

Strategy and Policy Statement for energy policy for Great Britain – consultation

Response from UCL Institute for Sustainable Resources and UCL Energy Institute

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The UCL Institute for Sustainable Resources' mission is to provide evidence, expertise and training to respond to climate change and support sustainable transitions for people and planet.

The UCL Energy Institute delivers world-leading learning, research and policy support on the challenges of climate change and energy security.

Across the team of authors there is a wide range of expertise including: energy security, energy and net zero modelling, the built environment, the energy transition, social aspects of energy use, energy-environment-economy interactions, sustainability assessment and energy markets.

We welcome the opportunity to present our view on the Strategy and Policy Statement for energy policy for Great Britain. We would be delighted to discuss this consultation, or any of our other work. Please contact Katherine.page@ucl.ac.uk

1. Does the strategy and policy statement identify the most important strategic priorities and policy outcomes for government in formulating policy for the energy sector in Great Britain? If not, please provide details of the priorities that you think should be included.

No

The document is intended to encapsulate the government's priorities for Energy Policy in Great Britain, with a particular focus on the future roles of Ofgem and the FSO.

In general, the strategy and policy statement covered the right headline strategic priorities. However, there were some conspicuous absences, including demand reduction, in the detail. We have some comments about the piece overall, and some specific areas where we feel more information is needed.

General comments:

Scope

The scope of the consultation isn't always well defined, especially the contrast between a focus on the electricity and gas systems (which fits with the remits of Ofgem and the FSO) and parts of the consultation that emphasise a broader 'whole system' approach. The concept of 'whole system' itself is not defined and could be open to interpretation. Phrases such as 'whole system', 'the energy system' and 'energy sector' need to be better defined and used more consistently in the statement.

When looking at the whole system, there should be more consideration for wider environmental and social impacts, as well as wider considerations for areas outside the Department for Energy Security and Net Zero (DESNZ) or Ofgem's remits which will be essential in enabling delivery, such as the planning system. A mechanism to take these considerations into account could be incorporated in FSO's eventual role, but that is not currently made clear.

Commitment to Net Zero

The statement is an opportunity to reaffirm the government's commitment to meeting net zero, decarbonising the whole energy system, and realising the wider environmental and social benefits of the transition. This is especially important following the Climate Change Committee's latest annual assessment of progress, which is extremely critical of government performance.

The statement will need to include reference to the recent change in Ofgem's statutory duty to support the government's compliance with climate targets including net zero. That statutory duty is welcome and will help to ensure that all of Ofgem's decisions are consistent with reducing emissions to meet net zero.

There is also an opportunity to more clearly link to the suggestions of the independent 'Mission Zero' report¹ by Chris Skidmore MP, some of which are already reflected here.

Another clear link to be made is between energy security and the necessary reduction in fossil fuel use to meet net zero. The International Energy Agency (IEA) defines 'energy security' as an uninterrupted availability of energy sources at affordable prices.² Long term domestic energy security, and particularly affordability, is contingent on reducing the UK's dependence on oil and gas. This is because the prices of these fossil fuels are set by international markets, irrespective of our domestic production. Therefore, as our reliance on oil and gas reduces, so our energy security increases – especially when fossil fuel prices are high.³

Intersections with other departments and stakeholders

Energy policy is cross cutting and involves the Treasury, Department for Environment, Food and Rural Affairs, Department for Transport, Department for Business and Trade, Department for Science, Innovation and Technology, and others. If the objective is a statement on all energy policy from a whole system perspective, then including other departments that represent other stakeholders, and ensuring there are structures for engaging citizens through local and combined authorities is important.

Given the statement is intended to encapsulate government priorities for energy policy, there is minimal mention of the government's role in delivering the policy outcomes in the 'Roles and responsibilities' section, outside of how it relates to Ofgem. There could be more transparency about the governance structure for delivery of energy policy within the government, and the governance structure and statutory responsibilities which will be built between Ofgem, the FSO and the government. For example, if the FSO is intended to have a whole systems view of the energy system, incorporating many intersecting aspects such as planning and social considerations, there should be a mechanism for feeding any insights gained from this work into the high level energy policy development in DESNZ.

Aside from the three bodies directly tasked with delivering the strategic priorities, government (which in this case is primarily the Department for Energy Security and Net Zero), Ofgem, and FSO, there is very little

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128689/mission-zero-independent-review.pdf

² <https://www.iea.org/about/energy-security>

³ <https://www.ucl.ac.uk/bartlett/energy/news/2023/jun/greater-policy-ambition-could-see-uk-energy-free-volatile-fossil-fuel-markets-well>

mention of how engagement with other departments and stakeholders would enable the policy outcomes that are discussed in the statement.

If there is intended to be a sponsoring team for this statement within DESNZ which will be responsible for cross government engagement, this should be made clearer.

Prioritisation

The consultation document gives the impression that all strategic priorities and policy outcomes should be pursued by energy system actors at the same time. In reality, prioritisation is inevitable. It would therefore be beneficial to have some prioritisation of what could be achieved in the short term, and things which will need a longer term approach.

Within the policy outcomes in the consultation document, there is a range in how specific they are. For instance, whether they include a date by which certain outcomes will be achieved. The policy outcomes are a reinstatement of existing policies and could be made more specific by linking to strategies or targets that have been already announced.

Specific comments on the strategic priorities and policy outcomes:

Demand reduction

One key area missing from the strategy and policy statement is a commitment to demand reduction. Where energy efficiency is mentioned, the focus is on improving technical efficiency, i.e. focused on specific technical improvements, rather than the large scale shift in demand that is also needed.

A broader low energy demand framework applied by the Centre for Research into Energy Demand Solutions (CREDS) captures both of these aspects within the structure of 'avoid, shift and improve'⁴. The research found that without substantial reduction in energy demand, meeting the governments legal climate targets becomes extremely expensive due to the substantial increases in the size of the energy system and the installation of expensive Carbon Dioxide Removal (CDR) technologies. Energy demand reduction is a significant enabler of a cost effective, timely and de-risked net-zero target.

A recent report by the Government Office for Science showed that 'if society changed in ways that reduce demand for energy, the energy system costs of a scenario meeting net zero could be lower by 2% of GDP than a baseline case where the UK fails to meet net zero' once again showing that meeting net zero is economically beneficial as well as environmentally essential⁵. A reduction in demand for energy can also strengthen the UK's energy security and resilience.

Regulators have played an active role in energy efficiency policy for 30 years. In 1992 the then director of Ofgas introduced a levy on energy bills to fund energy efficiency programmes, because 'saving energy was more cost effective than supplying it'. This resulted in four schemes: condensing boilers grants, a compact fluorescent lamp discount scheme, a Local Energy Advice Centre pilot and residential combined heat and power schemes. The electricity regulator Offer approved funding for energy efficiency schemes in the period 1994-1998, as long as they reduced electricity costs⁶. These schemes were followed by others, and eventually led to the large-scale energy supplier programmes of the 2000s and early 2010s. Under these programmes, energy suppliers installed millions of energy efficiency measures in homes.

⁴ <https://low-energy.creds.ac.uk/the-report/>

⁵ <https://www.gov.uk/government/publications/net-zero-society-scenarios-and-pathways--2>

⁶ <https://link.springer.com/article/10.1007/s12053-013-9197-7>

There is also a link here to equity and justice. The distribution of energy consumption across income levels is not flat, and strategies that aim to reduce energy demand need to engage with this reality⁷. Given the increased prominence of debates about how net zero policies should be paid for, there is also a need to provide more help to those on modest or low incomes. Ofgem should have a role in ensuring that the costs and benefits of net-zero are distributed fairly, with particular focus on ensuring that there are benefits to vulnerable groups – and not just those who have the ability to pay.

The strategy and policy statement, and the government's wider energy policies, also need to include more substantial levels of societal engagement. Initiatives such as Climate Assembly UK have shown the potential to engage UK publics in detailed and deliberative discussions about how to meet the net-zero target. Such initiatives, which could include an active role for Ofgem and the FSO, provide opportunities for citizens have agency rather than having energy policies imposed on them.

Long duration electricity storage

We appreciate that there is a timeline specified for the development of a policy on long duration electricity storage. This will be key in enabling a flexible and resilient decarbonised electricity system.

Low carbon heating

Decarbonising heating is a big challenge. However, it is important that the statement makes clear that there is an existing solution to hand – heat pumps. While hydrogen could form part of the solution, there is a mismatch in the attention given to each of these technologies in the document. For instance, the statement should include the current UK Government target of 600,000 heat pump installations per year by 2028.

The government has also previously set a target banning gas boiler installation in new build houses from 2025 and phasing out all new and replacement gas boiler installations from 2035⁸. The phrasing in the statement could be updated to reflect this target more accurately and positively. On page 16 of the consultation, it states an objective of 'Significantly increased uptake of low carbon heating by 2035, with the ambition that all new installations will be net zero compatible.' Instead of ambition, legislation is needed in this area, including a hard date beyond which no new gas heating systems should be installed.

Network connection targets

Page 17 mentions 'Significant and urgent reform of the connections regime so that new generation and demand projects critical to net zero can connect to electricity networks in a cost effective and timely manner and in way that meets the needs of connection customers and the electricity system as a whole.' The acknowledgement of the urgency is welcome. However, there needs to be a more specific timeline or target for network connections, including addressing the backlog of projects.

There also needs to be mention of how the government, Ofgem and FSO will work with bodies involved in planning regulation to facilitate this 'significant and urgent reform'. This was included as a recommendation in Chris Skidmore's Mission Zero report⁹ as follows: 'Government should work with regulators, devolved administrations, local authorities, industry and key stakeholders to streamline the planning and environmental permitting processes to ensure new power generation can come online as soon as possible.'

⁷ <https://www.nature.com/articles/s41560-023-01283-y>

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1044598/6.7408_B_EIS_Clean_Heat_Heat_Buildings_Strategy_Stage_2_v5_WEB.pdf

⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128689/mission-zero-independent-review.pdf

Making clear the wider benefits of low carbon transition

It is essential that Ofgem continues its commitment to protecting vulnerable individuals and households. In addition to this duty, there is the opportunity to go further – and to ensure the industry is creating benefits for all consumers. The transition to net zero will have many positives, and it is important that it is not only early adopters and those in middle and high income brackets who can gain.

Also, there is little acknowledgement that the impacts of the low carbon transition will go beyond economic benefits. For instance, the CREDS low energy demand scenarios found that co-benefits to pursuing energy demand reduction include improved air quality, warmer homes, healthier diets and increased opportunities for exercise. The definition of 'cost effective' should integrate these wider benefits, as otherwise estimations might not account for the true positive impacts.

2. Does the strategy and policy statement effectively set out the role of Ofgem in supporting government to deliver its priorities? If not, please identify where these expectations could be made clearer.

No

We understand that Ofgem have been working on a new Impact Assessment Framework for a long time. Since the consultation was published, it has been confirmed that Ofgem will have a new statutory duty to support the government's compliance with statutory climate change targets - including net zero emissions by 2050. It is not clear how the Impact Assessment Framework, the new Ofgem duty and the proposals discussed in the consultation document will work together.

Given that Ofgem now has to balance the needs of current consumers, future consumers and net zero, it is not clear what framework is in place for assessing areas where there may be trade-offs or difficult decisions to make.

3. Given the FSO does not exist yet but will need to have regard to the strategy and policy statement once it does, do you consider that we have effectively reflected the FSO's role in this document? If not, please identify where these expectations could be made clearer.

No

The FSOs role as set out in the document is rooted in a whole system and long term approach to transforming the energy system. However there needs to be more clarity of what is meant by 'whole system' in this context, as the term is used inconsistently in the consultation document.

As mentioned in a previous answer it would also be helpful to set out the expected governance structures between the government, Ofgem and FSO, including how much the FSO will be expected to collaborate and coordinate with other bodies in the energy system. As previously stated, if the FSO is intended to have a whole systems view of the energy system, incorporating many intersecting aspects such as planning and social considerations, there should be a mechanism for feeding any insights gained from this work into the high level energy policy development in DESNZ.

Finally, as the FSOs expected remit is so broad and important, it will be essential that it is properly funded, resourced, and that there is the skills capability to fulfil its duties.