

## Can Environmental Tax Reform contribute towards Net Zero Carbon for the UK?

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### Executive Summary

Net Zero is set to remain a key political issue for the foreseeable future. The Secretary of State for BEIS has stated that the UK is 'on track' to meet the 'challenging' target of net zero carbon emissions by 2050. Emissions have reduced by 45% in the UK since 1990 while the economy has grown by 80% ([Skynews](#)). Tax reform may play an important role in meeting these targets.

In our study we consulted with tax professionals, professional institutes, business decision makers and academics to find how environmental tax reforms in the UK might contribute towards net zero carbon. We found that most stakeholders are positive about the possibility of achieving the net zero carbon target by 2050, similar to the findings from research by Opinium for the Zero Carbon Campaign. Our overall findings in a nutshell:

- A long-term roadmap,
- change in behaviours of business and their stakeholders,
- clear policy from the government, coordinated initiatives across borders and among regions,

- feasible measuring scales, and
- co-ordination with other components of tax system.

### Recommendation for COP26

- Transparent and internationally approved definition of 'net zero' is needed. In addition, both '*net-zero emission*' and '*net-zero consumed*' to be promoted to public and businesses of all sizes.
- *Certainty, clarity, and lack of complexity* for the tax system. A *fundamental shift of tax system* can support the shift towards 'net zero'.
- Clear long-term trajectory of the carbon price floor with an *impact assessment* can help to reduce carbon emission.
- Use carbon calculator to *capture highly embedded carbon* in goods.
- A wider availability of '*green*' alternatives.
- Autonomy to approach unique environmental issues for regional authorities. The central authority will coordinate for a wider issue to drive change.
- The government needs to take actions to mandate polluters to act in a right direction. Where possible, *subsidise to make low carbon solutions cheaper* to encourage people to automatically shift towards net-zero carbon goal, and avoid 'greenwashing'.

### Background

In response to the 'My BEIS Inquiry' (2020), Professor Paul Ekins from University College London argued that existing institutional arrangements are not sufficient to achieve the net zero target by 2050, stating that there is an urgent need to explore alternative effective arrangements to assist the government to achieve the zero-carbon target by 2050. We find similar arguments in the Climate Change Committee's Progress Report to the Parliament. Darren Jones, Chair of the BEIS committee stressed the need for measures necessary for transition to net-zero. In the UK government's Ten Point Plan for a Green Industrial Revolution the mention of "Green Taxonomy" motivates us to examine the possibility of the environmental tax as an effective alternative contributory tool for transition to net zero.

We aim to share our research evidence related to environment tax reform with the BEIS committee members and also to support the business tax policy teams across government to understand how they can support in the transition to the net zero by the deadline. At present in the UK, we find different policies and subsidies for business directed towards decarbonisation. For example, £170 million is dedicated to projects funded under the Industrial Decarbonisation Challenge to be completed by 2024; £1 billion is invested in the Net Zero Innovation Portfolio starting from this year to 2026 etc. However, to continuously support innovative business projects, the government will need to generate revenue; business and their stakeholders will remain motivated to contribute to the cause of net zero especially, when they have a clear understanding about their financial contribution. To address the above two challenges, we recommend further consideration is given towards the revision of the environmental tax system in the UK.

In April 2021, the fifty-fifth report by the Public Accounts Committee (PAC) expressed their concern about the administration of the UK's strategic tax system by HM Treasury (HMT) and HM Revenue & Customs (HMRC) and put forward recommendations to be reported and actioned before COP26.

The **first recommendation** is focused on establishing a relationship between the UK tax system and the government's environmental objectives. There is a call for a better understanding about how the tax system can contribute towards net zero with other environmental objectives. The six principles proposed by the Climate Change

Committee stressed the need for strengthening reduction of emissions while considering the tax changes. However, the various stakeholders criticized existing changes in the tax system as they find increase in tax revenue for greening the UK economy is not supporting the transition to the net zero. For example, an increase in VAT on different low carbon products, no VAT adjustments in construction, energy consumption by households, no clear incentives or reward for electric based consumption etc.

There is a big gap between the UK's existing environmental policies and tax revenue. For example, in 2019-2020, the UK tax system generated £37 billion revenue from tax on fossil fuels which generated greenhouse gases. Thus, the current environmental policies is not supportive of tax revenue that is essential for net zero carbon movement.

In the last two years' Budgets there was no specific announcement on green tax. The Budgets indicate that fuel duty rates will be adjusted each year to align it with the net zero targets without giving a long term roadmap. Thus, the Budget failed to give an opportunity to business and households to develop a better understanding about the transition to the net zero by 2050.

The **second recommendation** by the PAC is focused on managing the measures of environmental tax efficiently to assess the changes required in the transition to net zero carbon. In the 2021 Budget, the Office for Budget Responsibility (OBR) mentioned the 130% capital allowance from the corporate tax as a strong incentive for investors in the short term. However, there is no clear indication that these deductions will enhance investment in green projects by reducing investment in fossil fuel. Thus, it is evident that any tax measure should consider the environmental impact, which is not a practice followed in the UK at present.

Few tax measures in the UK are positively related to decline in carbon emission. For example, Landfill tax give a clear idea about the reduction in waste volume but there is no monitoring about the disposal of the waste and if such wastes are generating more carbon in the environment. Thus, there is a need to monitor the environmental impact of the change in the tax system.

Moreover, the complex nature of the UK tax system requires higher coordination among changes in taxes in other departments. To achieve the net zero target, tax in other departments outside HMT and HMRC should also be considered.

Following the above, in our ongoing pilot study on “Green Tax and Sustainable Recovery in the UK”, we approached a range of experts to share their views on the above points.

### Why do we need this evidence?

From the various committee reports and other studies it is evident that to achieve the net zero carbon target by 2050 it is essential to reform the environmental tax system. In academic literature, we find support for a positive relation between environmental tax and carbon emissions (Ekins et al., 2012). However, in practice, we cannot observe a prominent positive relation between a drop in the carbon emissions and rate of environmental tax in the past years, partly because of the complex nature of the tax system, along with the above points mentioned in the PAC report. Thus, we decided to focus on the following themes for the interviews:

- **Existing net zero carbon structure:** We try to understand what the stakeholders think about the possibility of achieving the zero-carbon target by 2050. To what extent they think the existing environmental tax system is contributing towards net zero carbon? Do they believe that higher coordination among regional authorities with the central authority will be beneficial? If they think there are certain problems in the existing environmental tax system, we then asked them to propose some factors that can be part of the revised policy.
- **Role of HMT:** To recover from the adverse impact of Covid-19 in the short and long term, we focus on the role of HMT. Our questions for the participants were related to who should bear responsibility for creating pollution? How they think HMT can reflect long term certainty in government policy that can encourage investors for more investment towards zero carbon in both short and long term?
- **Signals from government:** Because of lack of transparency about environmental tax, many stakeholders believe that such tax is another way of generating revenue by the government to

invest in green technologies etc. Thus, we asked the participants which type of signals they expect from the government about environmental taxes. Is the government focused more on carbon reduction or carbon offsetting? Do they expect revision in the subsidy structure that will encourage businesses to eliminate or reduce carbon instead of offsetting carbon at national and international level?

In the interviews, we requested the participants to think carefully about how the revision in the environmental tax system will contribute to the socio-economic development of the UK economy by achieving the zero carbon target. In addition, we consider two current challenges before interpreting our findings related to environmental tax reform (ETR). *First:* There are breaks in the economic cycle over the years. Due to increases in inflation in past years (e.g., June rate was 2.5%, source: ONS), changes in unemployment rate, political uncertainty (e.g. Brexit referendum), we observe less supply of labour and investment from H<sup>1</sup> to B. So, B also failed to meet the demand of goods and services generated in H and as a result we can observe less wages earned by H. On most occasions H failed to pay the required tax to G. Moreover, less capital formation leads to less innovation or lack of capital-intensive lower carbon emission production processes resulted in higher pollution. Less tax received by G from H and B didn't support G's initiative to generate enough income to provide subsidy for the B to invest in carbon neutral production process. *Second, Covid-19 Shock:* Because of the recent pandemic the economic system started experiencing additional challenge of lack of resources, loss of jobs, reduction in consumption and savings, which lead to less production and restricted supply of finance for sustainable development. In a recent report PwC mentioned that Covid-19 crisis has amplified the materiality of ESG risks almost in every sector.

The above two challenges disrupt the link between HBG (both at regional and national level) which is prominent during the Covid-19 pandemic. Thus, the main question that we asked in this research is how to capture an equilibrium in the complex system of ETR? How should tax mechanisms be adjusted by policy makers both in the short term and also in the long term at regional and national level to achieve the net zero carbon target by 2050?

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<sup>1</sup> In this research we focus on three major units in the economy related to the UK national tax system. These three units are: Household (H), Business (B) and Government (G).

## Methodology

We conducted several online semi-structured interviews with 13 representatives (6 female and 7 male) with an interest in policy making or engaged in leadership role in sustainability and climate change from both SMEs and large companies in the UK. We were interested in their experiences and concerns with the current UK environmental tax system, as well as their insights of risks and concerns with attempting to improve the systems, which affects themselves as well as their clients and customers.

Our interview questions are based on a thorough systematic literature review. We have chosen a mixed group of respondents with expertise covering SMEs, environmental policy and climate change, and UK taxation. This procedure has improved the clarity of solving our research questions. The qualitative data collected through the interview are then analysed using interpretative approaches (Lune and Berg, 2017, p. 182). In this method the qualitative data is observed and gathered carefully to conclude on the responses. In addition, following Elliot (2005) we also use narrative technique where the spoken words are noted down by the researchers. The awareness and interpretation of climate change in recent times can introduce a bias towards the responses by the interviewees. We try to balance this bias when interpreting our qualitative data by giving more weights to types of companies that are under-represented in our sample.

We find that there is an urgent need of shifting of taxation to environmental issues rather than focussing on taxing profit and labour. The taxation system needs redesign. We also identify aspects contributing to the likelihood of encountering certain misconceptions and challenges by companies of any size. Figure 1 is a framework of our methodology.

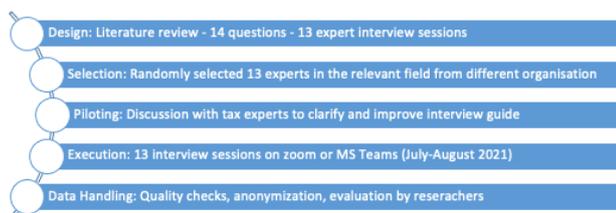


Figure 1: Research methodology framework

## Key findings and Recommendation

### A. Net-zero carbon target by 2050

We find that stakeholders are optimistic, and investors interested, in the challenge to tackle the climate change issue. However, there is some confusion around the current definition of net-zero carbon. Does it mean “anything that emits carbon will be removed and the emission should be reduced up to a certain percentage every year from the base year?” As reducing carbon emission is a global issue, is there any international confirmation? On the other hand, investors want transparency about what companies are doing for the transition to net-zero. Similarly, clarity is needed for the general public due to changes that each individual will have to make in their lives both now and going forward. In addition, there is a growing awareness that targets may not only be net-zero carbon emission, but also ‘*net zero carbon consumed*’. This leads our investigation to understand whether the technology involved in the process is accessible to the public, for instance, a carbon emission or consumption calculator. This is because, once we can measure the carbon footprint, we will be able to control and reduce it gradually.

Has the issue of net-zero carbon introduced a debate on carbon reduction and carbon offsetting? In our discussion with various participants, we find that majority of them think that carbon reduction should be the priority. A short-term solution is needed first then the long-term offsetting or rebalancing strategy is meaningful. Several academic and policy papers are now explaining carbon sequestration. But although carbon capture is important, this procedure and the subsequent storage is very much in its immature stage. In other words, a negative carbon technology can only act as a pocket of technologies and is unable to completely get rid of carbon emissions. Thus, it is important that ‘*companies need to own their decisions and be given help to creating their own carbon audits*’.

### B. Role of HMT

The UK’s current environmental tax system is providing a mix of incentives and disincentives to businesses and consumers. In addition, a number of companies indicated that the UK tax system is not accelerating towards net zero carbon. It is equally important to incentivise the right behaviour and investments in the right types of technologies, but also by taxing the bad behaviour. Currently, the tax system is too fragmented to deliver net zero carbon and thus a matching strategy should be in place on how to align all those measures. For instance, are the fuel duty, air passenger duty, and turning land into farming/pastures (thereby destroying natural carbon

sinks) aligned towards the environmental impact? Reducing carbon towards net-zero needs '*clarity, certainty and lack of complexity*'. To change behaviours, we want to see tax policy published and understood by government and business. There should be a clear trajectory to have certainty about the direction to tackle climate change rather than having 'carbon price support trap'.

HMT can take a leading role here "*by providing greater incentives for green capex investments, through grants and corporation tax shields, can help to steer companies into making better decisions*". However, HMT needs to work in conjunction with other government departments to incentivise long-term investment towards the optimal goal of net-zero carbon.

### **C. Signals from Government**

Government needs to make better use of '*impact assessments*'. It is important to focus on where emissions are the highest, for instance the energy sector, and the types of energy used. The government is introducing plastic packaging tax in 2022. But there is already confusion among businesses that need to use virgin plastic for regulatory reasons. But if they '*cannot meet the recycle content threshold*', they 'have to pay the tax'. This will be an ineffective environmental objective without arranging a substitute material. Therefore, the question is who will take the responsibility – the polluters or policy makers? In our discussion with companies, it became obvious that polluters need to take the responsibility. It is important that it should be mandated at a governmental level and imposing penalties through legislation. If this is not the case, there will be an unintended consequence such as greenwashing. In addition, the government should take measures because '*polluters are too slow to act voluntarily,*

*and they should impose the burden of responsibility on the polluter*'. The UK government has already  
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subsidised carbon audits and assisting companies to make their own carbon reduction plans. The subsidy plan for making low carbon solutions cheaper can encourage people to automatically make good decisions and thus government do not need to punish those who do not change behaviours towards net-

zero carbon. Similar to subsidies, which vary from sector-to-sector, the government's strategy needs to be clear and easy to apply. However, the incentive system needs to be regulated to be effective. Thus, to drive the behaviour of polluters in a net-zero carbon policy, government can incentivise the alternative approach as a simple proxy. For instance, when renewable energy became cheaper, several renewable energy companies are coming up with deals. The above recommendations can be qualified as an evidence for the UK's better strategic understanding in building a roadmap for net zero to be presented at the UN climate summit 2021.

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