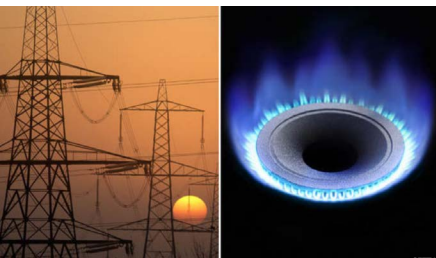
Policy considerations

Principles

Move away from a marginal cost pricing system to a Levelised Cost of Energy (LCOE) model where the price paid is the marginal cost for each type of fuel.

Recommendations

Ecotricity are working up a next-step proposal to share in October 2024.



Section 9

POLICY: DISTRIBUTION NETWORKS

Cap profits and protect vulnerable households

The government should address the excess profits made by Distribution Network Operators (DNOs) and Gas Distribution Networks (GDNs) who control the distribution and transmission of electricity and gas to end consumers.

They should do this by limiting the charges that DNOs and GDNs can place on bills and capping their profits at 1.5%.

Limiting the profit margins of these companies from their current levels to 1.5% would have saved over £5 billion (£5,274,107,220) in the past year, which would have been a £185.71 saving for every single household in the UK.

Role in achieving Energy Independence

The UK's grid infrastructure is critical to securing Energy Independence, especially with the increased electrification necessary to reach Net Zero.

Right now, the costs of managing and upgrading this infrastructure is mostly met by the public rather than the majority foreign-owned businesses that profit.

This burden should be shifted away from the public to support households as we reach Energy Independence.

Policy considerations

Principles

Reduce consumer bills and support vulnerable households by limiting the charges that DNOs and GDNs can place on bills and doing more to address the excess profits that these companies are able to make.

This is not about eliminating the business case for investment. DNOs/GDNs should remain profitable. It's about ensuring a fair balance between the investment needed to ensure they're fit for purpose, the amount they can charge consumers, and how much profit they can make.

Section 9

Ensure that these companies contribute their fair share to the costs necessary for grid upgrades, including by limiting the amount they can pay out in dividends before these costs are met.

Recommendations

Instruct Ofgem to review the price control framework it uses to govern DNOs and GDNs to put in place a 1.5% profit cap. Further details on this proposal can be found in Appendix B.

In the longer term, conduct a review of Ofgem's regulatory remit over DNOs and GDNs to ensure it better balances creating incentives for private sector investment with protecting users from higher bills.

Context

- DNOs and GDNs are natural monopolies that own the infrastructure they operate and charge users for the distribution and transmission of electricity and gas.
- The Network costs that they charge account for over 14% of energy bills, but these companies are allowed to make record profits and pay out dividends to their majority foreign shareholders during a cost of living crisis.
- Independent analysis shows that DNOs and GDNs enjoy some of the highest profit margins of any industry in the UK, with profit margins of 37.7% and 40.4% respectively in 2024.
- Although these companies argue that operating profit margin is the wrong way to assess their profitability, they still managed to pay out large dividends from 2017 to 2021, with dividend payments totalling £3.6 billion for DNOs and £2.4 billion for GDNs.

Section 10

POLICY: PRIVATISED UTILITIES

No dividends before required investment

From the National Grid to our water system, many of the UK's public utilities are in private ownership.

Rather than acting as stewards of this vital infrastructure, too often these businesses have been loaded up with debt and paid out record dividends without investing in the upgrades they need, which leaves the taxpayer to foot the bill.

The regulation of these utilities should be updated so that they are unable to pay out dividends, or equivalent, to their investors if they haven't invested sufficiently in infrastructure upgrades.

Role in achieving Energy Independence

Privatised utilities make up a substantial part of the critical infrastructure that supports the transition to Net Zero. A failure to properly invest in upgrading this infrastructure will undermine our ability to achieve Energy Independence.

Ensuring the owners of these utilities invest in the necessary upgrades will support Energy Independence while limiting the costs to the taxpayer.

Policy considerations

Principles

Privatised utility companies should not be allowed to pay out dividends to shareholders until they've invested a sufficient amount in upgrading and maintaining the infrastructure they manage.

Section 10

This is not about eliminating the business case for investing in these companies. They should remain profitable. It's about ensuring a fair balance between the profits they can earn, and the investment needed to ensure they're fit for purpose.

This could apply to all privatised utilities that provide vital infrastructure services to the UK, including the National Grid, DNOs, GDNs, water companies etc.

Recommendations

Task the relevant regulators with modelling the required investment for each privatised utility company that is needed prior to paying out dividends.

HM Treasury submission – Progressive energy bill pricing

The new Labour Government has set out its ambition to lower energy bills and address the cost-of-living crisis. Separately, Ofgem has been consulting on how to address ‘affordability and debt in the domestic retail market’, aiming to explore how pressure could be alleviated on the least well off. This document sets out a simple, effective and progressive policy change that could meet these objectives, including impact modelling examples.

In line with Labour’s desire to hit the ground running and bring about meaningful change quickly, this policy could be included as a part of their first budget later this year.

Policy summary

The government could restructure energy tariffs to create a tax-free zone for those with the lowest levels of consumption and income. It should do this by directly linking green levies and VAT to consumption. This would be more progressive while maintaining the same level of tax revenue and alleviating fuel poverty.

Furthermore, this policy would also support Net Zero and Labour’s ambition to become energy independent by incentivising lower energy consumption in a progressive and fair way. In order to reach Energy Independence, we need to balance our clean energy supply with demand.

Context

Households across the UK have been under sustained pressure from energy bills. Even as energy prices begin to fall, energy bills remain a significant issue for low-income families. This is something that can be seen across the market and something that Ecotricity has seen with its own customers.

The energy price crisis has exacerbated an existing issue with the domestic retail market, which disproportionately impacts those on the lowest incomes. As it stands, the costs of both green levies and VAT fall equally on all consumers regardless of consumption or income level. Green levies are applied at a flat rate per kWh of consumption, and VAT is applied at a flat rate across energy bills.

While there are some outliers, there is a strong correlation between consumption and income, with higher-income households generally consuming higher amounts of energy. This is supported by the research that Ofgem references in their recent call for input. The Office for National Statistics has also shown that spending on gas and electricity is higher as a proportion of disposable income for those in the poorest 10% of households, which further demonstrates that our proposal will support low-income families and alleviate energy debt.

Ecotricity proposes that both green taxes and VAT be applied to energy bills in a progressive way, rather than the current system which is regressive.

Ecotricity's proposal

Our proposal is to remove all green levies and VAT from those with the lowest levels of energy consumption and redistribute the costs to those with higher levels of consumption. This would shift the burden away from low-income households to high-income households.

The model proposed by Ecotricity uses multiple bands to determine the rate of green levies and VAT that consumers pay based on their energy consumption. The more energy households consume, the more they pay.

Under this system, annual energy bills for those on the lowest incomes would be lower than under Ofgem's price cap, with the difference spread across the bills of those that consume the most. This would equate to a modest and affordable increase for those on higher incomes that can most afford it, while significantly reducing the burden for those on lower incomes and helping to alleviate energy poverty.

Depending on the specific banding and application (see below for example banding), this new progressive energy tariff could see up to 80% of households benefit from a reduction in bills.

Supporting the Net Zero transition

Green levies on energy bills are about tackling carbon emissions and supporting the transition towards Net Zero. By strengthening the link between consumption and price, this change would also incentivise energy saving and lower levels of consumption, which would support an overall reduction in the UK's energy demand.

More generally, green levies are often politicised for increasing energy bills, with the argument being that they disproportionately impact lower-income households. This criticism can become particularly prominent during energy price spikes. Adopting this proposal would help to alleviate this criticism without losing any of the benefits from the revenue that green levies generate.

Proposal specifics and example banding

Our proposal creates a series of bands based on annual energy consumption. Green levies and VAT are then applied at different rates depending on the band that the household falls within. Those with the lowest levels of consumption are excluded from paying green levies and VAT altogether.

Green levies - rather than applying a flat per kWh cost of the green levies to all consumers equally, we propose applying it at progressively higher rates as consumption increases. Households that fall within the lower bands of consumption would be exempted from paying anything towards green levies.

The exact spread of the green levy costs across consumption bands can be adjusted depending on how many households you want to fall within each category. This can be done in such a way that the net income from green levies is the same.

VAT – rather than applying VAT equally to all households at 5%, we also propose applying it at progressively higher rates as consumption increases. VAT would be removed from households with the lowest levels of consumption.

Again, the exact gradient of increase can be structured in different ways so that the overall tax take from VAT on energy bills stays the same.

Example banding - The below tables set out some example scenarios for how the new bands could be structured, and what this would mean in real-terms savings for the lowest-income households. These are just illustrative, and there are various ways they could be created depending on how you want to apply the costs to different consumption levels.

Example 1:

Band	Household usage (kWh)	Percentage of MPANs	Total volume (GWh)	Total Green Levy & VAT contribution (£m)	Avg. annual Levy & VAT Payment per household	Impact on annual bill	Annual bill difference
1	<3,000	53%	26,511	£0	£0	£-110	-19%
2	3,000 - 5,000	26%	29,017	£1,816	£240	£-2	0%
3	5,000 - 10,000	17%	32,972	£2,984	£610	£185	8%
4	10,000+	4%	14,250	£1,687	£1,511	£705	17%

Example 2:

Band	Household usage (kWh)	Percentage of MPANs	Total volume (GWh)	Total Green Levy & VAT contribution (£m)	Avg. annual Levy & VAT Payment per household	Impact on annual bill	Annual bill difference
1	<2,000	31%	11,177	£0	£0	£-79	-19%
2	2,000 - 3,000	22%	15,318	£389	£63	£-94	-12%
3	3,000 - 5,000	26%	29,017	£1,622	£215	£-28	-2%
4	5,000 - 10,000	17%	32,972	£2,789	£570	£145	7%
5	10,000+	4%	14,250	£1,686	£1,511	£705	17%

Example 3:

Band	Household usage (kWh)	Percentage of MPANs	Total volume (GWh)	Total Green Levy & VAT contribution (£m)	Avg. annual Levy & VAT Payment per household	Impact on annual bill	Annual bill difference
1	<2,000	31%	11,177	£0	£0	£-79	-19%
2	2,000 - 5,000	48%	44,338	£1,816	£132	£-72	-7%
3	5,000 - 10,000	17%	32,972	£2,984	£610	£184	8%
4	10,000+	4%	14,250	£1,686	£1,511	£705	17%

Further information

Ecotricity would be happy to engage in further conversations or provide additional details in relation to the proposal in this document.

Background on Ecotricity

Founded in 1995, Ecotricity was the world's first green energy company. Throughout our history we have been Britain's green energy pioneers, and today we stand apart from the rest as the country's greenest energy company. With over 140 thousand domestic customers, we have a detailed knowledge of the issues relevant to this call for input.

HM Treasury submission – A 1.5% profit cap for DNOs and GDNs to protect vulnerable households

Following the news that the energy price cap will rise in October, the government has pledged to do all that it can to support vulnerable households.

In addition to working with energy suppliers, the government should also address the excess profits made by Distribution Network Operators (DNOs) and Gas Distribution Networks (GDNs) who control the distribution and transmission of electricity and gas to end consumers.

The government should look at how it can cap their profits at 1.5%, which would be the same as the profit cap placed on energy retail suppliers. The network costs that they charge account for over 14% of energy bills, but these companies are allowed to make record profits and pay out dividends to their majority foreign shareholders during a cost of living crisis.

Policy proposal

The government **should support vulnerable households by limiting the charges that DNOs and GDNs can place on bills and capping their profits at 1.5%**. To achieve this, it should instruct Ofgem to review how it regulates these companies and the way their price control framework is set.

Limiting the profit margins of these companies from their current levels to 1.5% would have saved over £5 billion (£5,274,107,220) in the past year, which would have been a £185.71 saving for every single household in the UK.

This is not about eliminating the business case for investment. DNOs/GDNs should remain profitable. It's about ensuring a fair balance between the investment needed to ensure they're fit for purpose, the amount they can charge consumers, and how much profit they can make.

The government should also consider limiting the amount these private companies can pay out in dividends to shareholders until they've invested a sufficient amount in upgrading and maintaining the infrastructure that they manage.

Policy context

DNOs and GDNs are natural monopolies that own the infrastructure they operate and charge users for the distribution and transmission of electricity and gas. They're majority foreign-owned

companies (see Annex A) that have consistently made record profits and paid out large dividends to their shareholders.

Ofgem regulates these companies and is supposed to balance the creation of sufficient incentives for private sector investment with the protection of consumer bills. They do this by putting in place a price control framework, which limits the returns they can make and sets financial incentives. However, the excess profits and margins enjoyed by these companies show that they have failed to get this balance right.

Ofgem admitted this themselves during their [2019 State of the Market report](#), stating “*the overall costs of the transmission and distribution networks to consumers... have turned out to be higher than they needed to be*”, and that “*the majority of network companies are achieving profit margins towards the higher end of our expectations for each sector*”.

Ofgem has attempted to address this in their most recent price control framework (RIIO-2), but this does not appear to have done enough to limit the profits they can earn.

[Independent analysis](#) shows that DNOs and GDNs still enjoy some of the highest profit margins of any industry in the UK, with profit margins of 37.7% and 40.4% respectively in 2024. Only banks and venture capital firms had higher profit margins.

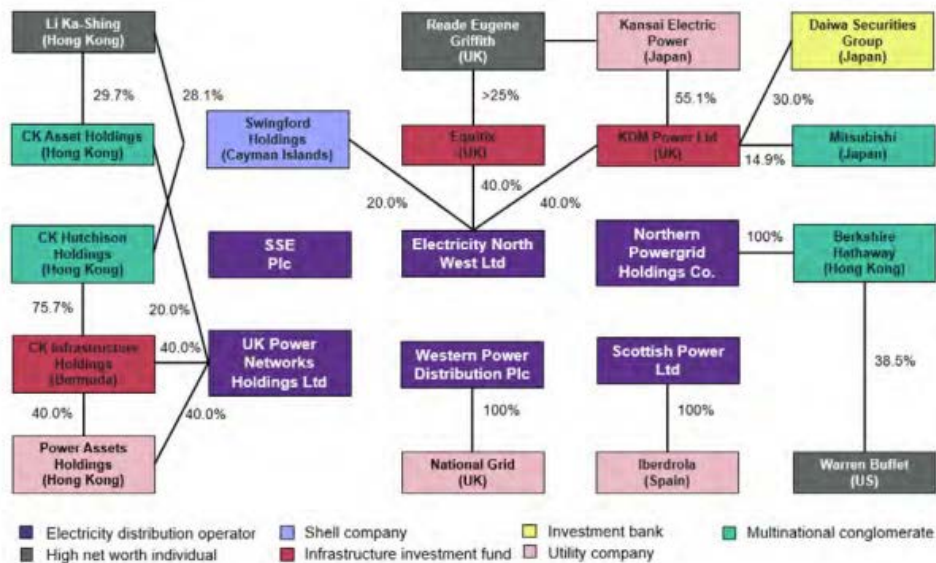
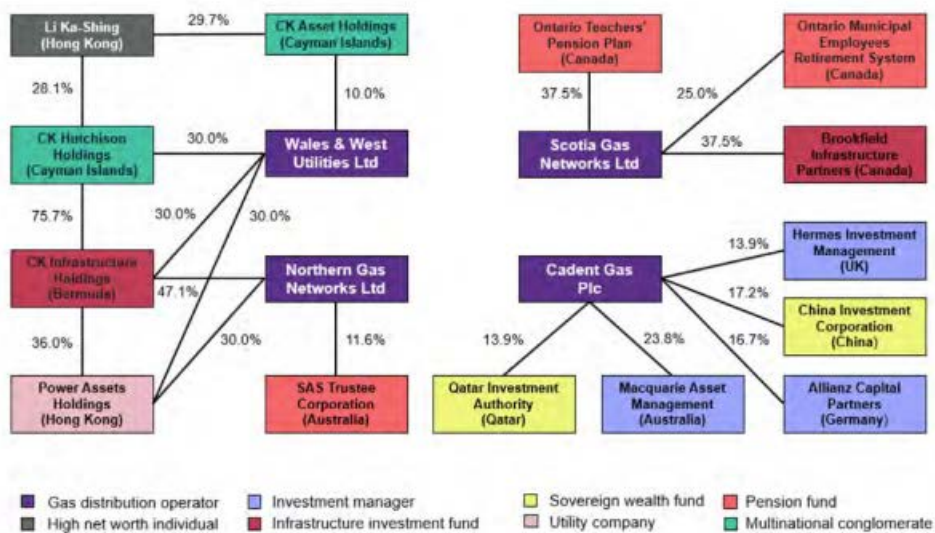
Although these companies argue that operating profit margin is the wrong way to assess their profitability, they still managed to pay out large dividends from 2017 to 2021, with dividend payments [totalling £3.6 billion for DNOs and £2.4 billion for GDNs](#).

The impact of network costs on consumers

The ‘network costs’ charged to consumers by DNOs and GDNs make up a significant proportion of energy bills during a cost of living crisis.

These costs are shown in the table below. They make up 10% of electricity bills and 19% of gas bills. That’s £86 and £158 per year under the latest price cap (October 1 to December 31, 2024).

Network cost component	Power	Gas
Distribution Use of System (DUoS) charges	£46	£151
Transmission Network Use of System (TNUoS) charges	£40	£7
Total Price Cap value (October 1 to December 31, 2024)	£884	£833
% of energy bill from network cost charges	10%	19%

Annex A – overview of DNO & GDN ownership structures
i. Major owners of the Distribution Network Operators

ii. Major owners of the Gas Distribution Networks


Source: *Common Wealth*, Profiting Amid the Energy Crisis: The Distribution Networks at the Heart of the UK's Gas and Electricity System, 2022.