Response to call for evidence on governance of net zero

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1. What are the key requirements for a governance structure that can deliver cross-Government climate action at the pace, scale and over the duration required to meet the carbon budgets and the 2050 net zero target?

- The time between designing, launching, running and ex-post evaluation of policies can be years. We need much more certainty about achieving ambitious targets across sectors, especially in the next ten years.
- There could be a cross-department unit whose job it is to provide frequent information feedback from currently running net zero schemes. They could cover local, devolved, and central government schemes. They could report on how well schemes, regulations, etc, are achieving their expected outcomes, and also any other trends that are affecting energy and emissions such as population changes, changes in lifestyle, changes in economy, new interactions between people and technologies.
- Reporting would be ideally every quarter or at least every six-months. This regular feedback would inform BEIS, Ofgem and CCC analysis. It would enable much quicker and responsive changes to policy, if needed, to keep net zero transition on track.

a) Are the Government's existing net zero governance structures effective in this role, both in terms of coordination across Whitehall, and coordination with the devolved administrations and local and regional authorities?

- I don't know much about how net zero is coordinated across Whitehall. I do suspect that there is not enough sharing of learning that is happening across local and devolved governments. It could be shared between local governments, or between local and national government – what is working or not, and why. Regular, formal workshops sharing recent findings and experience in net zero actions, attended by a rotating group of chosen LAs and devolved government, would be beneficial. Findings could be made publically available.
- An inter-authority approach might be also useful for including bottom-up social movements in the net zero process. How to get them involved, what exactly they could do (apart from raising awareness) and how they could work to support reduction of fuel poverty.
- There is more planning needed on the dependencies between local and central policies for different low carbon technologies. Some things that could be done locally depend on central government policies, and vice versa.
- Where local governments have set carbon budgets or targets for emissions reductions, they could be helped by central government experts, through providing methodology, with the difficult job of carbon accounting and setting boundaries for emissions responsibility.

b) What alternative governance structures could be established to coordinate and deliver cross-Government action on climate change more effectively?

- There needs to be much understanding about the everyday practicality of implementation of plans, by those designing and running programmes. For example, by seeing technology and behavioural changes from the worldviews of different parts of society. Why do businesses and householders respond in such varied way to schemes? How much heterogeneity in vehicles, building stock, and lifestyles is there and how will it affect the feasibility of the planned net zero changes?
- Heat pumps are a big part of net zero planning, but many home heating installers are wary due to uncertainties about their performance. The building stock varies a lot in terms of suitability for the technology. There needs to be more realism in targets for such theoretically feasible changes but which hold a wide range of uncertainties in implementation.
- A governance structure that allows much closer feedback from the supply chain that are working with end users, would provide better information about the expected rate of progress. Where progress is seen to be too slow, or only the low hanging fruit can reliably be expected to be achieved, governance needs to acknowledge this quickly and be flexible in finding other solutions.

Energy behaviours

- Energy behaviours have been acknowledged as highly important by the CCC. Yet there is barely any track record of achieving reductions in demand for energy services unless linked to decreasing income. In other words, the outcomes of any expectation of behavioural change are highly uncertain.
- Behavioural change is essential to reduce consumption of goods and services that lead to emissions, and most important in the next decade. Once supply has been decarbonised and equipment fuel switching has been achieved where needed, consumption could rise again. This needs to be communicated clearly to the public. In other words some of the changes might be temporary.
- Energy services consumption needs to be measured in a reliable and transparent way. For example, it is relatively easy to get data from the DfT on passenger and freight travel by mode, in pkm or tkm. But measuring other types of consumption, such as the relative comfort of home heating, amount of lighting used, and amount of food over-bought is difficult and rarely done.
- For people to be able to change behaviours, information feedback that is meaningful and timely is needed, at the level of each actor that is expected to make a change. From householders to company CEOs to local authorities. Actors cannot currently gauge whether what they are doing is supporting the net zero transition or not.

Fairness and transparency.

- Those who oppose the changes needed for net zero are often concerned about their own prosperity, lifestyle, energy poverty, and convenience. They may feel it is unfair to ask them to make changes that threaten their comfort and income, when there are others much richer who will still have many more options to choose from.
- One way to get over this is to ensure that those on lower incomes receive a direct reward for any changes they make. Not a direct monetary sum necessarily, but something that rewards their efforts and allows peer comparison - allowing them to tell their friends and family about their achievements. At the moment (although there are carbon calculators, they are not widely used) it is not possible for non-experts to gauge how fair the net zero changes are across society.

This could also be used by government to ensure low-income families and commercial organisations are not unfairly or unreasonably affected by the changes.

- Government needs to understand better what might motivate people to make behavioural changes, or not, where these are deemed necessary for net zero. There are many in society who are currently unwilling to make changes. This must be acknowledged now or there is a risk of pushback from the public once there are attempts to make the disruptive changes on the demand side that are needed.

- There are several good things about net zero that are not promoted. For example, promoting renewable energy as a patriotic endeavour that provides the UK with energy independence and also world leading technology exports. A focus on new jobs and new opportunities for entrepreneurship. A focus on clear air and local environment. A focus on renewing post-industrial towns with new businesses related to the net zero transition. The possibility of rejuvenating town centres by reducing cars and providing smart, responsive transport. A focus on the UK being first to industrialise and then first to transition away from fossil fuels – a narrative that can increase national pride and allow people to be see the UK's position in the world improving.

- In particular, stressing the benefits of net zero changes for UK energy security might appeal to those on the political right who don't agree with the net zero target.

c) What metrics should the Government use to measure their progress towards net zero?'.

- The easiest way to consider progress to net zero is the Kaya identity. This can be a central measurement tool across government. All of the terms are important at the same time. If goods and services consumption increases at a faster rate than energy intensity of GHG intensity falls, then targets will not be met.

  For the energy system it is:

  GHG Emissions = GDP * consumption intensity * energy intensity * GHG intensity

  = GDP * goods and services/GDP * energy use / goods and services * GHG emissions / energy use

  For non-energy emissions it can be something like:

  GHG Emissions = GVA * inputs used / GVA * GHG emissions / inputs used

- Cumulative emissions should be tracked along with annual emissions. This will emphasise the importance of timing in achieving emissions reductions, with early reductions more valuable than later ones.

2. What governance structures would enable HM Treasury to give greater priority to the net zero target and the carbon budgets in its financial and economic decisions?

- Financial and economic decisions need to be made on the basis of a combined metric of money and GHG emissions. This would require a dual accounting system. And the relative importance of money and GHG emissions would need to be decided upon. This could also provide input into the carbon floor price.

- A database of estimates of emissions associated with common goods and services would need to be created, to shorten the process of dual accounting.

- It could help to analyse details on the coupling between GDP and emissions. It could highlight where the coupling should be addressed if it is particularly strong.
- Also, how the public purse will need to adapt for a net zero economy in terms of tax income and fairness to consumers in bearing the additional costs from the net zero transition.

a) How could HMT better ensure that spending decisions contribute to achieving net zero in the long term?

- The treasury should review the discount rate in line with the ambitious net zero targets, to ensure it doesn't prevent investments with long-term benefits for net zero but low short-term gains. Using a duel accounting system would make this analysis easier.

3. What signals and support does business need from the Government in order to deliver cross-economy decarbonisation in line with the carbon budgets and the net zero target? What delivery function should Government provide itself and are relevant regulatory bodies mandated and resourced effectively to deliver on Government priorities?

- A clearly laid out and detailed pathway to net zero for each sector, now to 2050. This has been done for some sectors already but perhaps needs to be made more relevant and detailed in terms of what it means for those in the supply chain.
- A focus on smart ways to reduce energy services consumption would complement the technological push for fuel switching and new low carbon power. The ideal would be to allow the same quality of life but with lower energy services such as km travelled, space heated, goods procured (assuming there is some wastage). This would bring services consumption to a level that ensures wellbeing but reduces waste, and hopefully could even improve life for some. Examples include autonomous vehicles, information that encourages local shopping, smart heating in buildings that is controlled by zone, smart food packaging that helps to reduce food wastage, etc. Such approaches could lead to innovation and new/reworked business models.

a) How do policy and regulatory signals and support vary between Government Departments (and how have they varied over time)? How is this affecting business activity on climate change?

- Can't comment on all the departments. The DfT seems to be the one with the least leadership and clear signalling of all. Perhaps due to the high political capital needed to impact the car industry and car usage. EV take up is now taking off but is slower than needed.
- Carbon capture and storage/usage programmes have been stop and start since 2007. A clear path to successful CCS technologies needs to be put in place soon, working with the power sector and in industry. CCS support needs to be consistent especially in the current decade.
- Technological development for equipment used in businesses needs to be better supported by government, so that businesses can plan ahead for making changes to manufacturing operations, retail, etc. These changes can take longer than household changes.

b) Should Ofgem play a greater role in delivering on net zero and, if so, what changes are required to deliver this?

- As far as I understand, Ofgem's role covers the whole energy trilemma, and this is a vital role to ensure net zero doesn't increase energy poverty, reduce energy security, or make businesses bankrupt. So I guess Ofgem should stay in this role and leave the net zero emphasis to the other departments, who know their sectors better.

4. The BEIS Committee will be working with the Environmental Audit Committee on this inquiry and inviting guests from other select committees. We are also interested in comments on the effectiveness of current parliamentary scrutiny arrangements for climate change and proposals to improve this.

Can't comment on this.

August 2021