# One Nation Recovery Papers

Building Back Greener: The Environment

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Introduction

Jerome Mayhew MP

In May, the Prime Minister said, "We owe it to future generations to build back better." This mission is particularly important in relation to the environment which, as Conservatives, we have a responsibility to protect and enhance. Following this devastating public health and economic crisis, we have the opportunity to reboot our economy and create jobs, by accelerating the rollout of clean and resilient infrastructure and stimulating low-carbon industries across the UK. A clear majority of the public supports this agenda too, with 67% of British adults agreeing in a recent poll that failing to deliver a green recovery would be 'bad for the economy in the long run'<sup>1</sup>.

As Conservatives we reject the anti-capitalist assertion that economic growth and rising living standards are incompatible with achieving our Net Zero commitments. In fact, the UK's recent history shows there is no inherent conflict between economic growth and emission reduction. On the contrary, they can be mutually reinforcing. Offshore wind, electric vehicles, carbon capture and other clean technologies have the potential to create millions of jobs, attract private investment, and grow UK exports. By backing these sectors, we can not only create high-quality, secure jobs across the country, but also make progress towards our net zero target and make runaway climate change - a potentially bigger shock to our economy than COVID-19 - less likely.

In this collection of essays, we propose a number of policy ideas to deliver a green economic recovery. We propose some overarching fiscal measures - namely carbon pricing and sovereign green bonds - which would channel private investment into low-carbon solutions. We also set out proposals to capture the clean growth opportunities in specific economic sectors, such as electric cars, green homes, broadband, cycling, and carbon capture technology. Whilst each contributor is only responsible for the contents of their own essay we share a common purpose: to drive economic recovery through green growth.

<sup>&</sup>lt;sup>1</sup> https://www.cen.uk.com/polling

# Recommendations

Below is an aggregation of all the recommendations made across this report. Not all the recommendations will be agreed to by each author, and their specific recommendations can be found at the end of their contribution.

- Create a domestic carbon tax, with a border carbon adjustment tariff process for all manufactured imports and exports;
- Issue a sovereign green gilt to fund capital investment in green infrastructure;
- Legislate to ensure new homes include personal electric vehicle smart charging points or contribute to local authority on-street parking schemes;
- Support supply chain finance for small EV supply-side companies;
- Train for charge point installation and maintenance, and create green apprenticeships certified at NVQ Level-6 in related areas such as battery technology;
- Support social enterprises and zero carbon academies to train and re-skill people for the green economy;
- Adopt the Committee on Climate Change's recommendation to phase out internal combustion engine vehicles by 2030;
- Deliver our pledged £5 billion to upgrade broadband;
- Update planning, access and street work rules to enable faster broadband works;
- Simplify and fast track broadband community partnerships to reduce planning delays;
- Fund a training programme for green workers, help them to prequalify from sectors impacted by Covid and support the training of local energy efficiency installers;
- Tighten the Minimum Energy Efficiency Standards for privately rented buildings with a consultation potentially to offer further incentives for landlords to retrofit;
- Launch the £3.8 billion Social Housing Decarbonisation Fund, Home Upgrades Grant and Public Sector Decarbonisation Scheme pledged in the manifesto;
- Consider implementing a stamp duty incentive to offer discounts for energy efficient properties;
- Invest in green infrastructure including street trees and parks;
- Upgrade building regulations to deliver climate resilience and healthier homes;
- Increase cycling training and new car-free zones around schools at drop-off and pick-up times;
- Introduce tougher financial penalties for dangerous drivers and improve junctions that are dangerous to cyclists;
- Design cycling and dedicated cycle paths into all new infrastructure, including housing developments and roads;
- Expand employer schemes and other ways to reduce the cost of e-bikes;
- Publish a Greenhouse Gas Removal strategy, including Carbon Capture and Storage, tree planting and soil improvement;
- Commit to develop industrial Carbon Capture and Storage technology and adopt the target of capturing and storing 10MtCO2 by 2030;
- Set out a clear, fully funded tree strategy to meet the target of planting 30,000 hectares of trees a year, complete with interim targets, and annual monitoring and reporting;
- Monitor and report carbon sequestration in soil, promote policies to increase it under an overarching soil strategy with targets;
- Ensure the new Environmental Land Management Scheme funding for farming rewards carbon capture in soil.



# 1 - Carbon pricing

# Jerome Mayhew MP

# Introduction

As we look to come back from the economic crisis inflicted by our necessary response to Covid-19 it is a racing certainty that we will need to raise additional taxation if we are to maintain the Government's reputation for fiscal probity.

Whilst consumption taxes such as VAT are effective tax generators, and non-distorting of economic behaviour, they are regressive in their impact as the poorest in society pay a greater share of their income in such taxes than the rich. Conversely, whilst income taxes can be progressive in their application our current income tax policies are already disproportionately and vulnerably reliant on a very small taxpayer base.

There is an alternative that has the potential to generate a substantial new revenue stream for the Exchequer. At the same time it can positively distort economic behaviour to take full account of carbon emissions within trade and accelerate our progress towards Net Zero by 2050. The answer is twofold: the creation of a domestic Carbon Tax, together with a Border Carbon Adjustment ("BCA") tariff process for all international trade in manufactured goods.

### The rationale

The economic status quo does not account for all the impacts of a manufacturing process. Economic exchange takes account of the cost of inputs, production, marketing, distribution and profit, but fails to take account of the full cost to society of the emission of carbon and other greenhouse gases as part of the transaction. Whilst some sectors do include a base carbon price, it is very uneven and, in some sectors, non-existent. As defenders of free markets this is an inefficiency that we need to address in order for true exchange to be supported. Such a market inefficiency can be repaired by the addition of a Carbon Tax within the exchange to reflect the missing cost.

As we look to kickstart our economy in the aftermath of the Covid-19 crisis we have an opportunity to refocus economic growth in areas that actively support our move towards a low carbon economy. We need to recognise that not all economic growth is equally valuable, since short term stimuli to high carbon sectors will only increase the likelihood of significant stranded assets as carbon reduction policies become increasingly stringent in the years ahead. We are fortunate that, in the case of carbon reduction, we have very clear foresight of the direction of the world economy over the next 20 to 30 years. Not to focus our recovery to maximise growth potential within these known directions would be nonsensical.

It is, sadly, a universal truth that all taxes are paid by individuals in the end, but the great advantage of a carbon tax is that choice is returned to the individual through an exchange such that a voluntary change in behaviour alters the amount of tax to be paid. Having a tax system that makes a previously

hidden cost express, and therefore avoidable should you wish, gives increased freedom and power to the consumer whilst raising valuable revenue from those who choose to continue in their purchases. (I accept that this presupposes that every consumer has an effective choice, when many carbon heavy products, such as domestic heating and lighting, may be unavoidable necessities. It is also accepted that these necessities will represent a greater percentage of income for poorer households and that compensatory measures, payable from the proceeds of the tax, may be needed to soften this.)

# The detail

# **Domestic Carbon Tax**

Of the two revenue streams being discussed, the implementation of the domestic Carbon Tax is significantly the easier. It is not the role of this short policy paper to go into the detail of how such a tax could be (a) calculated and (b) collected. A number of academic papers have been written on this subject<sup>2</sup> that address these issues.

The focus of this policy paper is less on the environmental benefits of a carbon tax (very considerable though they are) but more on the revenue generating opportunity that such a tax presents to the Treasury.

Of course, providing an incentive for consumers to choose to reduce the purchase of carbon intensive, and therefore more expensive, products will stimulate new areas of economic activity in response. The most direct, and potentially employment generating of these, will be the retrofitting of improved insulation to the domestic housing stock. The benefits of this scheme to short term employment and longer-term energy efficiency is addressed more fully in another of our policy papers.

The Grantham Research Institute on Climate Change and the Environment has undertaken modelling work to estimate potential tax take were a carbon tax of £50/tCO2 introduced in 2020, increasing to £75/tCO2 by 2030 levied on gas, electricity and oil consumed by households.<sup>3</sup> The carbon tax on gas and oil would be levied at the point of consumption, whilst that of electricity would be paid by the generator, given the different levels of carbon intensity in electricity generating methods. The incentives for moving towards lower emitting methods of energy production are obvious and clear.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> A selection of papers on Carbon Tax:

<sup>-</sup> https://policyexchange.org.uk/wp-content/uploads/2018/07/The-Future-of-Carbon-Pricing.pdf

<sup>-</sup> Dieter Helm, The Carbon Crunch: How We're Getting Climate Change Wrong - and How to Fix it (2013)

<sup>-</sup> William Nordhaus, The Climate Casino: Risk, Uncertainty, and Economics for a Warming World (2015)

<sup>&</sup>lt;sup>3</sup> Distributional impacts of a carbon tax in the UK, Reports 1 and 2, March 2020 Burke et al.

<sup>&</sup>lt;sup>4</sup> There is potential for the carbon tax rate to be aligned with legally binding carbon budgets and ultimately net zero.

# **Border Carbon Adjustment**

There is a fear, or even genuine risk, that a domestic carbon tax would have a negative impact on our domestic manufacturing base in the absence of compensating tariffs for imported products that do not recognise the true costs of production within their prices. The evidence of the last decade does not support the "risk" argument so far, but the "fear" remains and could become genuine risk as emission reductions from the move away from coal comes to an end<sup>5</sup>. Increased domestic energy pricing and other environmental policies increase the domestic production cost and correspondingly decrease the competitiveness of energy intensive domestic industries in the international market, including many manufacturing processes. "Leakage" of carbon takes place when production is merely shifted abroad to countries without a carbon tax, a phenomenon that accounts for much of the UK's recent carbon reduction. This does not help the global environment but merely destroys domestic industry and employment.

The answer is to impose a Border Carbon Adjustment (BCA) on all imported carbon intensive goods. This would provide a fair competitive base between domestic and international competition without unfairly favouring one over the other, would provide a free market incentive for international markets to reduce their carbon use if seeking to access the UK market and would correct a market inefficiency across all sectors of UK exchange and not simply the domestic base.

#### But how could this be achieved?

At its most simple, in order to ensure that domestically produced goods are not undercut by imported goods benefitting from cheaper dirty energy, a BCA is levied on those imports equivalent to the cost of the domestic carbon tax. In addition, since exports to lower carbon-cost countries would also be at a commercial disadvantage, a carbon rebate is paid to all exporters to ensure no loss in global competitiveness.

It will be necessary to apply an open and transparent process for assessing the carbon equivalence of third countries, with a process for individual companies to apply for rebates based on evidence of lower emissions in their manufacturing processes. Whilst the EU has expressed increasing interest in the development of a BCA, one of the benefits of leaving the EU is that the UK will not be held back by the time needed to develop a multinational approach should it choose to progress with this policy.

# What could be raised by these measures?

The whole point of these measures is to incentivise behavioural change. If these incentives were 100% effective then no additional revenue would be raised for the Exchequer, but the benefit to the environment and our wider economy would be profound. At the other end of the behavioural scale, depending on the price rate applied to CO2 emissions, very significant sums could be raised. Modelling by the Grantham Institute suggests that a combination of domestic carbon tax and BCA

<sup>&</sup>lt;sup>5</sup> Most of our recent carbon reduction has come from the move away from coal and build-out of renewable energy (see https://www.carbonbrief.org/analysis-uks-co2-emissions-have-fallen-29-per-cent-over-the-past-decade). This is a triumph of both carbon pricing (for the coal to gas shift) and Contracts for Difference (for new renewable energy generation).

with a carbon price between £50-£75/tCO2 could raise between £27.4-£36.12 billion per annum. Whilst a degree of compensatory or smoothing payments may be deemed desirable, or a more gradual scaling of the carbon price imposed, it is none-the-less clear that this policy has the potential to provide a very significant new income stream to the Treasury whilst incentivising positive economic behavioural change.

# Recommendations

1) Create a domestic carbon tax, with a border carbon adjustment tariff process for all manufactured imports and exports.



2 - Green giltGareth Davies MP

This unprecedented public health crisis is placing an almighty toll on UK finances. Estimates vary, but the UK Government will be borrowing hundreds of billions by year-end, many businesses are suffering despite the extensive support offered and several years of record low unemployment are now being unravelled due to this terrible virus.

It is right that the Chancellor has been focused on measures to stabilise our economy and give reassurance to businesses and employees. The Job Retention Scheme for example, has helped ensure that businesses will be able to resume operations quicker and avoid the costs of laying off.

However, we must now start to look at our recovery and what measures can be taken to facilitate growth, boost jobs and expand production. This is an opportunity as much as a requirement. It is a chance for the Chancellor to reframe and redirect our economy to meet the long-term needs of our people and the planet.

#### Financial mechanisms to invest in net zero

A renewed focus on capital investment to achieve economic growth and productivity will be critical. The planned "infrastructure revolution" outlined in the 11 March budget must go ahead, as must the "levelling up" agenda. But let's make it a green infrastructure revolution, and level up to create new green jobs.

The UK has already shown great global leadership on climate change as the first major country to legislate to become a net zero emission nation by 2050. But to ensure we achieve such an ambition, the way we have done things previously needs to change, especially in capital markets.

As we come out of this crisis, the UK Government should issue a sovereign green gilt to specifically fund capital investment in infrastructure that will help stimulate the British economy after the coronavirus outbreak, creating new jobs, technology and transport – while also continuing the mission to become a net zero emission nation by 2050.

If we are to meet such an important and ambitious target, it is going to require significant investment, and this will require private capital.

# The global context

Britain is the world's leading financial centre, yet we are surprisingly behind the curve when it comes to utilising capital markets to finance green growth.

The Netherlands, France, Poland, Ireland and Belgium have all issued a sovereign green bond<sup>6</sup> and Germany<sup>7</sup> and Italy<sup>8</sup> have announced they will be issuing later this year. While many of these saw oversubscribed demand, the French have been the most successful to date, raising over £20 billion mainly from other countries to fund their green infrastructure.

Despite not having our own government green bond, UK investors are actually very active in the global green bond market – 28% of the money raised by the French for example, came from British investors.<sup>9</sup> Only 2% of the world's outstanding green debt is denominated in GBP, over 40% are denominated in euros.

# Time to invest in a greener future

So why has the British Government so far held back on a green gilt? Well, it is partly down to concerns expressed by the Debt Management Office (DMO), who issue the debt, about whether a green gilt will be more expensive to issue. But if we look at the other sovereign green bonds on the market, they either trade flat to, or even slightly tighter than their non-green peers<sup>10</sup>. The only real additional cost will be in the reporting on the use of proceeds, but these will be far outweighed by the benefits borne from the investment raised for our country's infrastructure.

Finally, in addition to being a cost effective way of growing our economy and making it more productive, it would also put a marker down for Britain as a future green finance leader, showing that the City of London can innovate, adapt and evolve to meet future needs.

Since 2010, the Conservatives in government have made great strides on climate change, but as we now face a great economic hurdle, we should seek to get out of the red by going green.

# Recommendations

2) Issue a sovereign green gilt to fund capital investment in green infrastructure.

<sup>&</sup>lt;sup>6</sup> <a href="https://uk.reuters.com/article/us-netherlands-bonds-green/debut-dutch-green-bond-lures-more-than-20-bln-euros-of-orders-idUKKCN1SR16W">https://uk.reuters.com/article/us-netherlands-bonds-green/debut-dutch-green-bond-lures-more-than-20-bln-euros-of-orders-idUKKCN1SR16W</a>

<sup>&</sup>lt;sup>7</sup> https://www.ft.com/content/3554fb78-2253-11ea-b8a1-584213ee7b2b

<sup>&</sup>lt;sup>8</sup> https://www.reuters.com/article/italy-greenbond/italy-to-issue-its-first-green-bond-in-second-half-of-2020-head-of-debt-idUSR1N2810CG

<sup>&</sup>lt;sup>9</sup> https://www.ft.com/content/d63e2036-f4e6-11e9-bbe1-4db3476c5ff0

<sup>&</sup>lt;sup>10</sup> https://www.bloomberg.com/professional/blog/increasing-demand-green-bonds-affects-yields/



# 3 – Acceleration of electric vehicles (EVs) and EV infrastructure

**Ruth Edwards MP** 

Introduction

# Why is this sector important for the environment?

Petrol and diesel vehicles remain a significant contributor to the UK's domestic emissions, with up to 91% of the CO<sub>2</sub> produced by the transport sector coming from road travel<sup>11</sup>. This represents about a fifth of the UK's overall greenhouse gas emissions. Among these emissions are many other harmful products, including carbon monoxide, nitrogen oxides and solid carbon particulates.

Atmospheric concentrations of CO<sub>2</sub> have increased rapidly in the last 70 years, reaching the highest levels the planet has seen in over three million years. There is clear evidence of the impact man made emissions are having on climate change and on long term public health, as air pollution contributes to 36,000 premature deaths a year in the UK<sup>12</sup>.

# What contribution could it make to future economic growth and job creation?

The automotive industry is an important contributor to the global economy, with estimates of up to 1.6% of global GDP coming from the sector<sup>13</sup>. The Government committed to bringing forward the phase-out date for internal combustion engine (ICE) vehicles from 2040 to 2035 earlier this year, so a nationwide public and private charging network, resilient supply chain and the skills to deliver these will be crucial to the sector's future success.

Surveys<sup>14</sup> carried out by the National Grid suggest range anxiety is a prevailing factor in consumer aversion to EVs. Connecting our highways and rural communities to reliable charging is essential, building on the Government's current vision that nobody will be out of range of a rapid public charger.

# What is the opportunity?

Throughout this pandemic we have seen spirited collaboration across our society, with Government, businesses and local communities coming together to transform production lines, innovate new medical technology to treat COVID-19 patients and protect the most vulnerable. Much of this has been done to timescales that would have previously been thought of as impossible.

As we restart our economy, we should embrace this collaborative spirit and sense of urgency to clean up our transport sector. These are potentially life-saving solutions with serious implications for

 $<sup>^{11}\,</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/878642/decarbonising-transport-setting-the-challenge.pdf$ 

<sup>12</sup> https://www.bmj.com/content/362/bmj.k3632

<sup>13</sup> https://greensillwebsite.s3.amazonaws.com/uploads/2020/04/drive\_to-survive.pdf

<sup>&</sup>lt;sup>14</sup> https://www.nationalgrid.com/document/125116/download

public health. Air pollution is projected to cause 2.5 million new cases of acute health conditions such as heart disease, stroke and asthma if current levels persist<sup>15</sup>.

A move to electric vehicles will also save considerable costs to Government. In 2017, health conditions caused by air pollution were estimated to cost the NHS £157m; this is expected to rise to as much as £18.6 billion by 2035 on a, 'do nothing', scenario<sup>16</sup>.

Shifting to EVs will cut our contribution to greenhouse gas emissions, improve air quality and have huge benefits for the health of our communities and public expenditure.

It also provides an opportunity to secure the UK's share of future economic growth in this industry, generating high-quality, green jobs across the UK.

# What is the current size and economic health of the sector?

The automotive industry is experiencing a global contraction as a direct result of COVID-19. Yet, against a backdrop of falling sales, the EV market continues to show signs of resilience. Here in the UK, where automotive sales are among the hardest hit<sup>17</sup>, the number of new registrations of EVs increased compared to this time last year, while petrol and diesel registrations fell as far as 66%. Remarkably, registrations of new battery electric vehicles (BEVs) even grew this May, up 21.5% on May 2019<sup>18</sup>.

The transition to an electric future is well underway in European markets. In March 2020, over 75% of new vehicle sales in Norway were reported to be electric<sup>19</sup>, and market insights point to there being 330 different EV models available to buy in Europe by 2025<sup>20</sup>, representing a groundswell of consumer choice and industry competitiveness.

# What the Government has done recently

The Government continues to consult on ways to advance its vision for the charge point network.

Alongside its commitment to bring forward the phase-out of petrol and diesel cars to 2035, the Government committed over £500 million in the March 2020 budget for a nationwide public charging network. Extra spending was also directed towards consumer incentives like the plug-in car grant. This is coupled with a round of private capital raised in 2018, backed by HM Treasury, bringing the private sector on board and directing significant and meaningful investment to the EV supply chain.

<sup>15</sup> https://www.imperial.ac.uk/news/186406/air-pollution-england-/

<sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> https://ihsmarkit.com/research-analysis/covid19-global-auto-demand-tracker.html

<sup>18</sup> https://www.smmt.co.uk/vehicle-data/evs-and-afvs-registrations/

<sup>&</sup>lt;sup>19</sup> https://cleantechnica.com/2020/04/02/norway-ev-market-share-breaks-all-records-75-of-vehicles-sold-have-plugs/

<sup>&</sup>lt;sup>20</sup> https://thedriven.io/2019/07/24/electric-vehicle-sales-to-surge-across-europe-with-2020-seen-as-new-tipping-point/

# What are the policies?

Beyond continued funding for the public charge point network, creative solutions focusing on smart charging in homes, supporting the supply chain and re-skilling could have a high impact on the recovery of the industry.

# Smart charging in all new homes

The retrofitting of homes with certain types of charger is already subsidised by the Government under the Electric Vehicle Homecharge Scheme. According to a 2019 Government consultation, the average cost saving of installing chargers in new homes over retrofitting them into existing homes is £1,064 per charge point. As the Government continues to fund local council charging schemes and invest in electric public transport, it's equally important that future homebuilding is compatible with the emerging EV landscape.

Legislating to ensure that all new homes in future developments include personal charging points as standard would make a huge impact on personal charging infrastructure and help secure demand for EVs. Secondary legislation to ensure that all new home chargers are 'smart' could reduce the impact of charging EVs during peak electricity times by 83%, according to some studies<sup>21</sup>.

Where this might not be possible, developers should be required to contribute to local authority onstreet charging schemes, similar to the Section 106 and Community Infrastructure Levy contributions already made towards local infrastructure.

# Supporting the supply chain

Studies<sup>22</sup> suggest that, even with generous fiscal support, the global financial impact of COVID-19 will be severe on the automotive industry. Backing the wider EV supply chain is important for the growth of the sector following this pandemic.

Through the Charging Infrastructure Investment Fund, the Government has set a precedent in raising private funding to aid the national EV rollout. The Government could further engage in Supply Chain Finance, securitising the invoices of small, supply-side companies and offering these as attractive bonds to investors at a time when interest rates are otherwise low. This would unlock liquidity in the supply chain and help the many businesses involved in automotive supply to stay competitive and reinvest in themselves, growing their production lines or boosting their spending on Research and Development.

<sup>21</sup> https://www.irena.org/-

<sup>22</sup> https://cdn.ihsmarkit.com/www/pdf/0520/IHS-Markit-Automotive-Rapid-Response-Vol-8-13MAY2020-Final.pdf

# Re-skilling and job creation

Even before coronavirus, the job market had started to undergo huge change as new technologies in automation, data analytics and mobile connectivity begin to revolutionise ways of working and the skills required by employers.

Investing in the roll-out of EV's and their associated infrastructure provides an opportunity for the UK to get ahead. As this investment takes effect, industry demand for high-quality manufacturing jobs and re-skilling will increase. This demand could be met by training people in charge point installation and maintenance, and creating Green Apprenticeships certified at NVQ Level-6 (degree equivalent) in areas such as battery technology.

The number of people enrolled on Degree Apprenticeships has grown year-on-year since their introduction, with many having been with their employer for over 12 months before choosing to further enhance their skills<sup>23</sup>. By incentivising industry and universities to focus on green technologies, there is opportunity to create both a resilient, green workforce and new revenue streams for Higher Education providers in the recovery from this pandemic.

Further mechanisms for delivering training could include social enterprises and Zero Carbon Academies. Social enterprises offer a low-cost solution to train and re-skill people for the green economy, including the EV rollout. These could be particularly effective when focused on training specific groups such as armed forces veterans, or within specific geographical areas where a large industry or employer has closed.

Zero Carbon Academies could be located on strategic sites around the country where the Government is looking to level up investment and create opportunity for nearby communities. One such location is the site of the Ratcliffe-on-Soar Power Station in Nottinghamshire, which is soon to be decommissioned and re-purposed as a zero-carbon technology and energy hub, with an expected 25,000 jobs to be created once the project is complete.

# A more ambitious target

The coronavirus pandemic has shown that we can achieve a great deal in a very short time when circumstances dictate that we must. Therefore, we also recommend that the Government adopt the more challenging target set by the Committee on Climate Change, to phase out ICE vehicles by 2030 instead of 2035. This nearer end-date will provide the catalyst to ensure that the roll-out of EVs gets the focus and investment it needs.

<sup>&</sup>lt;sup>23</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/766962/Apprenticeship-and-levy-statistics-December-2018-2.pdf

# Recommendations

- 3) Legislate to ensure new homes include personal electric vehicle smart charging points or contribute to local authority on-street parking schemes;
- 4) Support supply chain finance for small EV supply-side companies;5) Train for charge point installation and maintenance, and create green apprenticeships certified at NVQ Level-6 in related areas such as battery technology;
- 6) Support social enterprises and zero carbon academies to train and re-skill people for the green economy; and
- 7) Adopt the Committee on Climate Change's recommendation to phase out internal combustion engine vehicles by 2030.



4 - Broadband
Selaine Saxby MP

Broadband is not always seen as vital infrastructure. If lockdown has taught us anything it must be that it is, and that we have to ensure everyone has access to good connectivity.

Openreach's CEBR research showed that 360,000 tonnes of carbon could be saved through a reduction in commuting linked to more people working from home, thanks to better connectivity<sup>24</sup>. We have demonstrated how we can reduce emissions from commuting during lockdown, but for many its success has been limited by poor broadband connections.

# The case for embracing change

UK emissions dropped by 31% during the height of lockdown, however these falls have been shown to only be temporary, and so we must take steps to facilitate more people being able to work from home more of the time. Research from 2019 found that doubling the UK's number of home workers at the time to 8.66 million would see 374,931 fewer cars on the road in Greater London alone<sup>25</sup>.

With children not going back to school as normal and us being encouraged to work from home, we need to fill our empty streets with engineers to increase our broadband coverage and speed. We need to deliver on our manifesto commitment to cover the whole of the UK with 'gigabit-capable' broadband services by 2025 and ensure the £5 billion we have pledged does ensure that the remaining, least commercial 20% of the country is connected from the 'Outside-In'.

The CEBR research also showed that nationwide full fibre could boost UK productivity to the tune of £60 billion by 2025. As we move into the new normal, enabling people to innovate from their homes is vital for our economy as well as the environment.

The status quo has changed through lockdown as we have peered into the future. Virtual meetings have become the norm, as has connecting with friends and family online. Our air quality has seen a drastic improvement, which we know is vital for public health and enjoyment of the environment. Not least as we look forward to a new way of working which could promote working from home for many, and reduce the need for international travel with conferences being able to go digital.

Take up of faster broadband packages has continued to increase with around 75% home connections now superfast packages with advertised download speeds of 30 Mbit/s or higher, yet only 2% of UK lines are ultrafast packages downloading at 300 Mbit/s<sup>26</sup>.

<sup>&</sup>lt;sup>24</sup> https://cebr.com/reports/using-digital-to-revive-the-uk-full-fibre-broadband-and-the-growth-of-the-digital-economy-could-create-an-additional-1-2-million-skilled-jobs-by-2025/

<sup>&</sup>lt;sup>25</sup> https://airqualitynews.com/2019/04/24/working-from-home-could-significantly-reduce-uks-co2-emissions/

<sup>&</sup>lt;sup>26</sup> http://www.broadbanduk.org/2020/05/13/home-broadband-performance-report/

# Levelling up and leaving no household behind

Whilst we have seen improvements, this still leaves 25% of homes not connected at a speed fast enough for their children to effectively learn online, or to work from home effectively. This problem is particularly prevalent in rural communities which represent the majority of the nine million or so properties which are less commercially viable to connect. The other sector of society poorly served by current broadband infrastructure is multi-dwelling units which should not be left behind, despite the different challenge that connecting them presents.

We now need to dig for Britain and enable shovel ready projects that our commercial broadband providers are itching to start. Indeed through lockdown we have seen Openreach connect 17 new hospitals<sup>27</sup>, and in my North Devon constituency alone, they have: dug in 4.5km of Fibre to the Premises (FTTP) to facilitate the launch of the National Bereavement Partnerships; added another 1km to assist an isolated elderly resident connect to her family; unlocked high speed broadband for a Barnstaple business park; and begun a FTTP project for all of Lynton and Lynmouth. This is what we need to see across rural constituencies like mine – a removal of the bureaucracy of council led schemes and a removal of red tape to get these projects built, not to mention create thousands of engineering jobs simultaneously.

# What can the Government do?

To enable commercial providers to extend their reach they are calling for better planning, access and streetwork rules and we need to expedite that legislation. They ask for business rates to be removed on the new network until it generates income which will make 90% of the network commercially viable. We then need to spend our pledged £5 billion to reach the hardest 10%.

We need to make it easier for rural communities to connect themselves. Community partnerships are still drawn out processes where land access and planning issues delay this vital infrastructure reaching our villages and hamlets. These processes need to be made simpler, and if we can unlock the committed £5 billion to reach the hardest 10% and facilitate commercial development through the policy asks detailed here, we can connect ourselves better, work greener, and build back better.

Lockdown has shown how much work and study can be done without having to get in your car, but so much of it depends on a good broadband connection. Broadband is the infrastructure of the future and the present, and we need to facilitate the commercial entities desperate to unleash full fibre to help our economy recover from Covid-19.

# Recommendations

- 8) Deliver our pledged £5 billion to upgrade broadband;
- 9) Update planning, access and street work rules to enable faster broadband works; and
- 10) Simplify and fast track broadband community partnerships to reduce planning delays.

<sup>&</sup>lt;sup>27</sup> https://www.telegraph.co.uk/technology/2020/05/05/openreach-boss-axe-business-rates-speed-fibre-broadband-rollout



5 - Green homes

Fay Jones MP

# House building – changes to building development regulations

As we emerge into a post-Covid world, the construction sector will play an integral role in stimulating the investment-led economy. The Government has committed to strengthening Part L of the Building Regulations this year, which set energy efficiency standards for new homes, providing the opportunity to imbed more environmentally conscious thinking<sup>28</sup>.

The strengthening of new building standards is not only critical in meeting legally binding carbon targets, it is integral to delivering higher quality, healthier homes and buildings. The quality of our homes and places has come into sharp focus during the lockdown period, highlighting the importance to our health and wellbeing of daylight, thermal comfort and sound insulation, alongside access to local amenities and green spaces.

Capital investment from the private sector should be targeted on sustainable outcomes. This must work towards the transition to carbon neutral new homes by 2025 which is when the Future Homes Standard comes into force. There should be an active engagement with the private sector to boost the supply chain – not least additional investment in low carbon heat, which is a critical component of a net zero carbon UK. A government-funded training programme could rapidly upskill workers or those looking to requalify from sectors impacted by COVID.

# **Retrofitting homes**

Energy efficiency has a key role to play in providing an early economic stimulus as well as reducing household costs for families. Furthermore, it can both support existing workforces and create new jobs, delivering economic growth nationwide. Enabling households to save money on their energy bills means they will have more disposable income to spend in the local economy. Energy efficiency is also 'shovel ready' – with labour-intensive projects rooted in local supply chains. They can start small and then scale up rapidly as skills and supply chains develop and innovation drives down costs.

According to the household Energy Efficiency Statistics (published in March), 30% of properties with a cavity wall do not have cavity wall insulation; 34% of properties with a loft do not have loft insulation; and a full 91% of properties with solid walls don't have solid wall insulation<sup>29</sup>. This presents a large market for private sector investment, however, there is a lack of wider national strategy.

 $<sup>{}^{28}\,\</sup>underline{\text{https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings}$ 

<sup>&</sup>lt;sup>29</sup> https://www.gov.uk/government/collections/household-energy-efficiency-national-statistics

Living in a cold home markedly increases the incidence of respiratory disease for more severe incidences of COVID. Making our homes warmer and more comfortable will ease pressure on our NHS, while reducing COVID risk factors. Moreover, the economic cost to the NHS of cold homes, at a time of great pressure, is around £1.4 billion<sup>30</sup>. Investing in home retrofit will play a vital role in easing this. Minimum Energy Efficiency Standards for privately rented buildings should be tightened and a consultation introduced, potentially seeking to offer further financial incentives for landlords to encourage retrofitting.

There is a clear case that social housing should lead the way – but the Government must provide targeted support to enable social landlords to act. The National Infrastructure Commission has recommended in their National Infrastructure Assessment that £3.8 billion of grant or direct funding be allocated for energy efficiency improvements in social housing between now and 2030<sup>31</sup>. The Conservative manifesto included a £3.8 billion Social Housing Decarbonisation Fund and this which should be utilised immediately<sup>32</sup>. This should go hand in hand with the deployment of the other manifesto commitments such as the Home Upgrades Grant and the Public Sector Decarbonisation Scheme, the first phases of which were announced by the Chancellor in the Summer Economic Statement. Additional funding for training up local providers would support these stimulus schemes, ensuring that the supply chain is able to step up and deliver.

It must lay firm foundations for a continuing programme of energy efficiency activity across the owner-occupier sector, which is self-sustaining. Government is committed to an energy efficiency strategy for the able-to-pay market, which should build on the recently announced £2 billion Green Homes Grant which will provide insulation vouchers to homeowners. Forthcoming plans must ensure that consumer demand is built up to meet the supply. A stamp duty incentive - whereby buyers of more efficient properties get a discount and buyers of less efficient properties pay a premium - could play a key role in driving consumer demand and starting to build a value for energy efficient properties in the home-buying market.

# **Further recommendations**

Investing in 'green infrastructure', nature and biodiversity, such as street trees or parks, offers not only the opportunity to enhance the resilience of the built environment to the impacts of climate change, but also a long-term recognition of the value of green space for public health. The current crisis has acutely illustrated the value of green space to public mental and physical health, whilst also highlighting the inequalities between those with and without access to it.

Measures to enhance biodiversity and nature-based climate resilience solutions in the built environment have the potential to deliver substantial mental and physical health benefits, with considerable savings to the Exchequer and associated advantages for the economy. The evidence on the links between green space and both physical and mental health benefits is extensive and well-established. Researchers have estimated that the reduced health inequality in areas with more

<sup>30</sup> https://www.ukgbc.org/wp-content/uploads/2020/05/200504-UKGBC-Green-recovery-position-paper.pdf

<sup>31</sup> https://www.nic.org.uk/assessment/national-infrastructure-assessment/low-cost-low-carbon/

<sup>32</sup> https://assets-global.website-

green space can save approximately 1,328 lives per year<sup>33</sup>. DEFRA has estimated that if everyone had access to sufficient green space, the benefits associated with increased physical activity could save the health system at least £2.1 billion per year<sup>34</sup>. In addition, it is estimated that tree cover saved London more than £5 billion in 2014-18 through air cooling and prevented productivity losses of nearly £11 billion by keeping summer temperatures bearable<sup>35</sup>.

UK businesses must be incentivised to build lower carbon homes whereby private investment continues to place value on the quality of living. Low carbon design and products, such as innovative new construction methods, offer a market-based opportunity to create jobs and improve skills, enabling the UK to gain a competitive advantage and export cutting-edge goods and services, just when we need it most.

Similarly, building regulations must be upgraded to help deliver significant economic benefits, reduce health inequalities, enhance climate resilience and improve both physical and mental wellbeing. We must seek to create a legacy of green spaces as a permanent reminder of the important role they have played in maintaining public health during this crisis.

# Recommendations

- 11) Fund a training programme for green workers, help them to prequalify from sectors impacted by Covid and support the training of local energy efficiency installers;
- 12) Tighten the Minimum Energy Efficiency Standards for privately rented buildings with a consultation potentially to offer further incentives for landlords to retrofit;
- 13) Launch the £3.8 billion Social Housing Decarbonisation Fund, Home Upgrades Grant and Public Sector Decarbonisation Scheme pledged in the manifesto;
- 14) Consider implementing a stamp duty incentive to offer discounts for energy efficient properties;
- 15) Invest in green infrastructure including street trees and parks;
- 16) Upgrade building regulations to deliver climate resilience and healthier homes;

<sup>33</sup> https://www.nhs.uk/news/lifestyle-and-exercise/green-space-and-health/

<sup>34</sup> https://post.parliament.uk/research-briefings/post-pn-0538/

<sup>35</sup> https://www.bloomberg.com/news/articles/2020-03-09/how-london-s-trees-help-boost-the-local-economy



6 – Cycling
Selaine Saxby MP

# Introduction

During the lockdown, many people have dusted down their bicycles for their daily exercise and fresh air. This gives us an opportunity to capitalise on increased bicycle use, to keep our air cleaner and transform the UK's transport infrastructure. Not only does the uptake of cycling contribute to reduced carbon emissions, but also improved health outcomes such as tackling obesity. As people begin to change their transport habits, it is important we ensure cycling remains a part of our new daily lifestyle, and that we don't revert back to using cars.

There is clearly great potential for the UK to see the economic benefits of cycling too. There have been widespread reports in recent weeks of retailers running out of bikes to sell, so there is clearly a growing market for the Government to support. A healthier population is also likely to see significantly reduced costs to our NHS, and so this would be a clear and unambiguous win for the UK on all fronts.

# The status quo

The immediate aim of these new measures is to enable people to use cycling as a healthier and cleaner alternative to their car or public transport while social distancing rules remain in place. But there are wider reasons for promoting cycling. There are the obvious health benefits from reducing obesity and air pollution, both of which have been identified as contributing factors to worse outcomes for those who contract Covid-19. For example, 73% of those who became critically ill are overweight or obese<sup>36</sup>, with obesity increasing the chances of mortality four-fold for younger people and two-fold for those over the age of fifty<sup>37</sup>. A Harvard study has linked high levels of air pollution to increased vulnerability to Covid-19<sup>38</sup>. This is on top of the tens of thousands of premature deaths they cause annually in normal times.

The Department for Transport has long had an aspiration to boost cycling rates, and the coronavirus crisis has accelerated these efforts. In recent months, Ministers have announced an unprecedented £2 billion cycling and walking package, including a fast-tracked £250 million emergency active travel fund to create pop-up bike lanes, wider pavements, safer junctions, and cycle and bus-only corridors<sup>39</sup>. A further £1.7 billion of transport funding has been made available, which will make cycling safer by repairing potholes in local roads<sup>40</sup>. Although much of this funding will go to cities where it will be more straightforward for people to take up cycling, I hope rural areas also get the support needed, to encourage more cycling.

<sup>36</sup> https://www.bbc.co.uk/news/health-52561757

<sup>&</sup>lt;sup>37</sup> https://www.thetimes.co.uk/article/covid-19-being-black-does-not-put-you-at-greater-risk-researchers-say-vdf05prr6

<sup>38</sup> https://www.hsph.harvard.edu/biostatistics/2020/04/linking-air-pollution-to-higher-coronavirus-death-rates/

<sup>&</sup>lt;sup>39</sup> https://www.gov.uk/government/news/2-billion-package-to-create-new-era-for-cycling-and-walking

<sup>40</sup> https://www.gov.uk/government/news/multi-billion-pound-road-and-railway-investment-to-put-nation-on-path-to-recovery

# **Policy recommendations**

To unlock these benefits in full, we need to make cycling even safer, given one of the largest barriers to people taking up cycling is road safety concerns. Increased cycling training and new car free zones around schools at drop-off and pick-up times would give children and their parents the confidence to cycle safely to school. To help commuters, I would like to make it easier for cars and cyclists to co-exist on the roads, with tougher financial penalties for dangerous drivers and improvements to perilous junctions such as road markings and traffic light filters. This should be in addition to dedicated, segregated cycle lanes.

In the longer term we must design cycling into all new infrastructure, such as roads, housing developments, commercial buildings, and railway and bus stations. Government should be bold and future-facing by inducing demand for cycling. The evidence shows that if you build dedicated cycle paths, more people will choose to cycle. Indeed, 2018 was a record year for cycling following the construction of new cycle superhighways<sup>41</sup>.

Of course, cycling will not be suitable for everyone. E-bikes will be a good option for people who need to travel longer distances, more undulating terrain and for the less physically able. This could mean looking into the expansion of employer schemes and other ways to reduce the cost of bikes. Others will still be reliant upon their cars, particularly in rural areas like mine where the journey to work can be longer, or for tasks like food shopping. Different areas will need locally appropriate transport solutions. Encouraging cycling does not mean forcing people on to bikes, or making life worse for motorists. We just need to make it as easy and safe as possible for people to choose cycling if they want to. We would all benefit from less congested roads and less air pollution in our town centres.

There is a new impetus for Britain to get on its bike. One recent survey found that 53% of people are considering cycling to work for the first time<sup>42</sup>. Although new cycling infrastructure is being introduced as a temporary measure as a necessity to keep people safe through the pandemic, it could become permanent. The Department for Transport said recently it wanted to make active travel a natural first choice for people<sup>43</sup>, in order to achieve a healthier environment and population. If we get this right, we can as a nation rediscover cycling as a pleasant, safe, and healthy daily activity - and create a lasting legacy from this terrible crisis.

 $<sup>^{41}\,\</sup>underline{\text{https://www.theguardian.com/environment/bike-blog/2019/apr/26/if-you-build-them-they-will-come-record-year-for-cycle-counters}$ 

<sup>42</sup> https://www.telegraph.co.uk/health-fitness/body/people-now-cycling-work-health-benefits-huge/

<sup>&</sup>lt;sup>43</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/878642/decarbonising-transport-setting-the-challenge.pdf

# Recommendations

- 17) Increase cycling training and new car-free zones around schools at drop-off and pick-up times;
- 18) Introduce tougher financial penalties for dangerous drivers and improve
- junctions that are dangerous to cyclists;
  19) Design cycling and dedicated cycle paths into all new infrastructure, including housing developments and roads;
- 20) Expand employer schemes and other ways to reduce the cost of e-bikes;



# 7 - Greenhouse Gas Removal

# **Anthony Browne MP**

The Government legislated in 2019 to be the first G7 country to have a legally binding target to have net zero carbon dioxide emissions by 2050. The threat of climate change is not going away, so as we bounce back from the Coronavirus recession, we must do so in a way that helps us meet that target. Indeed, many of the things the UK needs to do to meet the target will help create jobs and stimulate the economy. For example, investing in the carbon capture and storage will help repurpose the jobs and infrastructure in the oil industry.

There are three main ways for the UK (and any other country) to become carbon neutral by 2050:

- reduce demand for energy;
- decarbonise the energy supply; and
- remove greenhouse gases.

The main focus of debate and policy has been on the first two, from insulating homes and improving public transport to increasing solar power and wind power. But there has been little focus on the third – removing greenhouse gases that have already been produced. The main opportunity here is removing the long lasting greenhouse gas, carbon dioxide, rather than greenhouse gases such as methane that will naturally break down quickly. Greenhouse Gas Removal (GGR) is fundamentally doing what the planet has done naturally over billions of years: plants and animals have taken carbon dioxide out of the atmosphere, and then their remains have been stored as coal, oil or carboniferous rocks, locking the carbon away. What mankind has been doing since the industrial revolution is reversing that process extremely rapidly.

# How, what and why

Greenhouse Gas Removal comes in two broad categories: natural and industrial. Natural means promoting natural processes to capture more carbon from the atmosphere, such as by planting more trees (which absorb carbon as they grow) or enriching the organic matter of soil. Industrial GGR is more usually known as Carbon Capture and Storage (CCS), using technology and large scale processes to either capture greenhouse gas emissions at the point of production before they are released into the atmosphere – for example at the flues of a power plant or steel smelter – or to capture and remove carbon dioxide that is already in the atmosphere (known as direct air capture). CCS with power produced by bioenergy, or with direct air capture is sometimes known as "negative emissions", which actually reduce the amount of greenhouse gases in the atmosphere.

Greenhouse Gas Removal – and in particular CCS - has a chequered history, and the environment movement has often been sceptical. Reforestation and soil improvement are "no regret" improvements, but they are limited in scale, and can only be a small part of the solution. Industrial CCS proved more technically complex and expensive than originally hoped. Environment groups

have raised questions about whether the captured carbon would escape from where it is stored, although oil and gas have remained trapped underground for hundreds of millions of years without negligible leakage. These issues have been compounded by the fact past UK governments have promised funding for CCS and then withdrawn it.

Despite this, CCS is very scalable, and so could potentially make an enormous contribution to achieving carbon neutrality. CCS can also achieve something that cutting consumption cannot: it can actually reduce the amount of carbon dioxide in the atmosphere, rather than just stabilise its growth. This means we could have an ambition to go beyond carbon neutral, to carbon negative: to return to the atmosphere to the balance of gases the Earth had before the industrial revolution. It also means that energy intensive industries such as steel and cement, if they can't find alternative carbon-neutral energies such as hydrogen, will be able to use fossil fuels without contributing to greenhouse gas emissions, limiting any economic downsides of the UK becoming carbon neutral.

# Innovation and feasibility

In the last few years, the prospects of CCS have been transformed through technological advances, with at least 51 large scale CCS projects around the world, proving that it can work<sup>44</sup>. Over 30 million tonnes of carbon dioxide are now removed from the atmosphere each year by CCS<sup>45</sup>. Costs have fallen by about half, making it more economically viable. It is also a sector where the UK could have a massive competitive advantage, presenting it with a historic economic opportunity.

Increasingly, climate scientists see it as an essential part of becoming carbon neutral. In its report "Net Zero: the UK's contribution in stopping global warming" (May 2019), the Government's climate advisers, the Committee on Climate Change, plotted various routes to meet the 2050 target, and insisted: "All scenarios require some active removal of greenhouse gases from the atmosphere." It concluded specifically: "Carbon Capture and Storage is a necessity not an option." The International Panel on Climate Change has now also embraced Greenhouse Gas Removal, seeing it as essential to keep global temperature rises to under the internationally agreed limit of 1.5 degrees centigrade.

The Government should set out a clear Greenhouse Gas Removal strategy, bringing together all forms, including CCS, tree planting and soil improvement, to set out how it can contribute to the target of becoming carbon neutral by 2050.

# **Building on past successes and policy**

On CCS, the UK has both natural and industrial advantages. We already have a massive oil and gas industry, providing appropriate infrastructure and skills for the ramping up of CCS. We have as much geological storage capacity, under our seabeds, as the rest of the EU combined. It could also contribute to the levelling up agenda, with particular CCS opportunities around Teesside, Humber, Scotland and South Wales.

<sup>44</sup> https://www.globalccsinstitute.com/resources/global-status-report/

<sup>45</sup> https://www.iea.org/reports/the-role-of-co2-storage

The Committee on Climate Change has called for the capture and storage of at least 75 million tonnes of CO2 (MtCO2) a year, and up to a maximum of 175 MtCO2, with an interim target of 10 million MtCO2 by 2030<sup>46</sup>. Achieving these goals will require a concerted and sustained effort by the Government. In the 2020 Budget, the Government committed £800m for a CCS Infrastructure Fund, to support "at least two UK sites" for CCS. The Carbon Capture and Storage Association (CCSA) said in a recent private paper to the UK Government: "The UK's success with offshore wind offers clear lessons for how CCS can be progressed within the UK".

The UK Government should make a firm commitment to the development of industrial CCS, and adopt the CCS target of 10MtCO2 by 2030. The Government should also adopt the same "commit and review" approach it had with wind -power, in order to give industry the confidence and certainty to invest. The CCSA estimate this would require £0.9 billion annually, resulting in a CO2 abatement cost of £90 per tonne by 2030. Although that is high, it is less than the annual investment in wind power. The costs are likely to plummet as the industry scales up, with economies of scale kicking in.

The development of CCS could be enhanced by a post-Brexit carbon tax or carbon permit trading (see section on carbon taxes), which create an economic cost to producing carbon, and could create an economic benefit for capturing and storing carbon. As the government develops its policies on carbon pricing, it must make sure that it creates the right economic incentives for CCS.

# **Nature-based solutions**

Greenhouse Gas Removal more generally includes afforestation, or planting trees, which has many other advantages in terms of biodiversity. The CCC calculates that planting 30,000 hectares (75,000 acres) a year, increasing woodland cover from 13% of the UK land area to 17%, will extract 22MtCO2 per year by 2050<sup>47</sup>. In recent years, tree planting has only been at one third of this level. But in its 2019 manifesto, the Conservative government committed to the target of planting 30,000 hectares a year with a £640m Nature for Climate Fund<sup>48</sup>. The Government needs to set out a clear, fully funded tree strategy to meet the target of planting 30,000 hectares of trees a year, complete with interim targets, and annual monitoring and reporting.

The UK could also make better progress on greenhouse gas removal in terms of promoting soil improvement. Using different agricultural techniques, such as minimising tilling and soil disturbance, enables farmers to increase organic matter (and hence carbon) content of soils. The National Trust's farm at Wimpole Estate in South Cambridgeshire, which manages 1,500 acres, has become carbon neutral already, largely because it sequesters 2,000 tonnes of carbon every year<sup>49</sup>. Three quarters of that is from soil quality improvement, a consequence of its farming techniques. The Government has recognised the importance of soil improvement in its Agriculture Bill, and is now committed to investing in it. The Government should monitor and report carbon sequestration in soil, and promote policies to increase it under an overarching strategy with targets. In particular, it must ensure that

 $<sup>^{46}\,\</sup>underline{\text{https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf}$ 

<sup>47</sup> https://www.theccc.org.uk/publication/land-use-policies-for-a-net-zero-uk/

<sup>48</sup> https://assets-global.website-

files.com/5da42e2cae7ebd3f8bde353c/5dda924905da587992a064ba Conservative%202019%20Manifesto.pdf

<sup>49</sup> https://www.nationaltrust.org.uk/press-release/farming-for-nature-pays-off-for-wimpole

the new Environmental Land Management Scheme funding for farming (replacing the Common Agricultural Policy) rewards carbon capture in soil.

# Recommendations

- 21) Publish a Greenhouse Gas Removal strategy, including Carbon Capture and Storage, tree planting and soil improvement;
- 22) Commit to develop industrial Carbon Capture and Storage technology and adopt the target of capturing and storing 10MtCO2 by 2030;
- 23) Set out a clear, fully funded tree strategy to meet the target of planting 30,000 hectares of trees a year, complete with interim targets, and annual monitoring and reporting;
- 24) Monitor and report carbon sequestration in soil, promote policies to increase it under an overarching soil strategy with targets;
- 25) Ensure the new Environmental Land Management Scheme funding for farming rewards carbon capture in soil.