



HM Government

Responding to the Independent Review of Net Zero's Recommendations

March 2023



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Introduction

We welcome the Rt Hon Chris Skidmore MP's Net Zero Review (Mission Zero), an independent review of net zero and government's progress towards achieving it. Chris Skidmore was asked to lead the Review and focus on how we can deliver a pro-growth, cost effective net zero in the context of global economic shocks.

The Review ran from September-December 2022 – with 52 roundtables across industry, government and civil society and 1800+ responses to a public Call for Evidence. It made 129 recommendations focused on ten missions. The Net Zero Growth Plan includes sections on how we are taking forward the recommendations, but we have also provided a response to each recommendation in this accompanying annex.

We agree with the Review's conclusion that net zero is the growth opportunity of the 21st century and could offer major economic opportunities to the UK – but that decisive action is needed to seize these. Other countries such as the USA with the Inflation Reduction Act are moving quickly, and we must do the same. We are focused on unlocking the ambition of places and communities to deliver net zero by 2050.

#	Timing	Recommendation	Response
1	-	Publish an overarching financing strategy covering how existing and future government spending, policies, and regulation will scale up private finance to deliver the UK's net zero enabled growth and energy security ambitions. This should include setting out the role of UKIB, BBB, BII, and IPA and UKEF in the transition.	In parallel to the Net Zero Growth Plan, the Government is publishing its 2023 <i>Green Finance Strategy</i> . This sets out how strategic government support can unlock private investment to drive forward economic transformation and innovation at the scale and pace required to deliver our net zero, climate resilience and environmental objectives. The Strategy covers the role of public finance institutions in financing net zero - supporting sectors and technologies across the commercial maturity curve.
2	Next SR	At the next Spending Review, review options for providing longer-term certainty to a small number of major priorities for net zero – where we know that long-term policy commitment will be essential for success and provide long-term opportunities to save money.	<p>Government recognises the importance of long-term policy and funding certainty for net zero, particularly to mobilise private finance to invest in the transition. HM Treasury sets departmental spending budgets at Spending Reviews to enable Ministers to consider the value for money of spending proposals across government priorities and within fiscal constraints to ensure total spending is affordable.</p> <p>Government does already provide longer-term funding certainty to a number of major priorities for net zero, and at Spring Budget confirmed up to £20 billion to support the early deployment of Carbon Capture, Usage and Storage. Government uses a range of policy levers to provide long term support, including the Contracts for Difference scheme for low-carbon electricity generation, through which generators have received almost £6 billion net in price support to date.</p> <p>Further, Government passed the Nuclear Energy (Financing) Act 2022, which enables new nuclear projects to benefit from a Regulated Asset Base (RAB) model, reducing the cost of new build nuclear and providing certainty to private finance.</p> <p>At the Autumn Statement 2022, the Chancellor announced a new long-term ambition to reduce the UK's final energy consumption from buildings and industry by 15% by 2030 against 2021 levels.</p>

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			<p>To lead this national effort, a new Energy Efficiency Taskforce has been established and £6 billion of new government funding will be made available from 2025 to 2028, in addition to £6.6 billion allocated this Parliament.</p> <p>Government’s National Infrastructure and Construction Pipeline (NICP) also provides certainty to the major infrastructure project delivery sector. The NICP is a forward-looking pipeline of planned projects and programmes in economic and social infrastructure, and is due to be updated later this year. Government also put the UK Infrastructure Bank on a statutory footing to help create a long-lasting institution focussed on driving infrastructure investment towards projects that help tackle climate change, as well as supporting regional and local economic growth across the UK.</p>
3	2023	Government to lead a bespoke consultation on funding scheme design – with a ministerial champion – to report on the issues and recommend reforms to government.	Both the 2023 <i>Green Finance Strategy Call for Evidence</i> and the <i>Independent Review of Net Zero</i> highlighted concerns that the very broad range of government funding schemes that are available for businesses and project developers can at times create undue complexity and do not always suit the specific needs of the relevant sector. The Government recognises the importance of ensuring the design of funding schemes is as impactful, effective and focused on value for money as possible, and we will explore the design of funding schemes for net zero projects ahead of the next Spending Review.
4	2023	Government to establish a new forum to coordinate across all regulators on the signals they are sending to businesses and investors across sectors about the net zero transition – including Ofwat, Ofgem, HSE, Environment	The Government works proactively with regulators on coordinated action to enable the delivery of net zero, including through dedicated sponsorship teams which lead on government-regulator engagement. The Government agrees a forum across all net zero regulators would strengthen coordination further.

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		Agency, Competition and Markets Authority, FCA, and the North Sea Transition Authority.	<p>To deliver this recommendation, the Government will work with the UK Regulators' Network (UKRN) to ensure this new forum builds on and works in conjunction with existing networks. Together we will explore and test the best way to expand regulator engagement beyond their established cross-regulator Climate Change Network membership. We aim to include those referenced in the recommendation, as well as additional net zero enabling regulators and key government contacts.</p> <p>We are developing the scope, remit, and ambition of this forum and expect to confirm a detailed proposal by Summer 2023.</p>
5	2023	Government should conduct and publish, before Autumn 2023, a review of how we should change regulation for emerging net zero technologies to enable their rapid and safe introduction, to support the net zero transition and boost growth.	<p>We agree that regulation will be an important factor in enabling the scale-up of emerging net zero technologies. This was a key focus of the recent Sir Patrick Vallance pro-innovation Regulation of Technologies Review: Green Industries. The review aimed to identify opportunities and enablers for pro-innovation regulation of science and tech sectors including those across green industries. The government has responded to the review alongside this publication and set out several areas of future work including on the capacity of regulators, enhancing grid connections, and supporting the roll-out of electric vehicle charging infrastructure. This will complement ongoing work to remove barriers to the development and deployment of net zero technologies set out in the <i>Net Zero Growth Plan</i>.</p>
6	2025	New 'Net Zero select committees' in both Houses of Parliament.	<p>The creation of new Select Committees is a matter for Parliament. The Government is awaiting the formation of the new Energy and Net Zero Select Committee which will scrutinise the work of the Department. In addition, the department is already subject to extensive scrutiny - for example via the Lords Environment and Climate Change Committee, the Commons Environmental Audit Committee and the Commons Public Accounts Committee.</p>

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7	2023	Government to establish an 'Office for Net Zero Delivery' by Spring 2023, to ensure that the cross-departmental priorities for net zero are properly managed.	We recognise the importance of coordinated action across departments to ensure there is consistency in government policy and decision-making. The creation of the Department for Energy Security and Net Zero means there is now a new department dedicated to delivering on our ambitious climate ambitions and a senior ministerial voice at the Cabinet table whose focus, alongside energy security, is driving overall delivery of net zero across government and maximising the economic opportunity the transition presents. The new department's officials work with counterparts across government to coordinate action, working particularly closely with Cabinet Office and HM Treasury to ensure that net zero is prioritised in government policy and decision-making and aligns with other priorities.
8	2023	Government to consider the case for creating new separate delivery agencies to deliver long-term decarbonisation programmes.	The Government appreciates that the delivery landscape will need to be kept under review on the road to net zero and will consider the case for new delivery agencies where they are the right model. The launch of Great British Nuclear is a good example of the Government using innovative delivery models. There are also other delivery models that merit consideration. We will factor in these models when considering the case for creating new separate delivery agencies.
9	2023	Government to significantly expand its public reporting on net zero - potentially either through the ONS's climate portal or developed in partnership with the CCC. This will act as a tool both for public communication and greater scrutiny of government's progress towards net zero. It should set out regular and publicly accessible data on key progress indicators.	The Government recognises the benefit in publishing public reports and opening itself to scrutiny. That is why there are many existing mechanisms to regularly scrutinise the Government's performance on net zero, including by Parliamentary Select Committees such as the Public Accounts Committee, independent bodies such as the National Audit Office, and – under the Climate Change Act – the Climate Change Committee (CCC). For the latter, the Government provides a detailed annual response to the CCC's <i>Progress Report</i> – a statutory duty – which is publicly available. The Net Zero Strategy also committed the Government

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			to report annually on 24 commitments. We have done this in the 2023 <i>Net Zero Growth Plan</i> . We also report on emissions and carbon budgets which are in the public domain. Consequently, we will not be expanding public reporting at this time, but we will continue to keep this under review as we progress on the pathway to net zero.
10	2024	Government to review how often it publishes data on UK emissions – and represent this alongside GDP.	Government publishes final estimates of UK greenhouse gas emissions annually, covering emissions data from two years prior. These statistics are used to monitor progress against the UK's emissions reductions targets. Provisional greenhouse gas emission estimates are also published annually in March, covering emissions data from one year prior. As is standard for all statistics produced within the remit of the official statistics Code of Practice, the frequency of emissions publications is kept under review. We will commit to reviewing the frequency of statistics though it is not guaranteed that this will lead to a change.
11	2024	HMT should work with OBR and CCC to set out a process for how it will ensure the climate impacts of fiscal decision making are considered. It should commit to publishing the climate impacts of future spending reviews.	<p>Fiscal policy is only one lever to deliver the Government's climate objectives. The <i>Net Zero Strategy</i> set out the Government's wider approach to meeting its 2050 net zero target including the role of regulation and private finance. Departments are also ultimately responsible for assessing the impacts of their programmes.</p> <p>Nonetheless, HMT recognises that it is important to consider climate impacts in fiscal decision making, to ensure that fiscal policy is supporting these objectives.</p> <p>HMT already has processes in place to assess the climate impacts of fiscal decision making, and published information on the climate and environmental impacts of Spending Review 2021.</p> <p>HMT remains committed to improving these processes, and will work with the OBR and CCC to consider how best to do so,</p>

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			though final decisions on publication at future spending reviews will be for HMT Ministers.
12	2023	Government to commission the ONS and/or UKRI to lead an engagement exercise with business to define their data needs and develop bespoke recommendations to address these.	Disclosure of specified energy use and scope 1 and 2 carbon emissions by the largest UK businesses has been required since 2013 and in the 2019 <i>Green Finance Strategy</i> , the government launched the UK Centre for Greening Finance and Investment (CGFI) to accelerate the adoption and use of climate and environmental data and analytics by financial institutions internationally. The update to the 2023 <i>Green Finance Strategy</i> published alongside this document sets out what further steps we are taking on data. We will engage with business to define their data needs through the work of the newly-established Net Zero Business & Investment Group.
13	-	Carry out competitiveness analysis for clean technologies setting out the UK's export and import strategies and where it intends to develop leadership - and utilises this to clarify for investors and industry the UK's current green industrial policy.	The Government has set out a clear and consistent set of strategic objectives and a long-term policy framework. From the <i>Net Zero Strategy</i> in 2021 and last year's <i>British Energy Security Strategy</i> , to the <i>Net Zero Growth Plan</i> and <i>Powering Up Britain: Energy Security</i> , we are providing longer-term clarity and certainty to businesses and investors. Government has committed £30 billion of domestic investment for the green industrial revolution at Spending Review 2021; £6 billion for energy efficiency at the Autumn Statement 2022 and up to £20 billion for CCUS announced at Spring Budget 2023. In the context of developing international markets in clean technologies, we continue to assess our support for low carbon technologies to deliver our net zero and economic goals and the Government continues to assess the impact of international policies on the UK's competitiveness to secure investment in net zero.
14	2023	Government to endorse and implement the International Sustainability Standards Board	We will continue to support the work of the International Financial Reporting Standards' (IFRS) Foundation's new standard-setting

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		(ISSB) standards as soon as possible. The UK should lead by example, launching a formal adoption mechanism as soon as the ISSB standards are published and moving swiftly to assess and endorse the standards for use in the UK. The UK should aim for 2024/25 as the first sustainability reporting cycle for companies in scope, encouraging companies to apply the ISSB's standards voluntarily in 2023/24.	board – the International Sustainability Standards Board (ISSB) – and will set up a framework to assess these standards for their suitability for adoption in the UK as soon as the final standards are published (expected Summer 2023).
15	2025	UK to continue its pioneering work in transition plan disclosures led by the UK Transition Plan Taskforce (TPT), share them internationally, and once more developed, Transition Plan Taskforce standards to be made mandatory for both listed and private firms to ensure comparable disclosure standards across the economy, in line with previous government commitment.	Currently the Financial Conduct Authority (FCA) requires listed companies, as well as large asset owners and managers to disclose transition plans on a 'comply or explain' basis. The Government commits to consulting on the introduction of requirements for the UK's largest companies to disclose their transition plans if they have them. To ensure parity between listed and private companies, as well as to ensure requirements are consistent and comparable across the economy, we expect to consult on the basis that these requirements could align closely with those of the FCA, including the 'comply or explain' basis. The government will also work with the FCA to ensure transition plan requirements are delivered across the financial services sector alongside requirements for listed and private companies.
16	2023	To ensure government facilitates sufficient investment in transition economic activity, investors need information on transition pathways to put transition plans into context, as well as common categories and definitions on what economic activities are aligned with the transition to net zero. Government to consider the appropriateness of a transition	We will deliver a UK Green Taxonomy – a tool to provide investors with definitions of which economic activities should be labelled as green. This will support the quality of standards, labels and disclosures used in the industry for green finance activity. We expect to consult in Autumn 2023. The Government proposes that nuclear - as a key technology within our pathways to reach net zero - will be included within the UK's Green Taxonomy, subject to consultation. After the Taxonomy has been finalised, we will

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		taxonomy (alongside a green taxonomy) that is simple and proportionate; and work with international partners to ensure the UK approach is interoperable and harmonised with others' approaches.	initially expect companies to report voluntarily against it for a period of at least two reporting years after which we will explore mandating disclosures. Government does not wish to place undue burdens onto companies whose size or scale makes the disclosure of taxonomy-related information unreasonable. Therefore, we will develop proposals with proportionality in mind. We are considering whether it is appropriate to pursue a 'Transition Taxonomy', which was a recommendation of the Net Zero Review, or include certain transitional activities within one Taxonomy.
17	2023	Government to consider the adoption of a Net Zero Charter Mark – a mark to acknowledge “best in class” among firms in terms of their role in the transition to net zero.	Businesses have significant power to drive change towards achieving our domestic net zero goal and we have seen significant numbers of companies signing up to science-based targets. Government's focus is on how we can support businesses in providing consistent and comparable data to the market on their plans to transition to net zero. As set out in our recently published <i>2023 Green Finance Strategy</i> , we are already focused on transparency of business action on net zero. This includes: becoming the first G20 country to require Taskforce on Climate-related Financial Disclosure-aligned (TCFD) disclosures across the economy; setting out a comprehensive approach to disclosure in the 2021 <i>Greening Finance: A Roadmap to Sustainable Investing</i> and establishing the Transition Plan Taskforce (TPT). The UK government is committed to continuing on this path, and creating an effective disclosure framework for sustainability information.
18	2023	The Government should, by autumn 2023, undertake net zero infrastructure and technology critical supply chain analyses to inform decisions at the next Spending Review	The transition to net zero will change the nature of the UK's critical supply chains. Government will work to ensure that resilience is at the heart of activity to develop the UK's green growth sectors and that the supply chains critical for net zero are secure, ensuring

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		on where support akin to the Automotive Transformation Fund could add value.	that the UK's clean growth sectors have access to the critical inputs that are essential to their success. The government regularly analyses net zero infrastructure and technology critical supply chains and takes appropriate action to meet the UK's net zero and economic growth ambitions. For example, the <i>Critical Minerals Strategy</i> published in 2022 sets out government's plan to secure supply chains, by boosting domestic capability in a way that generates new jobs and wealth, attracting investment and playing a leading role in solving global challenges with international partners.
19	-	Government and Ofgem should work with network companies to facilitate anticipatory investments in grid infrastructure.	Electricity networks are key enablers for the net zero transition and energy security. The government supports Ofgem's work to regulate electricity network companies in a way that enables the investment needed to deliver a secure, resilient, net zero network in an efficient way, including strategic and anticipatory investment where appropriate, and this will be reiterated in the forthcoming <i>Strategy and Policy Statement</i> . For the high voltage transmission network, the government welcomes Ofgem's Accelerating Strategic Transmission Investment work to accelerate transmission network delivery, so key to enabling consumers to gain the benefits of renewable generation joining the grid across Britain. On the lower voltage distribution network side, the next price control begins in April, and includes £3.1 billion allocated for network upgrades to support low-carbon technologies. Nick Winser has been appointed as commissioner to look at how to accelerate delivery of strategic infrastructure and will report to Ministers in the summer. The government and Ofgem will continue to work together closely to ensure alignment of priorities for the electricity network.

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20	-	Government should update Ofgem’s remit to incorporate the Government’s net zero target as set out in the 2008 Climate Change Act.	We do not believe that it is necessary to update Ofgem's remit to incorporate the net zero target as set out in the 2008 Climate Change Act. The Government maintains the view that Ofgem’s principal objective, that is, protecting the interests of existing and future consumers, including their interests in the reduction of emissions from targeted greenhouse gases, makes it clear that Ofgem has a duty to support the Government to meet its net zero targets. However, we will consider ways this can be made clearer, such as through the upcoming <i>Strategy and Policy Statement for Energy Policy in Great Britain</i> , which will provide strategic guidance to Ofgem on how to deliver the Government’s energy priorities, including providing a strengthened focus on the Government’s net zero goals.
21	2025	Government should develop a long-term cross-sectoral infrastructure strategy by 2025, to adapt and build respectively the distribution of liquid and gaseous fuels, electricity and CO2 networks over the next decade.	The Government is committed to meeting the UK's long-term infrastructure needs. <i>The National Infrastructure Strategy</i> , published in 2020 sets out plans to transform UK infrastructure in order to level up the country, strengthen the Union and achieve net zero emissions by 2050. Work to develop a cross sectional infrastructure strategy would requires a high level of consultation and co-development from across several government departments. The Department for Energy, Security and Net Zero has the lead for energy infrastructure and CCUS, and the Department for Levelling Up, Housing and Communities leads planning; the Cabinet Office is currently modelling spatial planning alongside work by HM Treasury and the National Infrastructure Commission. These departments will need to consider approach and timing of any potential updates to our national infrastructure strategy, while working together with expert stakeholders from industry, local government and other public bodies with strategic roles in the energy sector, such as Ofgem and the Future System Operator (once established).

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22	2024	Government should commit to outlining a clear approach to gas vs. electricity ‘rebalancing’ by the end of 2023/4 (depending on the fossil fuel prices), and should make significant progress affecting relative prices by the end of 2024. In outlining this approach, ensure that the distribution of the costs which make up energy bills are passed through to consumers, through their suppliers, in a way which is fair, affordable, and supports competition, decarbonisation and economic growth.	<p>We accept the <i>Independent Review of Net Zero</i> recommendation that Government should commit to outlining a clear approach to gas vs. electricity ‘rebalancing’ by the end of 2023/4 and should make significant progress affecting relative prices by the end of 2024.</p> <p>Rebalancing will generate the clear short-term price signal necessary to shift both households and businesses to lower-carbon, more energy efficient technologies like heat pumps. This is vital to meet Government’s existing decarbonisation commitments, including our goal of 600,000 heat pumps installed per year by 2028.</p>
23	-	Government should deliver REMA as a priority, to scale up electricity sector investment, unlock the benefits of renewables, reward flexibility and maintain security of supply.	<p>We agree with this recommendation. The REMA programme aims to reform (non-retail) electricity markets to help deliver a cost-effective transition as we move to our future net zero consistent power sector, whilst maintaining a secure electricity supply and ensuring our decarbonisation ambitions are achieved playing a key role in reaching our 2050 targets as the economy electrifies. We ran our first consultation from July to October 2022 and published the summary of responses in March 2023. We aim to publish a second REMA consultation in Autumn 2023 and will take decisions on shorter-term reforms more quickly where it is viable to do so throughout the REMA programme.</p>
24	2023	Government, regulators and industry should set up taskforces and develop deployment roadmaps for onshore wind and solar respectively in 2023 to reach required deployment levels for 2035 net zero grid, following the example of the offshore wind sector.	<p>This recommendation is addressed by individual responses to the onshore wind and solar taskforce recommendations.</p>

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25	2023	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.	<p>This recommendation aligns with work already underway within Government. <i>The British Energy Security Strategy</i> outlines Government’s commitment to accelerating the deployment of renewables. A cross government Action Plan, published in February 2023, sets out reforms to streamline and speed up consenting for nationally significant infrastructure projects.</p> <p>Government is currently consulting on our updated <i>Energy National Policy Statements</i>, to set a clear strategic direction for energy infrastructure planning and reflect the importance of energy security and net zero.</p> <p>The Levelling Up and Regeneration Bill contains powers to enable the development of a fast-track consenting process for Nationally Significant Infrastructure Projects which meet quality standards. The introduction of Environmental Outcomes Reports in the Bill will also streamline environmental assessment processes.</p> <p>For offshore wind, measures to implement an Offshore Wind Environmental Improvement Package to speed up consenting are being taken forward through the Energy Bill.</p> <p>We consulted on planning policy changes to support onshore wind generation (see recommendation 99).</p>
26	-	Government, regulators and industry should set up a taskforce and deployment roadmaps with clear milestones to reach up to 70GW by 2035.	<p>We expect a five-fold increase in solar by 2035 (up to around 70GW), building upon the 14GW capacity already deployed across large scale ground mounted projects and smaller scale domestic and commercial rooftop installations in the UK. In line with the <i>Independent Review of Net Zero</i> recommendations, Government will develop and publish a solar roadmap to 2035 to support the significant increase in deployment needed to achieve our challenging 70GW ambition, demonstrate our clear commitment to the sector and provide certainty to investors. To help achieve this ambition, we confirm that we are not making</p>

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			changes to categories of agricultural land in ways that might constrain solar deployment. We will also establish a taskforce led by Ministers to drive forward industry and government actions to make these ambitions a reality.
27	-	Government to assess how low-cost finance options can be provided to households and small businesses.	In line with the <i>Independent Review of Net Zero</i> recommendations and as set out in the <i>British Energy Security Strategy 2022</i> , Government is considering ways of facilitating low-cost finance from retail lenders to drive rooftop solar deployment and assessing the role of low-cost finance options for households and small businesses. For example, the Green Home Finance Accelerator programme which was launched in October 2022 makes £20m of funding available to support green financing products, including solar PV.
28	-	Government to ensure there is clear guidance to support case-by-case decisions, for example on sensitive issues such as siting and to allow new, innovative solutions, instead of technology-specific restrictions.	Our planning system already provides guidance on a case-by-case basis, with the relevant National Policy Planning Framework and associated Planning Practice Guidance being regularly kept under review. On that basis, we do not intend take forward any new work in light of this recommendation.
29	-	Solar: Build up UK capability and provide the necessary training and certification.	Government recognises that increasing skills and training for the solar workforce is key to achieving the deployment needed by 2035. In line with this <i>Independent Review of Net Zero</i> recommendation, the joint government/industry Green Jobs Delivery Group is developing an action plan to address key emerging workforce challenges for solar and other renewables. The Group's Power and Networks subgroup is also exploring ways of building UK training and capability for solar installers. The solar sector is also working with training partners, certification scheme providers and local bodies to provide grants, learning tools, and training and placement programmes. We expect that

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			the new solar taskforce will consider further actions to build supply chain resilience and strengthen skills capability.
30	-	Government, regulators and industry to set up a taskforce and develop roadmap with clear milestones for onshore wind to reach required deployment level for 2035 net zero grid.	<p>Government does not consider it to be the right time to establish an onshore wind taskforce. Instead, to ensure we capitalise on this mature, efficient, and low-cost renewable technology, Government is focussing on delivering the <i>British Energy Security Strategy</i> commitment to develop local partnerships for onshore wind in England. To enact this, Government has issued a technical consultation on changes to the National Planning Policy Framework, which closed on 2 March 2023. Separately Government will shortly publish a second consultation on community engagement and benefits. Taken together, the outcomes of these consultations will fulfil the commitment in the <i>British Energy Security Strategy</i> and ensure that onshore wind is built in areas where the community is supportive, and where the community is enabled to benefit from hosting the site.</p> <p>In addition, the Scottish Government have published an onshore wind policy statement in 2022 setting an ambition of 20GW deployment by 2030, and established a Strategic Leadership Group that will develop an onshore wind sector deal.</p>
31	-	Onshore wind: build up UK capability and provide the necessary training and certification.	The joint Government/industry Green Jobs Delivery Group is developing an action plan to address key emerging workforce challenges for renewables, including onshore wind.
32	2023	Government should implement reforms set out in the British Energy Security Strategy to double down on achieving the UK's nuclear baseload requirement	We are scaling-up our nuclear programme by establishing Great British Nuclear (GBN), including launching an SMR focused technology selection process. This body will drive delivery of new nuclear projects with an aim to ramp up nuclear capacity in the UK from up to 24GW by 2050. The first priority of GBN is to launch a competitive process to select the best Small Modular Reactor

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		<ul style="list-style-type: none"> • Expedite the set-up of Great British Nuclear (GBN) in early 2023, ensuring required funding and skills are in place. • Government and GBN to set out clear roadmap in 2023, including interim targets to reach 2050 ambition. Government to ensure funding is in place. As part of the roadmap, government should assess the possibility to increase the current ambitions supporting the development of supply chain to service a fleet of projects. • Roadmap to set out clear pathways for different nuclear technologies (including small modular reactors) and the selection process. This should consider how to use programmatic approach to deliver further cost reductions in a competitive environment. • Government to deliver on siting strategy by 2024. 	<p>technology recently announced in the Budget with Government providing co-funding to selected technologies.</p> <p>As set out in the <i>British Energy Security Strategy</i>, it is the Government's intention to take two projects to Final Investment Decision (FID) in the next parliament, including Small Modular Reactors, subject to value for money and relevant approvals.</p> <p>A roadmap will be published later this year following the establishment of GBN. Concurrently, Government is developing a new <i>National Policy Statement</i> for nuclear energy and, as a first step, we intend to consult on a siting strategy in 2023.</p>
33	-	<p>Government should ensure Office for Nuclear Regulation (ONR) has necessary capacity to progress applications. Government to explore potential to reduce timelines through international cooperation that would allow recognition of approvals by partner countries.</p>	<p>We are working with ONR to support their investments in future capability and resources. We are also working closely with all regulators (including ONR and Environment Agencies) to ensure that they remain closely sighted on the pipeline of new nuclear projects, so that they can plan their resources and upskill to meet future requirements.</p> <p>The Government will work with the regulators to understand the potential for any streamlining or removing of duplication from the consenting and licensing of new nuclear power stations, including possibly new harmonisation on international regulation.</p>

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34	-	<p>Government should work with GBN and industry on UK supply chain & skills. This includes:</p> <ul style="list-style-type: none"> • On basis of the roadmap, identify key issues and potential dependencies to address; • Agree commitment to boost resilience of UK supply chain and monitor supply chain; • Build UK capacity and skills, provide the necessary training and certification and explore synergies with other sectors. 	<p>The establishment of Great British Nuclear will support visibility of future demand, which will drive investment in building and enhancing capability. The development of the roadmap will enable us to identify further actions that build on ongoing work on skills and supply chain, including developing skills action plans with forums such as the Nuclear Skills Strategy Group and Green Jobs Delivery Group. For supply chains, the roadmap will support efforts to ensure a resilient supply chain and monitor opportunities and risks. Current work includes HMG's support on fuel production, via the Nuclear Fuel Fund launched in January, to ensure a secure and resilient sovereign fuel capability. Government also supports the wider nuclear industry through the Nuclear Decommissioning Authority's (NDA) spend of around £1.9 billion every year with its supply chain to leverage supply chain investment in skills, capabilities and facilities.</p>
35	-	<p>Government should ensure continued funding and support for new technologies such as advanced modular reactors (AMRs) and fusion that could play an important role in the future. Government should consider how a programme-approach could be used to drive down costs for AMRs in a competitive setting. Government should also look at the opportunities the nuclear industry provides outside the power sector, for example heat or hydrogen.</p>	<p>Government will continue support for AMRs and to develop policy on new uses of nuclear like hydrogen production, local heat sources and medical isotopes. The government has already committed to an AMR Research, Development & Demonstration programme which aims to demonstrate High Temperature Gas Reactor technology by the early 2030s and has provided support to the regulators to build expertise for regulating novel reactors and new uses of nuclear. We will keep all options under review as part of normal spending cycle.</p> <p>We agree also that government should continue to support the commercialisation of fusion energy technology in the UK. In line with the Government's <i>Fusion Strategy</i> published in 2021, we are already investing over £700 million in cutting-edge research programmes and facilities, to grow the capability of UK industry and make the UK the global hub for fusion innovation.</p>

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36	2024	By 2024, government should set a strategy for its market for flexible capacity, including pathways for different technologies to 2035.	A flexible energy system is essential for integrating low carbon power, heat, and transport and efficiently matching supply and demand for energy. Government has committed to addressing barriers to deployment for technologies that provide flexibility, including demand side flexibility, and will continue to deliver actions set out in the 2021 Smart Systems and Flexibility Plan. Government is considering bespoke support to de-risk some “first-of-a-kind” technologies: progressing power generation with carbon capture and storage (CCUS) using the Dispatchable Power Agreement, consulting on potential market intervention to support hydrogen to power, and aiming to implement appropriate policy to enable investment in Large Scale Long Duration Electricity Storage (LLES) in 2024. In the long-term, having multiple technology-specific mechanisms could create a fragmented market and risk distorting competition between technologies. Government acknowledges the need for and plans to set out a long-term strategy for all types of flexibility through the Review of Electricity Market Arrangements (REMA).
37	2023	Government should set ambitious targets for the four-year smart meter framework, due to be announced in 2023.	The Government is committed to ensuring that households and small businesses can benefit from smart meters as soon as possible. To enable this, a new, four-year framework of binding, annual installation targets for energy suppliers came into effect on the 1 January 2022. As of December 2022, there were 30 million smart and advanced meters in homes, businesses, and public sector organisations across Great Britain, with 55% of all meters now being smart or advanced. We accept the recommendation that the Government should continue to set ambitious targets for the remaining years of the smart meter Targets Framework. On 7 February 2023, the Government published proposals for energy supplier smart meter installation requirements in 2024 and 2025. These proposals are designed to be ambitious and realistic,

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			devised using a robust forecasting methodology that draws on a range of delivery evidence from industry and other sources.
38	2024	Ofgem should maintain focus on a timely implementation of its market-wide half-hourly settlement.	Market-wide half-hourly settlement (MHHS) is a key enabler for a range of market reforms that will support the transition to net zero in Great Britain. Significant changes to the systems and processes of the electricity retail market will be required. Under an industry-led implementation approach, Ofgem elected Elexon as Programme Manager and Senior Responsible Owner. With the detailed design for MHHS now substantially complete, Elexon is consulting on a revised delivery plan. When finalised, it will provide certainty to industry on the necessary rate of change to central systems and services prior to the commencement of design testing in autumn 2023. We accept the recommendation and intend that MHHS should be completed on the fastest practicable timescale. Ofgem expect Elexon, assisted by an independent programme assurer, to ensure that the industry sticks to the plan. Ofgem will monitor progress closely and provide support as necessary.
39	2023	By the end of 2023, the government should develop and implement an ambitious and pragmatic '10 year' delivery roadmap for the scaling up of hydrogen production. This roadmap should include detail on the plan for Track-2 decisions and should also include clear indication of how much capacity government hopes to procure through each future allocation round, including for electrolytic hydrogen, and how the UK will support growth of the electrolyser supply chain.	We are already making progress in our ambitions to have up to 2GW of low carbon hydrogen production capacity in operation or construction by 2025, and up to 10GW production capacity by 2030. Successful candidates for the first two strands of the Net Zero Hydrogen Fund (NZHF) were announced alongside <i>Powering Up Britain: Energy Security</i> . We aim to award contracts totalling up to 250MW of capacity from the first electrolytic hydrogen allocation round, subject to affordability and value for money, later this year. We published a shortlist of projects to progress to the next stage of due diligence for this round alongside <i>Powering Up Britain: Energy Security</i> . We set out that government will fund projects prior to the hydrogen levy being operationalised. We aim to launch a second electrolytic hydrogen

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			<p>allocation round in Q4 2023, and aim to award contracts to up to 750MW of capacity in early 2025, subject to affordability and value for money. On 15 March 2023 the Chancellor announced an unprecedented £20 billion investment in the early development of CCUS to help meet the government's climate commitments. Alongside <i>Powering Up Britain: Energy Security</i>, we have now announced the Track-1 project negotiation list, including industrial capture and hydrogen projects. We also launched Track-2 of the CCUS cluster sequencing process to establish two further CCUS clusters.</p> <p>We will continue to work with industry with a view to developing a hydrogen production delivery roadmap by the end of the year, which would provide greater clarity to investors and developers on scaling up hydrogen production and supply chain growth across the decade.</p>
40	2023	Government should deliver transport and storage business models as soon as feasibly possible and take a pragmatic approach to support key 'no regrets' transport and storage projects.	The <i>British Energy Security Strategy</i> made a commitment to design new business models for hydrogen transport and storage infrastructure by 2025. The Government recently consulted on the need and potential approaches for T&S infrastructure strategic planning. The Government response to the consultation is planned to be published by the end of June 2023, with any further details on strategic planning to align with the production roadmap. To bring forward hydrogen T&S business models, we are aiming to introduce legislative measures when parliamentary time allows, which will be crucial to designing these new business models by 2025.
41	-	Future System Operator (FSO) should take forward a role in setting out a system plan for hydrogen, considering the interactions between hydrogen storage and balancing	We agree that cross-cutting strategic planning for hydrogen infrastructure could be beneficial to ensure whole energy system benefits are realised. We aim to respond to our consultation on hydrogen T&S infrastructure in Q2 2023, in which we will set out

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		renewables for the decarbonised grid. Government, with advice from the FSO, takes decisive leadership on naming priority areas for minimum viable pipeline and storage infrastructure, providing strategic direction that shows how we will link up demand and supply. We need early identification of strategic assets that are critical enablers of other infrastructure and therefore require at risk investment.	our approach to strategic planning for hydrogen T&S infrastructure. Further time is required to consider the potential role and responsibilities of government, regulators such as Ofgem and other bodies such as the FSO in system planning for hydrogen transport and storage infrastructure.
42	2023	Government should continue the hydrogen heating community trials, to inform decisions on the role hydrogen can play in heating. Additionally, by the end of 2023, government should update its analysis of the whole system costs of the mass roll out of hydrogen for heating, in order to ensure that the case for economic optimality and feasibility still holds.	The Government is working with industry and the HSE to develop evidence on the feasibility, costs and benefits of converting gas networks to hydrogen to inform decisions on the role of hydrogen in heating by 2026, including supporting industry to organise community trials. We will continue to assess new evidence on hydrogen heating as it becomes available and keep the costs, benefits and whole system impacts under review.
43	2023	Government should publish its Biomass Strategy as soon as possible.	Government has committed to publishing a <i>Biomass Strategy</i> in 2023. The Strategy will set out how sustainable biomass could be best utilised across the economy to help achieve the government's net zero and wider environmental commitments while also supporting energy security.
44	2025	Accelerate the end to routine flaring from 2030 to 2025.	We already have ambitious plans to end routine flaring and venting. Beyond the challenging 2030 target, we signed up to the World Bank Zero Routine Flaring initiative, which aims to eliminate routine gas flaring globally. Under the initiative we committed to make every effort to ensure that routine flaring from existing oil fields ends as soon as possible, and no later than 2030.

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			<p>The North Sea Transition Authority expects flaring and venting emissions to be at the lowest possible levels. New systems to stop flaring in existing facilities are expected to be operational between 2025-2030 and new developments are approved on the basis of zero routine flaring and venting.</p>
45	2023	<p>Government should ensure all new oil or gas fields have abatement built in now to avoid backwards engineering when they are electrified.</p>	<p>The North Sea oil and gas industry has committed to reduce its emissions 50% by 2030, ensuring a net zero basin by 2050.</p> <p>The North Sea Transition Authority is already applying its regulatory powers to require new platforms to include low carbon power such as being built ‘electrification ready’, or already electrified. The NSTA considers factors sometimes collectively referred to as an ‘effective net zero test’ when approving new field developments. The North Sea Transition Authority uses this process to ensure new developments build in carbon abatement and is continuously looking at strengthen interventions to prioritise electrification where technically feasible.</p> <p>Government is additionally supporting existing platforms to deliver electrification via retrofitting their platforms to integrate with offshore wind and the onshore grid and deliver as soon as possible; long lead times for these projects mean that the 2030 target is already very ambitious.</p>
46	2023	<p>Government should ensure the Climate Compatibility Checkpoint is an effective tool to shape policymaking.</p>	<p>The Climate Compatibility Checkpoint is an effective tool to shape policymaking. The design was the result of a robust process involving public consultation. We can confirm that we are committed to ensuring future policymaking on oil and gas licensing continues to be based on robust, up-to-date evidence that takes account of the latest context, and will continue to review and refine the checkpoint in operation.</p>

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47	-	Government should consider setting fossil fuel producers operating domestically a 10% storage obligation target to restore carbon dioxide to the geosphere by at least 2035, separate to any investment on nature-based solutions.	<p>The Government's CCS programme and Emissions Trading Scheme incentivise geological storage of CO2 along with other abatement options on a cost-effectiveness basis. The Net Zero Strategy already contains programmes for consumers of hydrocarbons, including buildings and surface transportation. Given the international movement of hydrocarbons and potentially of captured CO2 we are conscious that a scheme linking producers to CO2 storage could require complex administration with implications for national and international carbon commitments. We are therefore cautious about the merits of such a scheme at this time but recognise this as an area for future consideration.</p> <p>The North Sea oil and gas industry has committed to reduce its emissions 50% by 2030, ensuring a net zero basin by 2050. Adding new obligations may have regressive impacts on these ambitious targets.</p>
48	2050	Government should recognise the importance of geological net zero and works to align international ambitions toward geo zero by 2050, in line with net zero.	<p>The Government's CCS programme and Emissions Trading Scheme incentivise geological storage of CO2 along with other abatement options on a cost-effectiveness basis. The Net Zero Strategy already contains programmes for consumers of hydrocarbons, including buildings and surface transportation. Given the international movement of hydrocarbons and potentially of captured CO2 we are conscious that a scheme linking producers to CO2 storage could require complex administration with implications for national and international carbon commitments. We are therefore cautious about the merits of such a scheme at this time but recognise this as an area for future consideration.</p> <p>The North Sea oil and gas industry has committed to reduce its emissions 50% by 2030, ensuring a net zero basin by 2050.</p>

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			Adding new obligations may have regressive impacts on these ambitious targets.
49	2023	The 2023 consultation on the long-term tax treatment of the North Sea must include an option to create a hypothecated net zero fund.	The Government does not accept this recommendation. The Government would have considerable fiscal sustainability concerns with regards to the use of EPL revenue for a hypothecated fund for energy efficiency investments, mostly due to the volatility of projections of EPL revenues as well the constraining impact on the management of public finances.
50	2026	Dependent on the response to the consultation, by the end of 2026, HMT should set out a long-term plan for replacing the Energy Profits Levy (EPL) with a 'Net Zero Fund' that clearly ringfences revenue for investment into clean offshore technologies and/or energy efficiency improvements.	Further detail on the scope of the review of the long-term tax treatment of the North Sea will be set out shortly, including exploring whether the ring fence regime can better support investment in clean offshore technologies during the transition to net zero.
51	2023	Greater transparency and data from industry on the carbon intensity of oil & gas (O&G) imports, and also from the North Sea Transition Authority (NSTA) and industry on O&G that is produced.	<p>The North Sea Transition Authority reports domestic production emission data via its annual Emissions Monitoring Report at an aggregated (basin-wide) level and has also recently published asset level domestic production emission information in publicly available dashboards¹.</p> <p>The North Sea Transition Authority does not hold import emission data but presents a gas footprint analysis comparing imports and domestic production using third-party data which will be updated this year².</p>
52	2024	Government should publish an offshore industries integrated strategy by the end of 2024 which should include roles and	The UK Continental Shelf presents a huge opportunity to contribute to the delivery of the energy transition and net zero, whilst supporting energy security and maximising growth. The

¹ <https://app.powerbi.com/view?r=eyJrIjojMWEwNTQ3ZWMtZjZiMC00NDRIITg4MzAtN2M5N2I5MjhIMTYxIiwidCI6ImU2ODFjNTIklTg2OGUtNDg4Ny04MGZhLWNlMzZmMWYyMWIwZiJ9>

² <https://www.nstauthority.co.uk/the-move-to-net-zero/net-zero-benchmarking-and-analysis/natural-gas-carbon-footprint-analysis/>

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		responsibilities for electrification of oil and gas infrastructure, how the planning and consenting regime will operate, a plan for how the system will be regulated, timetables and sequencing for the growth and construction of infrastructure, and a skills and supply chain plan for growth of the integrated industries.	government will continue to consider the opportunities for offshore energy integration in order to move forward with appropriate interventions and better support these objectives.
53	2023	As soon as legislation allows, government must finalise the business models and regulatory frameworks across the value chain, including for industrial CCS, Energy from Waste with CCS and CO2 transport and storage.	At Spring Budget, the Chancellor confirmed the government will also provide up to £20 billion funding for early deployment of Carbon Capture, Usage and Storage (CCUS) to help meet the government’s climate commitments. It will also kick-start the delivery of subsequent phases of this new sustainable industry in the UK, taking advantage of the country’s natural comparative advantage in CCUS. Later this year, we will launch a process to expand those clusters allowing further capture projects in Hynet, Teesside and Humber. We are also launching our process for selecting the next CCUS clusters and, expect Acorn (in Scotland) and Viking (in The Humber) to be best placed to meet The Government’s objectives.
54	2023	In 2023, HMT should set out the funding envelope available to support Track-1 clusters.	At Spring Budget, the Chancellor confirmed the government will provide up to £20 billion funding for early deployment of Carbon Capture, Usage and Storage (CCUS), to help meet the government’s climate commitments. This unprecedented level of funding for the sector will unlock private investment and job creation across the UK. It will also kick-start the delivery of subsequent phases of this new sustainable industry in the UK, taking advantage of the country’s natural comparative advantage in CCUS. Later this year, we will launch a process to expand those clusters allowing further capture projects in Hynet, Teesside and Humber. We are also launching our process for selecting the next CCUS clusters and, expect Acorn (in Scotland) and Viking (in

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			The Humber) to be best placed to meet The Government's objectives.
55	2023	<p>In 2023, government must act quickly to re-envisage and implement a clear CCUS roadmap, showing the plan beyond 2030. As part of the roadmap, government should take a pragmatic approach to cluster selection. This means allowing the most advanced clusters to progress more quickly. The roadmap should include:</p> <ul style="list-style-type: none"> • Approach to confirming the pipeline of capture projects, at least up to 2030, that will receive future funding, not limited to Track 1 cluster locations. In doing so, it should set out the process and timeline for Track 2 cluster selection; • Greater clarity on planned investment for CO2 transport and storage, including a streamlined route to market for future CO2 storage sites and a plan for making economic licenses more readily available to those that have safety licenses for CCUS acreage already; • The plan for ensuring our supply chain and skills can meet demand 	<p>The <i>Independent Review of Net Zero</i> acknowledges the critical role CCUS has in reaching net zero and the key opportunity CCUS has in creating growth. Through the cluster sequencing process, the government has made significant progress in making CCUS a reality in the UK. We have announced the negotiating list for the Track 1 clusters and a process to bring forward two more clusters through Track 2, and we also intend to commence a process to expand the Track 1 clusters. Nevertheless, we recognise the importance of providing further certainty for industry. In 2023 we will set out a vision for the UK CCUS sector, setting out how CCUS will support our net zero ambitions to raise confidence and improve visibility for investors.</p> <p>Government and industry continue to engage with all aspects of the supply chain, through the CCUS Council Supply Chain working group chaired by Lord Hutton. This group has the objective to ensure the supply chain capacity and capability can meet the UK demand, as well as assist other countries in the plans to decarbonise using CCUS.</p>
56	2024	By 2024, government must develop a strategy for the plan for non-pipeline transport and how dispersed sites and mini clusters can connect	Government continues to explore the development of pipeline and non-pipeline options for sites outside the CCUS Cluster Sequencing Track 1 locations and potential interactions with business model support. We are providing £5 million for local

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		to the CCS network and what support should be offered for doing so.	clusters to develop strategic, area-based plans to decarbonise, which is technology agnostic and could facilitate strategic thinking on dispersed CCUS networks in different locations around the UK as well as other technologies. Later in 2023 we will set out a vision for the UK CCUS sector in 2023 to raise confidence and improve visibility for investors.
57	2023	Government should announce, as soon as is possible, its intentions for engineered Greenhouse Gas Removal (GGR) business models including timings and eligibility. This announcement must clearly outline what standards these business models are expected to require.	<p>In the <i>Net Zero Strategy</i>, we committed to developing incentives for investment in GGRs by consulting on our preferred business models in GGRs. In 2022, we published a consultation on both power BECCS and GGR business models. We will publish the power BECCS response imminently and intend to provide a response to the GGR consultation and set out the next steps this year.</p> <p>In the consultations, we asked for opinions on factors such as net negativity and permanence to help define legitimacy in carbon removals, as well as committing to reviewing the existing landscape of standards and initiatives relating to engineered GGR MRV (monitoring, reporting, and verification). BECCS projects will be required to demonstrate compliance with strict biomass sustainability criteria. In January this year, we also held the first GGR Business Model Expert Group. This group of experts from industry will advise on the design of the GGR business model, alongside our wider stakeholder engagement.</p>
58	2023	By Autumn 2023 HMT should review how policy incentivises investment in decarbonisation, including via the tax system and capital allowances.	<p>Government recognises the importance of incentivising investment in decarbonisation, to support businesses with their transition to net zero and to meet our legally binding carbon budgets.</p> <p>From April 2023, the Annual Investment Allowance will be permanently increased to its highest ever level of £1 million, which</p>

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			<p>will amount to full expensing for a significant portion of investment, covering 99% of businesses.</p> <p>The government has also announced a generous economy-wide policy of full expensing, allowing companies to write off the full cost of qualifying main rate plant and machinery in the year of investment, with a 50% first year allowance for special rate plant and machinery investments.</p> <p>Plant and machinery is a broad term that includes items such as computers and office furniture, to solar panels and windfarms. Therefore, many types of businesses will benefit from these generous new capital allowances, including those investing to help improve their energy efficiency.</p> <p>The government expects the capital allowances changes announced at Spring Budget to improve the adoption of newer, more energy efficient technology and help support green industries, ultimately helping the UK to advance our net zero goals.</p> <p>The government keeps the tax system under continuous review. We will engage with industry and carefully consider how best to incentivise businesses to invest in green technology. This will help the government to consider whether there is a case for doing more through the tax system or whether other levers are more appropriate. This could help firms to further decarbonise their operations and support the country's path to net zero.</p> <p>Future decisions on tax are for the Chancellor, and any changes would be communicated at a future fiscal event.</p>
59	2023	<ul style="list-style-type: none"> Government should drive forward delivery of the recommendations of the Green Jobs 	<p>The Green Jobs Delivery Group (GJDG) was formed after the publication of the <i>Net Zero Strategy</i> and acts as the central government-industry forum for driving forward action on green jobs and skills. The group is driving forward the recommendations</p>

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		<p>Taskforce and the commitments from the <i>Net Zero Strategy</i>.</p> <ul style="list-style-type: none"> • Government to publish an action plan for net zero skills that includes a comprehensive roadmap of when, where, and in which sectors there will be skills needs specific to net zero. • Government should look to report on progress made to delivering the recommendations on a regular basis, starting by mid-2023. 	<p>highlighted by the Green Jobs Taskforce and commitments in the <i>Net Zero Strategy</i>.</p> <p>In line with the recommendations from the Net Zero Review, as the group progresses through its workplan, the outputs will be brought together into an overall <i>Net Zero and Nature Workforce Action Plan</i> in 2024. This will outline the headline actions and solutions the group is progressing to deliver the skills needed within the UK workforce to deliver net zero. These actions will be split across government and industry. Government will monitor the plan on a regular basis, alongside publishing bi-annual updates from the GJDG's co-Chair's, beginning in Spring 2023.</p> <p>We have published head start actions for a joint government-industry <i>Net Zero Power and Networks Workforce Action Plan</i>. Further detail is coming later in the Spring.</p>
60	2023	<p>To monitor progress against the just transition, Government should swiftly develop robust regional green jobs statistics (ideally at local authority level, at least for England), breakdowns of green jobs considering protected characteristics, and publish information about salary levels, to monitor the just transition.</p>	<p>The ONS will continue to develop green jobs statistics, including its recently published definition for 'Green Jobs', followed by experimental statistics based on the new definition. The Government will also prioritise the development of more granular green jobs data, with the ONS initially doing so through the Low Carbon and Renewable Energy Economy Survey. Our transition to net zero will be about building new net zero industries (such as CCUS and hydrogen), and helping existing industries such as automotive to transition to meet increased demand for low-carbon goods and services. We will also work closely with the Department for Levelling Up, Housing and Communities and its Spatial Data Unit to ensure this work supports efforts to reduce geographic disparities and level up the UK.</p>

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61	2023	<p>Government and the Green Jobs Delivery Group should explore a variety of targeted options, including:</p> <ul style="list-style-type: none"> • Increasing the flexibility of the Apprenticeship Levy, and assessing whether the Levy aligns with Government net zero and growth priorities, whether shorter, more intensive courses should be available alongside exploring the role of T levels • Options for retaining talent within businesses and access to international labour 	<p>The Apprenticeship Levy is a key part of the Government's reforms to the apprenticeship system, and we are committed to making apprenticeships work for businesses. For example, we are helping SMEs to hire apprentices and keeping Standards up to date to support changing workforce demands, like the domestic electrician apprenticeship which was recently updated. The government is committed to improving the apprenticeship system and continues to engage with stakeholders on their ideas. Short, intensive Skills Bootcamps also enable learning in sectors and jobs that support the transition to net zero.</p>
62	2025	<ul style="list-style-type: none"> • Government should legislate by 2025 for the minimum energy efficiency rating for all non-domestic buildings, both rented and owned, to be EPC B, to be implemented by 2030. • Government should legislate for all new non-domestic buildings from 2025 to have an EPC B rating. 	<p>The Government has consulted on proposals for the private rented sector and will publish the Government response in due course. We will also consider how we can further support greater energy efficiency in owner-occupied commercial buildings.</p> <p>Government has already made great strides forward in improving the energy efficiency of new non-domestic buildings. In 2022, over 85% of new non-domestic buildings were rated EPC B or above. We expect to see continued improvements as a result of the recent uplift to Part L (conservation of fuel and power) of the Building Regulations. The uplift, which came into force in June 2022, ensures that new non-domestic buildings produce 27% less CO2 emissions compared to those built to previous standards.</p> <p>As well as improving the energy efficiency of new buildings in the short term, the 2021 uplift acts as a stepping-stone to the Future Buildings Standard. Our intention is that from 2025, the Future Buildings Standard will produce extremely efficient non-domestic buildings, which are 'zero carbon ready' (meaning that no retrofit</p>

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			work will be necessary to ensure they have zero carbon emissions as the electricity grid continues to decarbonise).
63	2027	Government to drive the creation of sustainable material supply chains and influence market development through its public procurement standards by 2027.	We are working to understand the challenges with product supply chains and what can be done by government and industry to grow these and will consider actions once our initial phase of engagement with the industry is complete. This could include public procurement considerations, however we would need to better understand the impact of these in the round.
64	2023	UK to continue to show leadership through ambitious public sector decarbonisation by conducting its own trials to ensure alignment with the targets in the <i>Heat and Buildings</i> and <i>Net Zero Strategies</i> .	<p>We agree that decarbonising public sector buildings will demonstrate leadership and encourage action in other sectors, as well as making a direct contribution to net zero. We have an ambitious target to reduce direct emissions from public sector buildings by 75% by 2037. Activities to reach the targets in the <i>Heat and Buildings Strategy</i> and the <i>Net Zero Strategy</i>, include:</p> <ul style="list-style-type: none"> • Investing nearly £2.5 billion in heat decarbonisation projects through the Public Sector Decarbonisation Scheme. The latest tranche of £409 million of grant funding was announced on 22 March 2023, bringing total allocation up to more than £2 billion since 2020. • Providing support for organisations to develop heat decarbonisation plans through the Low Carbon Skills Fund, which can then be used to support decarbonisation business cases. • Providing tools and materials, such as those available through the Modern Energy Partners programme website, to help organisations access the knowledge and information they need to develop bids for decarbonisation funding and deliver projects.

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			<ul style="list-style-type: none"> Facilitating sharing of case studies and examples of best practice through the website of Salix Finance, our delivery partner.
65	2023	Building on the UK Business Climate Hub, BEIS to launch a Help to Grow Green campaign, offering information resources and vouchers for SMEs to plan and invest in the transition by 2024.	<p>In 2021, UK SMEs contributed an estimated 160 million tonnes of greenhouse gas emissions (Scope 1), representing 44% of the total UK non-household emissions (SAGE, 2021). Encouraging SMEs to reduce their emissions is therefore crucial to helping us achieve our net zero by 2050 target. It is therefore welcome that over 3,700 SMEs have already set a net zero target by making the SME Climate Commitment and joining the UN's Race to Zero campaign.</p> <p>The UK Business Climate Hub remains a useful source of advice and guidance for SMEs, and we are working to ensure the content remains as helpful as possible. The new Net Zero Business & Investment Group will seek to develop a common view of the barriers and challenges facing businesses of all sizes in relation to net zero, including SMEs.</p> <p>In addition to the UK Business Climate Hub, we are working to deliver an SME energy advice service on GOV.UK. We expect to have this up and running by the end of 2023.</p> <p>We are also currently designing a pilot scheme, which would offer subsidised energy assessments and small-scale grants to SMEs to encourage implementation of energy and resource efficiency measures and reduce energy demand. We are in the early stages of policy development and are currently conducting market engagement.</p>
66	2023	BEIS to develop a SME role models programme, which provides mentoring for	We are keen to empower businesses of all sizes to reduce their emissions. Many small and micro businesses across the UK are keen to tackle climate change but find it difficult to know how or

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		micro businesses and the self-employed by 2023.	where to start. We know that SMEs require a range of support to help them measure and manage their emissions, from clear information to better access to financial products. The UK Business Climate Hub remains a useful source of advice and guidance for SMEs, and we are working to ensure the content remains as helpful as possible.
67	2023	Government should establish a taskforce of suppliers, small business landlords and business groups to agree on how to cut energy use in rented premises by 2023.	In February 2023 we announced the terms of reference for the Energy Efficiency Taskforce. The objectives for the Taskforce include working with the private sector to increase the availability of green finance linked to installation standards and quality. At the first meeting of the taskforce in March 2023 the terms of reference and initial priorities for the Taskforce were discussed.
68	2023	Review how the UK can become the most competitive financial centre for green and transition listings, capital raising and project financing; to include reviewing prospectus and listing regimes to encourage integrity and growth in the market for green finance instruments, exploring new opportunities arising for professional services, climate and nature data and analytics and innovative product development.	A key area of feedback in the 2023 <i>Green Finance Strategy</i> call for evidence was transition finance, where financial markets have been increasingly innovating to provide products and services that support higher emitters to decarbonise and reduce their environmental impact. To support this, in line with the Net Zero Review recommendations, the UK government will commission an industry-led market review into how the UK can enhance our position and become the best place in the world for raising transition capital.
69	2023	Through their update to the <i>Green Finance Strategy</i> , BEIS and HMT should set out a clear, robust and ambitious approach to disclosure, standard setting, and scaling up green finance – including how it will meet existing commitments to implement Sustainable Disclosure Requirements across the economy; how it will provide a clear, long-	In parallel to <i>the Net Zero Growth Plan</i> , the Government is publishing its 2023 <i>Green Finance Strategy</i> . This sets out how the UK government will pursue its stated ambition to become the world's first Net Zero-aligned Financial Centre, including how the Government will provide the transparency, support the development of market tools, and establish the necessary transmission channels to allow the financial sector to align with net zero. This includes delivering on our commitments in <i>Greening</i>

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		term plan for attracting capital to meet net zero ambitions, and how to maintain the UK's position as the leading green finance hub internationally and metrics for success.	<i>Finance: A Roadmap to Sustainable Investing</i> , ensuring market participants have the information and data they need to manage risks and allocate capital where there are opportunities.
70	2024	Government should develop a policy proposal to incentivise on-site generation in Manufacturing by Q2 2024, with options to consult on the funding formula required by the public and private sector to reach the tipping point of adoption.	Government understands how energy costs impact the competitiveness of UK manufacturing and agrees that on-site generation is one measure that can help manufacturers, including energy intensive industries, to manage their energy use and related costs. New policies to incentivise on-site generation adoption will require a high level of consultation and co-development from across several government departments. This includes the Department for Business and Trade that works closely with manufacturers from across sectors, Defra which leads relationship with food and drink manufacturers, Department for Energy Security and Net Zero that has the lead for energy efficiency and Department for Levelling Up, Housing and Communities that leads planning, working with local authorities, These departments will need to consider approach and timing of any potential proposals, while working together with expert stakeholders from industry, local government and the National Grid.
71	2023	Government should progress its consultation on carbon leakage measures, including a carbon border adjustment mechanism (CBAM) and mandatory product standards by 2023 (See Pillar 6 for more discussion). To enable Government to implement effective carbon leakage mitigations from 2026.	The UK is committed to ensuring that efforts to decarbonise industry are not undermined by carbon leakage, and currently does so through free allocation under the UK ETS. We are currently reviewing our approach to free allocations, looking at ways to better target support for those most at risk of carbon leakage to ensure they are fairly distributed. As recommended by the <i>Independent Review of Net Zero</i> , the government has published a consultation on a range of domestic carbon leakage mitigation policies that could potentially mitigate future carbon leakage risk and ensure UK industry has the optimal policy

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			<p>environment to decarbonise. These include product standards, a carbon border adjustment mechanism (CBAM) and policies which would help grow the market for low emission industrial products, as well as any emissions reporting requirement which might be needed to underpin new policies. While the best solutions to carbon leakage are international, options for domestic action must be considered in parallel to support efforts to decarbonise the UK economy and reduce UK and global emissions. Government is clear that any policy or suite of policies will need to balance a range of priorities as well as meet existing commitments, both domestically and internationally. These include our commitment to free and open trade; respecting international climate change obligations, appreciating countries' differing levels of development, particularly for least developed and low-income countries, as well as minimising burdens on businesses and consumers and enabling consumer choice. Alongside changes to free allocation policy, consulting on these measures will inform the best approach to carbon leakage measures that support efforts to decarbonise UK industry, with the aim of ensuring that carbon leakage risks are mitigated at all stages of the UK's net zero transition.</p>
72	2023	Government to develop a public procurement plan for low-carbon construction and the use of low-carbon materials, by the end of 2023.	<p>The Government is committed to decarbonising the infrastructure and buildings that it funds and uses. The <i>Construction Playbook</i> sets out a consistent approach to the procurement of built assets, consistent with achieving the objective of net zero carbon by 2050. The Playbook requires government departments and arm's length bodies to undertake whole life carbon assessments of projects, and to ensure that decarbonisation is one outcome that project procurement is intended to achieve.</p> <p>To support procurers to achieve decarbonisation and wider mitigation of the environmental impacts of construction, the</p>

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			Government has also published a <i>Net Zero Carbon and Sustainability Guidance Note</i> to supplement the Playbook. This provides practical advice, identifies useful standards and resources for procurers, and also a set of case studies of large and small construction projects which have successfully reduced carbon emissions.
73	2023	BEIS, DfT and Defra to develop a strategy on the decarbonisation of non-road mobile machinery by the end of 2023.	Government intends to publish a Non-Road Mobile Machinery (NRMM) strategy which will set out how the sector can decarbonise in line with net zero while maintaining competitiveness, attracting investment and supporting growth. To deliver the strategy, government is developing its evidence base on NRMM decarbonisation options through ongoing external research and a Call for Evidence planned for later this year. Government has made support for NRMM decarbonisation available through schemes such as the £40 million Red Diesel Replacement competition, the Industrial Energy Transformation Fund (IETF), and the Renewable Transport Fuel Obligation (RTFO).
74	2023	Deliver urgently on commitments that the UK has already made on collection and packaging reforms, including extended producer responsibility, standardised collection and deposit return schemes. Industry engagement must be central to design and rollout of schemes.	<p>Defra is committed to delivering our Collections and Packaging Reforms as quickly and effectively as possible. We have announced that we will be introducing packaging Extended Producer Responsibility (EPR) from 2024 across the UK, and a Deposit Return Scheme (DRS) from October 2025 across England, Wales and Northern Ireland. A separate DRS in Scotland is due to launch on 16 August 2023.</p> <p>We are currently finalising the consistency in recycling consultation response for households and businesses in England and intend to publish the government response shortly.</p> <p>Industry engagement is at the core of our delivery approach to these reforms. We have set up a number of dedicated industry</p>

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			forums across the programme to ensure businesses and representatives are able to fully engage in the next phase of delivery.
75	2023	Launch a task force to work jointly with industry to identify barriers and enablers and develop sector-specific circular economy business models for priority sectors. This should have representation from BEIS, Defra, DLUHC, HMT and DIT, and include the role of Extended Producer Responsibility in promoting reuse, repair, remanufacturing, and rental alongside recycling, in line with the powers under the Environment Act 2021.	The government acknowledges the importance of the circular economy to delivering on net zero ambitions, as well as supporting growth and supply chain resilience. Circular economy approaches can support waste prevention targets and deliver the resource efficiency savings that are vital to hitting Department for Energy Security and Net Zero and Defra targets. Our departments have convened sector level working groups that span government departments, including, DLUHC, HMT, DIT and Defra, and the Devolved Administrations to support a comprehensive research project that will assess barriers and potential for resource efficiency measures in 11 industrial sectors. The scope of this work overlaps with the Energy Efficiency Taskforce's objectives, and we will consider options to further formalise productive cross-government policy making and joined up strategy. We believe that a taskforce model, building on existing industry partnerships, would be an effective way to deliver further progress.
76	2027	End export of UK plastic waste by 2027, and in parallel set an end date for the import of recycled plastic chips, subject to the UK's international legal responsibilities. To drive domestic demand for high-quality recycled materials, ratchet up minimum percentage recycled content targets for a range of products in consultation with industry.	Our ambition is to reduce the UK's dependency on waste exports and process more plastic waste domestically. However, we disagree with the recommendation to ban all plastic waste exports by 2027. We expect legitimate exports to Organisation for Economic Cooperation and Development (OECD) countries to continue to have a role in managing plastic waste generated domestically. We have committed to banning the export of plastic waste to non-OECD countries and plan to consult on a proposal to deliver this by summer 2023. This, alongside wider packaging and collection

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			<p>reforms, should provide industry with confidence to invest in UK plastic reprocessing infrastructure.</p> <p>The Government supports the operation of an international circular economy for recycled materials and has no plans to ban the import of plastic that has been recycled. Government supports the use of more recycled content in the manufacture of products and initiatives such as the Green Construction Boards Routemap for Zero Avoidable Waste in Construction and WRAP's Textiles 2030 programme. Additionally, going forward we will explore the role of eco-design, which can include the use of recycled content. The Government supports the operation an international circular economy for record materials and has no plans to ban the import of plastic that has been recycled.</p>
77	2023	<p>Delivering UK recycling infrastructure capacity in key areas. Areas to consider include:</p> <ul style="list-style-type: none"> • plastic processing capacity (an additional one million tonnes); • domestic capabilities in the circular economy of critical minerals; • the necessary infrastructure to support textile collection and fibre recycling. <p>In doing this, the Government should consider the expected profile of private sector investment in building UK recycling infrastructure - and explore opportunities to further enable such investment if current expectations fall short of domestic need.</p>	<p>Defra is engaging with stakeholders, including the UK Infrastructure Bank, to explore how to ensure necessary waste infrastructure is in place to meet strategic objectives. Defra is developing a 'Waste Infrastructure Roadmap' in partnership with the Waste and Resource Action Programme (WRAP) that will set out current and forecast waste infrastructure capacity and arisings to 2035 for a number of waste streams including food and organic wastes, dry recyclables (plastics, textiles, paper and card, metals, and glass) and residual waste. This analysis will be published and will provide clarity to investors as to where there is forecast to be over or under provision of waste infrastructure in response to the Collection and Packaging Reforms. This forecast and analysis will form the foundation of future assessment and consider future policy development, including the legally binding Residual Waste Reduction Target, once details of these policies are known and forecasts can be made.</p>

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78	2023	Task WRAP with developing a report jointly for the BEIS and Defra Secretaries of State to understand the right role for Government in supporting resource matching across the private sector, learning from e.g. Invest NI and the National Industrial Symbiosis Partnership. This must ensure resource planning to achieve symbiosis rather than just waste exchange.	Department for Energy Security and Net Zero is exploring the role that industrial symbiosis can play in reducing emissions from industry and how best to facilitate this. We are engaging with stakeholders to learn from regional and international experiences and will consider further research in this area.
79	2024	Government to swiftly deliver the ZEV mandate, to apply from 2024, whilst maintaining regulations, and funding to support the uptake of electric and other zero emission vehicles, and continuing to drive emission reductions from internal combustion engines.	Government has published a consultation on the proposed ZEV mandate regulations, to apply from 2024, to support delivery of our commitments to phase out the sale of new non-zero emission vehicles. This is alongside regulations ensuring non-ZEVs do not become more polluting over time, enabling ZEV technology to be prioritised.
80	2023	Government to publish the <i>Low Carbon Fuels Strategy</i> in 2023 and the necessary legislation for the sustainable aviation fuels (SAF) mandate to apply from 2025. Recognising that an adequate price stability mechanism is vital for investments in SAF, government to set out evidence for barriers to SAF investments and options to address this.	<p>The <i>Transport Decarbonisation Plan</i> committed DfT to produce a <i>Low Carbon Fuels (LCF) Strategy</i>, setting out a vision for LCF deployment across transport modes in the period to 2050. We are intending to publish the Strategy in 2023. <i>The LCF Strategy</i> will set out the direction of Government policy, to provide clarity on the role of LCF across different transport modes in the UK and address current uncertainty related to the fuel sector's transition. The strategy will support the industry's evolution, boosting investment in the growing advanced fuels sector and securing further carbon emission savings.</p> <p>The Government will confirm the design of the SAF mandate later this year following a further consultation which was published in March 2023, giving industry clarity over long term policy. This will ensure we can introduce legislation in time to fulfil our commitment for introduction of the mandate in 2025.</p>

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			<p>The barriers to investment in SAF plants are wider ranging than revenue/price stability and include feedstock, technology, and construction barriers. We commissioned an independent review from Philip New in October 2022 into how to accelerate investment in a UK SAF industry. The Government welcomes Philip New's report and will respond to it imminently. The government has been clear that it wants to see the UK continue to capture its share of the global SAF market and play a leading role in the development, production and use of SAF. This is why we launched the £165m Advanced Fuels Fund in 2022, and announced a second window for applications in March 2023. As our response to Phil New's independent report will set out, we will continue to work in partnership with industry and investors to explore the best approach to addressing barriers to investment.</p>
81	2024	Government to set out options for further legislative steps by 2024 and take leading role in International Maritime Organization (IMO) negotiations to decarbonise maritime sector.	<p>We are currently in the middle of negotiations to revise the International Maritime Organization's (IMO) GHG strategy. During these negotiations the UK has been vocal in calling for a 1.5C-aligned zero emissions target by 2050 and led a paper to this effect at the Marine Environment Protection Committee in June 2022.</p> <p>The UK played a key role in the April 2018 negotiations at the IMO to agree an <i>Initial Strategy on the Reduction of Greenhouse Gas (GHGs) Emissions from Ships</i>. The <i>Initial Strategy</i> included a target of at least 50% reduction in GHG emissions from shipping by 2050. At current negotiations the UK is championing a 2050 target of zero emissions for international shipping. In 2023 we will publish a refreshed <i>Clean Maritime Plan</i> to include indicative decarbonisation targets for the domestic maritime sector alongside the long-term interventions needed to support decarbonisation and reduce the environmental impacts of shipping.</p>

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82	2024	Government should continue to work with industry to set out a clear programme by 2024 to accelerate decarbonisation of the wider freight sector through modal shift and deployment of new technologies, building on the Future of Freight Plan.	Government and industry are progressing the actions in the <i>Future of Freight</i> including commitments to decarbonisation. Launched in January 2023, the £7 million Freight Innovation Fund will accelerate the deployment of new technologies and promote modal shift by funding innovations that improve how freight moves between modes. DfT operates two freight revenue grant schemes to encourage modal shift from road to rail or water. These two schemes together have a budget of £20 million in 2022/23. We are working with the Great British Railways Transformation Team to develop options for a long-term rail freight growth target which will be announced later in 2023. The creation of a Freight Energy Forum will bring together government and industry to focus on the provision of zero-carbon energy infrastructure and accelerate decarbonisation of the freight sector. The Forum is expected to contribute to the development of an HGV energy infrastructure plan by 2024.
83	-	Government to reduce delays to anticipated reforms by bringing forward the delayed Future of Transport Bill this Parliament.	The Transport Bill announced in the last Queen's Speech has not yet been introduced, due to pressures on the government's legislative programme, including emergency legislation required to tackle the energy price situation. In advance of the Bill, we are exploring the use of existing powers where possible to bring forward certain measures.
84	2023	Government to publish a Land Use framework as soon as possible, and by mid-2023.	Defra announced in the <i>Food Strategy</i> that we will publish a <i>Land Use Framework</i> for England in 2023. The <i>Land Use Framework</i> will be critical in setting out how we deliver a multifunctional landscape, resilient to our changing climate, whilst meeting food production, environmental recovery and net zero. The scope of the framework is to be determined but we will work closely with the devolved administrations to ensure a cohesive approach to land use in the UK.

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85	2023	Defra to publish full details of all Environmental Land Management Schemes and future plans by the end of 2023 - with a particular focus on how participants can take advantage of both public and private finance.	<p>We have set out detail on how farmers and land managers can contribute to government's statutory environmental and climate targets, including on net zero, in the <i>Environmental Improvement Plan</i> and Environmental Land Management Schemes (ELMs) update, both published in January 2023.</p> <p>To augment this, as part of the wider <i>Net Zero Growth Plan</i> package, we have set out a full list of policies and proposals which will contribute towards net zero across the agriculture and land use sectors. We will continue to work with stakeholders to further refine these policies and proposals as we progress delivery.</p> <p>Funding is available through ELMs and private schemes and markets, such as through the sale of services including natural flood risk management, biodiversity offsets, and nature-based carbon from woodland, peatland or other sources. We aim to support the growth of private funding by designing our schemes to dovetail with these private schemes and markets.</p>
86	2025	By 2025, 50% of UK-based food and drink businesses measure and report their scope 3 emissions against a government- and industry-agreed standard. Defra and UKRI research should prioritise innovations that support on-farm measurement and processes to accurately collect the remainder by 2030.	<p>Defra supports the need for UK-based food and drink businesses to consistently report scope 3 emissions. Working with key industry and civil society stakeholders via the Food Data Transparency Partnership we will consider the development of consistent reporting protocols and databases for scope 3 emissions for large food and drink businesses, which account for 66% of industry turnover. We will focus reporting requirements on large businesses to leverage their reach across the food supply chain, whilst minimising the burden on SMEs.</p> <p>Consistent and accurate on-farm measurement is required to underpin company reporting. We are undertaking research to examine existing carbon audit tools across different agricultural systems and published a call for evidence exploring monitoring, reporting and verification of agricultural emissions. We will</p>

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			develop a harmonised approach for measuring carbon emissions on farms and by 2024 will outline how farmers will be supported to understand their emission sources through carbon audits.
87	-	Deliver accurate monitoring of carbon across broader range of ecosystems, with a view to bringing more habitats into the inventory to drive habitat creation and restoration efforts.	Defra knows that protecting, restoring, and sustainably managing natural resources and broader ecosystems has adaptation and biodiversity benefits, and can contribute to carbon sequestration. We are doing further research and development to close evidence and data gaps to accurately quantify the potential contribution of broader ecosystems to net zero, with a view to considering the inclusion of additional habitats in the UK GHG Inventory.
88	2023	In line with wider thinking on voluntary carbon and ecosystem markets, ensure a pipeline of investable nature-based solutions projects is available.	<p>Defra established the Natural Environment Investment Readiness Fund (NEIRF) with the Environment Agency to support the development of a pipeline of nature projects that could generate revenue from ecosystem services and operate on repayable private sector investment. The NEIRF programme will run until 2024, developing a pipeline of 86 projects across England which will either monetise the benefits of nature or develop tools or standards to help others do so. Our refreshed 2023 <i>Green Finance Strategy</i> provides more detail regarding how we will support nature investment.</p> <p>Furthermore, Defra committed to invest in a new blended finance impact fund to catalyse and invest in a portfolio of high-integrity, revenue-generating nature-based projects in England to help develop the market.</p> <p>We are also designing our sources of public support for nature recovery to be compatible with private sector investment. Our Environmental Land Management schemes are being designed to dovetail with private investment.</p>

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89	2023	BEIS to work with DCMS and DIT to develop a campaign by Q2 2023 to promote digital technologies, including AI, robotics, digital twins, and autonomous systems, as a solution to industry's energy efficiency needs in the short term and their role in wider decarbonisation for the long term.	Government recognises the role of these technologies to improve productivity and energy efficiency and agrees there is a need to increase awareness of manufacturers of the benefits. Government funds the Made Smarter programme which aims to develop new technology solutions and increase the adoption of existing technologies including AI, robotics and digital twin by addressing barriers that include low-level awareness. There is potential to build on the Made Smarter brand that has a good level of awareness amongst manufacturers to develop a campaign supported by manufacturing trade associations and press.
90	2023	BEIS to include digitisation and the related energy demand change forecasts in Energy and Emission Projections by 2023.	From 2023 onwards we will incorporate the impact of any new policies that promote digitisation as a route to improved energy efficiency into the Department for Energy Security and Net Zero energy and emissions projections. In line with the established approach, we will only incorporate policies that have reached the required stage of development, i.e. where funding and all decisions on policy design are near final. The projections already include the impact of Smart Meter rollout.
91	2023	Central government should introduce a statutory duty for local authorities to take account of the UK's net zero targets, based on a clear framework of local roles and responsibilities.	After discussion with local government stakeholders, we will not be taking forward this recommendation. This is because, as laid out in the <i>Net Zero Strategy</i> , we do not believe that a new general statutory requirement is needed because there is already a high level of local commitment with the sector. We will continue to explore how we can support local authorities to deliver net zero through existing mechanisms such as the Local Net Zero Hubs Programme, which may allow for more flexibility to reflect local need.

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92	Next SR	Central government should simplify the net zero funding landscape for all local authorities by the next Spending Review. This should include consolidating different funding pots, reducing competitive bidding processes, giving longer lead-in times where bidding remains and providing funding over the medium- rather than the short-term.	As laid out in the <i>Net Zero Strategy</i> , we have already committed to explore simplifying local net zero funding where this provides the best results for net zero. We will continue this work.
93	2023	Central government should establish local net zero missions in 2023 for a number of key policy areas to encourage places to go further and faster.	Our Local Net Zero Hubs provide technical assistance to local authorities to support their capacity and capability to deliver net zero. This includes leading work to develop communities of interest that share experience and best practice on net zero local policy and delivery issues - local authorities can suggest new issues for groups to explore. We will continue to strengthen support for knowledge and information sharing through the Hubs and other partners.
94	2023	Central government should establish core principles for future net zero devolution and ensure that all devolution deals agreed between now and 2030 have a strong net zero element.	All the devolution deals agreed since the publication of the <i>Levelling Up White Paper</i> , including the deeper devolution deals with Greater Manchester and West Midlands Combined Authorities, and many prior, have included sections on net zero or clean energy, as well as other sectors and policy areas where net zero is a relevant consideration such as skills, transport and regeneration. The policy content of the deals agreed to-date has been informed by the devolution framework set out in the <i>Levelling Up White Paper</i> and local priorities, rather than government setting out what is in and what is out of scope of devolution with respect to net zero. Government would be open to exploring establishing a set of principles for future deals.
95	2023	Central government should fully back at least one Trailblazer Net Zero city, local authority	The Government's Prospering from the Energy Revolution programme has already begun to develop trailblazer

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		and community, with the aim for these places to reach net zero by 2030.	demonstrators and detailed designs for a place-based approach to net zero across the UK in several places. Government will continue to build on this work, including through our Local Net Zero Hubs Programme and the online technical assistance site, 'Net Zero Go'.
96	2023	Central government should provide guidance, reporting mechanisms and additional capacity and capability support to enable local authorities to better monitor and report their net zero progress.	We are already working on the data, metrics and reporting mechanisms for local net zero with local government and will continue to do this work. Our Local Net Zero Hubs support capacity and capability building on local net zero.
97	2023	Central and local government should work together to convene an annual Local Climate Summit that helps to share best practice, attract green investment and provides an opportunity for areas to update on their Locally Determined Contributions.	<p>The Department for Energy Security and Net Zero already sponsors an annual net zero event of this type with The Association for Public Service Excellence (APSE) - an organisation dedicated to promoting excellence in the delivery of frontline services to local communities around the UK.</p> <p>Outside of an annual summit, we also support ongoing knowledge sharing through our Local Net Zero Hubs, Net Zero Go, and the Innovate UK's Net Zero Places Knowledge Transfer Network Stakeholder Group.</p>
98	2023	Central government should reform the local planning system and the NPPF now. Have a clearer vision on net zero with the intention to introduce a net zero test, give clarity on when local areas can exceed national standards, give guidance on LAEP, encourage greater use of spatial planning and the creation of Net Zero Neighbourhood plans, and set out a framework for community benefits.	Our National Planning Policy Framework (NPPF) makes clear that local planning authorities should have a positive strategy in place to promote energy from renewable and low carbon sources. We intend to do a fuller review of the NPPF to ensure it contributes to climate change mitigation and adaptation as fully as possible. As a first step, we have consulted on proposed changes to the planning system to support the rollout of cleaner, cheaper renewable power, and are seeking views on a form of carbon assessment. The proposed reforms to the plan-making system in the Levelling Up and Regeneration Bill (LURB) will ensure local

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			<p>plans are in place more quickly and updated more often, so that development happens in ways that are consistent with and responsive to environmental and climate priorities. We are also seeking powers in the LURB to introduce ‘neighbourhood priorities statements’, which will provide communities with a simpler and quicker way for communities to determine priorities for their area. Plan-makers may continue to set energy efficiency standards which go beyond national Building Regulations standards through the Planning and Energy Act 2008. The Department for Energy Security and Net Zero has work underway to consider the role of Local Area Energy Planning (LAEP) in delivering net zero and in supporting efficient network planning. This includes engaging with Ofgem as part of its ongoing governance review into local energy institutions, as well as working closely with DLUHC, UKRI, ESC, the devolved administrations and other key stakeholders.</p> <p>We agree that communities should benefit from hosting net zero infrastructure. The government will seek alignment and consistency between energy technologies where appropriate, but believes it is important that the approach to community benefits for each technology reflects their unique impacts. The Department for Energy Security and Net Zero will issue consultations on local partnerships’ for ‘communities who wish to host new onshore wind infrastructure in return for benefits, and separately published a second consultation on options for community benefits for electricity transmission network infrastructure.</p> <p>It is also government’s view that community benefit guidance should remain separate from the planning process, to allow the planning process to remain a robust system through which communities can give their views on individual projects.</p>
99	2023	Government should undertake a rapid review of the bottlenecks for net zero and energy	As committed to in the <i>Net Zero Strategy</i> , we intend to do a fuller review of the NPPF to ensure it contributes to climate change

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		<p>efficiency projects in the planning system, and ensure that local planning authorities are properly resourced to deliver faster turnaround times.</p>	<p>mitigation and adaptation as fully as possible. As a first step, we consulted on proposals to address clearly-defined and pressing local planning bottlenecks on onshore wind and energy efficiency in historic buildings. We will also take forward our wider reform work to improve the Nationally Significant Infrastructure Project Planning Process, including regulatory and guidance changes to streamline the process and support digital transformation.</p> <p>The <i>Nationally Significant Infrastructure Project Action Plan</i> (February 2023) sets out reforms to the planning system for major infrastructure, so it is more resilient and can deliver projects faster, better and greener. System-wide improvements will be delivered through regulatory, guidance and operational changes to strengthen and streamline the process and support digital transformation. The reforms set out in the <i>NSIP Action Plan</i> will deliver Government's commitment within the <i>British Energy Security Strategy</i> to provide a fast-track consenting process for projects meeting quality standards.</p> <p>To improve capacity in the local planning system, we have announced in our recently published consultation our intention to increase planning fees. We have already started to work alongside the sector to design a suite of targeted interventions to support the development of critical skills and to build capacity across local planning authorities. We are currently consulting on changes to permitted development rights for solar equipment (to support the ambitions of the <i>British Energy Security Strategy</i>) and local authority led electric vehicle charge points.</p>
100	2023	<p>Government should commit to the Local Electricity Bill and publish a Community Energy Strategy that addresses regulatory, legislative, funding and capacity barriers in the sector. The Strategy should also consider what support</p>	<p>Government has laid out our current support for community energy in the <i>Net Zero Strategy</i> and the <i>Net Zero Growth Plan</i>, and we do not believe a separate community energy strategy would provide any additional value, at this time. Instead, we will continue to work with the sector through the Community Energy</p>

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		should be given to innovative projects such as community purchasing and community energy sharing and storage.	<p>Contact Group on some of the key policy and delivery issues which impact the sector.</p> <p>The Smart Export Guarantee provides small-scale low carbon electricity generation with the right to be paid for their exports, and suppliers already offer local tariffs. The Government is separately considering wider retail market reforms to deliver a fair deal for consumers, ensuring the energy market is resilient and investable over the long-term, and supports net-zero.</p>
101	2023	Government to publish a public engagement plan for England by 2023, to ramp up public engagement on net zero.	The government approach to public engagement for net zero was set out in the <i>Net Zero Strategy</i> . We agree with the conclusion of the Net Zero Review that the public will play a key role in the transition and will, in the coming months, set out further detail on how Government will (i) support public awareness of our actions through our digital platforms, (ii) develop a roadmap setting out plans and proposals under net zero and (iii) construct a guiding framework, in conjunction with partners and trusted messengers, to amplify net zero messaging.
102	2023	Government to run a competition to create a Carbon Calculator to inform consumers of the carbon intensity of different choices, in 2023.	The Government is committed to empowering people and businesses to make their own green choices. In July 2022, the government launched an online advice service that provides high-level trusted, impartial and tailored advice to consumers on how to improve home energy performance and information on retrofit recommendations. In December 2022, the Government also launched the 'It All Adds Up' campaign with £18 million funding. This campaign provides advice on simple, low, or no-cost actions that households can take to cut energy use. In 2022, we ran a digital discovery to explore whether there is a user need for new content on net zero on GOV.UK or a new resource to link together different sources of information and support on net zero in a

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			comprehensive platform. We will run an alpha phase later this year.
103	2025	Government to pursue ecolabelling to help consumers make more informed purchasing decisions, by 2025.	<p>The Government welcomes the <i>Independent Review of Net Zero's</i> recommendation and remains committed to improving eco-labelling to help consumers make green choices and reduce burdens on business. As highlighted by the <i>Independent Review</i>, the Government has committed to exploring eco-labelling for the embodied emissions of industrial products and we are currently consulting on how labelling could support demand for low carbon products by helping consumers to distinguish between them and their higher carbon equivalents. The Government also welcomes the <i>Independent Review's</i> support for the work to develop a mandatory methodology for eco-labelling of foods. We will work with industry and civil society through the Food Data Transparency Partnership to agree the inclusion of suitable metrics.</p> <p>Further, we are continuing to build the evidence base around eco-labelling and have launched a cross-government evidence review to understand how eco-labels can affect consumer and business decision making to meet net zero and environmental targets, as well as the opportunities for alignment across sectors.</p>
104	2023	Government should develop the distributional analysis of net zero policies started by the Review in 2023.	<p>We are accepting this recommendation and we expect to develop this analysis in the following manner during 2023:</p> <ul style="list-style-type: none"> • Work to reflect the latest policies on electric vehicles and buildings within the modelling; • Include the 1% of households on coal in order to achieve the full segmentation of the UK housing stock; • Update the analysis as government updates its fossil fuel price assumptions;

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			<ul style="list-style-type: none"> Extend the analysis to include a regional lens.
105	2024	Government should amend the regulatory framework to incentivise transport providers to increase demand and improve services, and that it works with them on this vision, by 2024.	<p>In the <i>National Bus Strategy and Plan for Rail</i> we outlined a model for improving and increasing demand for public transport.</p> <p>Using powers under the 2017 Bus Services Act, we are seeking a more collaborative approach between Local Transport Authorities (LTAs) and local operators. All LTAs are either implementing an Enhanced Partnership scheme with their operators or working towards bus franchising. Pursuit of one of those options was introduced as a condition to obtain access to supplementary Government funding to improve bus services.</p> <p>In the High-Level Output specification and Statement of Funds Available, published in December 2022, the Secretary of State committed £44.1 billion in funding for Network Rail, stressing the importance that Network Rail should support needed development in urban centres through protecting the attractiveness of rail as a mode of transport, taking steps to minimise the impact of disruption, and placing the highest priority on punctuality and reliability.</p>
106	2024	Government to equalise VAT on public and private electric vehicle charging in 2024.	<p>Decisions on tax including VAT are for the Chancellor to make as part of the tax policy making cycle and Budget process.</p> <p>Government is committed to supporting the transition to zero emission vehicles to help the UK meet its net zero obligations. Government has committed £2.5 billion since 2020 to support the transition to zero emission vehicles, which funds targeted vehicle incentives and the rollout of charging infrastructure.</p>
107	2025	Government should regulate through a suite of measures to create the conditions for sustained growth of new markets for low-carbon heat, so that at least 600,000 heat	The Government is putting in place a number of measures to reach the ambition for 600,000 heat pump installation p.a. from 2028, including plans for regulations. This includes regulating for the Clean Heat Market Mechanism which will help transform the

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		pumps are installed each year by 2028, and up to 1.9 million by 2033. The Government should implement the off-gas grid regulations that envisage the end of new and replacement fossil fuel heating systems in the mid-2020s.	heating appliance market in the UK. We have consulted on phasing out new and replacement fossil fuel heating systems for off gas grid properties, and will respond to these consultations.
108	2023	Government should bring forward all consultations and work to mandate the Future Homes Standards by 2025 to prevent further delays by ensuring the standard applies to all developments. This should include a consultation on mandating new homes to be built with solar and deliver the Net Zero Homes Standard, ensuring that the planning system (discussed in Pillar 4) is flexible enough to enable this.	<p>Our work on a technical specification for the Future Homes Standard has already been accelerated. We intend to consult on the specification in 2023, then legislate in 2024 ahead of implementation in 2025. As part of the consultation we will explore what transitional arrangements are appropriate to make sure that as many homes as possible are built to the new standard as quickly as possible.</p> <p>The Government introduced an uplift in energy efficiency standards, which came into force in June 2022. Our approach to achieving higher standards remains technology-neutral, to provide developers with the flexibility to innovate and tailor to their sites. We expect, however, that to comply with the uplift, most developers will choose to install solar panels on new homes. As part of the Future Homes Standard consultation this year, we will continue to explore what role solar should play in new homes.</p>
109	2030	Government should ensure the right policies are in place to achieve the UK's demand reduction targets, building on the 2022 Autumn Statement announcement, with interim targets and milestones to hit this goal. Noting the UK's 2050 net zero ambitions the government should publish clear analysis of which mix of policy measures gets the UK to the 15% target and assure future funding for those policies.	The Autumn Statement announced a new national ambition to reduce the UK's final energy consumption from buildings and industry to 15% by 2030 against 2021 levels. To drive delivery of this target we have also established a new Energy Efficiency Taskforce. This has an economy-wide remit, covering homes, businesses, and public sector buildings, as well as industrial processes.

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110	2023	Government should expand its energy efficiency advice service in 2023, ensuring that it helps consumers to access qualified traders and providers in local areas.	We have been supporting people to reduce energy usage with low and no-cost measures this winter through our 'It All Adds Up' campaign. The 'Find ways to save energy in your home' advice service on Gov.uk for homeowners builds on this with advice for improving and decarbonising their homes with links to accredited, trusted installers. We will enhance our service by launching regionally led in-person advice pilots in 2023 and are expanding the telephone helpline to also support users. We plan on making continuous improvements over the next 3 years.
111	2025	Government should support establishing retrofit hubs by 2025 to bridge the gap between households and suppliers. These could enable installers to seek training and impartial advice and could connect households to suitable installers.	Government supports bringing gaps between households and retrofit suppliers, and there are several organisations already working in retrofit sector that fulfil some of the proposed role for retrofit hubs. This includes the five government funded Local Net Zero Hubs and TrustMark, the government endorsed quality mark for retrofit. We understand the Construction Leadership Council are setting up a National Retrofit Hub focused on industry activity. We are also aware of businesses offering retrofit management services to consumers, assisting them with the process of determining which measures are appropriate for their home and joining them up with reputable and high-quality tradespeople and, in some cases, links to finance. We will continue to work with the various organisations already undertaking this sort of activity, with advice and input from the Energy Efficiency Taskforce, to consider whether more could be done and whether there is a role for further government support and signposting.
112	2023	Government should mandate that EPCs are updated on a regular basis, using a new metric which better reflects current relative costs of heat pump and accounts for wider benefits from low-carbon heating systems. Under this new metric, EPC ratings could become a more	The government is currently working on proposals for improving EPC metrics, and intends to consult on these, taking account also of recently published proposals from the Climate Change Committee. The Government also has a continuing programme of user research to improve the way in which information is presented on certificates. EPCs currently have a validity period of

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		holistic Net Zero Performance Certificate (NZPC), giving consumers more detailed information about the heating technology used in the property and its associated financial and social effects.	ten years and the Government intends to consult on options to change this validity period. We are overhauling the building physics model underpinning EPCs to make it fit for purpose to support net zero. We aim to consult on this new model later in 2023.
113	2024	<ul style="list-style-type: none"> • Government should provide certainty by 2024 on the new and replacement gas boiler phase out date to drive industry and investor confidence. The Review recommends bringing the proposed date of 2035 forward and legislating for 2033. including any hydrogen-ready boilers in areas possibly converting to hydrogen in the future. • Government should set a legislative target for gas free homes and appliances by 2033, to contribute to a gas free grid in future. • Government should legislate for all homes sold by 2033 to also have an EPC rating of C or above in line with the aforementioned NZPC, with exclusions around certain properties (e.g. listed properties, on grounds of affordability). Government should also mandate landlords to include 'average bill cost' alongside the EPC (and possible future NZPC) rating, when letting a property out. This will help renters understand what costs to expect, while also helping to put a premium on energy efficient homes. 	<p>The Government has an ambition to phase out all new and replacement natural gas boilers by 2035 at the latest, and will further consider the <i>Independent Review of Net Zero's</i> recommendation in relation to this.</p> <p>In relation to appliances, the Energy-Related Products Framework sets out the Government's plans for improving and building on energy efficiency policies like minimum standards where they can achieve additional benefits to consumers, businesses and our Net Zero objectives. As part of this, we will improve minimum energy performance standards and energy labelling requirements for energy-using products, including consulting on updating lighting requirements until April 2023, and on other products over the next year. We will continue this work and explore the implications of a 2033 target date on other types of gas appliances.</p> <p>We will respond to the consultation on improving home energy performance through lenders and we are planning to consult by the end of this year on how to improve the energy efficiency of owner-occupied homes.</p>
114	2023	Government should consider options to support homes to include roof solar panels	Solar panels are already eligible measures within SHDF, HUG, LAD and ECO for delivery within their schemes (specific eligibility

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		installation as part of its retrofit provision to support homes reaching the Net Zero Homes Standard.	criteria may apply). From March 2022 the Government announced a zero rate VAT on the supply and installation of (some) energy saving materials to domestic homes for 5 years – this includes Solar PV. We expect the majority of new homes to be built with solar panels as a result of changes to Part L (conservation of fuel and power) of the Building Regulations, which came into force in June 2022. This change is a stepping-stone towards the 2025 Future Homes Standard.
115	2023	Government should include an Energy Efficiency Taskforce workstream on green finance products to report by end of 2023. This should help to support those in low EPC rated properties to carry out green home upgrades and should identify opportunities to crowd-in private finance, alongside public funding.	In February 2023 we announced the terms of reference for the Energy Efficiency Taskforce. The objectives for the taskforce include working with the private sector to increase the availability of green finance linked to installation standards and quality.
116	2028	Government should deliver the Heat Pump Investment Accelerator to catalyse private investment for at least two major heat pump factories in the UK.	The government is launching the Heat Pump Investment Accelerator in 2023 to unlock significant private investment in the heat pump market, boosting our energy security and providing long term, secure net zero jobs.
117	2023	Government should choose from multiple options which could help increase heat pump efficiency: 1. Suppliers say this could be done via a mandate stating the minimum efficiency which needs to be achieved by all installations. Government should test whether this could be done by most major installers for most properties.	The government intends to consult on raising minimum performance standards as committed to in the Energy-Related Products Policy Framework to ensure industry makes improvements to the minimum efficiency of heat pumps. We are also supportive of doing more to incentivise lower lifetime costs and improved efficiency of heat pumps through our innovation programme and will consider the viability and options for delivering further support. The government is committed to improving the skills of the workforce to drive improved the performance of heating systems.

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		<p>2. Set up a heat pump coefficient of performance competition, run for example by the Energy Efficiency taskforce. This will show the state of the art technologies with higher efficiencies and allow others to replicate these.</p> <p>3. Quality of the installation matters; training and installation standards need to be accelerated to support this.</p>	<p>On 2 March 2023, Government announced an additional £5 million to support low carbon heating training, expected to support around 10,000 training opportunities. This is in addition to the £15 million previously committed to skills in the energy efficiency and low carbon heating sectors since 2020, which have supported over 16,000 training opportunities for people working in the energy efficiency, retrofit and low carbon heating sectors. All heat pump installations are expected to comply with building regulations, and the new funding will promote courses which ensure installers achieve the minimum competence requirements to join an appropriate competent person scheme. Contractors installing heat pumps within Government schemes are further required to be certified by the Microgeneration Certification Scheme (MCS). In addition to ensuring that installers are technically competent, MCS also provide consumers with additional protections.</p>
118	2028	<p>Government should extend the Boiler Upgrade Scheme to 2028 and consider whether grant levels should be increased in light of inflationary pressures, before being scaled down over time. This should happen alongside efforts to increase awareness of government support. Support for those unable to afford the upfront costs associated with improving energy efficiency and moving to low carbon heating systems should be continued and expanded, namely through the Home Upgrade Grant (HUG), Social Housing Decarbonisation Fund (SHDF) and other existing schemes for low-income households.</p>	<p>Government has committed a further £6 billion from 2025 to 2028 as part of the Government's 15% energy reduction target by 2030, and we can confirm that the Boiler Upgrade Scheme will be extended to 2028. Government is committed to increasing heat pump deployment under the BUS, and will enhance the current marketing campaign to increase consumer awareness and take-up.</p>
119	2023	<p>Government should set the policy framework and supportive investment environment to</p>	<p>Our commitment to grow the heat pump market to 600,000 installations a year by 2028 provides a clear long-term signal to</p>

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		encourage reskilling and greater training opportunities in the heat pump sector. Work to encourage adoption of standards to increase firms able to take up existing schemes.	<p>industry on the expected scale of heat pump deployment, providing certainty and enabling investment. The private sector is already starting to invest in training, for example Octopus Energy has invested £10 million in a new R&D and training centre near Slough, and Ideal Heating have announced a new £1 million training centre near Hull.</p> <p>Government is also providing funding to support engineers to take up this training through the Home Decarbonisation Skills Training competition which launched on September 20th 2022. This £9.2 million competition is funding training for people working in the energy efficiency, retrofit and low carbon heating sectors in England. The previous £6 million phase of this scheme in 2020 and 2021 supported almost 7,000 training opportunities, including training for over 2,000 heat pump installers.</p>
120	2023	Government should create a roadmap, by Autumn 2023, which details decision points for developing and deploying R&D and technologies that are critical for enabling the net zero pathway to 2050.	We accept this recommendation and agree that there is value in understanding the long-term role that technologies will play in delivering net zero. We are currently considering options for what format this roadmap should take to be the most effective given the different potential pathways to net zero by 2050 and are also considering interaction with other tools and publications we have produced such as the Net Zero Strategy, the Net Zero Research and Innovation Framework, and existing sector and investor technology roadmaps.
121	2023	By Autumn 2023, Government should review how to incentivise greater R&D for net zero, including considering the role of clarity on research priorities and government support, tax credits, greater ring-fencing of R&D spend, and enabling regulations.	We agree that it's important for Government to continue to incentivise greater R&D for net zero. Several actions have already been taken to address the individual aspects of this recommendation, including publishing the UK's first Net Zero Research & Innovation (R&I) Framework to give clarity on R&I priorities over the next 5-10 years. This has been followed by a Delivery Plan – published alongside this document - outlining

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			<p>government support aligned against those priorities. More broadly, the Innovation Strategy set out the levers government uses to incentivise R&D in the UK, including tax credits, and the Net Zero Strategy set out the role of enabling regulations to ensure technologies can deploy at scale. Regulations are also being considered through the GCSA-led review into better regulating emerging technologies. The Government is currently consulting on the design of a potential merged R&D tax relief scheme, including whether this should include differentiated rates of support for certain types of R&D or R&D intensive companies.</p>
122	2023	<p>Government should establish up to three new R&D demonstrator projects, out to 2035, aligning with the ten-year missions set out by this review. These should be considered when creating the overarching R&D and technology roadmap.</p>	<p>Given SR allocations for the current SR period have already been finalised, government is unable to support the establishment of new additional R&D demonstrator projects beyond those already planned in the near-term. However, we will explore this, including alignment with the ten-year missions, during the next spending review.</p> <p>Existing government net zero R&I programmes, such as the £1 billion Net Zero Innovation Portfolio will deliver demonstrator projects over this SR period, aligned to some of the missions identified by the Skidmore Review (e.g. Grid & Infrastructure, Nuclear, Energy Intensives & Industry).</p>
123	2023	<p>Government should include in forthcoming work from OSTs how regulators can provide more opportunity for demonstrations for net zero technologies.</p>	<p>We agree that regulation will be an important factor in enabling the scale-up of emerging net zero technologies. This was outlined in the recent Sir Patrick Vallance pro-innovation Regulation of Technologies Review: Green Industries. The review aimed to identify opportunities and enablers for pro-innovation regulation of science and tech sectors including those across green industries. The government has responded to the review alongside this publication and set out several areas of future work including on the capacity of regulators, enhancing grid connections, and</p>

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			supporting the roll-out of electric vehicle charging infrastructure. This will complement ongoing work to remove barriers to the development and deployment of net zero technologies set out in the Net Zero Growth Plan.
124	2026	Government should progress with the consultation on carbon leakage measures and speed up decision-making to enable Government to implement effective carbon leakage mitigations from 2026.	The UK is committed to ensuring that efforts to decarbonise industry are not undermined by carbon leakage, and currently does so through free allocation under the UK ETS. We are currently reviewing our approach to free allocations, looking at ways to better target support for those most at risk of carbon leakage to ensure they are fairly distributed. As recommended by the <i>Independent Review of Net Zero</i> , the government will consult on a range of domestic carbon leakage mitigation policies that could potentially mitigate future carbon leakage risk and ensure UK industry has the optimal policy environment to decarbonise. These include product standards, a carbon border adjustment mechanism (CBAM) and policies which would help grow the market for low emission industrial products, as well as any emissions reporting requirement which might be needed to underpin new policies. While the best solutions to carbon leakage are international, options for domestic action must be considered in parallel to support efforts to decarbonise the UK economy and reduce UK and global emissions. Government is clear that any policy or suite of policies will need to balance a range of priorities as well as meet existing commitments, both domestically and internationally. These include our commitment to free and open trade; respecting international climate change obligations, appreciating countries' differing levels of development, particularly for least developed and low-income countries, as well as minimising burdens on businesses and consumers and enabling consumer choice. Alongside changes to free allocation policy, consulting on these measures will inform the best approach to carbon leakage measures that support efforts to decarbonise UK

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			industry, with the aim of ensuring that carbon leakage risks are mitigated at all stages of the UK's net zero transition.
125	2024	<p>By 2024, Government should work within the UK ETS Authority to develop a pathway for the UK ETS until 2040. This pathway should:</p> <p>a) Set out a vision on the future design and operation of the ETS</p> <p>b) Set out a timeline for expanding the coverage to the rest of the UK economy, as well as sectors consulted on including maritime and waste.</p> <p>c) Address inclusion of GGRs to incentivise early investment in new technologies and potentially nature-based solutions.</p> <p>d) Provide reassurance to businesses around how the Government will mitigate the risk of carbon leakage as a result of expanding the ETS.</p>	<p>Government accepts the recommendation that we set out a long-term pathway for the UK Emissions Trading Scheme (ETS). We will work within the ETS Authority to publish one this year. Subject to agreement within the Authority, this pathway will set out our intention to legislate to continue the ETS beyond 2030 until at least 2050. It will remain aligned with our net zero target, so giving businesses the certainty they need to invest in decarbonisation.</p> <p>We will explore expanding the scheme to more sectors of the economy, including high emitting sectors. We consulted last year on expanding the scheme to cover energy from waste/waste incineration and domestic maritime emissions and on incorporating greenhouse gas removals. We will explore the potential role of emissions trading in decarbonising heat, alongside possible options for rebalancing energy costs away from electricity. We will work to develop a harmonised approach for measuring carbon emissions from farms.</p> <p>Throughout, we will ensure effective carbon leakage mitigations are in place to ensure the UK's efforts in decarbonisation lead to a true reduction in global emissions.</p>
126	2024	Government should endorse international VCM standards as soon as possible and consult on formally adopting regulated standards for VCMs and setting up a regulator for carbon credits and offsets by 2024.	The UK Government recognises the potential role that voluntary carbon markets could play in the delivery of domestic and international net zero, noting that market integrity concerns need to be addressed to maximise this opportunity. We support work to improve the integrity of VCMs, including that of the Integrity Council on Voluntary Carbon Markets (IC-VCM) and Voluntary Carbon Markets Initiative (VCMI), both launched under the UK's COP26 Presidency to develop international best practice.

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			<p>We will consult on the specific steps and interventions needed to support the growth of high integrity voluntary markets and protect against greenwashing. This will position the UK to serve as a global hub for voluntary carbon trading.</p> <p>Our work with the British Standards Institution will also develop nature market standards for investment in carbon and other ecosystem services, building on the international best practice such as the work of IC-VCM and VCMI, as well as the experience of the UK's Peatland and Woodland Carbon Codes.</p>
127	2024	Government should set up a programme for offsets and carbon credits, providing guidance to businesses looking to invest in carbon credits and offsets, for businesses looking provide carbon credits and offsets, and explore the opportunities to create a market in the UK for offsets through energy efficiency measures.	The UK Government recognises the role carbon markets can play in enabling businesses to transition to net zero. It is important that credits do not come at the expense of direct action by businesses; reflect genuinely additional removal and reduction in GHG emissions; and align with a credible science-based pathway to net zero. Forthcoming reports of VCMI and IC-VCM will also provide recommendations to business.
128	2024	Government should establish baseline environmental and climate protections in Free Trade Agreements (FTAs) and for removal of trade barriers to environmental goods and services.	<p>Government fully recognises that bilateral and multilateral trade can play a vital role in tackling climate change and protecting the environment, including by bringing down the cost of green goods, services and technologies and accelerating innovation. That is why we are taking action to remove barriers to green trade both bilaterally and multilaterally, for example through the World Trade Organisation. We also remain committed to aligning our trade and environment agendas as a global leader on decarbonisation and a champion for free trade.</p> <p>For each of our Free Trade Agreements (FTAs), Government publishes a public mandate prior to negotiations. Mandates have previously included objectives to maintain the UK's right to regulate to meet net zero, reaffirm parties' international climate and environment commitments, seek ways to address barriers to</p>

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			trade in green goods and services, and prevent parties from failing to apply environmental laws for a trade advantage.
129	2023	Government should conduct a strategic review of the UK's international climate leadership and ensure the 2030 Strategic Framework on Climate and Nature provides practical direction for the UK's international climate and nature leadership.	Following our COP26 Presidency, and our leading role in advocating for an ambitious Global Biodiversity Framework, the UK remains committed to accelerating progress on international climate and nature action. This is essential to safeguard UK and global security and prosperity and support the most vulnerable countries to adapt to climate impacts. The <i>2030 Strategic Framework</i> outlines ambitious UK action - in this critical decade for delivery - to halve global emissions, halt and reverse biodiversity loss and build resilience to climate impacts. We will utilise the UK's strengths in green finance, science, technology and innovation, net zero delivery, international partnerships and trade and continue to drive forward high impact initiatives such as Just Energy Transition Partnerships, Mission Innovation and the Forest and Climate Leaders Pledge.



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