



House of Commons  
Committee of Public Accounts

---

# Achieving Net Zero: Follow up

---

**Forty-First Report of Session 2021–22**

*Report, together with formal minutes relating  
to the report*

*Ordered by the House of Commons  
to be printed 23 February 2022*

## The Committee of Public Accounts

The Committee of Public Accounts is appointed by the House of Commons to examine “the accounts showing the appropriation of the sums granted by Parliament to meet the public expenditure, and of such other accounts laid before Parliament as the committee may think fit” (Standing Order No. 148).

### Current membership

[Dame Meg Hillier MP](#) (*Labour (Co-op), Hackney South and Shoreditch*) (Chair)

[Mr Gareth Bacon MP](#) (*Conservative, Orpington*)

[Shaun Bailey MP](#) (*Conservative, West Bromwich West*)

[Dan Carden MP](#) (*Labour, Liverpool, Walton*)

[Sir Geoffrey Clifton-Brown MP](#) (*Conservative, The Cotswolds*)

[Rt Hon Mark Francois MP](#) (*Conservative, Rayleigh and Wickford*)

[Peter Grant MP](#) (*Scottish National Party, Glenrothes*)

[Kate Green MP](#) (*Labour, Stretford and Urmston*)

[Antony Higginbotham MP](#) (*Conservative, Burnley*)

[Mr Richard Holden MP](#) (*Conservative, North West Durham*)

[Craig Mackinlay MP](#) (*Conservative, Thanet*)

[Sarah Olney MP](#) (*Liberal Democrat, Richmond Park*)

[Kate Osamor MP](#) (*Labour (Co-op), Edmonton*)

[Nick Smith MP](#) (*Labour, Blaenau Gwent*)

[Helen Whately MP](#) (*Conservative, Faversham and Mid Kent*)

[James Wild MP](#) (*Conservative, North West Norfolk*)

### Powers

Powers of the Committee of Public Accounts are set out in House of Commons Standing Orders, principally in SO No. 148. These are available on the Internet via [www.parliament.uk](http://www.parliament.uk).

### Publication

© Parliamentary Copyright House of Commons 2021. This publication may be reproduced under the terms of the Open Parliament Licence, which is published at <https://www.parliament.uk/site-information/copyright-parliament/>.

Committee reports are published on the [Committee's website](#) and in print by Order of the House.

### Committee staff

The current staff of the Committee are Jessica Bridges-Palmer (Media Officer), Ameet Chudasama (Committee Operations Manager), Richard Cooke (Clerk), Rose Leach (Committee Operations Officer), Heather Nathoo (Chair Liaison), Ben Rayner (Second Clerk).

### Contacts

All correspondence should be addressed to the Clerk of the Committee of Public Accounts, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 5776; the Committee's email address is [pubaccom@parliament.uk](mailto:pubaccom@parliament.uk).

You can follow the Committee on Twitter using [@CommonsPAC](#).

# Contents

---

|   |           |
|---|-----------|
| <b>Summary</b>  | <b>3</b>  |
| <b>Introduction</b>   | <b>4</b>  |
| <b>Conclusions and recommendations</b>                                  | <b>5</b>  |
| <b>1 Reliance on future innovation and consumer behaviour</b>           | <b>9</b>  |
| Private sector investment   | 10        |
| Influencing consumer behaviours   | 11        |
| <b>2 Other risks to delivery</b>  | <b>13</b> |
| Working with local government   | 13        |
| Skills in the private sector and civil service                          | 14        |
| Contributing to reducing global emissions                               | 16        |
| Reporting progress and costs  | 17        |
| <b>Formal minutes</b>   | <b>19</b> |
| <b>Witnesses</b>  | <b>20</b> |
| <b>Published written evidence</b>                                       | <b>21</b> |
| <b>List of Reports from the Committee during the current Parliament</b> | <b>22</b> |



## Summary

In June 2019 government committed to achieving net zero greenhouse gas emissions by 2050. In October 2021, more than two years after the net zero target was enshrined in law, government published its plan for achieving this. To achieve its net zero goal by 2050, government has committed more than £25 billion up to 2024–25.

The government has unveiled a plan without answers to the key questions of how it will fund the transition to net zero, including how it will deliver policy on and replace income from taxes such as fuel duty, or even a general direction of travel on levies and taxation. The Government has no reliable estimate of what the process of implementing the net zero policy is actually likely to cost British consumers, households, businesses and government itself. The HM Treasury witnesses we questioned were reluctant to be drawn on what the future costs of achieving net zero would be, cautioning that while the Climate Change Committee has provided estimates, they contain ‘heroic assumptions’ with errors potentially compounding over very long periods. Government is relying heavily on rapidly changing consumer behaviours together with technological innovations driving down the costs of green options but it is not clear how it will support and encourage consumers to purchase greener products. Certainty for business and consumers is critical but as highlighted repeatedly in this Committee’s recent reports into Achieving Net Zero (HC935), Environmental tax measures (HC 937), Low emission cars (HC 186), and the Green Homes Grant Voucher Scheme (HC 635), government has too often pursued stop-start strategies which undermine confidence for business, investors and consumers in committing to measures which would reduce carbon emissions, especially when some green alternatives are still significantly more expensive than current options.

The government’s net zero strategy requires government, local government, regulators, businesses, and consumers to deliver its targets. A top-down strategy from government won’t deliver on its own. There is a risk that a series of disconnected initiatives announced by central government will not bring about the changes that are set out in law. Instead, government now needs to be clear about what impact new measures will have across the board, particularly for local government.

The government needs to monitor and report its progress including on how it will ensure consumer engagement and buy-in; and how it plans to ensure both the civil service and private sector are equipped with the technical skills to deliver government’s ambition. In addition, Government rightly recognises it has much more work to do to understand the emissions impact of international supply chains, including the risk of domestic emissions being only window dressing if these are merely shifting emissions offshore to other countries.

## Introduction

---

On 19 October 2021, shortly before the UK hosted the 26th United Nations Climate Change Conference of the Parties in Glasgow (commonly referred to as COP26), government published its overarching Net Zero Strategy. On the same day, it also published related documents including its Heat and Buildings Strategy, Net Zero Research and Innovation Framework, and HM Treasury's Net Zero Review. The overarching Strategy brings together individual sector strategies and is government's most comprehensive articulation to date of its long-term plan for transitioning to a net zero economy. It sets out illustrative scenarios of net zero power use and technology in 2050 and models an indicative trajectory to meet emissions targets up to the Sixth Carbon Budget, which sets an interim emissions target for the period 2033 to 2037.

These scenarios and models demonstrate the uncertainty inherent in a long pathway with an end-state nearly three decades from now, a multitude of interdependencies and interactions within and between sectors on that journey, and the sensitivity of any projections to economic, societal and technological change. The government intends its Strategy to provide confidence to the private sector to invest in research and development, and to upskill existing workforces and provide more jobs. This investment is key to the success of the Strategy: spurring technical innovations and driving down the costs of transition to government and consumers. But there is a lot of work to be done to deliver this step change. The Strategy also sets out how government will coordinate its activities in pursuit of net zero objectives, including how central and local government will work together on key local issues such as transport, waste and recycling, and heat and buildings. It sets out government's targets and ambitions, which will form part of government's annual public update on its progress towards net zero.

In undertaking this inquiry, we took evidence from the Department for Business, Energy & Industrial Strategy (the Department), and HM Treasury, on government's strategy to achieve net zero by 2050 and how this transition to a green economy will be funded.

## Conclusions and recommendations

1. **Government has no clear plan for how the transition to net Zero will be funded. Its ability to track its performance against the 2050 target is hampered by vague performance measures, a lack of overall budget or plans to collate and report what it is spending and limited assessment of the cost impact on consumers.** Currently, the government does not plan to report spending in pursuit of its net zero objectives, which the Department considers may be challenging to separate from other costs. While we acknowledge the challenge, which will increase over time as behavioural changes are embedded, this should definitely not be a reason for the Department, working with HM Treasury, to shy away from tracking and reporting public money spent on achieving its net zero objectives and outcomes achieved. For example, the NAO overcame similar challenges to create its Covid Cost Tracker. In addition, some of the net zero measures are cast as best endeavours “as many as possible” or “as many...as reasonably practicable”. These features will make any assessment of progress less transparent and more challenging.

HM Treasury was reluctant to be drawn on the future costs of achieving net zero, cautioning that while the Climate Change Committee has provided estimates, they contain ‘heroic assumptions’ with errors potentially compounding over very long periods.<sup>1</sup> To publish policy without commensurate funding merely amounts to an aspiration not a real intention by government. At a time when people are worried about their energy bills, government must be clearer about the costs facing consumers, households and business of achieving its net zero objectives. Our previous work on green taxation did not give us any confidence that there is a clear plan, and we highlighted our concern that HM Treasury and HM Revenues & Customs (HMRC) have taken a very limited view of tax so far and could not clearly explain to us how the tax system is to be used in achieving the government’s environmental goals. One example is government’s goal of increasing ownership of electric vehicles, which requires HM Treasury to take account of Fuel Duty and Vehicle Excise Duty receipts forgone and provide clarity on how these impacts on the consumer and Exchequer will be managed. At present HMRC and HM Treasury only recognise four environmental taxes as these are the only ones with specific environmental objectives. They have focussed on the revenue these taxes raise but have not kept track of the impact of other taxes such as tax reliefs to support energy saving and clean technologies, or the impact of tax measures affecting the consumption of fossil fuels. We were encouraged to hear that the departments have started to assess the impact of fuel duty freezes on the environment, but environmental assessments should be made for all taxes.

**Recommendations:** Alongside the Treasury Minute response, the Department and HM Treasury should write to the Committee setting out in detail how it will report progress in implementing its net zero policies, including:

- *specific metrics, including the effects of tax measures such as vehicle and fuel related duties.*

- *how it will use these metrics to track progress against long-term targets on an annual basis, for example by setting interim or annual ambitions; and*
- *what it will do if progress demonstrates underperformance.*

*The Department and HM Treasury should also set out how it will ensure Parliament can scrutinise the implementation of its net zero policies. We expect this to take the form of annual reports that include the updated costs to 2050 and the amount spent in that year in the public sector to achieve net zero as well as the impact on consumers, households, businesses and local and central government across all sectors and departments and what the expected CO2 reductions will be.*

2. **Significant uncertainty remains as to whether consumers will rapidly change their behaviours in line with the expectations of government’s Net Zero Strategy.** For government to achieve net zero by 2050 requires extensive consumer engagement with its policies and behaviour change in line with its objectives, from installing heat pumps and better insulation to driving electric vehicles. For example, government has a target of installing 600,000 heat pumps a year by 2028, and that by 2035 all new cars and vans sold are to be zero emission. However, government has a poor track record of engaging consumers, including over-estimating buy-in to its policies. For now, the cost to consumers of these products can be high, although government is confident that this will change and the cost of, for example, a heat pump will be lower by 2035 than the cost of a gas boiler. In addition, the Department does not yet have a picture of the cumulative impacts its net zero policies are having on individuals and groups, although it is monitoring public attitudes to net zero issues on a quarterly basis.

**Recommendation: *The Department should:***

- *Include consumer take-up relative to expectations, and how different social groups are being impacted, in its annual progress updates.*
  - *Conduct scenario planning to prepare for and inform situations where consumer take-up falls below expectations.*
  - *Evaluate the causes of any consumer take-up shortfalls, to inform policy responses.*
3. **Government’s Net Zero Strategy relies heavily on private investment and innovation driving down costs; however, government has a poor track record of providing investor confidence.** The Strategy relies on government leveraging billions of pounds of private investment to spur innovation in pursuit of its objectives. Despite this, in some areas such as heat and buildings government is only ‘fairly confident’ that the measures it is putting in place, including grant funding and regulatory reform, will encourage economies of scale that will drive down the cost of net zero technologies. The private sector needs to have confidence in government’s policies to risk investing resources in developing technologies and upskilling the workforce. However, government has a repetitive track record of making stop-start decisions on green schemes that erode investor confidence, which we have seen again most recently in relation to the Green Homes Grant Voucher Scheme debacle. It remains to be seen whether departmental budgets set over a three-year period

gives investors sufficient long-term clarity. The Department indicated that the new Strategy would have greater permanence because it was developed in conjunction with HM Treasury's multi-year spending review and has long-term targets and trajectories with legal commitments to carbon budgets and achieving net zero.

**Recommendation:** *The Department should monitor how quickly technology costs are falling and the levels of private investment it is attracting, and set clear triggers for interventions such as new policies and regulations for when things go off course. The Department should write to the Committee every 12 months with an update on its progress.*

4. **We are disappointed by government's apparent lack of urgency in clarifying how it will work with local government to achieve net zero.** We have previously reported that local authorities have significant scope to influence emissions in their local area, but government had not sufficiently engaged with them on their role in achieving net zero. The Strategy includes the Department's new role of having overall responsibility for improving coordination with local government, and its plans to establish a Net Zero Forum to bring together senior officials from national and local government on a regular basis to discuss policy and delivery options on net zero. However, we are concerned that there is still a lack of clarity in the roles and responsibilities of local authorities in delivering net zero objectives, and a lack of capacity at the local level to carry out these activities. We are also concerned that some local authorities continue to struggle to access central government money to fund net zero activities. The Department indicated that its funding model was intended to ensure funds got to where they were most needed, for example the poorest social housing stock; however, it committed to consider how it could balance its objectives with a simpler funding system. The Department acknowledges that it has much work to do in relation to local authorities and net zero.

**Recommendation:** *The Department should urgently provide further clarity on how it intends to work with local government on achieving net zero. This should include how it will:*

- *clarify the role it expects local authorities to play in achieving net zero;*
  - *manage risks around local government's delivery of net zero; and*
  - *make net zero funding simpler for local government to access and utilise.*
5. **We are concerned that neither the private sector nor the civil service yet have the necessary skills to deliver the Net Zero Strategy.** The Department acknowledges that the private sector does not currently have the skills to deliver key aspects of the Strategy, such as for buildings and low-carbon heating. It is, nevertheless, confident of this capacity and capability in future. For example, it considers it will achieve its target to install 600,000 heat pumps a year by 2028 because discussions with industry have suggested that heating engineers with 'transferable skills' can be retrained as heat pump engineers. However, the recent failure of the Green Homes Grant Voucher Scheme was in part driven by the lack of skilled workers. The civil service will also need to ensure it has people with the requisite skills to deliver net zero. The Green Book has been updated, requiring officials to assess the carbon impacts of policies; however, the distribution of officials with these skills is not uniform across

government, with the highest concentrations in the Department, Department for Transport and Defra. The Department, working with the Government Skills and Curriculum Unit, is trying to develop the civil service's future development pipeline, including through specialisms and the fast stream.

**Recommendation: *The Department should:***

- *Set out its strategy for encouraging the private sector workforce to develop the skills needed to achieve net zero, drawing on the recommendations included in the Green Jobs Taskforce.*
- *Work with the Cabinet Office to perform a comprehensive analysis of the skills needed in the civil service to deliver net zero and fill gaps either through increased cross-departmental working, training or recruitment.*

6. **Increasing focus on its domestic Net Zero Strategy should not detract government from leading global action to tackle climate change.** Climate change is a global challenge which requires a global solution. Government aims to lead by example domestically to help drive action and ambition internationally. However, delays in publishing targets for reducing public sector emissions risk undermining its credibility nationally and internationally. There is also a risk that policies driving emissions reductions domestically increase emissions elsewhere, and the Department acknowledges that so-called 'consumption emissions' are harder to measure as it requires information on emissions generated by the manufacture and transport of imported goods. Although HM Treasury is considering the challenges of carbon 'leakage' for UK competitiveness, that is displacing emissions from one country to another, the Department recognises that international supply chain emissions, and product standards are areas where it needs to do more work. There are obvious limitations without solutions in obtaining accurate, quality data from many foreign jurisdictions. It is not easy to see how these limitations can be overcome. It plans to launch a call for evidence on demand-side low-carbon products to address issues on product standards and help consumers identify low-carbon products.

**Recommendation: *The Department, together with Defra, should work to increase public awareness of consumption emissions (for example, the carbon footprints of products sold in the UK), so the impact of consumer decisions play a more central role in tackling climate change.***

# 1 Reliance on future innovation and consumer behaviour

---

1. We took evidence from the Department for Business, Energy & Industrial Strategy (the Department), and HM Treasury, on government's Strategy to achieve net zero by 2050 and how it will fund the transition to a green economy.

2. In June 2019, government passed legislation committing to it to achieving 'net zero' greenhouse gas emissions by 2050.<sup>2</sup> This means reducing emissions substantially from current levels, requiring the UK's greenhouse gas emissions in 2050 to be equal to or less than what is removed from the atmosphere by either the natural environment or carbon capture technologies. Government set the net zero target to deliver on the commitments it made by signing the Paris Agreement in 2016. Achieving net zero is a colossal challenge, requiring wide-ranging changes to the UK economy and to the way we all live our lives, including further investment in low-carbon electricity generation, as well as changing the way people travel, how land is used and how buildings are heated.<sup>3</sup>

3. The Department has overall responsibility in government for achieving net zero. It also has lead responsibility for decarbonising many of the highest-emitting sectors of the economy, such as power and industry. HM Treasury has a key role to play allocating budgets to government departments: it is central to assessing the relative priority of policies across government and ensuring that departments have sufficient financial resources to manage programmes aimed at reducing emissions. Through the Autumn Budget and Spending Review 2021, government confirmed the spending plans set out in the Strategy, including that it had committed more than £25 billion up to the end of the 2024–25 financial year, but no further.<sup>4</sup> The Department must also work with devolved administrations; local authorities, which have a key role to play regarding local transport, waste and recycling, and heat and buildings; and also other departments, like the Department for Levelling Up, Housing & Communities, Department for Environment, Food & Rural Affairs (Defra) and the Department for Transport, which each hold policy responsibility for decarbonisation in their respective policy areas.<sup>5</sup>

4. In October 2021, just days before the UK hosted the 26th United Nations Climate Change Conference of the Parties in Glasgow (commonly referred to as COP26) and more than two years since the UK net zero target was enshrined in legislation, government published its overarching Net Zero Strategy (the Strategy).<sup>6</sup> On the same day, it also published related documents including its Heat and Buildings Strategy, Net Zero Research and Innovation Framework, and HM Treasury's Net Zero Review.<sup>7</sup>

5. The overarching Strategy brings together individual sector strategies, for example the Transport Decarbonisation Plan and the Industrial Decarbonisation Strategy, and provides government's most comprehensive articulation to date of its long-term plan

---

2 The Climate Change Act 2008 (2050 Target Amendment) Order 2019

3 C&AG's Report, *Achieving net zero*, Session 2019–21, HC 1035, 4 December 2020, paras 2, 6

4 HM Treasury, *Autumn Budget and Spending Review*, 2021, HC 822, 27 October 2021. Table 2.5

5 C&AG's Report, para 1.15

6 Q 43; C&AG's Report, paras 1, 1.2, 1.12; HM Government, *Net Zero Strategy: Build Back Greener*, October 2021

7 HM Government, *Heat and Buildings Strategy*, CP 388 October 2021; HM Government, *UK Net Zero Research and Innovation Framework*, October 2021; HM Treasury, *Net Zero Review Final Report*, October 2021

for transitioning to a net zero economy.<sup>8</sup> The Strategy sets out illustrative scenarios of net zero power use and technology in 2050 and models an indicative trajectory to meet emissions targets up to the Sixth Carbon Budget, which sets an interim emissions target for the period 2033 to 2037.<sup>9</sup> These scenarios and models demonstrate the uncertainty inherent in a long pathway with an end-state nearly three decades from now; a multitude of interdependencies; and interactions within and between sectors on that journey. The projections are also sensitive to economic, societal and technological changes.<sup>10</sup> Government intends for the Strategy to provide confidence to the private sector to invest in research and development, and to upskill existing workforces and provide more jobs.<sup>11</sup> This investment is key to the success of the Strategy: spurring technical innovations and driving down the costs of transition to government and consumers.<sup>12</sup> The Strategy also sets out government's targets and ambitions, which it plans will form part of an annual public update on its progress towards net zero.<sup>13</sup>

### Private sector investment

6. The Strategy estimates that for the UK to achieve net zero by 2050, capital investment must grow to an average of £50–60 billion each year during the late 2020s and through the 2030s, with most of this investment coming from the private sector.<sup>14</sup> It set out the role for government as creating an attractive environment in which to invest, through long-term policy, regulation, and funding for developing new technologies.<sup>15</sup> For example, the Department intends for its three-year Boiler Upgrade Scheme to act as seed funding from 2022–23, helping companies innovate, upskill and develop the supply chain.<sup>16</sup> The Department told us it was 'fairly confident' that the measures it is putting in place will encourage economies of scale that will drive down the cost of net zero technologies such as heat pumps.<sup>17</sup>

7. Although the Strategy relies on private investment, government does not have a good track record of providing investor confidence in climate policy.<sup>18</sup> For example, government set out plans for zero carbon homes in 2006, but cancelled these in 2015.<sup>19</sup> Even today, on the back of Net Zero and COP 26 commitments, the UK continues to build over 200,000 new homes per year, the overwhelming majority use fossil fuel heating systems and traditional building methods with insufficient insulation. This is incoherent. The previous Committee reported in 2017 that the decision to cancel support for the construction of the UK's first large-scale carbon capture and storage project had a negative impact on investor confidence, and this decision was at the time the latest in a series of decisions on energy

8 Department for Transport, *Decarbonising Transport: A Better, Greener Britain*, July 2021; Department for Business, Energy & Industrial Strategy, *Industrial Decarbonisation Strategy*, March 2021

9 Net Zero Strategy, Chapter 2, page 77, Figure 13; Committee on Climate Change, *Sixth Carbon Budget: The UK's path to Net Zero*, December 2020

10 Net Zero Strategy, chapter 2, pages 70–73

11 Net Zero Strategy, chapter 1, page 42, paras 8–9; page 43, para 12; page 44, paras 17–18

12 Net Zero Strategy, chapter 1, page 43, para 15; page 49, paras 19, 22; chapter 3, page 143

13 Net Zero Strategy, chapter 4, page 254, para 30

14 Net Zero Strategy, page 49 para 19

15 Net Zero Strategy, page 49 para 22

16 Q 24; Net Zero Strategy, page 145 para 24

17 Q 27

18 Qq 99–101; Net Zero Strategy, page 49 para 19

19 Q 25, 100; House of Commons Library, *Zero Carbon Homes*, Number 6678, 27 April 2016

policies that had potentially impacted investor confidence.<sup>20</sup> Most recently, we reported that the Green Homes Grant Voucher Scheme damaged investor confidence by being cancelled at short notice and when it was only partially complete: government announced this Scheme in July 2020 and closed it in March 2021, having paid out £256 million of £1.5 billion available.<sup>21</sup> In total, the Department estimates that it will spend £314 million on this Scheme, woefully underperforming by upgrading around 47,500 homes compared to the 600,000 originally envisaged.<sup>22</sup> Highlighting the short term, stop-start nature of schemes such as this, NAPIT, an accredited membership scheme operator in the building services and fabric sector, highlighted the challenges for it in educating its members about government policy and priorities and the need for clarity and government to rebuild trust in the sector to encourage installers to play their part in reducing carbon emissions in dwellings.<sup>23</sup>

8. Despite its track record, the Department considers that the Strategy will have greater permanence than previous climate policies that have subsequently been reduced or withdrawn.<sup>24</sup> This is partly because the Strategy was developed in conjunction with HM Treasury's 2021–2 to 2024–5 multi-year spending review, and partly because it contains long-term targets and trajectories which are grounded in legal commitments to carbon budgets up to 2033–7, and then ultimately net zero by 2050.<sup>25</sup> However, it is arguable as to whether three-year departmental budgets can provide sufficient confidence to the private sector.<sup>26</sup> HM Treasury told us that it does not want to give overconfidence or false confidence to the partners it works with in the private sector.<sup>27</sup>

## Influencing consumer behaviours

9. In March 2021 we reported that as much as 62% of future emissions reductions would rely on individual choices and behaviour but that government had not yet properly engaged with the public on substantial behavioural changes that achieving net zero would require.<sup>28</sup> In our current inquiry, the Department told us that the most important consumer behaviour changes government is now seeking through its Strategy are the choices to buy an electric car, a heat pump and housing insulation.<sup>29</sup> The Strategy has 'targets and ambitions' including 600,000 heat pump installations each year by 2028; as many homes as possible to be EPC Band C (a measure of energy efficiency) by 2035; and 100% of new cars and vans sold to be zero emission also by 2035.<sup>30</sup> However, government often overestimates consumer buy-in to its policies aimed at reducing emissions.<sup>31</sup> The Energy Systems Catapult, an independent, not-for profit centre of excellence set up by Innovate UK to promote collaboration between industry, government and academia,

20 Committee of Public Accounts, *Carbon Capture and Storage*, Sixty-fourth Report of Session 2016–17, HC 1036, 28 April 2017

21 Q 94; Committee of Public Accounts; *Green Homes Grant Voucher Scheme*, Twenty-seventh Report of Session 2021–22, HC 635, 1 December 2021

22 Qq 94, 100; Comptroller and Auditor General, *Green Homes Grant Voucher Scheme*, Session 2021–22, HC 302, 8 September 2021, para 7

23 NAPIT, page 3

24 Q 8

25 Qq 6, 8, 89, 99

26 Qq 89–103

27 Q 100

28 Committee of Public Accounts, *Achieving Net Zero*, Forty-Sixth Report of Session 2019 - 21, HC 935, 5 March 2021

29 Q 60

30 Net Zero Strategy, page 254–255 para 30

31 C&AG's Report, para 18

highlights policies that are uneven and too weak to drive change, and has compared helping 70 million people transition to a low-carbon economy within a generation as likely to be more complex and complicated than the first lunar landing.<sup>32</sup>

10. Achieving net zero will clearly be challenging. The Department stressed that although many of the technologies the strategy relies on are currently very expensive, it is confident that the cost of these will reduce over time.<sup>33</sup> For example, a heat pump is currently more expensive than a gas boiler; however, the Department hopes that by 2035, replacing a gas boiler at the end of its working life with a heat pump will be a money-saving choice for consumers.<sup>34</sup> Non-financial issues also play a part in consumer choices: in May 2021 we reported that the appeal and acceptance of electric vehicles were also barriers, in addition to cost and range considerations.<sup>35</sup> The Confederation of Passenger Transport, representing manufacturers and operators of buses and coaches, highlighted range, infrastructure and reliability as well as cost concerns for operators when comparing diesel vehicles with those that are ultra-low or zero emission.<sup>36</sup> These zero-carbon technologies and replacements place huge reliance on a massive expansion of electricity supply and distribution capacity for which there is no clear national plan or cost estimate. The Department told us that it monitors attitudes to net zero on a quarterly basis, including what it considers the ‘enablers’ of net zero.<sup>37</sup>

11. We questioned whether the Department was also monitoring and collecting data on the impacts of net zero policies on individuals and groups with different characteristics.<sup>38</sup> The Department pointed to HM Treasury analysis of household exposure to net zero ‘abatement’ costs by income deciles, but also described why it does not consider income to be the defining feature of how net zero policies impact an individual. Rather, it considers a range of relevant factors that all contribute to determining the overall impact on an individual, including the type of housing stock people live in, how they commute and what sort of industry they work in, how their children get to school, and whether they have family overseas.<sup>39</sup> The Department told us it has commissioned research, but admitted this was a complex area where its understanding was limited and would become more sophisticated over time.<sup>40</sup> In written evidence, The Energy Systems Catapult told us that voices of all parts of society must be heard and the impacts on different parts of society must be managed fairly.<sup>41</sup> Core Cities UK, an advocacy group of large regional cities outside Greater London suggested to us that financial disincentives could be attached to activities associated with higher emissions, while ensuring these did not disproportionately impact vulnerable or low-income consumers.<sup>42</sup> The Department told us that for now it is focused on making sure each programme, such as its programme on insulation, does not leave anyone behind; and that it has a plan for industries in transition, such as the automotive industry as it pivots towards producing electric vehicles.<sup>43</sup>

---

32 Energy Systems Catapult, pages 2–3

33 Q 24; Net Zero Strategy, chapter 3, page 143

34 Q 24

35 Committee of Public Accounts, *Low emission cars*, First Report of Session 2021–22, HC 186, 19 May 2021

36 Confederation of Passenger Transport, page 3

37 Q 11

38 Q 84

39 Qq 84–85, 105–106; HM Treasury, *Net Zero Review Final Report*, October 2021, para 3.11–3.15 and Chart 3.D

40 Qq 84–85

41 Energy Systems Catapult, page 4

42 Core Cities UK, page 6, para 5

43 Q 84

## 2 Other risks to delivery

### Working with local government

12. We previously reported in 2021 that local authorities have a key role to play in achieving net zero as they have significant scope to influence emissions in their area, by leading decarbonisation of sectors such as housing and transport, and by influencing local businesses and residents to take climate action. We also reported that although the Department had not sufficiently engaged with local authorities on their role in achieving net zero, it committed to engaging actively with local authorities on how sector strategies would be rolled out, as the strategies were published.<sup>44</sup>

13. The Department reiterated that local government is key to achieving net zero particularly in delivering emission reductions in buildings, transport and waste management.<sup>45</sup> Government analysis suggests that more than 30% of emissions reductions to deliver the Sixth Carbon Budget rely to some extent on local authority involvement, and in evidence submitted to us the Local Government Association noted that net zero can only be achieved with decarbonisation happening across the country, which requires local leadership.<sup>46</sup> Despite this, the Energy Systems Catapult told us that some sub-national actors have very few powers in relation to net zero, making choices and delivery of important infrastructure such as heat networks and electric vehicle charging challenging.<sup>47</sup> Also in written evidence, Core Cities UK, an alliance of 11 cities, highlighted the importance of ‘place-based policy’ and that it was therefore critical that government continues to devolve powers to cities and city regions.<sup>48</sup>

14. The Strategy sets out plans for how central government will work with local government in pursuit of net zero.<sup>49</sup> The Department will take overall responsibility for improving coordination with local government and other local actors on the design and delivery of local net zero policies.<sup>50</sup> The Department will establish a Local Net Zero Forum to regularly bring together senior officials from national and local government to discuss policy and delivery options.<sup>51</sup> However, the Department described a ‘journey’ it needs to take with local authorities, starting with the Forum.<sup>52</sup> The Local Government Association, representing councils from England and Wales, told us it has been calling for a climate taskforce to be established, bringing together ministers and local representatives in a forum to encourage greater national-local government coordination and partnership.<sup>53</sup> When we queried which areas the Department still felt it had work to do in despite having published its Strategy, the Department highlighted working with local authorities, and indicated that this should now progress more quickly.<sup>54</sup>

44 Committee of Public Accounts, *Achieving Net Zero*, Forty-Sixth Report of Session 2019–21, HC 935, 1 March 2021

45 Q 12

46 Net Zero Strategy, page 263, para 8; Local Government Association, page 1, para 2.3

47 Energy Systems Catapult, page 4

48 Core Cities UK, page 2, para 2.7

49 Q 17

50 Net Zero Strategy, page 264, para 14

51 Net Zero Strategy, page 264, para 14

52 Q 12

53 Local Government Association, paras 2.4–2.5

54 Q 82

15. We questioned how local authorities access funding to help achieve net zero. The Local Government Association highlighted to us the core issues of uncertainty, spending power and fragmentation in relation to challenges facing council finances.<sup>55</sup> The Department considers that the current system run at a national level can ensure that areas that really need support, for example to address poor social housing stock, can get it.<sup>56</sup> However, in 2021 the NAO found that a fragmented funding landscape dominated by competitive funds brings the risk that money does not go to where the need or opportunity is greatest, and it can make it difficult for local authorities to plan for the long term.<sup>57</sup> The Department accepts that there are alternative methods, including devolving funding to local authorities, but rejects that this approach is inherently better. The Strategy suggests that longer term, co-ordinated funding can enhance innovation and investment, reduce bureaucracy, and encourage efficient and integrated decision making. The Department told us it is committed to making funding to local authorities simpler.<sup>58</sup>

16. The Energy Systems Catapult highlighted the importance of expanding local authority competence and resources to ensure the capacity and capability to conduct project appraisal and to access funding to help deliver net zero.<sup>59</sup> The Department explained that local net zero hubs exist to help local authorities secure funding, and that, for example, the public sector decarbonisation scheme is accompanied by the low-carbon skills fund to ensure local authorities have the capability to put together a bid of the required standard.<sup>60</sup> In addition, the Department indicated that in future the UK Infrastructure Bank will provide support to local authorities to develop business cases for funding over £5 million.<sup>61</sup> The Department expects the Local Net Zero Forum to provide the opportunity for central and local government to raise issues such as funding, to share information on funding available, and provide information on support mechanisms to facilitate those who wish to access it.<sup>62</sup>

## Skills in the private sector and civil service

17. The Department recognises the need to upskill the private sector to have the capacity and capability to provide goods and services that will contribute to the government's net zero goals.<sup>63</sup> We have recently reported that while the failure of the Green Homes Grant Voucher Scheme was largely down to design and timetable it was also hampered by a lack of workers with the necessary skills.<sup>64</sup> The Department agreed that the private-sector workforce does not currently have the necessary skills in sufficient quantities; however, it is confident that the commitments in the Strategy will motivate individuals to seek training and allow government to, for example, hit its target of installing 600,000 heat pumps a year by 2028.<sup>65</sup> The Department told us that the industry is also confident that it can retrain heating engineers as heat pump engineers, and the Heat Pump Association runs

---

55 Local Government Association, para 2.11

56 Q 17

57 C&AG's Report, *Local government and net zero in England*, Session 2021–22, HC 304, 16 July 2021, para 17

58 Q 17

59 Energy Systems Catapult, page 4

60 Q 17

61 Q 18

62 Q 18

63 Q 69

64 Committee of Public Accounts, *Green Homes Grant Voucher Scheme*, Twenty-seventh Report of Session 2021–22, HC 635, 1 December 2021

65 Qq 68–69

a course aimed at training those with transferrable skills in less than a week.<sup>66</sup> However, NAPIT told us that short courses do not go far enough to create a workforce confident in installing clean-heat measures.<sup>67</sup> NAPIT also flagged to us a paper by the Institute of Public Policy Research warning of possible workforce shortages as more than one in three construction workers are over 50 years old, and the proportion of workers aged below 30 has declined over the last five years.<sup>68</sup>

18. The civil service also needs to ensure it has people with the right skills to address net zero challenges.<sup>69</sup> We previously reported that some departments had failed to provide detailed assessments of the climate impacts of their capital expenditure plans for spending review 2020, despite HM Treasury requesting that they do so. HM Treasury told us that the main reason for this was that the relevant capability was concentrated in the Department. HM Treasury recognised that there was more it could do to ensure departments have the necessary tools and capabilities.<sup>70</sup> The Department told us that, in conjunction with HM Treasury, it has been providing training to other departments to help them account better for carbon in the assessments they make.<sup>71</sup> Separately, we also previously reported that the Cabinet Office acknowledged that some skills are particularly scarce in the civil service, such as the ability to lead large projects. It planned to make upskilling the civil service a key focus of its civil service reform process.<sup>72</sup> The Cabinet Office's 2021 Declaration on Government Reform highlighted the need for, among others, science and project delivery skills in the civil service, albeit without referencing net zero as a unique challenge.<sup>73</sup>

19. We questioned whether there remained a net zero skills imbalance across government.<sup>74</sup> The Department told us that it has a high concentration of relevant skills, and there are secondary but still substantial concentrations in the Department for Transport and the Department for Environment, Food & Rural Affairs. The Department told us that these two other departments had invested in these skills over the last year, and that more departments would follow suit.<sup>75</sup>

20. In 2020 government established the Government Skills and Curriculum Unit. The Strategy indicates that this Unit is working with the Department to review the skills, training and networks that civil servants need to achieve net zero.<sup>76</sup> In addition, the Department told us that government is also building its talent pipeline by, for example, embedding climate considerations in the Policy Profession Standards, the competency framework for civil servants developing policy, and introducing climate training into the Civil Service Fast Stream.<sup>77</sup>

---

66 Q 69

67 NAPIT, page 2

68 NAPIT, page 2

69 Net Zero Strategy, chapter 4, page 258–259, paras 54–58

70 Committee of Public Accounts, *Achieving Net Zero*, Forty-Sixth Report of Session 2019–21, HC 935, 1 March 2021, para 14

71 Q 71

72 Committee of Public Accounts, *Specialist Skills in the civil service*, Thirty-Second Report of Session 2019–21, HC 686, 11 December 2020, para 7

73 Cabinet Office, Declaration on Government Reform, June 2021, part 2

74 Q 71

75 Q 71

76 Net Zero Strategy, page 258, paras 54–55

77 Q 86; Net Zero Strategy, page 249, para 5; page 258–9, paras 56–58

## Contributing to reducing global emissions

21. The Department recognises that climate change is a global challenge requiring a global solution. The Strategy identifies international collaboration as a key aim for the UK's presidencies of COP26 and the G7. The Strategy further commits to lead by example internationally on climate policies, in part by building on a strong foundation of domestic action.<sup>78</sup> However, its credibility can legitimately be questioned when the government has delayed the introduction of new Greening Government Commitments which set targets to reduce emissions from central government departments and arm's-length bodies and has not been clear about how its consideration of an application to open a new coal mine in Cumbria, and extraction of fossil fuels at the Cambo oil field off the coast of Shetland fit into its net zero strategy.<sup>79</sup> OGUK, a representative organisation for the UK offshore oil and gas industry, told us that in March, together with the Department and Oil and Gas Authority, it published the North Sea Transition Deal. Both OGUK and the Department expect the deal to harness the expertise of the UK offshore oil and gas industry to help meet net zero, and that it is the first deal of its kind by a G7 country.<sup>80</sup>

22. We previously reported in 2021 that it was critical that actions to reduce the UK's emissions did not result in moving emissions abroad, so-called 'carbon leakage', which would undermine global efforts to tackle climate change. At that time, government did not have a clear way of determining whether its actions to reduce emissions in the UK transferred emissions to other countries, and HM Treasury told us that it was considering the feasibility of a tax based on carbon embedded in imports (a carbon border adjustment tax) to reduce the risk of pushing emissions abroad.<sup>81</sup>

23. In its new Strategy, government recognises the importance of addressing the risk of carbon leakage so that its net zero interventions do not lead to increased emissions elsewhere, and to ensure that UK industry has confidence to decarbonise.<sup>82</sup> The Department sought to assure us that it has not found serious problems with carbon leakage, and that Defra report the UK's 'carbon footprint', which includes consumption emissions relating to imports from China, the EU or the rest of the world. The Department told us that Defra's data show a declining trajectory.<sup>83</sup> However, it should be noted that Defra classes these as experimental statistics because of inherent uncertainties in the estimation of emissions.<sup>84</sup>

24. The Department told us consumption emissions are more difficult to measure than territorial emissions, the latter being the standard approach of the United Nations Framework Convention on Climate Change (UNFCCC).<sup>85</sup> The Department told us that it intends to use product standards and carbon adjustment mechanisms at the border as long-term levers to prevent carbon leakage.<sup>86</sup> In its Strategy, government stated its intentions to launch a call for evidence on consumer-focused demand-side low-carbon products as a first step to address issues on product standards by Spring 2022.<sup>87</sup> HM Treasury's Net Zero

78 Qq 42–43; Net Zero Strategy, pages 284, 285 paras 2 and 7

79 Q 2; [UK Government Minister meets with energy firm over Cambo - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/uk-government-minister-meets-with-energy-firm-over-cambo)

80 Q 28; OGUK

81 Committee of Public Accounts, *Achieving Net Zero*, Forty-Sixth Report of Session 2019 - 21, HC 935, 5 March 2021

82 Q 112; Net Zero Strategy, page 122 para 9

83 Qq 33, 37; Defra, [UK's Carbon Footprint 1997 - 2018](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101111/uk-carbon-footprint-1997-2018.pdf)

84 Defra, [UK's Carbon Footprint 1997 - 2018](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101111/uk-carbon-footprint-1997-2018.pdf); Note dated 15 November 2021 from Department for Business, Energy & Industrial Strategy para 2

85 Qq 33–34

86 Q 37

87 Qq 37–38; Net Zero Strategy, page 131 para 61

Review also concluded that carbon leakage was an area where it too needed to do further work.<sup>88</sup> On 3 November the International Financial Reporting Standards Foundation (IFRS) announced ‘prototype’ climate sustainability disclosure requirements.<sup>89</sup> HM Treasury told us that government would consider how these will be interpreted for the public sector, but was unable to give us a timeframe for their application.<sup>90</sup>

## Reporting progress and costs

25. The Strategy commits government to providing an annual public update on progress made in the previous year towards net zero. This will include progress against the ‘targets and ambitions’ set out in the strategy, commentary on contextual changes that might affect the expected pathway to meeting decarbonisation commitments, and a summary of progress against the pathway, policies and proposals within the Strategy.<sup>91</sup>

26. We questioned the Department as to whether it felt measures relating to the energy efficiency of buildings cast as best endeavours, such as ‘as many as possible’ and ‘as many... as reasonably practicable’ were transparent, clear and effective.<sup>92</sup> The Department told us that a one-size-fits-all measure cannot be applied to buildings, and the flexibility was intentional to take into consideration the diversity of building stock.<sup>93</sup> The Department indicated that these measures were intended to provide a sense of direction, and confirmed under further questioning that it will also report more detailed metrics against these measures to allow progress to be tracked over time.<sup>94</sup> However, interim targets and detailed milestones will not be included for all measures set out in the Strategy.<sup>95</sup>

27. In its 2020 report *Achieving net zero*, the NAO stated that neither the Department nor HM Treasury collated information on the total costs and benefits of government policies that contribute to achieving net zero.<sup>96</sup> HM Treasury told us that costs associated with achieving the Nationally Determined Contribution (which commits the UK to reducing economy-wide greenhouse gas emissions by at least 68% by 2030 compared to 1990 levels), achieving the Sixth Carbon Budget, contributing to international climate finance, and any UK commitments made at COP26 are already covered either in the current Spending Review settlement, or will be covered by future spending reviews.<sup>97</sup> HM Treasury also told us that the Climate Change Committee produces cost estimates over much longer periods, for example 30 years, and the Office for Budgetary Responsibility produces an official estimate of the future costs of climate adaptation and mitigation in its fiscal risks report over an even longer time horizon of 50 years.<sup>98</sup> However, HM Treasury cautioned that such estimates contain ‘heroic assumptions’ with errors compounding over potentially very long periods.<sup>99</sup> It concluded in its Net Zero Review that costs and benefits will not fall

88 HM Treasury, *Net Zero Review Final Report*, October 2021, para 2.33

89 IFRS, [IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements](#)

90 Qq 109–110

91 Net Zero Strategy, page 254, para 30

92 Q 62

93 Q 63

94 Q 64–65

95 Net Zero Strategy, page 254, para 30

96 Q 70; C&AG’s Report, para 17

97 Qq 87–92; UK Government, *United Kingdom of Great Britain and Northern Ireland’s Nationally Determined Contribution*, 2020

98 Qq 95–96, 105–107

99 Q 95, 97

evenly, but that it was impossible to forecast how individual households would be affected over the thirty-year transition given consumer costs would be driven by factors including incomes, preferences and the technology mix available including its costs.<sup>100</sup>

28. The Department pointed to the cost-benefit analysis it prepared as part of government's consideration for legally adopting the Sixth Carbon Budget, and also its financial resources (expressed as capital and operating expenditure limits) set against different targets including net zero and contained within its Outcome Delivery Plan.<sup>101</sup> The Department told us that it was possible for it to make aggregated calculations of how much money it and other departments were assigning to net zero objectives.<sup>102</sup> We asked if costs and spend against net zero could be collated and tracked in the same way the NAO has captured Covid-19 costs through its publicly available Covid Cost Tracker. HM Treasury told us that it was looking at the best way to attribute costs and give a clear account of what is being spent in a way that would be meaningful and helpful, but it and the Department recognised that net zero costs may not always be clearly identifiable as such.<sup>103</sup>

29. In addition to direct costs to the Exchequer of achieving net zero, HM Treasury also recognises the impact of behaviour change reducing tax revenues. Revenues from Fuel Duty and Vehicle Excise Duty amounted to £37 billion in 2019–20, and if the current tax system were to remain unchanged receipts from these taxes will decline towards zero over the next 20 years.<sup>104</sup> We previously reported in 2021 that HM Treasury cannot explain how it will manage declining revenues from consumption of fossil fuels and that it should set out a timetable for how it will consult on options for replacing these. Despite committing to write to the Committee in November 2021 with such a roadmap, HM Treasury's response did not provide one.<sup>105</sup> HM Treasury told us that where possible, the government holds consultations on major tax reforms to support understanding of these measures. However, "...there is a great deal of uncertainty inherent in any modelling as far into the future as 2050, which is highly sensitive to economic, societal and technological developments. Given this, a tax roadmap could ultimately give a false sense of certainty."<sup>106</sup>

---

100 HM Treasury, *Net Zero Review Final Report*, October 2021. Executive summary; para 3.7

101 Q 70; [Impact Assessment for the Sixth Carbon Budget](#); Department for Business, Energy & Industrial Strategy, *Outcome Delivery Plan: 2021 to 2022*, July 2021

102 Q 70

103 Q 71–72; Q 56–58 (Oral evidence: Covid-19: Cost tracker update, HC 173, 17 November 2021)

104 Q 106; HM Treasury, *Net Zero Review Final Report*, October 2021, para 6.4

105 Letter from Exchequer Secretary to the Treasury to PAC Chair dated 30 November 2021

106 Q 98, 106; Committee of Public Accounts, *Environmental tax measures*, Forty-Fifth Report of Session 2019–21, HC 937, 28 April 2021

# Formal minutes

---

## Wednesday 23 February 2022

Members present:

Dame Meg Hillier, in the Chair

Sir Geoffrey Clifton-Brown

Mr Mark Francois

Peter Grant

Kate Green

Antony Higginbotham

Sarah Olney

Kate Osamor

Nick Smith

James Wild

## ***Achieving Net Zero: Follow up***

Draft Report (*Achieving Net Zero: Follow up*), proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 29 read and agreed to.

Summary agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

*Resolved*, That the Report be the Forty-first of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

## **Adjournment**

Adjourned till Monday 28 February at 3:30pm

## Witnesses

---

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

### Monday 25 October 2021

**Sarah Munby**, Permanent Secretary, Department for Business, Energy & Industrial Strategy; **Lee McDonough**, Director General for net zero strategy and international, Department for Business, Energy & Industrial Strategy; **Ben Rimmington**, Director General Net Zero Buildings and Industry, Department for Business, Energy & Industrial Strategy

[Q1–86](#)

### Wednesday 17 November 2021

**Sir Tom Scholar**, Permanent Secretary, HM Treasury; **Cat Little**, Director General Public Spending, HM Treasury; **Steve Field**, Director of Climate, Energy and Environment, HM Treasury

[Q87–113](#)

## Published written evidence

---

The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

ANZ numbers are generated by the evidence processing system and so may not be complete.

- 1 The Confederation of Passenger Transport (CPT UK) ([ANZ0005](#))
- 2 Core Cities UK ([ANZ0007](#))
- 3 About Energy System Catapult ([ANZ0002](#))
- 4 Heathrow Airport ([ANZ0001](#))
- 5 NAPIT ([ANZ0003](#))
- 6 OGUK ([ANZ0006](#))
- 7 The Local Government Association ([ANZ0004](#))

## List of Reports from the Committee during the current Parliament

---

All publications from the Committee are available on the [publications page](#) of the Committee's website.

### Session 2021–22

| Number | Title   | Reference |
|--------|---|-----------|
| 1st    | Low emission cars   | HC 186    |
| 2nd    | BBC strategic financial management  | HC 187    |
| 3rd    | COVID-19: Support for children's education  | HC 240    |
| 4th    | COVID-19: Local government finance  | HC 239    |
| 5th    | COVID-19: Government Support for Charities  | HC 250    |
| 6th    | Public Sector Pensions  | HC 289    |
| 7th    | Adult Social Care Markets   | HC 252    |
| 8th    | COVID 19: Culture Recovery Fund   | HC 340    |
| 9th    | Fraud and Error   | HC 253    |
| 10th   | Overview of the English rail system   | HC 170    |
| 11th   | Local auditor reporting on local government in England  | HC 171    |
| 12th   | COVID 19: Cost Tracker Update   | HC 173    |
| 13th   | Initial lessons from the government's response to the COVID-19 pandemic                         | HC 175    |
| 14th   | Windrush Compensation Scheme  | HC 174    |
| 15th   | DWP Employment support  | HC 177    |
| 16th   | Principles of effective regulation  | HC 176    |
| 17th   | High Speed 2: Progress at Summer 2021   | HC 329    |
| 18th   | Government's delivery through arm's-length bodies   | HC 181    |
| 19th   | Protecting consumers from unsafe products   | HC 180    |
| 20th   | Optimising the defence estate   | HC 179    |
| 21st   | School Funding  | HC 183    |
| 22nd   | Improving the performance of major defence equipment contracts                                  | HC 185    |
| 23rd   | Test and Trace update   | HC 182    |
| 24th   | Crossrail: A progress update  | HC 184    |
| 25th   | The Department for Work and Pensions' Accounts 2020–21 – Fraud and error in the benefits system | HC 633    |
| 26th   | Lessons from Greensill Capital: accreditation to business support schemes                       | HC 169    |
| 27th   | Green Homes Grant Voucher Scheme  | HC 635    |

| <b>Number</b>      | <b>Title</b>   | <b>Reference</b> |
|--------------------|--|------------------|
| 28th               | Efficiency in government   | HC 636           |
| 29th               | The National Law Enforcement Data Programme                          | HC 638           |
| 30th               | Challenges in implementing digital change                            | HC 637           |
| 31st               | Environmental Land Management Scheme                                 | HC 639           |
| 32nd               | Delivering gigabitcapable broadband                                  | HC 743           |
| 33rd               | Underpayments of the State Pension                                   | HC 654           |
| 34th               | Local Government Finance System: Overview and Challenges             | HC 646           |
| 35th               | The pharmacy early payment and salary advance schemes in the NHS     | HC 745           |
| 36th               | EU Exit: UK Border post transition                                   | HC 746           |
| 37th               | HMRC Performance in 2020–21  | HC 641           |
| 38th               | COVID-19 cost tracker update   | HC 640           |
| 39th               | DWP Employment Support: Kickstart Scheme                             | HC 655           |
| 40th               | Excess votes 2020–21: Serious Fraud Office                           | HC 1099          |
| 1st Special Report | Fifth Annual Report of the Chair of the Committee of Public Accounts | HC 222           |

### Session 2019–21

| <b>Number</b> | <b>Title</b>   | <b>Reference</b> |
|---------------|--|------------------|
| 1st           | Support for children with special educational needs and disabilities   | HC 85            |
| 2nd           | Defence Nuclear Infrastructure   | HC 86            |
| 3rd           | High Speed 2: Spring 2020 Update                                       | HC 84            |
| 4th           | EU Exit: Get ready for Brexit Campaign                                 | HC 131           |
| 5th           | University technical colleges  | HC 87            |
| 6th           | Excess votes 2018–19   | HC 243           |
| 7th           | Gambling regulation: problem gambling and protecting vulnerable people | HC 134           |
| 8th           | NHS capital expenditure and financial management                       | HC 344           |
| 9th           | Water supply and demand management                                     | HC 378           |
| 10th          | Defence capability and the Equipment Plan                              | HC 247           |
| 11th          | Local authority investment in commercial property                      | HC 312           |
| 12th          | Management of tax reliefs  | HC 379           |
| 13th          | Whole of Government Response to COVID-19                               | HC 404           |
| 14th          | Readying the NHS and social care for the COVID-19 peak                 | HC 405           |
| 15th          | Improving the prison estate  | HC 244           |
| 16th          | Progress in remediating dangerous cladding                             | HC 406           |

| <b>Number</b> | <b>Title</b>   | <b>Reference</b> |
|---------------|--|------------------|
| 17th          | Immigration enforcement  | HC 407           |
| 18th          | NHS nursing workforce  | HC 408           |
| 19th          | Restoration and renewal of the Palace of Westminster                         | HC 549           |
| 20th          | Tackling the tax gap   | HC 650           |
| 21st          | Government support for UK exporters  | HC 679           |
| 22nd          | Digital transformation in the NHS  | HC 680           |
| 23rd          | Delivering carrier strike  | HC 684           |
| 24th          | Selecting towns for the Towns Fund   | HC 651           |
| 25th          | Asylum accommodation and support transformation programme                    | HC 683           |
| 26th          | Department of Work and Pensions Accounts 2019–20                             | HC 681           |
| 27th          | Covid-19: Supply of ventilators  | HC 685           |
| 28th          | The Nuclear Decommissioning Authority's management of the Magnox contract    | HC 653           |
| 29th          | Whitehall preparations for EU Exit   | HC 682           |
| 30th          | The production and distribution of cash                                      | HC 654           |
| 31st          | Starter Homes  | HC 88            |
| 32nd          | Specialist Skills in the civil service                                       | HC 686           |
| 33rd          | Covid-19: Bounce Back Loan Scheme  | HC 687           |
| 34th          | Covid-19: Support for jobs   | HC 920           |
| 35th          | Improving Broadband  | HC 688           |
| 36th          | HMRC performance 2019–20   | HC 690           |
| 37th          | Whole of Government Accounts 2018–19   | HC 655           |
| 38th          | Managing colleges' financial sustainability                                  | HC 692           |
| 39th          | Lessons from major projects and programmes                                   | HC 694           |
| 40th          | Achieving government's long-term environmental goals                         | HC 927           |
| 41st          | COVID 19: the free school meals voucher scheme                               | HC 689           |
| 42nd          | COVID-19: Government procurement and supply of Personal Protective Equipment | HC 928           |
| 43rd          | COVID-19: Planning for a vaccine Part 1                                      | HC 930           |
| 44th          | Excess Votes 2019–20   | HC 1205          |
| 45th          | Managing flood risk  | HC 931           |
| 46th          | Achieving Net Zero   | HC 935           |
| 47th          | COVID-19: Test, track and trace (part 1)                                     | HC 932           |
| 48th          | Digital Services at the Border   | HC 936           |
| 49th          | COVID-19: housing people sleeping rough                                      | HC 934           |
| 50th          | Defence Equipment Plan 2020–2030   | HC 693           |

| <b>Number</b> | <b>Title</b>  | <b>Reference</b> |
|---------------|---|------------------|
| 51st          | Managing the expiry of PFI contracts                        | HC 1114          |
| 52nd          | Key challenges facing the Ministry of Justice               | HC 1190          |
| 53rd          | Covid 19: supporting the vulnerable during lockdown         | HC 938           |
| 54th          | Improving single living accommodation for service personnel | HC 940           |
| 55th          | Environmental tax measures                                  | HC 937           |
| 56th          | Industrial Strategy Challenge Fund                          | HC 941           |