Policy insight
November 2022

A green tax road map for the future

Summary

> “The tax system actively discourages people and businesses from switching to low carbon alternatives.”

The UK has committed to net zero carbon emissions by 2050. Although this will address climate change, it is well understood that the transition will also increase the country’s energy and resource security, create new industries and, on balance, save businesses and people money. But the UK’s tax system, currently geared to a high carbon economy, is becoming increasingly out of date and is hindering this transition.

In many cases, the tax system actively discourages people and businesses from switching to low carbon alternatives or making sustainable choices. And, as fossil fuels are phased out, the revenue from some taxes, for example fuel duty, will fall, creating fiscal black holes. A tax system adjusted for the new economic circumstances would encourage sustainable behaviours and maintain a stable income for the public purse.

We recommend that the chancellor of the exchequer publishes a tax roadmap clarifying how the tax system will support, and be adapted for, a low carbon economy. We are in good company with this recommendation as it has also been advocated by the Confederation of British Industry (CBI), the Institute for Government and the Chartered Institute of Taxation.[1,2,3]

This approach has proved successful in the past. The 2010 Corporate Tax Roadmap was roundly praised by businesses and tax professionals, as it allowed them to understand the overall strategy behind corporate tax reform, plan ahead and engage in the policy making process.[4]

> **A roadmap should align the tax system with net zero goals."**

Strategic direction of the tax system will accelerate early climate action and help households and businesses to adapt. It will also stimulate productivity, by enhancing private investment in the research and skills needed for the future.[5]

Criteria for a successful tax roadmap

As we set out below, a roadmap of this nature should explain clearly how the government plans to transform the tax system. As a priority, it should include a clear commitment to align the tax system with net zero goals.

To achieve this overarching ambition, the roadmap should set out, at a minimum, the government's approaches to:

— carbon pricing, beyond current proposals to reform the UK Emissions Trading Scheme (ETS);

— revenue shortfalls from taxes that will decline during decarbonisation of the economy;

— where the roadmap's plans can be expected to flex;

— using tax to support different sectors and departments to support net zero;

— evaluating all new tax measures and changes against net zero goals.

Why a tax roadmap is needed

The Climate Change Committee estimates the upfront cost of decarbonising UK homes will be

£250 bn

The net zero transition requires significant investment to switch high carbon technologies and business models to clean alternatives. For example, the Climate Change Committee (CCC) estimates the upfront cost of decarbonising UK homes will be £250 billion.[6]

Not all of this can or should come from the public purse and policy can mobilise private finance by providing a supportive, predictable investment environment, including an indication of where prices might increase in future, ie through carbon pricing or carbon taxes. Investors, whether businesses or individuals, need confidence in the longer term before they commit money to low carbon alternatives to reducing their environmental footprint in other ways.

At the moment, although carbon taxes, pricing and border adjustment mechanisms are being publicly discussed and advocated outside government, the government's own intentions are unclear, beyond its current proposals to reform the UK Emissions Trading Scheme (ETS). The government should set out clearer timelines for introducing carbon pricing and explain the implications of this for trade policy.

Many low carbon solutions are at the early stages of development and deployment. Targeted tax measures help to build markets and drive rollout, as the exemption of electric vehicles from Vehicle Excise Duty has done. In other cases, existing tax treatments are discouraging the uptake of low carbon solutions, especially when it comes to the price of electricity. The policy costs of promoting renewables are levied on electricity, but not on gas, which is skewing prices.[7] Those looking to electrify industrial processes or home heating are still in the dark about how this price differential will be addressed, despite widespread acknowledgement that electricity should form the backbone of a low carbon energy system.

Recommendations:

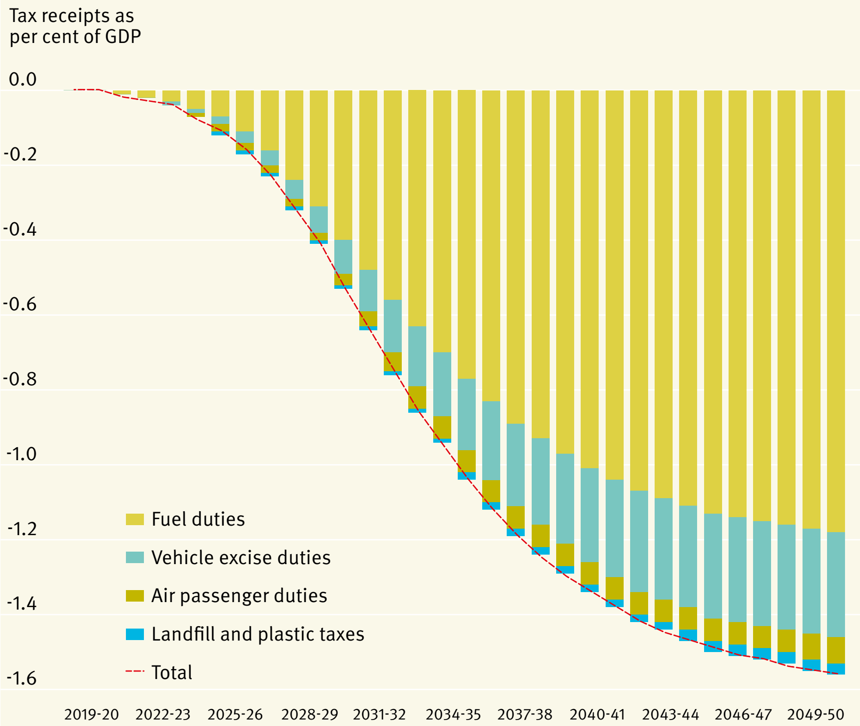
- Make a clear commitment to evaluate the impact of the tax system and align it with the UK's net zero targets and strategy.
- Set out the intended approach to carbon pricing, beyond the UK ETS, and an indicative timeline.

Addressing fiscal black holes

Fuel duty currently raises
£33.6bn
a year and will rapidly diminish as the nation's car fleet electrifies

The current tax system is geared to a high carbon economy, with significant amounts of revenue reliant on the sale of fossil fuels. These are termed "fiscal risks" by the Office for Budget Responsibility, and its analysis shows receipts, equivalent to 1.6 per cent of GDP in 2025-26, could be lost by 2050 due to decarbonisation. This does not include losses of revenue caused by the contraction of North Sea oil and gas.[8]

The Climate Change Committee's balanced pathway to net zero will result in a steep fall in tax revenues[9]



A tax roadmap for net zero should prepare the ground for government action to address these fiscal realities. This is most urgent in the case of fuel duty, which currently raises £30 billion a year and will rapidly diminish as the nation's car fleet electrifies. Tackling this early with plans to fill the gap left by fuel taxes, for instance through road user charging, will make implementation less politically challenging.

Recommendation:

— Outline the approach to revenue shortfalls from taxes that decline as the economy decarbonises, including carbon taxes.

Enabling behaviour change

> **"Many environmental tax measures are designed precisely to change behaviour."**

The Treasury has, so far, resisted calls for a net zero tax roadmap, citing the need to avoid "forestalling activity", whereby taxpayer behaviour changes in advance of tax increases.[10] This is a valid consideration for measures where the primary purpose is to raise revenue. However, many environmental tax measures are designed precisely to change behaviour, meaning a successful tax of this type would eventually raise little revenue and would need to be balanced by other changes to the tax system.

This principle applies beyond environmental tax measures: for instance, the sugar tax was forecast to raise £520 million a year but, because of significant reformulation efforts by soft drinks companies, it raised only £336 million in its first year. This is regarded as a policy success, despite the reduction in tax revenue, because the tax's stated objective was to reduce sugar consumption.

Forestalling activity in decarbonisation is highly desirable as existing policies are predicted to result in higher emissions than are permitted under the government's fourth, fifth and sixth carbon budgets (which cover the period from 2023 to 2037). Frontloading mitigation will make it possible to meet legal obligations under the 2008 Climate Change Act. In other words, it will signal to businesses and consumers that tax changes are

“Providing tax incentives for the uptake of energy efficiency measures, renewables and electric vehicles will also help with the cost of living.”

coming, to encourage earlier adoption of green technologies and behaviours. Providing tax incentives for the uptake of energy efficiency measures, renewables and electric vehicles will also help with the cost of living.[11] Introducing a tax with no meaningful adjustment period is likely to increase the costs of the net zero transition and be less effective overall.

The Treasury has said that “market uncertainty” prevents it from fixing future taxes. But, while it is reasonable to allow for circumstances in which a roadmap might flex, the future is not completely opaque. New petrol and diesel cars will be phased out from 2030. Many millions of homes need to be retrofitted and have electric heating systems installed over the next decade. It is prudent to establish plans for the tax system to accommodate these changes ahead of time, to avoid being forced into reactive or politically compromising positions.

A roadmap will enable the government to explain its reasoning and contextualise tax changes within a wider policy framework. Findings from Green Alliance’s citizens’ jury on environmental taxation in 2021 showed broad consent for the use of the tax system to enable behaviour change, provided that certain conditions are met around fairness, the availability of alternatives and the position of taxes within a wider vision for change.[12]

Recommendation:

- Indicate where roadmap plans can flex, in relation to the carbon pricing timeline, for instance at times of volatile market prices.

The power of the Treasury to guide net zero policy

> **"The Treasury is well positioned to facilitate cross departmental working."**

The Treasury is in control of important tax policy levers which are often most effective when used in conjunction with policies in other areas.

Currently, it is unclear how tax reform will fit with wider policy changes for high emitting sectors, like transport and buildings, despite recognition of the important role of taxes.[13,14] Collaboration with other departments would allow tax policy to be properly integrated into departmental strategies and make the overall package more effective.

The Treasury is well positioned to facilitate cross departmental working. For example, where a tax policy might have an impact on vulnerable members of society, it would need to be balanced and combined with other measures, such as changes to benefits set by the Department of Work and Pensions, to offset any negative effects. Similarly, some potential tax measures such as cutting VAT for repair services, would be more effective if other departments – notably the Department for Business, Energy and Industrial Strategy and the Department for Environment, Food and Rural Affairs – set supportive standards requiring products to be designed for repair.[15]

> **"The Treasury's evaluation of tax impacts does not account for behaviour change and rarely monitors environmental impacts."**

At the moment, the environmental impact of the tax system is not well understood. As commentators, including the Public Accounts Committee, have noted, all fiscal measures, whether or not they have explicit environmental aims, "have an environmental impact in so far as they either encourage or disincentivise different behaviours".[16] The Treasury's evaluation of tax impacts does not account for behaviour change and rarely monitors environmental impacts. To achieve net zero, the impact of all taxes should be considered and monitored as standard.

Currently, tax changes are announced at successive budgets, sometimes with little advance warning to affected departments. This leads to ad hoc tinkering and measures that do not cohere with wider goals, including environmental ones. With no overarching strategy, the process is vulnerable to kneejerk policy making, such as the 2022 fuel duty cut which neither delivered savings for motorists nor aligned with the government's net zero goal.[17]

Recommendations:

- Breakdown, sector by sector, how tax policy will support the net zero transition within a broader policy framework, developed in collaboration with other departments.
- Include a net zero test for all new tax measures and tax changes to ensure they have, at minimum, a neutral effect on decarbonisation and the natural environment.

How taxation could support climate goals?

Domestic heating is responsible for 14 per cent of the UK's carbon emissions and is a challenging sector to decarbonise. Low income households will need significant support to insulate their homes and install electric heating systems. Wealthier households may be asked to fund their own home upgrades. Tax incentives are one lever the government can use to encourage uptake.

Tax policy could be used more effectively to support the transition. A tax roadmap which forewarned of changes to come could lead to even greater impact, by giving those businesses involved in the supply of building retrofit products time to increase their inventory and train staff. Homeowners would also benefit from the visibility of knowing about future tax changes, allowing them to plan projects.

Tax strategies for energy saving

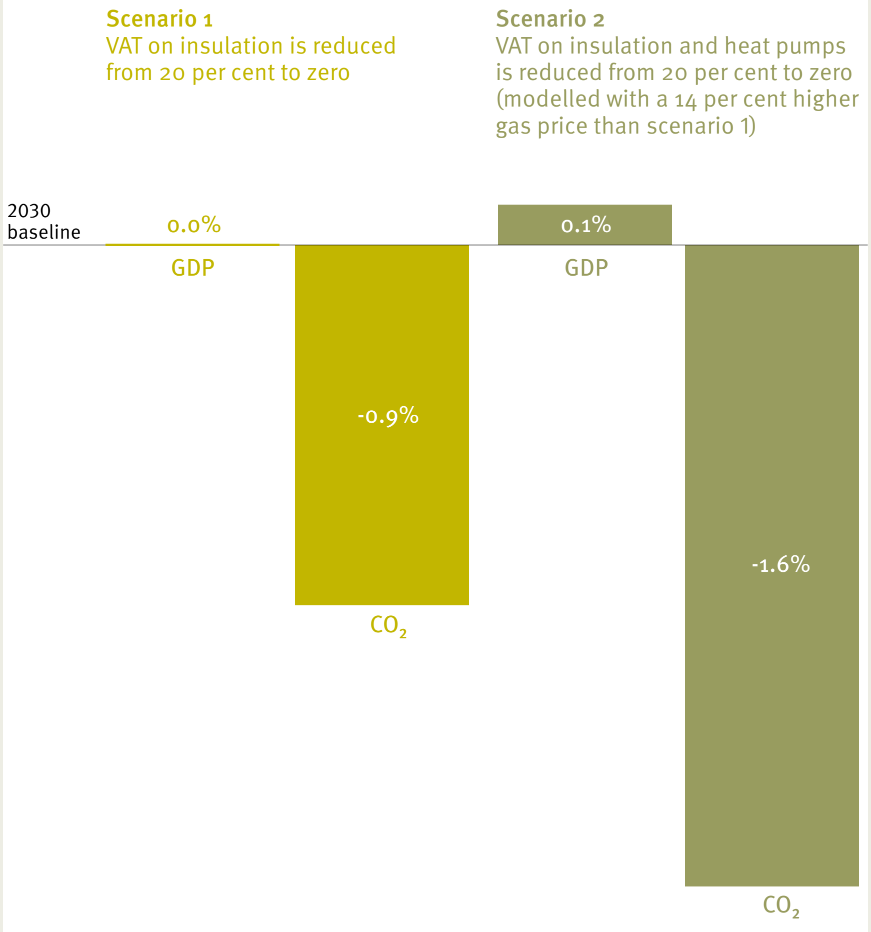
Energy saving products, such as insulation and heat pumps, are currently enjoying a VAT holiday, announced in the 2022 spring budget. With the help of Cambridge Econometrics, in late 2021, we modelled the impact of removing VAT from insulation (see scenario one, page ten), on both CO_2 emissions and GDP. We also modelled what the impact would be if this measure was combined with a modest increase in the price of domestic gas (14 per cent higher than late 2021 prices) and removing VAT from heat pumps, in line with their current VAT holiday (see scenario two, page ten).

Dynamic modelling allows us to understand the wider economic impacts of policy changes, including the effect on behaviour change and feedback loops. For example, households that install insulation have lower energy bills. This increases their disposable income and can create higher demand for other goods and services. Although this can have a positive effect on GDP if those goods and services are carbon intensive, such as flights, it could offset some of the carbon savings made from energy efficiency.

Our modelling shows that cutting VAT on insulation could save 0.9 per cent of the UK's total annual carbon emissions in 2030 and would have a negligible impact on GDP. However, if combined with a VAT reduction on heat pumps and a small increase in the price of gas, the effect is much greater: almost twice as much carbon is saved and there would be a small boost to GDP. In this case, the policies are complementary and lead to increased employment in building retrofit and heat pump installation. Gas consumption is reduced, improving the UK's trade balance. The increase in gas price modelled (14 per cent) was much lower than the level of increase following the invasion of Ukraine in February 2022.

Our results show that wealthier households would benefit most from this policy change as they have access to capital, allowing them to pay the upfront costs of insulation and heat pumps, but lower income households would also benefit from the improved macroeconomic environment.

Combining different tax measures with the same aim can result in greater benefits for the environment and the economy



Endnotes

1 CBI, 2021, *Greening the tax system – how tax policy could support net-zero*

2 Institute for Government, 2020, *Net zero: how government can meet its climate change target*

3 Chartered Institute of Taxation, 2021, *Climate change tax policy roadmap*

4 House of Lords Economic Affairs Committee, ‘2nd report of session 2013-14, The Draft Finance Bill 2014’

5 Green Alliance, 2022, *Climate for growth: productivity, net zero and the cost of living*

6 Climate Change Committee, 2020, *The sixth carbon budget sector analysis: buildings*

7 The government has invested in stimulating the market for renewables through Contracts for Difference and the Renewables Obligation, which have driven cost reductions and made renewable power cheaper than all types of fossil power generation. So far, these have been paid for by a levy on electricity bills.

8 Office for Budget Responsibility, 2021, *Fiscal risks report*

9 Source: Office for Budget Responsibility, July 2021, *Fiscal risks report*

10 Letter from the exchequer secretary to the Treasury to the chair of the Public Accounts Committee, 30 November 2021

11 Green Alliance, 2022, *Cutting the cost of living with a green economy*

12 Green Alliance, 2021, *A greener tax system: the people’s verdict*

13 Department for Transport, 2021, *Decarbonising transport*

14 Department for Business, Energy and Industrial Strategy, 2021, *Heat and buildings strategy*

15 Through retained EU legislation on ecodesign the Department for Business, Energy and Industrial Strategy can set resource efficiency standards for energy related products. Through the Environment Act, the Department for the Environment, Food and Rural Affairs now has powers to set such standards for non-energy related products.

16 Public Accounts Committee, 2021, *Environmental tax measures*

17 Competition and Markets Authority, 2022, *Road fuel review*

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Author
Zoe Avison

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