

The Green Recovery Act



The Green Recovery Act
A report produced by
Common Wealth

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July 2020

**COMMON
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Contents

01. [Law, the Covid-19 conjuncture, and a transformative green recovery](#)

By Mathew Lawrence, Common Wealth Director

02. [The Green Recovery Act 2020](#)

–[Executive Summary](#)

–[Explanatory Notes](#)

–[Part 1. The Green Recovery Commission](#)

–[Part 2. Transport](#)

–[Part 3. Energy](#)

–[Part 4. Coal, oil and gas elimination](#)

–[Part 5. Full employment, income and training guarantee](#)

–[Part 6. Agriculture, supermarkets and stores](#)

–[Part 7. Finance and corporate governance](#)

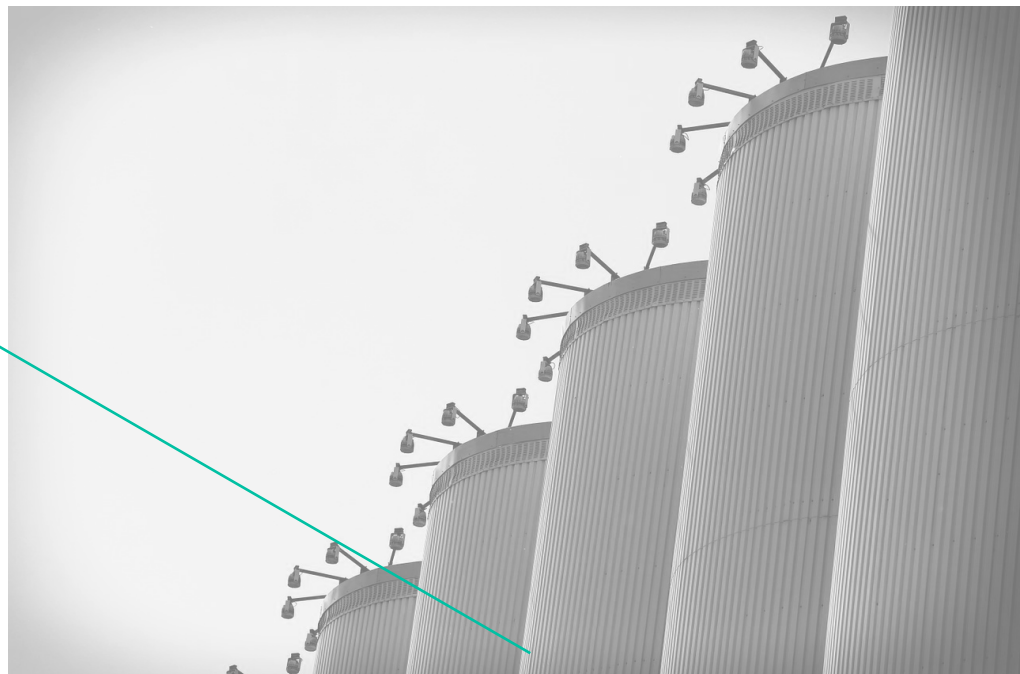
–[Part 8. Local authority empowerment](#)

–[Part 9. International and trade agreements](#)

–[Schedule 1 - Temporary exemptions from prohibitions on fossil fuels](#)

–[The Green Recovery Act 2020](#)

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Law, the Covid-19 conjuncture, and a transformative green recovery

By Mathew Lawrence, Common Wealth Director

“Laws are like cobwebs, which may catch small flies, but let wasps and hornets break through.”

—Jonathan Swift

A momentous juncture

We are at a momentous juncture. An unprecedented public health emergency has once again exposed and deepened longstanding inequalities within society. The impact of Covid-19 has fallen unevenly along gender, race, and class lines, with working class and ethnic minority people hardest hit. The virus may not discriminate, but society does, both structurally and systematically.

The economic crisis triggered by the effects of sustained lockdown – the sharpest recession in 300 years, with unemployment expected to surge to levels not seen in decades – is profound and traumatic. And it has sharpened an underlying crisis of care, underscoring how the work of producing and sustaining life is foundational to all economic activity, yet remains undervalued and marginalised, with its burdens unequally distributed, gendered and racialised.

Into this moment has risen up a vital worldwide movement demanding justice that has long been denied, seeking to dismantle interlocking forms of oppression, state violence, and the deep harms and structural inequalities of racialised capitalism, patriarchy, and white supremacy.

Looming above everything is the mounting climate and environmental emergency – an emergency that reflects the accumulated effects of an extractive and unequal global economy, one intimately bound up with ongoing histories of empire and colonialism, where those least responsible for the crisis are most exposed to the consequences of accelerating breakdown.

The need for a new settlement is clear; in whose interests that will be build remains to be decided, the subject of politics and struggle in all its dimensions. If we can secure a transformative and green recovery, this could be a watershed moment, a break from an unsustainable present and unjust past towards a reparative future, anchored in just social and ecological reproduction and generative enterprise. But there is no guarantee the Covid-19 conjuncture will not be resolved on terms that deepen and accelerate the conditions of our long crisis.

A systems crisis requires systemic change

Absent a transformative response, the crisis risks further consolidating power in an economy that has scarcely recovered from the Global Financial Crisis of 2008 and a decade of austerity, leaving unchallenged – or more likely, amplifying – forms of insecurity, domination, and rent-seeking that already scar our society. And, despite the temporary abatement of rising emissions, the climate crisis and nature emergency will worsen unless we also ensure the recovery is not based on a surge in emissions and extraction. To take one recent example, the Bank of England’s corporate bond holdings – which broadly reflect the distribution of the market – are consistent with average temperature increases of 3.5°C above pre-industrial levels by 2100,¹ a future in which, in the words of JP Morgan Chase – one of the largest funders of the fossil fuel industry – “we cannot rule out catastrophic outcomes where human life as we know it is threatened.”² Yet that is the world we are hurtling towards, driven by the design and operation of our economic and financial systems.

There is still time to avert the worst damage, mitigate inevitable harm, and put us on the path to a more humane and liveable future. But this will require more than marginal adjustments. As signs at recent Black Lives Matter demonstrations across the world have spelled out, “The system isn’t broken, it was built this way.” To secure racial, economic and climate justice, which are inseparable, we cannot simply reinflate the old economy as Covid-19 wanes; rather, we must reimagine our foundational economic and political institutions, seizing the moment to build a new economic model that is democratic, equitable, and sustainable by design.

This may seem a radical step, but in an era of environmental breakdown and structural inequality, transformative action is the safest and fairest path forward. A dogged defence of the status quo will guarantee the acceleration of environmental breakdown; a willingness to only tweak a model driving us deeper into crisis is the truly extreme position. Genuine security now requires deep change. Timidity of action will prove an aid to a resurgent far right, devastating climate crisis, and the embedding of a ‘reactionary political economy that marries anger at economic and political corruption with exclusionary attachment to racialised and gendered hierarchy.’³ In this context, if we want to secure a future where everyone can flourish in dignity and freedom, in a thriving, interconnected living world, transformation is a modest proposal. The challenge is clear. Our future is radically undetermined, but retreating to incrementalism is a dangerous false comfort. Instead, we must meet a systemic crisis with an agenda for systemic change.

The Green Recovery Act

A root and branch transformation will require us to rewrite the UK’s legal framework to restructure society toward equity, substantive democracy, and sustainability. Until now debate has rightly centred on the need – and historic opportunity given the ultra-low cost of public borrowing – for a transformative, debt-financed step-change in public investment to underpin a green recovery. But unless this is accompanied by a similarly ambitious reordering of the UK’s legal architecture to rewire behaviours and outcomes, then a just and green transition will inevitably – and dangerously – fall short.

Common Wealth’s proposed Green Recovery Act, presented below, offers a blueprint for such a transformation – an intervention that seeks to rapidly decarbonise economic activity, democratise

decision-making, and fairly wind down the fossil fuel industry while simultaneously scaling up a post-carbon economy of shared prosperity. Six principles underpin the Act:

- The '**ban**' principle - ban coal, oil and gas as fast as technologically practicable, not as slow as climatically feasible.
- The '**necessity**' principle - base exceptions to the coal, oil and gas ban on technological necessity.
- The '**climate damage**' principle - acknowledge openly that coal, oil and gas cause climate damage (not 'change') along with damage to health, and damage to property.
- The '**prudence**' principle - save taxpayers and businesses money with investment and long-term prudence.
- The '**mainstream**' principle - conservation and renewable energy become the mainstream practices across all public and private bodies.
- The '**coherence**' principle' - ensure coherence of the UK's national action with international conduct, to halt imports of polluting products and fossil fuel extraction abroad.

Institutionalising these principles via the law is fundamental to a green recovery – and a transformative legal project is a precondition for deeper systemic change. Law, of course, has an ideological character of its own, one that often has ingrained biases toward an existing and unequal status quo. This can preclude its progressive repurposing, placing limits on how far it can recodify and construct a democratic and sustainable economy. But the

Green Recovery Act shows how it could be a tool for climate and economic justice.

Law as systems architect

The ‘economy’ is not a separate, autonomous zone, prior to politics, but rather one that emerges from legal and political ordering. As such, the law and legal institutions vitally condition how wealth is created and distributed, determine the scope and operation of markets, and set the terms and limits of freedom for actors within them, determining ‘who is subject to market ordering and on what terms, and who is exempted in favour of other kinds of protection or provision.’⁴

The law is then a vast, intricate coding machine, and an inherently social institution that defines the terms of social co-operation and competition. The law ‘allocates the powers and resources that are necessary to most human projects, thus defining the terrain on which people must work with others to fulfil their needs and pursue their purposes.’⁵ As such, it powerfully constitutes the economic order. Law shapes the allocation of co-ordination rights within the economy; structures markets, which are malleable and contain a range of possibilities; and creates and codifies unequal endowments of resources and power. And although inequality of property and wealth distribution creates inequalities in bargaining power - the ability to “hold out” longer, as Adam Smith said - bargaining power can also derive from collective organisation that is in part created by law. Capital can combine through the corporation – a legal institution granted extraordinary privileges to co-ordinate production– but the ability of workers to organise through trade unions and collective bargaining is subject to legal and political limits. But property distribution is not law alone - it can be physical force, and pre-law threats of violence, tacit or not.

Law determines whether property and bargaining power is relevant, vitally shaping the terms of economic organisation: who has power and exercises it to what purpose.

Law, as Katharina Pistor has argued, codes capital. It creates assets, generates value, and protects property against distributional claims in ways that weave inequality into the fabric of society.⁶ And the law helps define the terms of our encounter with the environment. As Jedediah Britton-Purdy argues, the law does not just manage a pre-existing and untouched nature, but is itself a mechanism for active world-making:

Law does not so much administer ‘the natural world’ as it helps to create it by shaping regions, ecosystems, and the planet – a creative action that overlaps and interpenetrates with law’s shaping of the social world, from cities and suburbs to the agricultural economy to energy and transport systems.⁷

Our legal regime currently creates and consolidates structural inequality and stark asymmetries in economic power and resource. Law codifies capital’s near-monopoly of co-ordination rights within the economy, rights that structure economic activity to the exclusion of other vital stakeholders, stacks bargaining power in favour of employers and asset-owners against labour, and too often treats the environment as an external, inexhaustible source of value, falsely separating the economic from the environmental.⁸ As Sanjukta Paul argues, the public already allocates economic coordination rights in notionally wholly private spheres - but does so in ways that currently work against the possibility of democratising production and provision through forms of economic democracy. In doing so, the law generates, sustains, and safeguards hierarchical and

unequal distributions of political-economic power, makes market-mediated inequalities appear as a natural outcomes, generated by apolitical processes,⁹ and erodes the scope and capacity of democratic power to order our common life in ways that support mutual flourishing.

Vitally, the law both enables and rewards behaviours that are driving the accelerating nature and climate emergency.¹⁰ It helps determine whether we see destruction of the ecosphere as “climate change” or climate “damage”. Law defines who makes decisions about the use of renewable energy, how fast it is deployed, and how carbon infrastructures are maintained. Law ensures that younger generations, marginalised economic and social communities, and vulnerable nations, which are and will continue to suffer the worst consequences of climate damage despite being least responsible, have no representation in economic management that is driving breakdown, while protecting those whose actions are accelerating the crisis. The UK’s legal framework defines who has voice and agency in shaping the speed and nature of decarbonisation, in the UK and beyond, as well as who bears the costs and reaps the benefits, both socially and environmentally.

We cannot address our current crisis without a transformative reconstruction of the law capable of driving a Green New Deal-led recovery from the coronavirus pandemic. In contrast to the concentration of coordination rights among property-holders, this reconstruction must disperse and democratise economic control and association. Against the naturalisation of inequality and unequal power, it must open up the space for democratic ordering of and participation in economic and social life, and instead of enabling activity that is driving us deeper into crisis, it must approach environmental law as ‘a species of public provision, a means of securing basic human interests by maintaining key resources

that are open to all on fairly equitable terms.’¹¹ And it must treat ecological and social functions and needs not as external to the economy, but central to its operation and purpose.¹²

A new legal framework – as set out in the Green Recovery Act – should therefore work to expand substantive economic equality and freedom, not the partial forms offered by today’s marketplace. This requires not just the redistribution of wealth and goods, but the redistribution and democratisation of power and authority within society, and the reshaping of governance and purpose. That in turn requires legislation that can drive a rapid, exponential increase in our ability to decarbonise the economy and bring economic activity within sustainable limits. We cannot build a just and democratic society on a dying planet.

Beyond “law and economics”

Such a bold transformation will require us to challenge the direction of Anglo-American legal ideology and practice in recent decades: the “law and economics” movement, which has facilitated the growth of inequality and the unsustainable use of carbon and other natural resources. There are two key trends underlying this process.¹³ First, the legal treatment of “the economy” has increasingly centred narrow definitions of “competition” and “efficiency” as guiding legal principles, limiting the scope for democratic participation, co-operation, and the public good to regulate economic activity. Second, in more “political” domains, the capacity of formal political institutions to contest and reorder economic power has been progressively neutered, and the operation of the economy has been insulated from democratic intervention.¹⁴ The neoliberal turn in the law and legal institutions has in turn been fundamental to neoliberalism’s ‘disenchantment of politics by economics’,¹⁵ insulating the market and market-mediated

inequalities from democratic reconstruction,¹⁶ and ‘identifying liberty with certain forms of market participation.’¹⁷ Without a legal turn that can overcome these effects, securing climate and economic justice in tandem will be impossible.

This approach - and the need for a transformative legal agenda to support a Green New Deal-led recovery to the pandemic - is arguably most clear in the operation of the firm. As Gareth Dale argues, ‘the relentless increase in global resource throughput and environmental despoliation is not principally the result of states aspiring to a metric – higher GDP – but of industrial and financial firms, driven by market competition to expand turnover, develop new products, and increase profits and interest.’¹⁸ Any effort to restructure our economy toward justice and sustainability must then have a plan for reimagining the firm: how it is governed, how it operates, in whose interest, and for what purpose.

The dominant model of the firm – organised to maximise shareholder wealth, with coordination rights held exclusively by capital – limits workplace democracy, generates steep inequality, and in aggregate drives the economy to operate beyond environmental limits. In the Green Recovery Act, measures to reshape the behaviour of the firm – both the institution, but also specific forms of behaviour within key carbon-intensive sectors – are set out that would deliver a just transition for workers, communities, and the environment. From accelerating the movement toward a renewable energy system and a fairly managed decline of the fossil fuel industry, from decarbonising agriculture and transport, to a democratisation of the governance of the company, a green recovery will depend on rewriting the legal rules governing firm behaviour.

The Green Recovery Act reflects a key insight: neither the firm nor the economy is a fixed, 'natural' institution, but instead is constituted by politics and law, where rights and powers are publicly granted, legally defined, and capable of being transformed. The market is not a space of private contract and property that precedes social action, but rather one made possible by public power, both a product of and subject to democratic intervention and reordering. There is not one inevitable 'market', but many market possibilities, depending on how the rules are defined and the resources with which participants are endowed with. These can be redefined and reallocated to hardwire sustainability and shared prosperity into the economy, democratising governance rights and decarbonising economic activity.

If the Covid-19 crisis, like so many before it, has underscored the inseparability of economics from politics, our response must be to transform the economic rules to reflect this in ways that build a more equitable commonwealth. In place of supporting extractive economic institutions, the law should nurture a new economy: one that is purposeful, sustainable, and democratically governed, where all its stakeholders have a stake and a say in the wealth we create in common, infusing rights and collective rule into relations previously defined by unequal power and subordination.

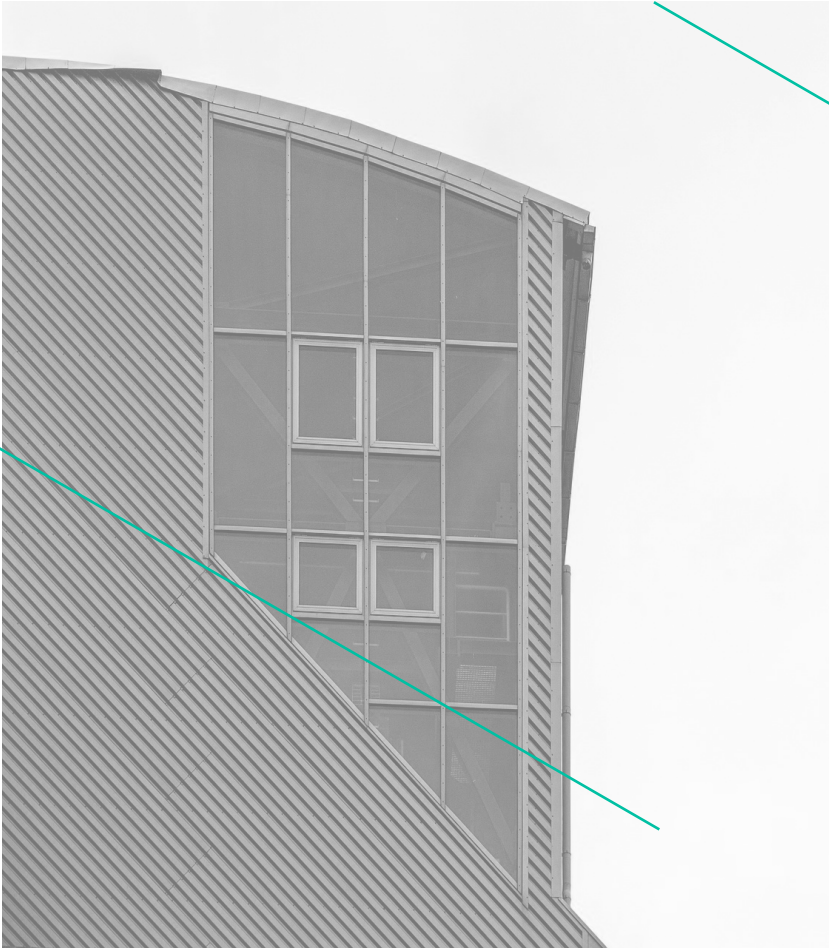
Resources of hope

The agenda and proposals laid out in the Green Recovery Act may appear implausibly bold amid the disruption and pain of the current moment. Yet there are resources of hope to draw upon. As a recent paper by The Democracy Collaborative and CLES set out, there are five lessons from the Covid-19 crisis that can help inform an ambitious and lasting reconstruction.¹⁹

First, the pandemic has forced us to reckon with what is truly essential; there is therefore an opportunity to reorganise our economy to value forms of work, relationships and activities that have been deliberately under-rewarded and marginalised, and centre new forms of purpose at the heart of economic life. Second, the scale of the shock has upended the political landscape, with the previously impossible becoming necessary; with the common sense shaken, the chance to forge a broad-based coalition for change is there to be won. Third, it has shown the state – hollowed out by neoliberalism though it may be – still remains an actor with the capacity to act decisively to reorder the economy, and has reiterated the importance of organised labour and social solidarity as vital contributors to our common life. Change is possible; the endless cancellation of the future can be revoked. Fourth, it has stressed the urgent need to rebuild our collective resilience to shocks and stresses, a profoundly urgent project in an age of worsening breakdown. And finally, the pandemic has underscored the deep harm and vulnerability created by longstanding structural inequalities, and the need to overcome them through an agenda that can deliver genuine equity by eliminating the causes of inequality.

Taken together, these elements can ensure that in this momentous juncture, a green recovery is our collective response, meeting systemic crisis with commensurate ambition. A transformative legal agenda – generating a new purpose and governing logic for the economy – will be vital to the process of reconstructing, democratising and decarbonising our futures. The Green Recovery Act is a blueprint for how we do this.

By Mathew Lawrence





The Green Recovery Act 2020

— Executive summary

The Green Recovery Act 2020 is a comprehensive plan to recover our economy, and environment, in the wake of the covid-19 pandemic, and secure 100% renewable energy.²⁰ It will end climate damage from coal, oil and gas. It will create clear skies, clean cities, a prosperous countryside, and a living planet. It puts a central idea into law: that our economy and environment can improve, and we can build a better future for ourselves, each other and our planet.

Today's main legal framework is the Climate Change Act 2008. This sets a target of reaching net zero carbon in the UK by 2050. Like the Paris Agreement 2015, this aims to limit climate damage through global warming to 2°C. Its approach was an advance in 2008. We now know it is no longer enough, scientifically and economically, for at least three reasons:

- Air pollution from coal, oil and gas kills 40,000 people in the UK a year, has made more people vulnerable to covid-

19, and costs the NHS at least £6 billion a year;²¹

- Coal, oil and gas have been the worst performing investments every year since 2017, meaning fossil fuels hurt pensions, retirement security and the national economy;²²
- Climate damage has already heated the planet by 1°C, and it is devastating our homes and lives, from floods in Britain, to fires in the Arctic, Amazon and Australia.

The Green Recovery Act addresses the costs of inaction: to health, the NHS, pensions and the environment. Targets in 2025, 2030 or 2050 have become routine in narratives about environmental reform. Targets may be useful when technology is not available. But where technology is available, distant targets entrench inaction and provide no basis for democratic accountability. The Act's approach is to take swift, orderly action. It secures astonishing benefits: a cleaner environment, a sustainable and prosperous economy, and a better way of life. It turns the law the right way up, and looks to a positive future.

The Green Recovery Act requires change as fast as technologically practicable, not distant target dates. Its fiscal cost is zero, and it delivers immense savings.²³ It has nine parts:

- A **Green Recovery Commission**, which advises how budgeted investment money can be spent to decarbonise the United Kingdom, as well as any future reforms,
- On **transport**, for instance, to only give tax deductions to new vehicles that are clean,

- On **energy**, for instance, Ofgem and all energy producers have duties to decarbonise,
- **Coal, oil and gas** are banned with strict exceptions; liability for climate damage codified,
- On a guarantee of full employment, Incomes, Training (a '**FIT guarantee**') for affected workers,
- TO Refresh supports for **agriculture**, and duties on supermarkets for emissions and waste,
- On prudent **finance and corporate governance**, replacing 'GDP' with an objective indicator, a new monetary policy, and company directors' duties to invest in green tech,
- **On local authority empowerment** for clean transport, energy, buildings and pensions, and
- On duties to negotiate **international agreements** with green principles abroad like at home.

Running throughout the Green Recovery Act's sections are six main principles:

- Ban coal, oil and gas as fast as technologically practicable, not as slow as climatically feasible (the 'ban' principle)
- Base exceptions to the coal, oil and gas ban on technological necessity (the 'necessity' principle)
- Acknowledge openly that coal, oil and gas cause climate damage (not 'change') along with damage to health, and

damage to property (the 'climate damage' principle)

- Save taxpayers and businesses money with investment, clean jobs and long-term prudence (the 'prudence' principle)
- Conservation and renewable energy become the mainstream practices across all public and private bodies (the 'mainstream' principle)
- Ensure coherence of the UK's national action with international conduct, to halt imports of polluting products and fossil fuel extraction abroad (the 'coherence' principle')

The ban principle, with strict technological exceptions, is the Act's fulcrum. It follows a core moral value: climate damage is wrong. It also follows the most obvious, most successful model of pollution law: in the Montreal Protocol of 1987, the world agreed to ban Chlorofluorocarbons (CFCs), and more recently Hydrofluorocarbons (HFCs), to repair the hole in the Earth's ozone layer. Bans work, and they are right. Taxes to 'internalise the externality' do not work as well, and are morally ambiguous.²⁴ We are all keen to 'follow the science'. But it misunderstands the nature of science to think science tells us we should pollute up to 1.5°C or 2°C warming, till 2030 or 2050. Science shows us what 'is', not what we 'should' do. Every lump of coal, every slick of oil, every fume of gas, is causing climate damage. The only rational conclusion is that we must stop climate damage now. We can either live on a living planet, or we can keep a fossil fuel industry. We can not do both.

The idea of a 'Green New Deal' and a 'Green Industrial Revolution' has caught the public imagination, from progressive to conservative circles.²⁵ Climate damage is political, but the need to

stop it is too big to be stalled by politics. This Act's Green Recovery Commission creates the architecture for public investment at scale. This includes bond schemes enabled by a new Bank of England monetary policy, and green jobs to improve agriculture, retrofit buildings, clean transport and detoxify energy. It also goes far further. The Green Recovery Act re-engineers the laws that produce climate damage and under-investment. Tax and spending are important, but why use correctional taxes if the law still perpetuates climate damage and under-investment? It is better to re-code our laws, to ensure all public and private bodies help in the fight for a living planet. With the smallest possible legal changes, the Green Recovery Act creates the biggest possible social and environmental impacts.

The Green Recovery Act illustrates the immense social benefits from conservation and renewable energy. The idea of a trade-off between stopping climate damage and developing the economy is such nonsense it is time to exclude it from mainstream discourse.²⁶ There are billions in taxpayer savings and business opportunities with renewable energy, but there are no profits, and no jobs, on a dead planet. We must simply change what we build and buy. The 'projection' that fossil fuels must continue as a part of meeting a rising 'energy demand', or for 'energy security',²⁷ is consistently refuted by the evidence of technological innovation, and prices. That argument has lost, and it has lost badly. Renewables are cheaper. Fossil fuels are costly and toxic. So, it is time to shift our attention to practical solutions. The costs are mounting for health, pensions, the economy and environment from not replacing coal, oil and gas now. Replacement must be done in a swift, and orderly fashion, to give way to clean cities, clear skies, a prosperous countryside, and a living planet. This is why we need the Green Recovery Act in 2020.

— Explanatory notes

These explanatory notes summarise the nine parts of the Act and its Schedule. They present the problems that each part addresses, and explain the solutions of the Act section by section.

Contents of The Green Recovery Act 2020

Part 1. The Green Recovery Commission

Part 2. Transport

Part 3. Energy

Part 4. Coal, oil and gas elimination

Part 5. Full employment, income and training guarantee

Part 6. Agriculture, supermarkets and stores

Part 7. Finance and corporate governance

Part 8. Local authority empowerment

Part 9. International and trade agreements

Schedule 1 - Temporary exemptions from prohibitions on fossil fuels

Part 1. The Green Recovery Commission

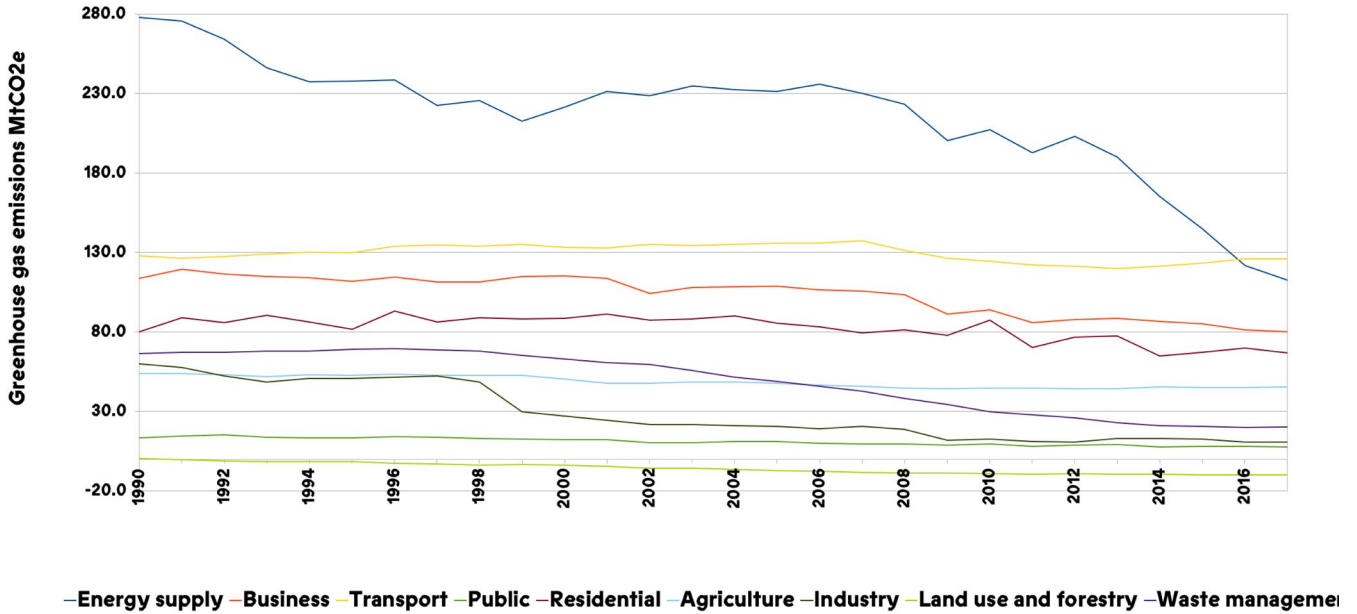
Today what is called climate ‘change’ threatens unprecedented damage to the environment, the economy, and our lives. The burning of coal, oil and gas has heated the Earth’s average temperature by more than 1°C over pre-industrial levels. Carbon dioxide in our air has risen from 0.028% in 1780, to 0.0338% in 1980, to over 0.0415% (or 415 parts per million) today.²⁸ This has caused more extreme floods in Britain,²⁹ hurricanes in America,³⁰ and apocalyptic fires from Australia, to the Arctic, to the Amazon.³¹ Coal, oil and gas corporations have proven reserves that would release 2,900 gigatonnes of carbon dioxide if burned, and there are estimated reserves of 11,000 Gt of CO₂.³² Burning proven reserves alone will raise Earth’s temperature by 3.3°C to 8.25°C.³³ This will destroy

food crops worldwide, trigger mass migration, famine, and death. Sea level rises will destroy London, New York, Sydney, Mumbai, Shanghai and St Petersburg. Britain will be uninhabitable.³⁴ Burning 500 gigatonnes alone will mean at least a 1.5°C temperature rise, which accelerates the mass floods, hurricanes and fires we have now, killing millions of people and destroying property.³⁵ The end of fossil fuels, and the punishment of those responsible for harm, cannot be achieved through individual or market choices, because individuals and markets do not choose the laws. We all choose the laws together as a democracy. We must ban fossil fuels as fast as technologically practicable. We need to care, for ourselves, for each other, and for our planet.

Part 1 of the Green Recovery Act establishes a Green Recovery Commission (section 1) to report to Parliament on fiscal and legal measures to end coal, oil and gas. This builds upon the idea behind the Decarbonisation Bill first tabled by Caroline Lucas MP and Clive Lewis MP. While Parts 2 to 9 of the Act set out immediate cost-saving and environment-recovering reforms (in transport, energy, employment, food, finance and corporate governance, local government, and international relations) the Green Recovery Commission has three main roles. First, it reports to Parliament how planned government investment can be spent to replace all coal, oil and gas. Second, it recommends what additional subsidies or payments to enterprises are necessary (if at all) in order to phase out and replace production with renewable energy.³⁶ Third, it recommends any necessary further legislation in light of the developing science and technology (sections 2-6). Its overall mandate is based on the twin principles of conservation of the economy and environment, and of 100% renewable energy. The current trend in UK greenhouse gas emissions is stagnant, except for energy supply. The Green Recovery Commission, and the Act as a whole, will change that, eliminate all emissions, and make more money for pensions and investments.

UK greenhouse gas emissions 1990-2017

Source: DBEIS, 2017 UK greenhouse gas emissions: final figures - data tables (2019) Table 3



Part 2. Transport

Today in the UK, the transport sector is the largest source of greenhouse gases, all avoidable. Every year 40,000 people die from air pollution,³⁷ even from school classrooms.³⁸ This comes from fossil fuel transport and energy, and it costs the NHS at least £6 billion a year.³⁹ According to the Royal College of Physicians the full economic cost of air pollution is £20 billion a year.⁴⁰ But the true cost of losing people's loved ones is incalculable and daily. This is why section 7 puts a general duty on the Office and Rail and Road and Secretary of State to eliminate all fossil fuels 'as soon as technologically practicable', not by some distant date.

The five main types of land transport are trains, delivery vehicles, buses, taxis, and personal cars. Most pollution comes from the 'working vehicles' because they are used constantly. Buses, taxis and delivery vehicles are around 56% of exhaust pipe emissions in the UK,⁴¹ but number just 6.8 million vehicles. By contrast, there are around 31 million personal vehicles, which on average spend 96% of their lives parked.⁴²

Part 2 addresses each vehicle type in turn. First, train companies take up to £7.1 billion a year in subsidies,⁴³ and around £400 million a year in profit,⁴⁴ yet they have electrified only 42% of railway lines,⁴⁵ among the worst records in Europe.⁴⁶ Only in Scotland can railways be owned by the British public.⁴⁷ But the French, German and Dutch public do own British rail through their nationalised companies (SNCF, Deutsche Bahn, Nederlandse Spoorwegen). Under the Railways Act 1993, the only governments in the world that cannot own our railways are our own.⁴⁸ Section 8 requires that train companies electrify their lines at a rate of 20% of outstanding lines each year (complete in five years). Section 9 repeals the constraint on rail ownership by UK governments, so that any unsustainable private companies may be replaced with a more efficient public sector entity if necessary.

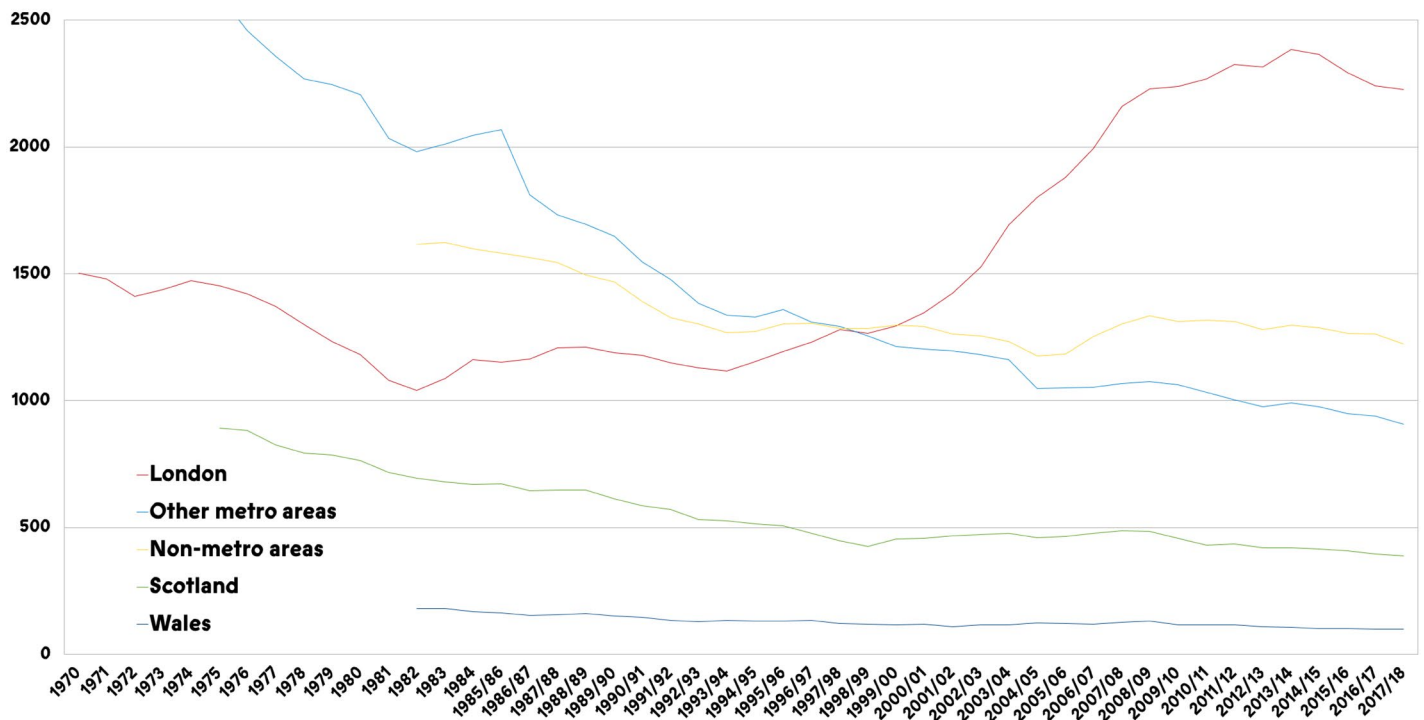
Second, delivery vehicles are subsidised by tax deductions, and are around 40% of roadside emissions. When people buy a business vehicle, they are entitled to reduce the profits they report by the vehicle's cost, whether the vehicle is clean or not.⁴⁹ Since 2015 the 'total cost of vehicle ownership' has been lower for clean vehicles than petrol or diesel,⁵⁰ even without taking account of the £6 billion cost to the NHS. This means tax deductions encourage business to both lose money, and to pollute. That makes no sense. Section 10 makes tax deductions available only for zero exhaust pipe emission vehicles, or other machinery, and enables the Secretary of State to write more detailed rules.

Third, buses are also subsidised by tax deductions, whether clean or not, and this makes tax reform equally urgent, as buses account for around 16% of emissions. However, outside London bus availability has plummeted, fares have soared, and environmental damage from personal car reliance has increased. This is because the buses, timetables, fares, conditions of service publicly regulated

or owned only in London,⁵¹ and 33 councils that have maintained municipal bus networks.⁵² Like for trains, UK councils are prohibited from starting new bus companies, though French, German and Dutch governments run many bus services: the only governments in the world that cannot run our transport are our own.⁵³

Bus passenger journeys, 1970-2017

Source: DfT, Annual bus statistics, year ending: March 2018 tables Bus0103 and 0108



Section 11 gives local authorities the power to regulate fares and timetables as can be done in London, and removes the prohibition on UK governments owning bus companies. It requires no new buses that have exhaust pipe emissions and requires replacement of diesel or petrol fleets by 20% a year.

Fourth, taxis are licensed by local authorities and account for 2% of emissions. Section 12 requires that, like in London, all new hackney carriages, private hire vehicles, or equivalents have zero exhaust pipe emissions. After 2022 it requires clean vehicles only.

Fifth, personal car manufacturers in Europe are far behind China, where Changan and BAIC will produce 100% electric

vehicles by 2025, while Geely has a 50% pledge.⁵⁴ As World War Two unfolded, the British and American governments went to the auto-makers and said they needed to retool to build planes. The auto-makers said the government's time scale was impossible. No way. Only 10-15% of production could be converted a year. But then it was done.⁵⁵ The covid-19 crisis has shown us today that manufacturers can rapidly build ventilators or protective equipment, and if needed this can be done using emergency legislation.⁵⁶ Parliament has declared a climate emergency. Rapid decarbonisation is a matter of law and will, not economics, because the technology is there. Section 13 requires no new vehicles are produced by manufacturers unless they have zero exhaust pipe emissions.

To assist rapid decarbonisation, auto-manufacturers need to be under public oversight, illustrated by the 'dieseldgate' scandal. In 2007 the European Court of Justice held that 'golden shares' in Volkswagen, held by the German state, Lower-Saxony, violated the right to free movement of capital.⁵⁷ The government argued that having a golden share, giving it special powers over Volkswagen's governance, was needed to protect workers (it did not mention the environment). But the court held the government's aims in having a golden share were not objectively justified. Just as the golden share litigation was being completed (and now without public scrutiny) Volkswagen's chief executive launched a strategy to become the world's biggest car company, and used 'cheat devices' to do it. These switched on when a car was being tested for pollution, but switched off on the road. Volkswagen made millions of cars with toxic emissions, killing thousands of people.⁵⁸ Other companies did the same, and have continued to break the law, engaging in a wanton pattern of fraud.⁵⁹ This means that for a transitional period to decarbonise, auto-makers need oversight. Section 14 gives the UK government a special share in all auto and engine makers in the UK for the purpose of decarbonising production. The special share

carries rights to call meetings, speak, make resolutions, vote, and the other rights that members have. On issues of decarbonisation, the special share is deemed to carry a majority of votes.

Clean vehicles need more charging points. Petrol station companies have ideal locations, but they have a conflict of interest in installing new points because they profit from fossil fuels. The Automated and Electric Vehicles Act 2018 currently says that the Secretary of State 'may' direct petrol stations to install charging points. The Green Recovery Act section 15 says that the Secretary of State 'shall' require charging points to be installed.

Planes cause around 2% of global greenhouse gas emissions. For a small number of journeys there is currently no technological equivalent to flights, yet many flights are unnecessary. As the covid-19 crisis showed, video conferencing may work as well as many business trips. Less flying also reduces other disadvantages such as cancerous radiation exposure during flights,⁶⁰ and noise pollution. But also, air travel exists even where rail journeys are equal or faster in time, for instance, from Edinburgh to London, or London to Paris. Section 16 empowers the Secretary of State to close air travel routes where total transport time, including average commuting and check in times, between city or town centres is faster or equal by rail. The Secretary of State must report to Parliament what subsidies or legal changes, if any, are needed to reduce rail prices to plane price levels.

Part 3. Energy

Just 33% of UK electricity was renewable in 2018,⁶¹ even though wind turbines, solar power, and batteries, are now cheaper and more secure than toxic sources,⁶² and even excluding the

costs of climate damage. The UK's six largest energy companies charge around £10.6 billion a year to customers in electricity bills, and make £4 billion a year in profit,⁶³ but have no credible plans to decarbonise as fast as technology allows. On present costs alone, just £9.2 billion a year in investment is needed over five years to give every home renewable energy,⁶⁴ not including so called 'biomass' to which ex-coal power plants have converted. 'Biomass' is deemed renewable by law,⁶⁵ because it was argued that trees take in as much carbon when they grow as they release when burned. This is false, because there are emissions released by machinery in deforestation, in soil degradation, and in transport.⁶⁶ Biomass smoke also damages health. Full carbon capture and storage is a myth: as yet it operates nowhere.⁶⁷

Section 17 requires the Gas and Electricity Markets Authority (known as Ofgem) to take into account the public interest in 'elimination' (not just 'reduction') of greenhouse gas emissions. It further requires that biomass or carbon capture users must prove total emissions are lower in the whole production chain than in combustion before they operate. Section 18 requires that any holder of an electricity supply licence must reduce emissions by 20% each year.

Small scale production by businesses is key to reducing costs, although there is not yet a clear right to sell energy to the grid at reasonable prices. Because small-scale solar and wind producers must sell surplus energy, and have little bargaining power against larger energy companies, reasonable prices need to be guaranteed. Section 19 ensures that the feed-in tariff rates paid by companies to energy producers are no less than 90% of the market price charged by the company to its own consumers.

Part 4. Coal, oil and gas elimination

The UK's history as the home of the industrial revolution, and the forefront of the coal, oil and gas industry creates a special responsibility to lead the elimination of fossil fuels. By 2010, just 90 corporate entities were responsible for 63% of all historical greenhouse gas emissions,⁶⁸ and among the top 20 are British Petroleum, Shell, BHP-Billiton, and Anglo-American each with UK headquarters, incorporations, and listing on the London Stock Exchange. Coal, oil and gas companies are no longer viable, even if they pay for climate damage (see section 39 below). The UK government used to charge a Petroleum Revenue Tax at 75% from 1983 to 1993, but this has now become a subsidy that the Treasury gives away, supposedly for the purpose of decommissioning North Sea oil rigs: £1.1 billion in subsidies from 2018 to 2020.⁶⁹ This is similar abroad where UK companies operate: for instance Australia – the world's biggest coal producer in 2016, now being burned by apocalyptic bushfires – receives almost no tax revenue from coal, oil and gas companies.⁷⁰

Despite the vast subsidies from non-enforcement of tax, fossil-fuel investments have consistently under-performed other industries, and were the worst performing sector in the S&P 500 in 2018 and 2019.⁷¹ The Church of England pension fund, which has led divestment, has had higher returns than almost all asset managers.⁷² But despite the Climate Change Act 2008 duty to reduce carbon emissions, the Infrastructure Act 2015 created a duty on the Oil and Gas Authority to 'maximise the economy recovery' of petroleum. This backward law makes no sense.

The Green Recovery Act eliminates the fossil fuel industry in a swift, orderly and profitable fashion. Section 20 creates duties on the Coal Authority and the OGA and to eliminate coal, oil and gas

as soon as technologically practicable. Section 21 requires that the Secretary of State investigates and then brings petitions for winding-up of all coal, oil and gas companies that are incorporated in the UK, wherever they operate globally. Section 22 creates personal liability for directors and senior managers for all decommissioning projects, so that environmental obligations cannot be escaped. The Secretary of State is required to review the environmental impact of decommissioning with evidence only from marine scientists and biologists working in higher education institutions.

Like the industry itself, all promotion of fossil fuels must end, just as tobacco advertising was banned. Section 23 prohibits the advertising of fossil fuel companies or products, including vehicles, machinery or unnecessary plastic. In addition, several countries with major fossil fuel exports own media in the UK to promote their interests, sow conflict, and spread online disinformation for political sabotage.⁷³ This includes Russia, which controls RT and Sputnik. Section 24 requires the Office of Communications to review licences of broadcasters, in whatever medium, that are influenced by nation-states with limited democracy, rule of law, or respect for human rights, and which export fossil fuels. Ofcom must further review licences of broadcasters that are influenced by individuals with assets in fossil fuel business. Ofcom also acquires the power to prohibit 'large internet broadcasters' from broadcasting any media that promotes the interest of fossil fuel states, denial of climate damage or science, and division, discrimination or harassment within the meaning of the Equality Act 2010. It finally requires information on climate damage in weather reporting.

Part 5. Full employment, income and training guarantee

There are workers in coal, oil and gas industries who must be fully supported as their jobs change. In the covid-19 crisis, the UK

government subsidised 80% of income for over 8 million workers. By contrast, there around 62,000 workers in the UK coal, oil and gas industries.⁷⁴ Fossil fuel lobbies claim that their toxic industry ‘supports’ thousands more jobs,⁷⁵ but these estimates tend to be highly overstated. North Sea oil rig engineer jobs have been replaced with jobs laying building wind turbines and laying cables. Coal and gas extraction jobs can be replaced with safer, better paying jobs in solar plant building and building maintenance. Because renewable energy is cheaper, and its benefits are more decentralised, the fossil fuel industry’s concentrated nature is damaging to, not supporting employment.⁷⁶

Section 25 requires that any affected fossil fuel workers have the ‘FIT guarantee’. First, there is a right to Full employment, and to be redeployed into a job of comparable skill. Second, there is a right to the same Income, that is, at least the same pay as a previous job. Third, there is a right to Training, to pay the full cost of new skills before being redeployed. The Secretary of State may exempt categories of senior managerial worker from the FIT guarantee, to prevent payment of excessive salaries or bonuses. Section 26 further restores the duty on government (which lapsed in 2017) to report on how it will achieve full employment.⁷⁷ This defines full employment to mean fair wages, reasonable working time, a rate of under 2.5% unemployment, and a fair regional distribution of jobs.⁷⁸

Part 6. Agriculture, supermarkets and stores

In spite of the farming community’s resilience, the UK’s food chain is wasteful and anti-competitive. Under the Common Agricultural Policy, €58.8 billion in the EU (a third of its budget), and £3.5 billion in the UK, is spent on subsidies to farms, but without conditions to promote sustainable practice. Most farm subsidies do not even go to farm workers,⁷⁹ or farm owners, but are taken by

supermarkets that use their market power to underpay farmers. Subsidies are also paid to Sheikhs who kidnap and torture their daughters,⁸⁰ and grouse hunters that burn the land.⁸¹

Today we know much more about good agricultural practice. Not tilling soil with heavy machinery saves the average farm thousands of pounds, improves soil quality, crop yields, and worm and bird populations.⁸² Small robot weed killers can replace mass herbicide sprays and machinery at a fraction of the cost.⁸³ The Green Recovery Act section 27 places a duty on the Secretary of State of Environment, Food and Rural Affairs to eliminate fossil fuel use in agriculture, supermarkets and stores, improve greenhouse gas absorption on land, reduce emissions in imports, and reduce food waste. Farm subsidies should be targeted to reduce tillage, improve soil quality, reduce pesticides, herbicides and fertilisers, and restore forests or other ecological focus areas.

Consumers want products that do not damage the environment, but are not given information to decide, like the ingredients list or energy and sugar contents. Section 28 requires that every supermarket, retailer or manufacturer has a duty to place traffic light labels (red, amber, green) on all products to reflect their greenhouse gas emissions in production and distribution. The Food Standards Agency oversees this.

Plastic packaging, clothing or other non-recyclable products are a special problem. Supermarkets use plastic, which is produced using oil, to tie products together so that people buy more, and to protect produce from marks. But they have a conflict of interest in regulating themselves. Plastic clothing (such as polyester, acrylic, nylon) is of lower quality and durability than natural fibres like cotton, wool or linen, and releases trillions of plastic micro-fibres into our drinking water when washed.⁸⁴ Section 29 requires

that supermarkets, retailers and manufacturers eliminate plastic packaging and clothing, and empowers the Secretary of State to make exceptions based on strict necessity for the purposes of safety and security. Section 30 creates a general duty on supermarkets and retailers to ensure that all packaging is recycled in the local authority where it is sold. (Section 44 also enables councils to charge supermarkets for waste collection costs.)

Part 7. Finance and corporate governance

Today's financial system funds climate damage, and this starts with the priorities our government sets. The UK Treasury currently follows 'Gross Domestic Product' as a measure for economic success. GDP adds up government spending, investment, consumption, and net exports, however wasteful or harmful the activity.⁸⁵ For example, the US spends an average of \$10,586 per person a year on health care, and US life expectancy is 78.6 years. The UK spends the equivalent of \$3,121 (around £2,450) per person a year (through the public NHS) and UK life expectancy is 81.3 years.⁸⁶ Perversely, in GDP per capita this makes the US look like it is \$7,465 better off – more spending on health care adds to GDP – even though Americans are made poorer and die quicker under their health system. GDP also goes up if business profits from climate damage, for instance by building oil rigs that explode, and then again by paying someone to clean up the filth. This makes no sense, and it damages our welfare. Section 31 requires the Bank of England to conduct regulatory and monetary policy so as to eliminate investment and funding in fossil fuels. Section 32 requires the Treasury, the Bank of England, and all other public bodies to replace GDP with measures based on objective criteria, including real wages, working time, life expectancy, health, and years of education,⁸⁷ not subjective criteria that damage our well-being and the environment.

Better corporate governance is vital to accelerate a just transition to clean energy. For companies, clean transport and energy generation is already cheaper than fossil fuel sources. However, as a matter of behavioural psychology, businesses often show a *status quo* bias.⁸⁸ Many business do not switch vehicles, switch energy sources, or insulate buildings even when it would save money in the medium to long term, because change means effort. Section 33 clarifies that a director's duty of care, which may be enforced by all company members, includes a duty to 'invest in the replacement of fossil fuel vehicles, the insulation of buildings, and the installation of clean energy generation, with regard to the savings in the long term.' This duty extends to equivalent positions in all public bodies.

Rapid divestment from all fossil fuels is essential not only because coal, oil and gas are damaging retirement funds (fossil fuels were the worst performing sector from 2017 to 2020⁸⁹), but because they also create conflicts of interest. For example, if a shareholder invests in an oil company, and a car company, it has less incentive to use its voting rights to make the car company stop petrol and diesel vehicles, because that may harm its oil investments. Some argue that divestment achieves nothing, but these arguments are uninformed about the conflicts of interest that result from diversification and modern portfolio theory, and do not appreciate the urgency. Section 34 places a duty on all financial institutions to divest from fossil fuels, enforced by the Financial Conduct Authority and Prudential Regulation Authority. It further codifies a criminal offence to invest in fossil fuels anywhere in the world from April 2021, and raises the punishment for fossil fuel investment to the level of the Criminal Damage Act 1971 in April 2022. Schedule 1 sets out limited, and temporary exceptions to the investment ban based on technological necessity.

Climate damage exists because economic decisions of corporations are not democratically accountable. Shareholders control most voting rights in the economy, but shareholding firms take those votes from ‘other people’s money’.⁹⁰ If combined, the three largest US asset managers (BlackRock, State Street, and Vanguard) would be the largest shareholder in 438 of the S&P 500 companies.⁹¹ They have under 50 people in their corporate governance departments casting votes on shares,⁹² all with other people’s money. The situation is similar or more concentrated in the UK. The money in company shares comes mainly from workers saving for retirement in pension, life insurance, and mutual funds. But the true investors are excluded from voting. So are workers, despite their investment of labour. More democratic economic governance means higher productivity, employment, and innovation,⁹³ and strongly supports environmental reform.⁹⁴ Section 35 states that financial intermediaries may only vote on company shares when following instructions from the beneficial owner (e.g. elected pension fund trustees). It also extends existing laws (first introduced in 1995) so that at least one half of all capital funds are nominated by the true investors. Section 36 requires that all workers are registered as members of companies, and hold at least 20% of voting rights on a one person, one vote basis in the general meeting.⁹⁵ The Secretary of State may raise this threshold.

As well as the true investors, and workers, businesses and consumers must be empowered to stop climate damage. For example, if all competitors in an industry agree to not use plastic packaging (despite any cost increases), or to eliminate petrol and diesel vehicles, they risk having to argue in court that this falls within a block exemption for competition law, and they must prove agreement is justified in the consumer interest. This deters obviously pro-competitive, clean conduct. Section 37 clarifies that

any agreement is lawful if it is to ‘eliminate the use of fossil fuels as fast as reasonably practicable, provided that the agreements are publicised on a website of the undertaking.’ This positive right to cooperate is a necessary and overdue element of a sustainable competition law.

One of the most important contributions to climate damage is the sheer volume of excessive production. Products are built to fail, not built to last. Companies plan obsolescence so that they may sell more replacements. Section 38 introduces a consumer right to products of ‘lasting and durable’ quality, based on guidance issued by the Competition and Markets Authority.

Finally, all incentives of companies to engage in climate damage must cease. Polluters must pay. Section 39 codifies the principles of the common law of negligence and criminal liability into a statutory wrong of ‘climate damage’. Any company, director, or shareholder that may exercise control, is jointly liable for damage based on that company’s percentage of historic greenhouse gas emissions, and the material increase in risk that it creates. Punitive damages must be paid where a defendant’s conduct was calculated to make a profit.⁹⁶ After 2025, a criminal offence is extended extra-territorially, so that carrying on a fossil fuel company anywhere in the world falls under the Criminal Damage Act 1971.

Part 8. Local authority empowerment

Local transport, energy generation, building, and recycling are all issues that local authorities should be empowered to regulate: at least 281 councils have declared a ‘climate emergency’, including Conservative, Labour, SNP, Liberal and cross-party councils.⁹⁷ There is no single codified list of local authority powers,⁹⁸ and so council powers are often unclear or limited. As well as the power

to establish a bus company in section 11, section 40 empowers a local authority to create a smart emission zone. An SEZ may charge fossil fuel vehicles for entering an area, and graduate the charge based on any business turnover: this ensures the council can target the largest polluters with the greatest ability to switch. Section 41 empowers a local authority to create a clean energy company, and also to require businesses to switch contracts to the local authority on prices at least equivalent to existing energy contracts. Section 42 empowers a local authority to make planning permission conditional upon buildings having energy generation, storage, and transport charging points. It may also require landlords to provide energy generation and batteries where reasonably practicable, and to transform streets from car parks into garden parks.

One of the biggest restrictions on UK local authorities is ability to raise finance, despite the cost of its duties. In particular, an average of 25% of council budgets is spent on waste collection, totalling at least £2.3 billion a year.⁹⁹ Yet councils do not have clear powers to make waste producers pay. The waste creators are overwhelmingly supermarkets.¹⁰⁰ There is currently a 'Landfill Tax', but this is levied on the party bringing waste to landfill, not the supermarkets or other businesses that are responsible for it. They increase wasteful packaging (that they could easily change) because they do not pay the cost of disposal. Section 43 enables a local authority to require full recycling rates by business, and to require that supermarkets meet the cost of waste collection. This will potentially increase local authority income by up to £2.3 billion a year, and drastically reduce waste to prudent levels.

Local authorities must also meet pension obligations, but the Local Government Pension Scheme is made up of thousands of trustees, and hundreds of funds.¹⁰¹ Because the LGPS is divided, it has no bargaining power against asset managers raising fees, and cannot manage money efficiently and sustainably

in house. This raises costs for taxpayers, and reduces the value of council worker pensions. Section 44 requires the establishment of a unified Local Government Pension Scheme with a board of eleven trustees. The first board is elected by existing trustees, and it must write a policy on the use of its investment power on environmental, social and governance issues. Subsequent boards shall be elected by an electronic ballot of local government workers, except for two trustees appointed by the Secretary of State.

Part 9. International and trade agreements

Because there is one planet, the UK's actions must be fully coherent between home and international affairs. The Climate Change Act 2008 and the Paris Agreement 2015 count greenhouse gas emissions at the point of production. In reality, the UK consumes vastly more than it accounts for because production with coal, oil and gas takes place abroad, and products are imported. Products abroad may be made with poor labour practices, which also increase emissions, because high working time and low leisure time raises consumption.¹⁰² The single biggest source of greenhouse gas emissions, however, is movements of military forces, even without a war.¹⁰³ Section 45 requires that the UK negotiates in every international agreement for the non-proliferation and elimination of coal, oil and gas. Section 46 requires that in every international agreement, the UK negotiates for raising of environmental and work standards. Section 47 requires that the UK negotiates for reduction in military movement, and to replace military spending with investment in restoration of the world's environment. Climate damage is worldwide, and so principles to create a living planet must extend worldwide too.

Schedule 1 – Temporary exemptions from prohibitions on fossil fuels

Although there is technology to decarbonise almost all transport, energy, and agriculture, there are limits where there are not yet adequate alternatives to coal, oil and gas. Schedule 1 recognises this by providing that the Secretary of State may supervise exceptions to the prohibitions on fossil fuels based on strict technological necessity. Any investments in exempt fossil fuels must carry a duty to pay 1 per cent of revenues to a research and development fund to produce alternatives. This enables the Secretary of State to take into account complex factors, such as transnational equity and access to technology. The Schedule finally defines what ‘as soon as technologically practicable’ means, according to expert evidence in judicial review. It empowers courts to enforce decisions of public bodies or directors to a strict standard, by enabling the substitution of the court’s judgment, and the award of effective remedies.

By Dr Ewan McGaughey¹⁰⁴





2020 CHAPTER 99

The Green Recovery Act 2020

CONTENTS

PART 1

GREEN RECOVERY COMMISSION

- 1 Duty of the Secretary of State for green recovery
- 2 Objectives of the Green Recovery Commission
- 3 Governance of the Green Recovery Commission
- 4 Report of the Green Recovery Commission
- 5 Funding of the green recovery strategy
- 6 Legislative changes for the green recovery strategy

PART 2

TRANSPORT

- 7 Duty of the Office of Rail and Road to decarbonise transport

- 8 Tax deductions only for non-fossil fuel vehicles
- 9 Restoration of local bus networks, fare, timetabling and emission regulation
- 10 Duty of transport authorities to licence clean taxis and private hire vehicles
- 11 Duty of railway companies for electrification
- 12 Removal of railway ownership restrictions
- 13 Duty of automobile manufacturers to produce zero emissions vehicles
- 14 Golden share in automobile manufacturers for decarbonisation
- 15 Duty of large fuel retailers to install electric charging points
- 16 Closure of air travel where other total transport time is faster or equal

PART 3

ENERGY

- 17 Duty of the Gas and Electricity Markets Authority to decarbonise energy
- 18 Feed-in tariff minimum price guarantee
- 19 Annual emission reduction duties on energy generators up to 2025

PART 4

COAL, OIL AND GAS ELIMINATION

- 20 Duty of the Oil and Gas Authority and Coal Authority eliminate fossil fuels
- 21 Duty to petition for fossil fuel corporation insolvency and to cancel subsidies
- 22 Personal liability of fossil directors and senior managers for decommissioning

- 23 Prohibition on advertising of all fossil fuel products
- 24 Office of Communications duty to review licences of fossil fuel state media

PART 5

FULL EMPLOYMENT, INCOME AND TRAINING GUARANTEE

- 25 Full employment, income and training guarantee
- 26 Restoration of duty on Secretary of State to report on full employment

PART 6

AGRICULTURE, SUPERMARKETS AND STORES

- 27 Duty of the Secretary of State for Environment, Food and Rural Affairs to decarbonise food
- 28 Traffic light labelling for emissions on all products
- 29 Elimination of plastic packaging and clothing
- 30 General recyclability duty

PART 7

FINANCE AND CORPORATE GOVERNANCE

- 31 Duty of the Bank of England for decarbonisation in monetary policy and finance
- 32 Replacement of Gross Domestic Product with objective criteria
- 33 Duty of care of directors for clean transport, building and energy investment
- 34 Duty on financial institutions to divest from fossil fuels and criminal enforcement
- 35 Financial intermediaries not to vote without instructions from representatives
- 36 Requirement of worker voting rights in enterprise governance

- 37 Block exemption from competition law for cooperation to decarbonise
- 38 Consumer right to products of durable quality, and to repair
- 39 General liability of companies, directors and shareholders for climate damage

PART 8

LOCAL AUTHORITY EMPOWERMENT

- 40 Smart emission zones for transport
- 41 Clean energy companies
- 42 Planning permission for clean energy, buildings, and streets
- 43 Power to require full business recycling rates
- 44 Local authority pension fund governance

PART 9

INTERNATIONAL AND TRADE AGREEMENTS

- 45 Duty of the Secretary of State to negotiate for elimination of coal, oil and gas
- 46 Duty of the Secretary of State to negotiate for environmental and work standards
- 47 Duty of the Secretary of State to minimise military movement and negotiate reduction

SCHEDULE 1 – Temporary exemptions from prohibitions on fossil fuels



2020 CHAPTER 99

The Green Recovery Act 2020

An Act to place duties for a green recovery on the relevant Secretaries of State, the Office of Rail and Road, the Gas and Electricity Markets Authority, the Oil and Gas Authority, the Coal Authority, the Department for the Environment, Food and Rural Affairs, the Bank of England, the Financial Conduct Authority, the Prudential Regulation Authority, and all public and private bodies, including an investment strategy, a just transition for workers in fossil fuel industries, and improvement of the economy and environment of the United Kingdom and the world.

BE IT ENACTED by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

PART 1

THE GREEN RECOVERY COMMISSION

- 1 Duty of the Secretary of State for green recovery
 - (1) The Secretary of State shall have the duty to –
 - (a) conserve and enhance economic sustainability, nature and biodiversity,
 - (b) replace all fossil fuels with renewable energy, subject to Schedule 1, and
 - (c) level up income, wealth, health and opportunity, according to the standards set under section 32.
 - (2) The Secretary of State shall establish a Green Recovery Commission within 6 months.

- 2 Objectives of the Green Recovery Commission
 - (1) The objectives of the Green Recovery Commission shall be to –
 - (a) prepare a green recovery strategy to meet the duties in section 1(1),
 - (b) promote the green recovery strategy among all public bodies, the private sector, and across society,
 - (c) advise the Secretary of State on an appropriate timeframe for policy change, the financial implications of acting or not acting, and how costs should be met,
 - (d) report to Parliament in accordance with section 4, and
 - (e) recommend the date of the dissolution of the Commission, upon completion of decarbonisation, as soon as technologically practicable.

(2) The strategy under subsection (1)(a) shall be laid before Parliament within 1 year.

3 Governance of the Green Recovery Commission

(1) The Secretary of State shall appoint between 9 and 15 members to the Green Recovery Commission, having regard to –

- (a) knowledge in natural science, social science, law, or any other relevant field,
- (b) representation of civil society groups,
- (c) representation of trade unions, and
- (d) diversity to reflect the society of the United Kingdom, including gender, race, age, class, geography, and political affiliation or its absence.

(2) Members shall be appointed for a term of up to three years, and may be appointed for one further term.

(3) The Secretary of State may make regulations for the governance of the Commission.

4 Report of the Green Recovery Commission

(1) The Green Recovery Commission shall prepare reports for Parliament on,

- (a) the progress towards meeting the duty in section 1(1),
- (b) any appropriate interim targets, in light of technological possibility,
- (c) the progress of public bodies,
- (d) the progress of the private sector,
- (e) the implementation of sections 7 to 47 of this Act, and
- (f) any other material as the Commission sees fit.

(2) The first report shall be laid by the Secretary of State before

Parliament within 1 year. Subsequent reports shall follow at six month intervals.

(3) The Green Recovery Commission shall consult with Scottish Ministers, Welsh Ministers, the Greater London Authority and the Department of the Environment in Northern Ireland on the green recovery strategy.

5 Funding of the green recovery strategy

(1) The Green Recovery Commission report shall include recommendations to fulfill the duty in section 1(1) on –

(a) how planned government investment can be spent to eliminate fossil fuels,

(b) what additional investments are desirable and for how many years to complete decarbonisation, including through the creation of national or regional investment banks, and

(c) what changes to taxation are desirable.

(2) The strategy may include any other funding policies consistent with section 1(1).

6 Legislative changes for the green recovery strategy

(1) The Green Recovery Commission report shall include recommendations for legislative or any other changes to fulfil the duty in section 1(1). These may include changes to the regulation of –

(a) transport,

(b) energy,

(c) fossil fuels,

(d) labour rights,

(e) agriculture, retail, or buildings,

(f) finance and corporate governance,

- (g) local authorities and regional government,
- (h) international relations, and
- (i) taxation.

(2) The report may include any other recommendations related to the duty in section 1(1).

PART 2

TRANSPORT

7 Duty of the Office of Rail and Road and Secretary of State to decarbonise transport

(1) The Office of Rail and Road and Secretary of State shall have a primary duty to –

- (a) eliminate the use of fossil fuels in rail and road transport as soon as technologically practicable, and subject to that,
- (b) coordinate a comprehensive bus and rail network, with the objective of decreasing reliance on individual vehicles.

(2) The Secretary of State shall have the power to establish bus or rail services in any route where, in its opinion, consumer demand is not fulfilled.

(3) In this Act the term ‘fossil fuel’ refers to coal, lignite, peat, natural gas, crude liquid petroleum, petroleum products, or any substance that releases greenhouse gas emissions. The Secretary of State may make regulations providing further definition.

(4) In [section 12\(2\)](#) of the Infrastructure Act 2015, before paragraph (a) insert – “(za) the primary duty to eliminate the use of fossil fuels from road transport and infrastructure,”.

(5) In [section 4\(1\)](#) of the Railways Act 1993, before paragraph

(zb) insert – “(za) to eliminate the use of fossil fuels from rail transport and infrastructure,”.

8 Duty of railway companies for electrification

(1) In [section 9](#) of the Railways Act 1993, after subsection (1) insert – “(1A) A condition of each existing or future licence shall include the duty of each railway operator in agreement with Network Rail to electrify all existing lines over five years, at a rate of at least 20 per cent of total distance each year. (1B) A condition of each existing or future licence shall include the duty of each railway operator to install wind turbines, solar panels and battery facilities, with regard to its long-term economic interests.”

9 Removal of railway ownership restrictions

(1) [Section 25](#) of the Railways Act 1993 (Public sector operators not to be franchisees) is repealed.

10 Tax deductions only for non-fossil fuel vehicles

(1) No deductions from a chargeable tax shall be allowed for vehicles or machinery that run on fossil fuels.

(2) In [section 104AA\(4\)](#) of the Capital Allowances Act 2001 for “110” substitute “0”.

(3) The Secretary of State shall have the power to make regulations to remove deductions in relation to plant and other machinery, with regard to the cost of available alternatives.

11 Restoration of local bus networks, fare, timetabling and emission regulation

- (1) A local authority shall have the power to –
 - (a) establish a company for the provision of bus services,
 - (b) determine the level and structure of fares to be charged for any public passenger transport services provided within its boundaries, and
 - (c) determine the structure of routes of such services and the frequency of operation within its boundaries, and any other relevant power to manage bus services equivalent to Transport for London under the Greater London Authority Act 1999.
- (2) The Secretary of State shall make regulations to determine the procedures for cooperation among local authorities in any case of overlapping geographical boundaries.
- (3) In [section 22\(1\)](#) of the Bus Services Act 2017, omit the word “not”.
- (4) In [section 4C](#) of the Public Passenger Vehicles Act 1981, after subsection (1) insert “(1A) The guidance of the senior traffic commissioner shall include duties to – (a) issue no vehicle operator’s licence unless all vehicles have zero exhaust pipe emissions, and (b) replace the fleets of existing licensees with vehicles that have zero exhaust pipe emissions by at least 20 per cent each year, in reference to the first year.”
- (5) In section 181 of the Greater London Authority Act 1999 after subsection (5) insert “(6) Transport for London shall replace the fleet of existing buses with vehicles that use no fossil fuels by at least 20 per cent each year, in reference to the first year.”

12 Duty of transport authorities to licence clean taxis and private hire vehicles

(1) Every new hackney carriage, private hire vehicle or equivalent shall have zero exhaust pipe emissions.

(2) In [section 2](#) of the Private Hire Vehicles (London) Act 1998, after paragraph (1) insert “(1A) No person shall receive a licence to operate a private hire vehicle unless it has zero exhaust pipe emissions. (1B) No person shall operate a private hire vehicle unless it has zero exhaust pipe emissions after 1 April 2022.”

(3) In [section 37](#) of the Town Police Clauses Act 1847 after “fit” insert – “, provided that the vehicle has zero exhaust pipe emissions.”

(4) In [section 48](#) of the Local Government (Miscellaneous Provisions) Act 1976 after paragraph (b) insert “(c) that the vehicle has zero exhaust pipe emissions,”.

13 Duty of automobile manufacturers to produce zero emission vehicles

(1) Automobile manufacturers shall have a duty to produce zero emission vehicles, and shall produce no further vehicles that do not have zero exhaust pipe emissions.

(2) The Secretary of State may make regulations to exempt certain classes of vehicle from the duty in subsection (1) on the basis of strict necessity, and lack of available technological alternatives.

14 Golden share in automobile manufacturers for decarbonisation

(1) The Secretary of State shall have a special share in all automobile and engine manufacturing companies

incorporated in the United Kingdom.

- (2) The special share shall carry the right to,
 - (a) call a general meeting,
 - (b) attend and speak at company meetings,
 - (c) propose resolutions,
 - (d) vote at meetings, and,
 - (e) all other rights of ordinary members of the company.
- (3) The voting rights of the special share shall be deemed to be a majority of votes on any issue connected to the elimination of fossil fuels in the company's production.
- (4) Where any automobile or engine manufacturing business has productive assets within the United Kingdom, it shall have a duty to incorporate a company under the Companies Act 2006 to hold those assets. The Secretary of State may make regulations to ensure the effectiveness of this provision.

15 Duty of large fuel retailers to install electric charging points

- (1) In [section 11\(1\)](#) of the Automated and Electric Vehicles Act 2018 for “may” substitute “shall”. In section 11(2) for “may, for example” substitute “shall”.

16 Closure of air travel where other total transport time is faster or equal

- (1) In consultation with the Civil Aviation Authority, the European Aviation Safety Authority, the Office of Rail and Road and other relevant bodies, the Secretary of State shall have the duty and the power to close air traffic routes where total transport time, including average commuting and check in times, between city or town centres is faster or equal by rail or bus. The Secretary of State may increase the scope of

closures by order.

(2) The Secretary of State shall consider what financial arrangements are necessary to reduce railway fares and report these to Parliament.

(3) The Secretary of State shall consider what financial arrangements are necessary to internalise the pollution and climate damage cost of air travel and report these to Parliament.

PART 3

ENERGY

17 Duty of the Gas and Electricity Markets Authority to decarbonise energy

(1) The Gas and Electricity Market Authority shall have a principal objective to eliminate the use of fossil fuels in energy generation and distribution as soon as technologically practicable.

(2) For the purpose of energy generation, licences shall enable the use of biomass and carbon capture and storage only where more greenhouse gas emissions over the entire production chain are proven to have been absorbed than are released upon combustion. In determining this question, a court shall rely upon independent scientific advice.

(3) In [section 3A\(1A\)](#) of the Electricity Act 1989, in paragraph (a) for “reduction” substitute “elimination”.

(4) In section [4AA\(1A\)](#) of the Gas Act 1986, in paragraph (a) for “reduction” substitute “elimination”, and in paragraph (b) for “security” substitute “replacement with electricity”.

18 Annual emission reduction duties on energy generators up to 2025

(1) The holder of an electricity supply licence under [section 6](#) of the Electricity Act 1989 shall have the duty to eliminate its emissions over five years, by at least 20 per cent each year.

19 Feed-in tariff minimum price guarantee

(1) In [section 41](#) of the Energy Act 2008 after subsection (3) insert - “(3A) The Secretary of State shall provide that the payment to a small-scale low-carbon generator shall be no less than 90 per cent of the market price charged by the holder of a supply licence to its average customer.”

PART 4

COAL, OIL AND GAS ELIMINATION

20 Duty of the Oil and Gas Authority and Coal Authority eliminate fossil fuels

(1) The Oil and Gas Authority and the Coal Authority shall have the duty to cease the extraction of fossil fuels as soon as technologically practicable.

(2) In [section 9A](#) of the Petroleum Act 1998, for “maximising the economic recovery of UK petroleum” substitute “eliminating the extraction of UK petroleum”, and omit paragraph (a).

(3) In [section 2\(1\)](#) of the Coal Industry Act 1994 for paragraphs (a) and (b) substitute “(a) that no coal extraction shall be licensed or continued; and”.

21 Duty to petition for fossil fuel corporation insolvency and to cancel subsidies

(1) The Secretary of State shall have a duty to appoint investigations of all fossil fuel companies that extract coal, oil or gas anywhere in the world, with assets or listings in the United Kingdom, under the Companies Act 1985 [Part XIV](#). The investigations shall be completed within three months from the date of this Act.

(2) Following the investigations in subsection (1), the Secretary of State shall petition the court for the investigated companies to be wound up on grounds of the public interest, under the Insolvency Act 1986 [section 124A](#).

(3) The Secretary of State shall review the Petroleum Revenue Tax and report to Parliament on the viability of restoring it to 100 per cent under [section 1\(2\)](#) of the Oil Taxation Act 1975.

22 Personal liability of directors and senior managers for decommissioning

(1) The Secretary of State shall review all decommissioning projects under the Petroleum Act 1998 Part IV with a view to suspension of decommissioning, and diversion of allocated resources to building renewable energy infrastructure.

(2) The review of the Secretary of State shall gather evidence exclusively from marine scientists and biologists who work at higher education institutions.

(3) The directors and senior managers of licensed petroleum companies shall be jointly, severally and personally liable for any necessary decommissioning costs.

23 Prohibition on advertising of all fossil fuel products

(1) Advertising of fossil fuel companies or products by newspaper, billboard, television broadcast, radio broadcast, internet broadcast, or any other medium is prohibited.

(2) In [section 321\(1\)](#) of the Communications Act 2003 before paragraph (a) insert – “(za) must prohibit advertising of fossil fuel companies or products, including products that use fossil fuels, such as vehicles, machinery, or unnecessary plastics,”.

24 Office of Communications duty to remove fossil fuel state media

(1) The Office of Communications shall review licences granted to all broadcasters that are owned or influenced by nation-states that –

- (a) have limited or non-existent democratic political systems,
- (b) fail to uphold human rights and the rule of law, and,
- (c) export fossil fuels.

(2) The Office of Communications shall review licences granted to all broadcasters that are owned or influenced by individuals with assets in fossil fuel business.

(3) The Office of Communications shall have the power to prohibit large internet broadcasters from broadcasting media of kind from persons that –

- (a) promote the interests of fossil fuel states,
- (b) promote the denial of climate damage, man-made global warming, or science, or
- (c) promote social division, discrimination, or harassment within the meaning of [sections 4 to 19](#) and 26 of the Equality Act 2010.

(4) The Office of Communications shall require that licence

holders include information on atmospheric pollution and climate damage in its daily weather reporting.

PART 5

FULL EMPLOYMENT, INCOME AND TRAINING GUARANTEE

25 Full employment, income and training guarantee

(1) A worker of a fossil fuel company who becomes redundant by virtue of sections 20 or 21 shall be guaranteed full employment, on fair wages and working hours, from Her Majesty's government, until such time as they can be redeployed to an appropriate job.

(2) A worker under subsection (1) shall be guaranteed –

(a) the same income that they earned before their redundancy, while employed by the government, or when they are redeployed to the first appropriate job, and

(b) the right to training for work on renewable energy.

(3) The Secretary of State may by regulation exempt categories of senior managerial worker, and may include further categories of worker, under subsection (1).

26 Restoration of duty on Secretary of State to report on full employment

(1) The Secretary of State must lay a report before Parliament annually on the progress which has been made towards full employment.

(2) In the report under subsection (1) "full employment" shall mean –

(a) at fair wages,

- (b) with reasonable working time,
- (c) an unemployment rate under 2.5 per cent of those willing and able to work, and
- (d) with fair regional distribution of employment opportunities.

PART 6

AGRICULTURE, SUPERMARKETS AND STORES

27 Duty of the Secretary of State for Environment, Food and Rural Affairs to decarbonise food

(1) The Secretary of State for Environment, Food and Rural Affairs shall have a duty to –

- (a) eliminate the use of fossil fuels in agriculture, supermarkets and stores,
- (b) improve the absorption of greenhouse gases by agriculture and forests,
- (c) secure food imports with the least greenhouse gas emissions possible, and
- (d) reduce the waste of food.

(2) The Secretary of State, acting through the Rural Payments Agency or otherwise, shall give financial assistance under the basic payment scheme, rural development support, or any other scheme, so as to prioritise,

- (a) the reduction of tillage and machinery so far as technologically practicable,
- (b) the improvement of the soil quality, earthworm and wildlife populations,
- (c) the elimination or reduction of environmentally detrimental herbicides, pesticides and fertilisers so far as technologically practicable, and
- (d) the restoration of forests, or other ecological focus areas.

28 Traffic light labelling for emissions on all products

- (1) All supermarkets, retailers and manufacturers shall have a duty to apply traffic light labelling to food or other products, including the greenhouse gas emissions created in the production and distribution of those products.
- (2) The traffic light labelling shall be display –
 - (a) red for high greenhouse gas emissions,
 - (b) amber for low greenhouse gas emissions, and
 - (c) green for zero greenhouse gas emissions.
- (3) Traffic light labels shall be displayed prominently –
 - (a) on each product where the product has packaging, and
 - (b) immediately next to the price on display where the product is sold.
- (4) The Food Standards Agency shall determine the conditions for traffic light labelling, and shall monitor its implementation.
- (5) After six months from the date of this Act, where the Food Standards Agency finds that any supermarket or large retailer has failed to display appropriate traffic light labelling, it may impose a fine of up to 1 per cent of annual turnover for each violation.
- (6) Greenhouse gas emissions shall include the release of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆). The Secretary of State may add substances by order.

29 Elimination of plastic packaging and clothing

- (1) All supermarkets, retailers and manufacturers shall have a duty to eliminate plastic packaging and clothing within six months from the date of this Act.

(2) The Secretary of State may make regulations to grant exceptions based upon strict necessity for the purpose of safety and security.

30 General recyclability duty

(1) All supermarkets and retailers shall ensure that packaging for products is recycled in the locality where they are sold.

(2) The Secretary of State shall make regulations specifying the types of materials that must be recycled by local authorities.

PART 7

FINANCE AND CORPORATE GOVERNANCE

31 Duty of the Bank of England for decarbonisation in monetary policy and finance

(1) An objective of the Bank of England shall be to eliminate investments and funding in the coal, oil, and gas industry.

(2) In [section 11](#) of the Bank of England Act 1998 before paragraph (a) insert – “(za) to eliminate investments and funding in the coal, oil, and gas industry, (zb) to eliminate greenhouse gas emissions so far as technologically practicable,”.

32 Replacement of Gross Domestic Product with objective criteria

(1) Her Majesty’s Treasury, the Bank of England, and all other public bodies shall replace Gross Domestic Product, or related measures of growth, with measures based on objective criteria, including –

- (a) real wages,
- (b) progressive reduction of working time,
- (c) life expectancy,
- (d) health,
- (e) years in education,

and in so doing take into account any inequality in the distribution of those criteria.

(2) The objective criteria in subsection (1) shall not include any revenue from the production of goods or services that may damage safety, health, the environment, the climate, education, or other human right within the meaning of the Universal Declaration of Human Rights.

33 Duty of care of directors for clean transport, building and energy investment

(1) In [section 174](#) of the Companies Act 2006, after subsection (2) insert – “(3) A director of a company shall invest in the replacement of fossil fuel vehicles, the insulation of buildings, and the installation of clean energy generation, with regard to the savings in the long term.”

(2) This duty shall be deemed to apply to people in positions equivalent to directors in all public bodies, including –

- (a) the executives of any National Health Service foundation, trust or other body,
- (b) the principals and governing body members of any school or higher education institution,
- (c) the councillors of any local authority, or
- (d) the chief constable of any police service.

(3) The Secretary of State may write regulations defining categories of responsible person.

34 Duty on financial institutions to divest from fossil fuels and criminal enforcement

- (1) The Financial Conduct Authority and the Prudential Regulation Authority shall ensure that all regulated entities divest from fossil fuels.
- (2) In [section 1B\(3\)](#) of the Financial Services and Markets Act 2000 before paragraph (a) insert “(za) the objective to eliminate all investment or funding in fossil fuels;”.
- (3) In section 2B(3) of the Financial Services and Markets Act 2000 before paragraph (a) insert “(za) ensuring that all investment or funding in fossil fuels is eliminated,”.
- (4) Investment in coal, oil, or gas enterprises anywhere in the world shall be a criminal offence from April 2021, punishable at level 5 on the [standard scale](#).
- (5) Investment in coal, oil, or gas enterprises anywhere in the world shall be a criminal offence within the meaning of [section 1](#) of the Criminal Damage Act 1971 from April 2022.

35 Financial intermediaries not to vote without instructions from representatives

- (1) Every financial intermediary has a duty to follow the voting policy and specific instructions of trustees or clients on how voting rights on securities shall be voted.
- (2) No financial intermediary that manages funds on behalf of any client may vote on securities except in accordance with the policy or instructions from that client.
- (3) Where a financial intermediary pools savings from different clients into single funds, it shall ensure that votes are cast where necessary on a split basis in relation to each client’s portion of funds.
- (4) Every financial intermediary has a duty to facilitate

electronic voting in the simplest manner possible, free of charge to its clients, and to publicly report its voting records.

(5) The Secretary of State shall exercise its power under the Pensions Act 2004 [section 243](#) to require that a minimum of one half of pension trustees or directors of trust corporations are member nominated trustees.

(6) The requirement for member nominated trustees shall apply to all saving funds, whether constituted as a trust, a corporation, a contract, or any other legal form. The Secretary of State may write regulations specifying included or exempt funds.

36 Requirement of worker voting rights in enterprise governance

(1) Every worker has the right to be entered on the register of members of their company.

(2) Each worker shall have one vote in the meetings of companies. Workers as a group shall be entitled to a minimum of twenty per cent of the total votes in the company. The Secretary of State may by order raise the minimum percentage of votes.

(3) Workers as members shall be entitled to bring derivative claims for breach of the duties of directors as listed under [sections 170 to 177](#) of the Companies Act 2006 or for any other breach of legal or equitable duty.

(4) Where a company controls the governance of another company, workers shall be entitled to be entered onto the register, to vote, and to bring claims on a proportionate basis in the controlling company as well as their own.

(5) A worker may delegate their vote on a revocable basis to an independent trade union.

(6) Companies shall facilitate voting by electronic means in the simplest possible manner.

(7) Where a worker works for partnership, statutory body, unincorporated association, or any other legal form of organisation, they shall be entitled to be registered, vote in meetings, and bring claims against the board of directors, or other governing body, on the same basis as in a company, regardless of legal form. The Secretary of State shall make regulations amending such legislation as is necessary to achieve this objective.

37 Block exemption from competition law for cooperation to decarbonise

(1) In [section 3](#) of the Competition Act 1998, after subsection (1) insert “(1A) The Chapter I prohibition does not apply where undertakings agree to cooperate to eliminate the use of fossil fuels as fast as technologically practicable, provided that the agreements are publicised on a website of the undertaking.”

38 Consumer right to products of durable quality, and to repair

(1) In [section 9](#) of the Consumer Rights Act 2015 for the word “satisfactory” substitute “lasting and durable”.

(2) In section 9, after subsection (1) insert – “(1A) “Lasting and durable” means products that are designed to last as long as is reasonable with regard to technical possibility, and the total minimisation of greenhouse gas emissions. Hardware and software manufacturers shall be jointly liable to provide relevant software upgrades.”

(3) A trader shall have a duty to inform customers of their right to repair under [section 23](#) of the Consumer Rights Act 2015 on product packaging or by notice at the time of purchase.

(4) In consultation with relevant consumer rights and

environmental groups, the Competition and Markets Authority shall give guidance on the appropriate time for product life. Such guidance shall be taken into account as a minimum standard in interpreting section 9 of the Consumer Rights Act 2015.

39 General liability of companies, directors and shareholders for climate damage

(1) The general liability of companies, directors and shareholders for climate damage is based on certain common law rules and equitable principles and have effect in place of those rules. Regard shall be had to corresponding common law rules and equitable principles in interpreting and applying the general liability.

(2) A company, a director of a company, and any shareholder that may exercise control in a company at a relevant time, shall be jointly and severally liable for any damage caused by greenhouse gas emissions including –

(a) personal injury or death,

(b) damage to property,

(c) economic loss, or

(d) the cost of building defences, on the basis of the proportion of greenhouse gases that have been historically produced or emitted by that company.

(3) Punitive damages shall be paid in addition to compensatory damages where the conduct of a defendant was calculated to make a profit.

(4) This section shall apply with the necessary changes to all forms of partnership, trust, unincorporated association or any other entity that carries on business like a company.

(5) The causation of “damage” in subsection 2 shall be determined according to the percentage likelihood that

global warming has materially increased the risk of the damage occurring.

(6) The Secretary of State may make exemptions from liability under subsection 2 on the basis that the defendant took all reasonable steps to avoid the damage. An exemption may not apply to defendants whose conduct was calculated to make a profit from greenhouse gas emissions. A consumer of fossil fuel products shall not be liable for contribution to climate damage.

(7) Carrying on a fossil fuel enterprise anywhere in the world shall be a criminal offence within the meaning of [section 1](#) of the Criminal Damage Act 1971 from April 2025.

PART 8

LOCAL AUTHORITY EMPOWERMENT

40 Smart emission zones for transport

(1) A local authority shall have the power to create a smart emission zone for all highways under its jurisdiction.

(2) A smart emission zone may include –

(a) the power to levy a charge upon road transport users based upon exhaust pipe emissions,

(b) graduated levies based upon the size of the business of the road transport user,

(c) an exemption for sole traders, and exemptions for other individual users,

(d) the right of any subcontracted driver to pass the duty to pay the levy to one or more businesses for which they carry out road transport work.

(3) A driver shall be considered to be subcontracted under subsection (2)(d) by taking into account the proportion of time

spent carrying out work for the contracting party, and the relative bargaining power of the parties.

(4) The Secretary of State may issue guidance on the definition of the subcontractor, and the appropriate party to pay any levy, having regard to the relative size of the business.

41 Clean energy companies

(1) A local authority shall have the power to create a clean energy company.

(2) A clean energy company may include,

- (a) generation of electricity by wind turbines,
- (b) generation of electricity by solar panels,
- (c) storing of electricity in batteries or other facility, or
- (d) the purchase of electricity from renewable energy installations.

(3) A local authority shall have the power to require businesses operating within its boundaries switch its energy supply contracts to the local clean energy company at prices equivalent to their existing contracts.

42 Planning permission for clean energy, buildings, and streets

(1) A local authority shall have the power to make planning permission conditional upon,

- (a) building material use and insulation,
- (b) buildings generating or storing energy through solar, wind or batteries,
- (c) buildings having electric charging points for transport, and
- (d) any other measure relevant to conservation and renewable energy.

(2) A local authority shall have the power to require that

business properties and landlords of any description insulate, install energy generation, and install battery facilities where reasonably practicable. The Secretary of State shall publish guidelines for the installation of such facilities.

(3) A local authority shall have the power, in consultation with local residents, to designate any highway to,

- (a) reduce or remove vehicle parking spaces,
- (b) reduce or remove thoroughfares, and
- (c) plant trees, hedges, flowers, or plants of any description.

43 Power to require full business recycling rates

(1) A local authority may require that businesses that use waste collection recycle or compost 100 per cent of their waste, and impose reasonable charges to prevent any failure to do so.

(2) A local authority may require that supermarkets or other businesses pay reasonable contributions for the costs of waste collection within that local authority.

44 Local authority pension fund governance

(1) The assets of all funds in the Local Government Pension Scheme ('the scheme') shall be merged into one entity.

(2) The scheme shall be managed by a board of eleven trustees. The first trustees shall be elected for a term of four years by the current trustees of the scheme fund.

(3) The first board of trustees shall write a constitution for the scheme. This shall include its policy on environmental, social and governance issues in choosing investments and in casting voting rights. The constitution shall provide for its amendment through a 60 per cent resolution of the beneficiaries of the

scheme. Each beneficiary shall have one vote.

(4) After the first term, the subsequent trustees shall be elected by a confidential electronic ballot of the beneficiaries of the scheme. Each beneficiary shall have one vote.

(5) The Secretary of State shall have the right to appoint two trustees to the board with the same rights and duties as elected trustees.

(6) The Secretary of State shall provide adequate training for all trustees in carrying out their professional responsibilities.

PART 9

INTERNATIONAL AND TRADE AGREEMENTS

45 Duty of the Secretary of State to negotiate for elimination of coal, oil and gas

The Secretary of State shall have a duty in all future international agreements, including on trade, to negotiate with other nation-states for the elimination of coal, oil and gas from the economy by analogy to the provisions set out in this Act.

46 Duty of the Secretary of State to negotiate for environmental and work standards

The Secretary of State shall have a duty in all future international agreements, including on trade, to negotiate with other nation-states to progressively raise standards –

- (a) for the protection of the environment,
- (b) of real wages through voice at work, and
- (c) for the reduction of working time, by analogy to the provisions set out in this Act.

47 Duty of the Secretary of State to minimise military movement and negotiate reduction

(1) The Secretary of State shall have a duty to minimise all military movements for the purpose of conserving energy including by –

- (a) the British Army,
- (b) the Royal Marines,
- (c) the Royal Navy, and
- (d) the Royal Air Force.

(2) The Secretary of State shall have a duty in all future international agreements, including on trade, to negotiate with other nation-states to progressively reduce military expenditure in order to invest in renewable energy and to restore the world environment.

SCHEDULE 1 – Temporary exemptions from prohibitions on fossil fuels

1 For the purposes of this Act, the following shall be temporarily exempt so far as strictly necessary from the prohibitions on the investment in and carrying on of fossil fuel companies –

- (a) the manufacture of steel,
- (b) the manufacture of concrete,
- (c) the use of gas for pre-existing heating installations,
- (d) the distribution of petroleum for vehicles,
- (e) the production of aviation fuel, and
- (f) the production of heavy shipping fuel.

2 Any person who uses or invests in fossil fuels for the purposes listed in paragraph 1 shall have an obligation to pay at least 1 per cent of annual revenue into research and development fund administered by the Secretary of State. The Fund shall be constituted separately from the Consolidated Fund, and shall be distributed as the Secretary of State sees fit to higher education institutions in the United Kingdom to research and develop technological alternatives to fossil fuels.

3 The Secretary of State has a duty to review the exemptions listed in paragraph 1 and report to Parliament on the progress made in developing alternatives.

4 The Secretary of State shall write regulations to amend paragraph 1 in light of technological restraints and developments as soon as technologically practicable.

5 In judicial review of the duties in this Act upon any public body or director, a court shall interpret the phrase 'as soon as technologically practicable' with regard to expert evidence. Where a court finds that action taken to fulfil a duty is not reasonable to meet the goal of stopping climate damage, it shall substitute its judgement for the conduct of the public body or director, and shall grant an effective, dissuasive and proportionate remedy.

References

- 1 Bank of England (2020) The Bank of England's climate-related financial disclosure 2020, <https://www.bankofengland.co.uk/-/media/boe/files/annual-report/2020/climate-related-financial-disclosure-report-2019-20.pdf?la=en&hash=5DA959C54540287A2E90C823807E089055E6721B>
- 2 Patrick Greenfield and Jonathan Watts, 'JP Morgan economists warn climate crisis is threat to human race', *The Guardian*, 21 Feb 2020. <https://www.theguardian.com/environment/2020/feb/21/jp-morgan-economists-warn-climate-crisis-threat-human-race>.
- 3 Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski, and K. Sabeel Rahman (2020) 'Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis', *Yale Law Journal*, Forthcoming; Columbia Public Law Research Paper No. 14-657.
- 4 Ibid.
- 5 Ibid.
- 6 Katharina Pistor (2019) *The Code of Capital: How the Law Creates Wealth and Inequality*, Princeton University Press.
- 7 Jedediah Britton-Purdy (2017) 'Understanding Environmental Law as Public Provision', *Law and Political Economy*, 29 November 2017.
- 8 Sanjukta Paul (2020) 'Antitrust As Allocator of Coordination Rights', *UCLA Law Review*, Vol. 67, No. 2, 2020.
- 9 Britton-Purdy et al, 2020.
- 10 David Singh Grewal, Amy Kapczynski and Jedediah Britton-Purdy (2017) 'Law and Political Economy: Toward a Manifesto', *Law and Political Economy*, 6 November 2017.
- 11 Jedediah Britton-Purdy (2017) 'Understanding Environmental Law as Public Provision', *Law and Political Economy*, 29 November 2017.
- 12 Alyssa Battistoni (2017) 'Living, Not Just Surviving', *Jacobin*, 15 August 2017.
- 13 Britton-Purdy et al, 2020.
- 14 Ibid.
- 15 Will Davies (2014) *The Limits of Neoliberalism: Authority, Sovereignty and the Logic of Competition*, SAGE Publication.
- 16 Quinn Slobodian (2018) *Globalists: The End of Empire and the Birth of Neoliberalism*, Harvard University Press.
- 17 Britton-Purdy et al, 2020.
- 18 Gareth Dale (2019) 'Economic growth: a short history of a controversial idea', *openDemocracy*, 14 June 2019.
- 19 Joe Guinan, Jonty Leibowitz, Neil McInroy, and Sarah McKinley (2020) 'Owning the Future After Covid-19, a new era of community wealth building', *Democracy Collaborative and CLES*.

- 20 This Bill builds upon the Decarbonisation and Economic Strategy Bill first tabled by Caroline Lucas MP and Clive Lewis MP in February 2019, published in full draft form in September 2019 and re-tabled on 7th July 2020.
- 21 Royal College of Physicians and Royal College of Paediatrics and Child Health, *Every breath we take: The lifelong impact of air pollution* (February 2016) xliii. A Hunt and C Brand, 'Health damage from cars and vans costs £6 billion annually to NHS and society' (6 June 2018)
- 22 B Nauman, 'Sharp rise in number of investors dumping fossil fuel stocks' (9 September 2019) [FT](#). '2019 Stock Index Results Show Fossil Companies as Worst-Performing Segment' (14 January 2020) [Energy Mix](#)
- 23 For instance, stopping air pollution saves £20bn a year: Royal College of Physicians and Royal College of Paediatrics and Child Health, *Every breath we take: The lifelong impact of air pollution* (February 2016) xliii.
- 24 See F Green, 'Anti-fossil fuel norms' (2018) [150 Climatic Change 103](#) on the importance, and success, of bans, using the examples of ending slavery, aggressive war, and nuclear testing.
- 25 e.g. S Swinford, 'Coronavirus: Rishi Sunak wants green new jobs for laid-off workers' (3 June 2020) [The Times](#)
- 26 Note that investors have often sued sovereign governments for changing laws that are argued to amount to 'expropriation' e.g. under the Energy Charter Treaty 1994 [arts 12-13](#). All claims will fail whenever the action taken is reasonable. Post-Fukushima, see *Vattenfall v Germany*, on the ban of the nuclear industry by 2022.
- 27 e.g. BP Energy Outlook 2035 (February 2015) 5, in a blurb by BP's ex-chief executive Bob Dudley.
- 28 US EPA, *Climate Change Indicators* (2019) and click on the [spreadsheet](#). In 1066, it was 281ppm, and in 19 AD it was 276ppm.
- 29 e.g. E Bevacqua et al, 'Higher probability of compound flooding from precipitation and storm surge in Europe under anthropogenic climate change' (2019) [5\(9\) Science Advances 1-7](#)
- 30 e.g. J Berardelli, 'How climate change is making hurricanes more dangerous' (2019) [Yale Climate Connections](#)
- 31 e.g. F Pearce, 'Long Shaped By Fire, Australia Enters a Perilous New Era' (16 January 2020) [YaleEnvironment360](#)
- 32 C McGlade and P Ekins, 'The geographical distribution of fossil fuels unused when limiting global warming to 2oC' (2015) [517 Nature 187](#), Figure 1.
- 33 IPCC, *Climate Change 2014: Synthesis Report* (2014) 62, 'The global mean peak surface temperature change per trillion tonnes of carbon (1000 GtC) emitted as CO₂ is likely in the range of 0.8°C to 2.5°C.' It follows burning 2900 Gt will raise temperatures from 3.3°C to 8.25°C, given a 1°C already. But note that IPCC modelling stops at 6°C, after which further consequences are unpredictable.
- 34 e.g. M Lynas, *Six Degrees: Our Future on a Hotter Planet* (2007) summarised in (11 March 2007) [Sunday Times](#)
- 35 On the latter alone, P Read and R Denniss, 'With costs approaching \$100 billion, the fires are Australia's costliest natural disaster' (17 January 2020) [Conversation](#). \$100 billion in Australia is around £54 billion or €60 billion.
- 36 See generally F Green, 'Anti-fossil fuel norms' (2018) [150 Climatic Change 103](#), on the importance of bans in historical context, for slavery, aggressive war, and nuclear testing. This section acknowledges that there are costs in significant social change, but no right model. The UK's Slavery Abolition Act 1833 [s XXIV](#) set up a compensation scheme for slave owners, while the US Emancipation Proclamation 1863 paid no compensation. It is debatable whether fossil fuel business should be compensated, pay for climate damage, or a compromise.

- 37 'Air pollution 'kills 40,000 a year' in the UK, says report' (23 February 2016) [nhs.uk](https://www.nhs.uk)
- 38 e.g. R Watt, D Clark, S Joiner and A Cappaert, 'London air pollution mapped: how does your child's school compare?' (9 May 2019) [The Times](https://www.thetimes.co.uk)
- 39 A Hunt and C Brand, 'Health damage from cars and vans costs £6 billion annually to NHS and society' ([6 June 2018](https://www.bbc.com/news/health-45812345))
- 40 Royal College of Physicians and Royal College of Paediatrics and Child Health, *Every breath we take: The lifelong impact of air pollution* ([February 2016](https://www.rcplondon.ac.uk/publications/every-breath-we-take)) xliii
- 41 See Defra and Department for Transport, *UK plan for tackling roadside nitrogen dioxide concentrations* ([July 2017](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628123)) 7, Figure 3, for NOx emissions, vans and HGVs are 40%, buses 16%, taxis 2%, cars 43%, other vehicles 1%. This assumes similar exhaust pipe emission breakdowns for carbon dioxide and other gases.
- 42 J Bates and D Leibling, *Spaced out: perspectives on parking policy* ([RAC 2012](https://www.rac.org.uk/publications/spaced-out)) vi, 80% at home, 16% elsewhere.
- 43 Office of Rail and Road, *Rail Finance: 2018-19 Annual Statistical Release* ([14 November 2019](https://www.orr.gov.uk/publications/rail-finance-2018-19))
- 44 e.g. N Sommerlad (2 January 2017) [Mirror](https://www.mirror.co.uk).
- 45 'Will the UK ever get electrification back on track?' (13 June 2018) [Railway Technology](https://www.railway-technology.com), 'a paltry 42%.'
- 46 'Electrified railway lines' (2016) ec.europa.eu. Switzerland has 100% electrified rail.
- 47 Scotland Act 2016 [s 57](https://www.legislation.gov.uk/ukpga/2016/54/section/57)
- 48 Railways Act 1993 [s 25](https://www.legislation.gov.uk/ukpga/1993/25/section/25). D Keating, 'Almost all British train lines are now owned by other EU countries' (15 August 2019) [Forbes](https://www.forbes.com).
- 49 Capital Allowances Act 2001 [s 104AA\(4\)](https://www.legislation.gov.uk/ukpga/2001/104/section/4)
- 50 K Palmer, JE Tait, Z Wadud and J Nellthorp, 'Total cost of ownership and market share for hybrid and electric vehicles in the UK, US and Japan' (2018) [209 Applied Energy 108](https://www.sciencedirect.com), finding lower costs after 16,000 miles for hybrid vehicles, and that with government subsidies at the time of writing, electric cars were cheaper overall.
- 51 Greater London Authority Act 1999 ss 154-155, 174-175, 180-188 and Sch 10
- 52 These include Suffolk, Nottingham, Blackpool, Guisborough, Skipton, Cardiff, Newport, Ipswich, Edinburgh, Dumfries and Galloway, Moray, and Northern Ireland.
- 53 Bus Services Act 2017 [s 22](https://www.legislation.gov.uk/ukpga/2017/22/section/22)
- 54 T Dixon ([26 October 2017](https://www.evoobsession.com)) EVObsession, on Changan. ([18 December 2017](https://www.automotive-world.com)) CleanTechnica, on BAIC. ([22 April 2020](https://www.geely.com)) Automotive World, on Geely.
- 55 J Zeitlin, 'Flexibility and Mass Production at War: Aircraft Manufacture in Britain, the United States, and Germany, 1939-1945' (1995) [36\(1\) Technology and Culture 46](https://www.sciencedirect.com), 52, Table 1 and 56.
- 56 e.g. Civil Contingencies Act 2004 [s 22](https://www.legislation.gov.uk/ukpga/2004/22/section/22)
- 57 *Commission v Germany* (2007) [C-112/05](https://eur-lex.europa.eu)
- 58 See J Armour, 'Volkswagen's Emissions Scandal: Lessons for Corporate Governance?' (2016) [Oxford Business Law Blog parts 1](https://www.oxfordbusinesslaw.com) and [2](https://www.oxfordbusinesslaw.com)

- 59 e.g. P McGee, 'EU finds evidence carmakers are manipulating results' (24 July 2018) [FT](#) and D Keating, 'Carmakers Are Cheating Again - But This Time They're Inflating Their Emissions' (26 July 2018) [Forbes](#).
- 60 A Matthews-King (26 June 2018) [Independent](#).
- 61 DBEIS, *Digest of UK Energy Statistics* (2019) 80
- 62 e.g. M O'Boyle, 'The coal cost crossover: economic viability of existing coal compared to new local wind and solar resources' (March 2019) [Energy Innovation](#). N Harmsen, 'South Australia's giant Tesla battery output and storage set to increase by 50 per cent' (19 November 2019) [ABC](#).
- 63 A Davis, 'What is the average cost of utility bills per month?' (5 July 2019) [Money Advice Service](#). A Vaughan, 'Profits slide at big six energy firms as 1.4m customers switch' (11 October 2018) [Guardian](#)
- 64 The Moray East wind farm is costing [£2.6 billion](#) to build, and provides enough electricity for just under 1 million homes. There are around 27 million homes in the UK, and [one-third of electricity](#) is already renewable. This means a rough investment figure of £46.8 billion would electrify the remaining 18 million UK homes: that is £9.2 billion a year for 5 years.
- 65 Renewable Energy Directive 2009 art 17 and Annex V
- 66 M Le Page, 'The Great Carbon Scam' (24 September 2016) [231 New Scientist](#) 20–21
- 67 D Kuch, "'Fixing" climate change through carbon capture and storage: Situating industrial risk cultures' (2017) [92 Futures](#) 1, 2, 'CCS has monumentally failed to reach key milestones.' See also K Burton, 'Carbon con: does capturing carbon from power stations really work?' (11 March 2020) [Geographical](#).
- 68 R Heede, 'Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010' (2014) [122 Climatic Change](#) 229
- 69 e.g. *Budget 2020* (March 2020) 114, Table C.5, showing negative £700 million in 2018-19 and negative £400 million in 2019-20 under Petroleum revenue tax current 'receipts'. The tax was reduced to zero in Finance Act 2016 s 140(1).
- 70 N Khadem, 'ATO data reveals one third of large companies pay no tax' (2 January 2020) [ABC](#). Note the entries for Glencore Investments, Origin Energy, Woodside Petroleum, Shell Energy, Santos, Anglo American, Whitehaven Coal, Chevron, BHP Billiton Mitsui, ConocoPhillips, QCoal, Petronas and Kogas.
- 71 '2019 Stock Index Results Show Fossil Companies as Worst-Performing Segment' (14 January 2020) [Energy Mix](#)
- 72 P Smith, 'Church of England fund becomes top world performer' (21 May 2017) [FT](#) and S Nasralla and S Jessop, 'Church of England pension fund shifts \$789 million to climate index' (30 January 2020) [Reuters](#). The Church's deadline is 2023.
- 73 See in particular, the Mueller Report, *Report On The Investigation Into Russian Interference In The 2016 Presidential Election* (2018) 1, referring to 'sweeping and systematic' interference. This was mainly possible by exploiting lack of regulation on social media networks.
- 74 House of Commons, 'Oil and Fossil Fuel Production (including Gas) Sector Report' (2017) reporting 67,652 employees, and deducting 4000 staff fired after the covid-19 outbreak: F Harnett (27 March 2020) [City AM](#).
- 75 OGUK, *Workforce Report* (2019) 10.
- 76 See historically, T Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (Verso 2011) ch 1, 36 explaining how oil and modern coal extraction requires smaller workforces.

- 77 See previously the Welfare Reform and Work Act 2016 [s 1](#)
- 78 This definition follows W Beveridge, *Full employment in a free society* (1944) 18.
- 79 P Lord, 'Valuing labour: The interaction of law and informal norms in UK agriculture' (2019) [1 Journal of the Oxford Centre of Socio-legal Studies 1](#), 16-25, interviewing a cross section of farm workers. An Agricultural Wages Board is gone since 2013 but continued in Wales and Scotland, ensuring fair wage scales beyond the minimum.
- 80 Panorama, *Escape from Dubai: The mystery of the missing princess* (6 March 2020) [BBC](#). L Carter and C Dowler, 'UAE Prime Minister given £1m in farm subsidies for horse breeding empire' (23 October 2016) [Unearthed](#).
- 81 G Shrubsole, *Who Owns England* (2019) ch 4, 96-97 (grouse).
- 82 e.g. DR Montgomery, *Growing a Revolution: Bringing our Soil Back to Life* (2017)
- 83 e.g. 'Meet the robot that maps weeds on farm for National Trust' (4 December 2019) [Shropshire Star](#)
- 84 T Herbert, 'Plastic in water and food: Brits eat a credit card's worth of micro-plastics every week according to new study' (12 June 2019) [Evening Standard](#)
- 85 There are different methods of calculating GDP, but they should add up to the same thing. See HM Treasury, 'User's guide: Background information on GDP and GDP deflator' (2006). The more that human rights or public goods, like health, are monetised, the more that GDP goes up when people are in fact becoming poorer. The same is true when businesses overcharge people for transport, electricity, water, food, communication or information, and when working hours are high.
- 86 See OECD, *Health expenditure and financing* (2018) [stats.oecd.org](#)
- 87 This example follows the model of the United Nations Inequality Adjusted Human Development Index, but replaces GDP with a ratio of real wages for working time. Another possible model is the Genuine Progress Indicator.
- 88 D Kahneman, JL Knetsch and RH Thaler, 'Anomalies: The endowment effect, loss aversion, and status quo bias' (1991) [5\(1\) Journal of Economic Perspectives 193](#). Among other things, this insight led to auto-enrolment: Pensions Act 2008 [ss 1-8](#).
- 89 '2019 Stock Index Results Show Fossil Companies as Worst-Performing Segment' (14 January 2020) [Energy Mix](#)
- 90 of A Smith, *The Wealth of Nations* (1776) [Book V, ch 1, §107](#). Today, see E McGaughey, 'Democracy in America at Work: The History of Labor's Vote in Corporate Governance' (2019) [42 Seattle University Law Review 697](#), 744-748 and in the UK see 'Does corporate governance exclude the ultimate investor?' (2016) [16 Journal of Corporate Law Studies 221](#).
- 91 EA Posner, FM Scott Morton and EG Weyl, 'Proposal to Limit the Anti-Competitive Power of Institutional Investors' (2017) 81 Antitrust LJ 1, 2
- 92 S Krouse, D Benoit and T McGinty, 'Meet the New Corporate Power Brokers' (24 October 2016) [Wall St Journal](#)
- 93 Z Adams, L Bishop, S Deakin, C Fenwick, SM Garzelli, G Rusconi, 'The economic significance of laws relating to employment protection and different forms of employment: Analysis of a panel of 117 countries, 1990–2013' (2019) [158\(1\) International Labour Review 1](#)
- 94 e.g. AMNT, *Red Line Voting* (2016) showing a series of ESG proposals from member nominated trustees of pensions that UK asset managers have initially refused to follow. See also S Hirst, 'Social Responsibility Resolutions' (2018) 43 Journal of Corporation Law 217, 224-27 on US asset managers consistently opposing proposals.

95 The guarantee of voting rights for staff was first introduced by the Oxford University Act 1854 [s 6](#). Another old example is the Port of London Act 1908, sponsored by Winston Churchill.

96 In the UK, see *Chandler v Cape plc* [2012] EWCA Civ 525 (shareholder liability), *Fairchild v Glenhaven Funeral Services Ltd* [2002] UKHL 22 (material increase of risk), *Rookes v Barnard* [1964] AC 1129 (calculation to make a profit). For ongoing cases in New Zealand see *Smith v Fonterra Co-Operative Group Ltd* [2020] [NZHC 419](#) and in Germany see *Lliuya v RWE AG* (2015) Case No. 2 O 285/15 Essen Oberlandesgericht.

97 See a list at www.climateemergency.uk/blog/list-of-councils/

98 M Sandford, *Local government in England: structures* (2018) [HC Briefing Number 07104](#), Appendix, is excellent.

99 R Nierynck, 'Council waste spending topped £2.3 billion in 2013/14' (15 August 2016) LetsRecycle.com.

100 e.g. '£1 in every seven now spent in Tesco' (16 April 2007) [Telegraph](#)

101 The Public Service Pensions Act 2013 [c 25](#) failed to combine all funds into one, where they could have benefited from economics of scale, like major funds abroad such as CalPERS, CalSTRS or OMERS.

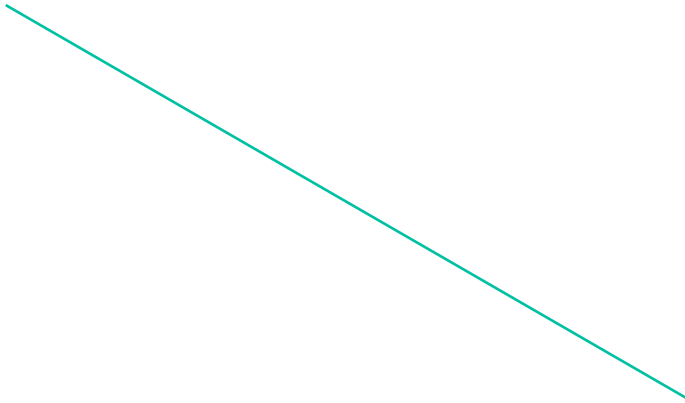
102 e.g. F Devetter and S Rousseau, 'Working Hours and Sustainable Development' (2011) [69\(3\) Review of Social Economy 333](#), showing longer hours increases impulse buying, and carbon intensive activity.

103 e.g. NC Crawford, 'The Pentagon Emits More Greenhouse Gases Than Any Other Part of the US Gov't.' (12 June 2019) [Live Science](#)

104 [School of Law](#), King's College, London. Centre for Business Research, University of Cambridge. Please contact at ewan.mcgaughey@kcl.ac.uk or [@ewanmcg](#). This document results from many people's contributions of ideas, but I am especially grateful for discussion and comments from Laura Bear, Jason Hickel, Liv Jores, Alan Simpson, Ann Pettifor, Ania Zbyszewska, Laura Mai, Henry Leveson-Gower, Fergus Green, Thomas Piketty, Grace Blakeley, Steve Daly, Tim Ashton, Declan Kuch, Mathias Boer-Maher, David Adler, Pawel Wargen, Leslie-Anne Duvic-Paoli, Nathan Tamblyn, John Balson, Mat Lawrence, and Richard Benwell.



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