

Policy proposals for the Liberal Democrat 2015 election manifesto

THE GREEN MANIFESTO

*How to increase living standards, improve
quality of life and future-proof the economy*

by

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The Green Manifesto puts forward proposals for consideration for inclusion in the Liberal Democrats' 2015 election manifesto. Although several of the proposals contained here are existing party policy, many are not.

We recognise that some proposals will require additional public spending and the speed with which they can be achieved will depend on decisions over overall levels of expenditure and taxation – although most proposals are designed to be cost-neutral, or even produce savings, over time, and in some cases we have indicated potential sources of funding. The 2015 manifesto will, of course, be fully costed.

Not every contributor necessarily agrees with every proposal in this paper.

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1 Our approach

The Green Manifesto contains proposals for inclusion in the Liberal Democrats' manifesto for the 2015 general election.

The coalition government has made a good start with getting the public finances back on track and rebalancing the economy after the disastrous Labour years, when debt ballooned and investment was neglected. However, much more remains to be done to put the economy on to a long-term sustainable footing in which British businesses can compete in global markets in an increasingly resource- and climate-constrained world. For all Liberal Democrat ministers' best efforts, the government is failing to share the fruits of economic recovery equitably or to reform the UK's outmoded and centralised forms of governing.

The good news is that there are real opportunities to change this. The UK's green industries already account for almost 10 per cent of GDP and employ close to a million people; they have grown strongly throughout the recession and in 2014–15 are expected roughly to halve the UK's trade deficit. Britain, a world leader in offshore wind, marine renewables, low-carbon transport and green finance, is well placed to compete in the new and expanding international markets around low-carbon, resource-efficient and environmentally sensitive infrastructure, technologies and services.

To build on this potential and realise these opportunities, however, requires a fundamentally new approach. It requires rebuilding the economy and society on a truly sustainable basis – one that will improve people's quality of life and enhance living standards, now and for generations to come. It requires an active state which uses regulation, taxation and direct intervention to implement a long-term strategy for the transformation of the economy and society to a sustainable footing.

A modern, successful and competitive economy *is* a green economy – low-carbon, resource-efficient and high-skill. If it is not green, it will be neither modern nor successful nor competitive. A healthy and thriving society, where people enjoy life and realise their aims, *is* a green society, built around a flourishing natural environment and a sustainable built environment, in which families are independent and secure from sudden rises in the cost of living, where they are able to value their sense of place. If it not green, it will be neither healthy nor sustainable.

That is why *The Green Manifesto* isn't about 'the environment' as a niche interest. It's about the future prospects for the UK economy and the sort of society people want – where we build infrastructure and communities to last, where we invest in innovation and new technology, where we respect the natural world, and enjoy its benefits, and where we improve the health and quality of life for all in their local communities.

We put forward proposals for consideration across a broad range of government activities. Taken together, they aim to achieve three big outcomes –

A better economy, for all

Our proposals aim to generate growth that is genuinely sustainable – viable in future years, balanced between business sectors, benefiting all parts of the country, and creating entry-level jobs for young people and apprentices. This includes:

- A new green industrial strategy to promote industries of the future, a green innovation arm in the new Business Bank, and giving priority in government investment to sectors that can sustain manufacturing and jobs across the whole country. *(Section 2)*
- Freeing the Green Investment Bank to raise finance, including enabling it to issue green bonds for retail savers; expanding its remit to include domestic energy efficiency and community energy. *(Section 2)*
- A strategic infrastructure plan which prioritises green infrastructure to provide the physical backbone for a new industrial revolution, including renewable electricity transmission, waste-minimising material management facilities and climate adaptation. *(Section 2)*
- Building 1.5 million new homes to verified ‘nearly zero energy’ standards, potentially creating and sustaining directly more than 300,000 jobs across the whole country, with many more in the wider economy. *(Section 5)*
- Improving energy security and creating more certainty for business, by increasing the role of low-carbon energy sources, so that by 2050 all the UK’s electricity demand is met by sustainable energy, setting a target of 50 per cent of electricity generation from renewable sources by 2030 and putting in place a legally binding target for the decarbonisation of the electricity sector. *(Section 2)*

Lower costs, less waste, greater business efficiency

Our proposals amount to a ‘war on waste’: an end to wasting energy and wasting natural resources, generating savings for households and consumers and raising their quality of life, enhancing businesses’ ability to compete in world markets and increasing the resilience of the economy. This includes:

- For homes: retrofitting a million homes every year, transforming the Green Deal into an effective national programme to raise the energy efficiency standards of

all Britain's households and eradicating fuel poverty – helping to reduce Britain's energy demand by 50 per cent by 2030. *(Section 3)*

- For businesses: legally binding waste reduction and resource efficiency targets, new EU standards for products, appliances and vehicles, a ban on dumping non-recyclable wastes and a 'Stern Report' for reducing the UK's consumption of natural resources. *(Section 3)*
- For consumers: protection from sub-standard goods, with new standards for energy efficiency and durability so that lifetime costs are clearer and lower, and reuse and recycling is easier; including the personal health benefits (and likely costs of inaction) as an explicit part of deciding all government spending; and extending the remit of the Food Standards Agency to promote good health and sustainability. *(Section 3)*

Better places to live

What matters is quality of life, not just standard of living, and critical to that aim is the protection and enhancement of the natural environment, of the countryside, of wildlife and of city parks and gardens and green spaces of every kind. This includes:

- Statutory targets for clean air, fresh water and biodiversity, and requirements on local authorities to develop protection plans for their local ecologies; support for British farming with a National Food Strategy and further reform of the Common Agricultural Policy. *(Section 4)*
- Better protection from extreme weather and flooding, with high standards for flood resilience for buildings, long-term planning for droughts and floods, and an independent report on the likely impacts on the UK of a 3–4 degree global average temperature rise. *(Section 4)*
- Learning from the garden city movement to create new planned sustainable settlements, in order to protect existing communities and ensure much higher standards of house design and performance, and reform of planning law to introduce the concept of landscape-scale planning and protect and enhance urban green spaces. *(Section 5)*
- Standardised electronic contactless ticketing to encourage the use of public transport, developing the Local Sustainable Transport Fund, extending the electrification of rail routes, encouraging alternatives to personal car ownership, and an Active Travel Act to promote cycling and walking. *(Section 5)*

To achieve these big outcomes requires changes in the way in which the country is run –

Devolving power and responsibility

- Giving more power and responsibility to localities and communities; keeping more spending, saving and jobs in the local economy, including creating small business zones and supporting community banks; reaching a target of more than half of households and businesses generating renewable energy; and giving local authorities responsibility for energy efficiency programmes and encouraging them to set up their own electricity generation capacity. (*Section 6*)

Embedding long-termism

- Making long-term thinking the norm, through a proper framework for policy, including a zero-carbon Britain by 2050, and natural capital accounting, reform of government (including a new Office of Environmental Responsibility and a statutory Natural Capital Committee) and mechanisms to guarantee that companies and investors are fully aware of the environmental and social implications of their decisions and actions. (*Section 7*)

Cooperating globally

- If our aims are to be achieved, the UK must work with other countries, through the EU and global institutions. This includes working to secure agreement on a new global climate treaty and an EU target for greenhouse gas reductions of at least 50 per cent by 2030, halting net global deforestation by 2020, and ensuring that development aid, free trade and investment agreements support rather than undermine environmentally sustainable development. (*Section 8*)

We believe that the Liberal Democrats are uniquely placed to pursue the programme outlined in *The Green Manifesto*. Liberalism is an intrinsically green political philosophy; the green approach comes more naturally to us than it does to either the Conservatives or Labour. Free from vested interests, we are more open to new thinking and more prone to think for the long term. With a philosophy based on liberty, rather than the defence of sectoral interests, we are pragmatic about using government intervention – regulation, taxation or behavioural ‘nudges’ – in whatever combination works best. Instinctively internationalist, we have been enthusiastic about pursuing European and global solutions to international environmental problems. Traditionally decentralist, we understand the value, and the necessity, of community and local authority action.

The party's 2015 election manifesto will of course need to include many other topics not covered here. But because *The Green Manifesto* addresses the key economic and social challenges the country will face in the next Parliament, we believe it offers a potential structure for the entire election manifesto itself – not merely the 'green thread' of previous programmes, but a 'green backbone' around which the party's appeal at the next election can and should be constructed.

2 A competitive and green economy

Summary:

- Implement a new green industrial strategy, include a green innovation arm within the new Business Bank, commit greater public funding on a longer timescale to support innovation, work with local authorities to create innovation hubs, and create a Green Retrofitting Hub.
- Establish a clear and consistent government commitment to policies that create long-term demand for low-carbon technologies and infrastructure, realise the potential of the Green Investment Bank to promote low-carbon industries and expand its remit to include domestic energy efficiency and community energy, and include higher green criteria in public procurement policy.
- Draw up a strategic infrastructure plan which prioritises green infrastructure, and transfer the associated funding and regulatory powers to the Green Investment Bank, decentralise as much central government infrastructure and investment as possible to combined authorities in metropolitan areas, and encourage public/private collaboration.
- Task the Natural Capital Committee with identifying the key resources being used unsustainably and recommending legally binding targets for reducing their net consumption, as a first step, commission a 'Stern Report' for reducing the UK's consumption of natural resources, facilitate industrial symbiosis, minimise waste and ensure that only non-recyclable waste is incinerated, and argue for the faster development of EU sustainable design and production standards.
- Increase the role of low-carbon energy sources, so that by 2050 all the UK's electricity demand is met by sustainable energy, set a target of 50 per cent of electricity generation from renewable sources by 2030 and put in place a legally binding target for the decarbonisation of the electricity sector, develop a more diverse and competitive generation and supply market, and require all energy projects above 5MW to publish a supply chain plan.
- Build more electricity interconnection capacity, give preference to the use of biomass for heating rather than electricity, encourage combined heat and power, end the use of all coal in electricity generation by 2030 and require any new gas-fired stations to be fitted with CCS, limit shale gas exploration and permit the construction of new nuclear stations only without public subsidy.

- Electrify all suburban and major rail routes by 2025, promote a new generation of light rail and ultra-light rail schemes, support ambitious EU vehicle emissions standards, encourage the market for electric vehicles (with priority for light goods vehicles, taxis and buses), aim to allow only ultra-low carbon vehicles on UK roads for non-freight purposes by 2040 and oppose any plans for additional runways at Heathrow, Gatwick or Stansted or for a Thames Estuary airport.

World markets are growing rapidly for green technologies, those which minimise pollution and waste and maximise resource efficiency. The UK has done well so far in developing low-carbon industries, such as renewable energy, but further progress is hampered by a lack of a clear government commitment to supportive policy and institutional frameworks.

British business still has a long way to go in improving the efficiency with which it uses natural resources, including energy. Conservative ministers in the coalition government have been obsessed with driving down labour costs and deregulating the labour market, but have ignored resource costs, even though 80 per cent of UK manufacturing business chief executives identify raw materials shortages as a risk to their business. The UK cement industry is 75 per cent more energy-intensive than the EU average and paper-making more than 35 per cent more intensive.

The latest global recession is unique in that natural resource prices have risen rather than fallen. The world is undergoing a period of intensified resource stress, driven in part by the scale and speed of demand growth from emerging economies and a decade of tight commodity markets. The outlook is one of supply disruptions, volatile prices, accelerated environmental degradation and rising political tensions over resource access. And at the same time one recent assessment of immediately available resource efficiency opportunities in the UK with a payback period of less than one year found a potential total saving of £23 billion.

We need an activist state with a clear and sustained commitment to a green economy – because a green economy is competitive – underpinning coherent industrial and infrastructure strategies and support for long-term investment, innovation, smart regulation and liberalisation of those markets (most notably, electricity supply) currently blocked by incumbents and poorly designed market structures – all helping to drive down the costs of the new technologies on which the British economy can thrive.

Promoting innovation

- Implement a new green industrial strategy, targeted at technologies that can underpin emerging green industries, where evidence suggests the UK can capture comparative advantage. This requires, among other things:
 - A clearer approach to the selection of technology priority areas, with explicit processes for review.
 - The enhancement of existing ‘mission-driven’ R&D agencies and Catapults (such as the new energy system catapult), identifying where new ones may be necessary to drive core green economy technologies.
 - The development of long-term patient-finance vehicles for green innovation, by including a green innovation arm within the new Business Bank currently being developed; this would invest and hold equity in technology-based firms developing new clean technologies.
 - Better alignment of downstream policies focused on supporting diffusion of core green technologies with upstream funding support for technological innovation.
 - Support for innovation in business models: the Technology Strategy Board should develop a small fund for proof-of-concept or feasibility studies for innovative business models, particularly targeting energy and resource efficiency.
- Commit greater public funding on a longer timescale to support innovation, and promote access to European funding streams, such as the new EU Horizon 2020 programme, where three-quarters of the energy budget is ring-fenced for low-carbon investments.
- Work with local authorities to create innovation hubs, modelled on the one in Cambridge which links first-class universities to green sector jobs, allowing for mutual learning and encouraging exchange of ideas; aim to build these hubs into a ‘green silicon valley’.
- In particular, support the development of energy efficiency and carbon capture and storage (CCS) technology for industrial uses, focusing on ‘carbon clusters’ to ensure resource-efficient development of the necessary infrastructure
- Create a Green Retrofitting Hub (modelled on the Green Building Hub for new buildings), bringing industry and central and local government together to collaborate over innovation in retrofitting buildings and infrastructure.

Supporting investment in green industry

- Establish a clear and consistent government commitment to policies that create long-term demand for low-carbon technologies and related infrastructure, such as renewable energy, networks or low-carbon transport – giving investors the confidence to invest (see further in Section 7).
- Realise the potential of the Green Investment Bank to promote low-carbon industries by increasing its capitalisation, allowing it to raise funds from capital markets independently and enabling it to issue green bonds (for which there is clearly a healthy demand); expand its remit to include domestic energy efficiency and community energy alongside its current priorities of offshore wind, waste management and commercial energy efficiency (also see below on infrastructure).
- Include steadily higher green criteria in public procurement policy, helping to grow the markets for green technologies, products and services.
- Legislate to require UK Trade & Investment and UK Export Finance to promote exports of low-carbon and environmental products and technologies, and remove support for fossil-fuel and related industries.
- Remove all immigration restrictions for engineers, scientists and other skilled technicians entering the UK; green jobs should be open to anyone with the skills to deliver.

Leading the way through public investment

- Draw up a strategic infrastructure plan which, unlike the current National Infrastructure Plan, sets out criteria and prioritises green infrastructure, such as additional transmission capacity for renewable electricity, waste-minimising material management facilities or climate adaptation; transfer the associated funding and regulatory powers to the Green Investment Bank, and include ambitious carbon and resource efficiency specifications on all infrastructure projects.
- Decentralise as much central government infrastructure and investment as possible to combined authorities in metropolitan areas, with similar powers to those in London, and require them to develop integrated, demand-reduction-led approaches to energy and transport, with support from the Green Investment Bank and from EU structural funding (see further in Section 6).

- Encourage public/private collaboration on the model of Cambridge Retrofit, which is combining academia and the public and private sectors to spend £1 billion over thirty years to retrofit every building.

Improving resource efficiency

- Task the Natural Capital Committee with identifying the key resources being used unsustainably and establish a duty on the Committee to recommend legally binding targets for reducing their net consumption, along the lines of the Climate Change Act; as a first step, commission a ‘Stern Report’ for reducing the UK’s consumption of natural resources.
- Facilitate industrial symbiosis (the process by which industries collaborate to increase resource efficiencies and minimise wastes) by identifying where one industry’s by-product materials or unused resources can be used as an input for another industry.
- Regulate to ensure that only non-recyclable waste is incinerated; review waste definitions and product specification through the Waste Resource and Action Programme (WRAP) and the Environment Agency, with the aim of minimising waste; introduce binding packaging reduction targets and better enforcement of the excess packaging regulations.
- Argue for the faster development of EU sustainable design and production standards, with the aim of developing systems that reuse materials in continuous closed cycles; require specified products to be sold with parts and labour guarantees for at least five years to ensure people benefit from products which are made to last.
- Maintain the landfill tax and implement annual increases in the aggregates tax; commission the Natural Capital Committee to investigate the potential for other resource taxes, variable waste charging for households, and deposit-refund schemes.
- Use public procurement policy to grow the market for resource-efficient, waste-minimising and reusable products, and encourage a product-to-service shift where appropriate.

(See also our proposals for reducing the waste of energy in Section 3.)

Transforming energy generation

- Increase the role of low-carbon energy sources, so that by 2050 all the UK's electricity demand is met by sustainable energy (renewables or gas-fired plants with carbon capture and storage (CCS)) plus residual nuclear (if any).
- To help ensure that the UK follows this path and ensure continued investment in renewables, set a target of 50 per cent of electricity generation from renewable sources by 2030; and put in place a legally binding target for the decarbonisation of the electricity sector to a level of 50g CO₂/kWh by 2030, consistent with advice from the Committee on Climate Change.
- Develop a more diverse and competitive generation and supply market, with a greater role for smaller, independent and community renewable generators and suppliers; reduce planning barriers to renewable energy developments and promote community energy schemes (see further in Sections 5 and 6); reform grid access and charging regimes to enable renewable and low-carbon generation to connect to the grid more rapidly and at lower cost.
- Change the remit of Ofgem so as to embrace meeting Climate Change Act targets, enabling new innovation in technologies and new business models to help deliver renewable energy supply and energy efficiency, delivering wider ownership and investment in energy investments, and ending fuel poverty.
- Require all energy projects above 5MW to publish a supply chain plan, and encourage local authorities, Local Enterprise Partnerships and City Deals to work with investors and local businesses to realise the new opportunities opening up from expanding industries.
- Build more European electricity interconnection capacity as a reliable, cost-effective and clean solution to balancing renewables, and allow interconnected capacity to bid into the capacity market; coordinated international development of offshore wind and marine renewables in the North Sea would provide a cost-effective supply of secure sustainable energy of strategic importance to the UK and its northern European neighbours.
- Give preference to the use of biomass for heating rather than electricity generation, and for local and small-scale uses; provide financial support and regulatory reform to encourage the wider use of biogas, particularly from anaerobic digestion and especially where it is injected into the gas network.

- Decarbonise heat supply by requiring any new fossil-fuelled power stations to be connected to a guaranteed use for their waste heat (i.e. combined heat and power); enable local authorities to zone areas where district heating should provide the heating for existing buildings after a set date.
- End the use of all coal in electricity generation by 2030 because of its high carbon emissions and impact on local air quality, and require any new gas-fired stations to be fitted with CCS equipment; encourage the development of CCS technology centres or hubs in strategic regions of the UK and provide funding to develop and underwrite an industry model to incentivise commercial deployment of CCS, including, if necessary, further demonstration projects.
- Limit shale gas exploration until it has been shown that environmental regulations are adequate and are strictly enforced and methane emissions are properly monitored and accounted for; require local communities to be fully consulted over extraction, given community benefits, and compensated for any damage to the local landscape; and use at least half of the total tax take from shale gas exploration and production to fund enforcement, low-carbon innovation and energy efficiency.
- Allow existing nuclear power stations to run to the end of their operating lives, and permit the construction of new nuclear stations only without public subsidy.

(See also our proposals for energy efficiency in Section 3 and for community energy in Section 6.)

Making transport low-carbon

- Electrify all suburban and major rail routes by 2025, promote a new generation of light rail and ultra-light rail schemes in towns and cities, and proceed with HS2, as the first stage in a high-speed rail network to Scotland, helping to reduce flying within the UK; this long-term programme of investment in rail and light rail would support the railway supply industry and encourage more suppliers to site in the UK.
- Support ambitious EU emissions targets for cars, of around 70g CO₂/km, to take effect by 2025, and tighter EU emissions targets for vans.
- Continue to encourage the development of the market for electric vehicles, giving priority to light goods vehicles, taxis and buses, through purchase subsidies, vehicle tax reform (replacing annual vehicle excise duty for all new vehicles with an upfront first registration fee equal on average to fifteen times the current duty), and

local traffic scheme incentives, and by supporting research and development of improved battery technologies and standardised charging facilities.

- Set a target of 2040 for the date after which only ultra-low carbon vehicles will be permitted on UK roads for non-freight purposes.
- Investigate how the impending introduction of autonomous cars can best be used to cut emissions as well as accidents.
- Replace air passenger duty with a per-plane duty, charged in proportion to the carbon emissions created by that journey; make effective use of existing airport capacity and oppose any plans for additional runways at Heathrow, Gatwick or Stansted or for a Thames Estuary airport.
- Promote international action to reduce shipping emissions.

(See also our proposals for local sustainable transport in Section 5.)

3 Protecting consumers, empowering citizens

Summary:

- Aim to reduce total UK energy demand by 50 per cent by 2030, including retrofitting 1 million homes every year, transform the Green Deal into an effective national programme to raise the energy efficiency standards of all Britain's households, eradicate fuel poverty, and provide funding by recycling revenue collected from the Carbon Price Floor and the EU Emissions Trading Scheme and by reforming winter fuel payments.
- Support energy-efficiency investments in the commercial, services and public sectors and require energy-intensive industries to adopt low-carbon and energy-efficiency measures in exchange for compensation for energy taxes.
- Argue for new EU standards for products, appliances and vehicles, develop a comprehensive set of benchmark lifetime performance standards, require retailers to offer a new 'green deal' for replacing consumer goods, and use public procurement to promote healthy and sustainable eating in public buildings.
- Extend the 'polluter pays' principle to cover a broader range of environmental costs, extend the role of the Food Standards Agency to the active promotion of good health and sustainability, and consult on ways to extend freedom of information provisions to the private sector.
- Require local authorities to devise programmes to achieve key sustainability outcomes, encourage them to use citizens' juries in decision-making, and devolve responsibility for more government spending through 'total place' budgeting.
- Include health costs and benefits as an explicit part of deciding all government spending, promote outdoor activities and better health through greater access to green and open spaces.

Liberal Democrats have always aimed to challenge entrenched vested interests, disperse power and foster diversity. Through constitutional and political reforms, we have long tried to break up centralised political power. Today, however, it is the power of big business that is growing. Our approach is therefore to use the power of government to get a better deal for ordinary people – to protect consumers in the marketplace and to empower citizens in their communities. Over the longer term, the transformation of the economy and society to sustainable consumption and production cannot succeed

without the involvement of citizens and households; school education has a critical role to play too.

Dealing with energy costs is our most urgent priority, as rising energy prices now pose one of the most serious threats to well-being; energy prices are a much bigger slice of household income for those on low wages or low pensions, exacerbated by the fact that many in these groups live in the worst insulated homes. Britain has some of the least energy-efficient buildings in Europe; over half are not properly insulated, which wastes households money, causes fuel poverty and is the single most important source of greenhouse gas emissions. Yet in this challenge lies a huge opportunity: reducing energy use through greater efficiency can cut energy bills for households and businesses, generate jobs and boost the economy. The Green Deal brought in by Liberal Democrat ministers is a good start but will need significant further development to achieve its full potential.

(See also our proposals for energy market liberalisation in Section 2, decentralisation of power in Section 6, and for corporate regulation in Section 7).

Cutting energy costs

- Set a target of reducing total UK energy demand by 50 per cent by 2030, from buildings, industry and transport, including retrofitting 1 million homes every year, and the provision of free household insulation to all those in fuel poverty and those most at risk, such as elderly people.
- Transform the Green Deal into an effective national programme to raise the energy efficiency standards of all Britain's households to the EnerPHit standard by 2050; this requires:
 - The provision of interest-free loans through the Green Investment Bank.
 - Hands-on impartial expert advice by a trusted provider (which probably excludes most existing energy suppliers).
 - Additional support for those in hard-to-treat homes (e.g. with solid wall insulation).
 - As a condition of permission for any extension or alteration of buildings, the requirement that consequential improvements be made to enable the existing property to meet a proportionate level of energy efficiency standards.
 - Council tax and stamp duty discounts for home owners and buyers making their homes significantly more energy-efficient.
 - Steadily raising over time the minimum Energy Performance Certificate rating required if properties are to be rented, and strictly enforcing these standards.

- Aim to eradicate fuel poverty (as defined by the Hills review) by providing free insulation for all low-income households living in poorly insulated properties; this includes:
 - Setting up Warm Home Zones in areas of high fuel poverty, where providers, in partnership with local authorities, install energy efficiency measures street by street; everyone in the Zones to be offered measures to reach at least an Energy Performance Certificate C rating.
 - Increasing significantly the Warm Home Discount before homes are upgraded.
- Provide funding for these commitments by recycling revenue collected from the Carbon Price Floor and the EU Emissions Trading Scheme and by phasing out the winter fuel payment (which is wholly untargeted either on those in fuel poverty or those in poorly insulated homes), starting with the best-off pensioners.
- Construct a million and a half new homes, over the five years of the next Parliament, to ‘nearly zero energy’ standards, minimising energy bills for the occupants; strictly enforce this standard; and introduce ‘allowable solutions’ to compensate for the CO₂ emissions reductions that are difficult to achieve through normal design and construction (see further in Section 5).
- Support energy-efficiency investments in the commercial, services and public sectors (which account for 17 per cent of all UK carbon emissions) through interest-free loans for energy efficiency finance for small and medium-sized enterprises; and through introducing differentials in business rates and council tax rates to reward efficient and low-carbon buildings and penalise less energy-efficient and high-carbon buildings.
- Require energy-intensive industries to adopt low-carbon production methods and invest in energy-efficiency measures in exchange for compensation for the indirect and direct costs of energy taxes; and extend this framework beyond 2015.

Moving towards sustainable consumption

- Argue for new EU standards for products, appliances and vehicles so as to reduce the lifetime costs of energy, material and water use, and to make reuse and recycling easier.
- Develop a comprehensive set of benchmark lifetime performance standards, led by consumer groups such as *Which?*, enabling consumers to make better choices and stimulating innovation by manufacturers.

- Require retailers to offer a new 'green deal' for replacing consumer goods, allowing the costs of scrapping old appliances to be recovered from lifetime savings, with leasing as well as purchase options.
- Levy a small surcharge on conventional advertising (as the Advertising Standards Authority does already to pay for its compliance service) to catalyse a shift to sustainable consumption habits, using crowd-sourcing for new ideas and roll-out through social media platforms.
- Include the study of environmental sustainability and sustainable consumption in the National Curriculum to spread awareness of the impacts of consumer choices.
- Use public procurement to promote healthy and sustainable eating in public buildings such as schools and hospitals (see Section 4).

Protecting consumers

- Extend the 'polluter pays' principle, currently applicable to some environmental discharges and waste streams, gradually to cover a broader range of environmental costs, notably where long-term negative health impacts such as poor air quality or excessive noise nuisance cause significantly increased public spending on health care.
- Extend the role of the Food Standards Agency from health protection to the active promotion of good health and sustainability, with an independent advisory board to consider extending on-pack labels for health impacts, controversial ingredients and countries or localities of origin.
- Consult on ways to extend freedom of information provisions both to for-profit companies providing services to public authorities and selectively to large manufacturers and service providers, to create a public right to know and so foster greater openness, transparency and accountability.

Extending citizens' rights

- Require local authorities to devise policies and programmes that will achieve key sustainability-related outcomes, linked to quality of life and well-being indicators, such as health improvement, increase in gross value-added per head and biodiversity enhancement.

- Encourage local authorities to overcome the risks of NIMBYism on important but controversial decisions by using empowering and deliberative mechanisms such as citizens' juries in the decision-making process.
- Devolve responsibility for more government spending through 'total place' budgeting where all flows of public money in an area are mapped and made accountable (see Section 6).

Protecting and promoting good health

- Include health costs and benefits as an explicit part of deciding all government spending – measured by the estimated change in long-term public spending on health care – by extending the current Impact Assessment requirements and including National Audit Office scrutiny of the outcomes.
- Develop a strategy to promote outdoor activities, facilitating public access and public participation to improve health and fitness, tackling obesity and reconnecting children to nature.
- Promote better health through greater access to green and open spaces, requiring that any local planning applications which reduce open spaces must estimate the costs of likely impacts on obesity, mortality and mental illness.

4 Better places to live: the natural environment

Summary:

- Empower the Natural Capital Committee to make recommendations on securing natural capital, pass a Nature Act with statutory targets for biodiversity, clean air and clean water, ensure that laws against environmental crimes are properly enforced, place the management of public forests on a sustainable footing and triple the current rate of tree planting.
- Ensure flood defence spending is kept in line with that needed to protect against climate change impacts, introduce high standards for flood resilience for buildings, reinstate programmes to help farmers and other land users adapt to climate change impacts, introduce long-term planning for droughts and floods, update construction and planning standards to future-proof buildings against higher summer temperatures and commission an independent report on the likely impacts on the UK of a 3–4 degree global average temperature rise.
- Extend water metering to at least 80 per cent of households by 2020, reform water abstraction licensing, restore English rivers that are not in good ecological health and designate an ecologically coherent network of marine protected areas.
- Press for further reform of the Common Agricultural Policy, introduce a National Food Strategy to promote healthy, sustainable and affordable food, use public procurement policy to increase the use of locally and sustainably sourced, healthy and seasonal food, develop a national vision and timetable for economically, socially and environmentally sustainable UK fishing businesses, communities and fish stocks, and fully enforce the EU regulation on illegal fishing.

Politics is about more than just economics, prices and costs, growth and jobs. It is also about creating the conditions for a good life, for better places in which to live. Critical to that aim is the protection and enhancement of the natural environment, of the countryside, of wildlife and of city parks and gardens and green spaces of every kind. This objective is critical to personal health and well-being, quality of life and a sense of personal and community identity. It is worth defending even at the cost of some economic 'growth' (as conventionally defined).

And there is in any case a strong economic case for environmental protection. The natural environment feeds us, provides vital services like clean air and water, or pollination,

and helps to manage floods and water run-off. The total value of such natural resources to the UK economy was an estimated £35 billion in 2011. We should therefore champion policies which enhance biodiversity and protect the natural environment, as well as supporting local economic and community activity that enhances water, landscape and heritage management. All of these aims are currently threatened by the intensification of farming and by climate change, and adapting successfully to the impacts of climate change – including ever-more serious flooding – is an urgent priority.

Protecting the natural environment

- Empower the Natural Capital Committee to make recommendations on securing natural capital to halt the loss of habitats, species and biodiversity, and pass a Nature Act with statutory targets for biodiversity, clean air and clean water.
- Require each local authority to adopt a Local Ecological Plan, acting not only as a mechanism for guiding the location of proposed development, but also as the driver for the local collaborative activity needed for the restoration and protection of the environment.
- Ensure that laws against environmental crimes, including water pollution and wildlife crime, are properly enforced and the penalties truly reflect the damage done and the cost of clean-up and restoration; commit to long-term funding for the National Wildlife Crime Unit.
- Legislate to place the management of public forests on a sustainable footing, in line with the recommendations of the Independent Panel on Forestry, and triple the current rate of tree planting, on both private and public land, to reach a target of an additional 1 million ha by 2050.
- Extend the protection offered by the designation of Sites of Special Scientific Interest to some natural habitats that cannot be replaced, including the small remaining areas of ancient woodland and upland moorland.
- Encourage the reintroduction of species that used to be native to the UK but that have been lost due to persecution or habitat degradation, such as beavers.
- Provide greater resources, financial, technical and human, to protect the 90 per cent of British biodiversity which is found in the UK Overseas Territories; declare 1 million square kilometres of highly protected marine reserves in Ascension Island and the South Sandwich Islands (both territories without permanent populations), to act as mega-nurseries for fish stocks, with global benefits.

Adapting to climate change

- Ensure flood defence spending is kept in line with that needed to protect against climate change impacts, as the Committee on Climate Change has recommended; introduce high standards for flood resilience for buildings in flood risk areas and enforce these for new build and major renovations.
- Reinstate programmes to help farmers and other land users adapt to climate change impacts (which can also often contribute to climate mitigation) – including protecting soil and forest carbon sinks, encouraging planting in uplands, and restoring flood plains, with adequate compensation for landowners to put into place ‘soft’ prevention measures at source rather than relying on ‘hard’ flood defences downstream.
- Introduce long-term planning for droughts and floods, building natural resilience to extreme weather, rather than waiting to clean up the damage.
- Update construction and planning standards to future-proof housing and commercial buildings against higher summer temperatures caused by climate change, protecting people from heat-related deaths and reducing the need for air conditioning.
- Commission an independent report on the likely impacts on the UK’s landscapes, natural resources and infrastructure of a 3–4 degree global average temperature rise, helping to increase understanding of and preparation for the impacts of climate change.

Using water sustainably, protecting rivers and coastlines

- Deliver fair, sustainable and affordable water charging which would see at least 80 per cent of households on a meter by 2020, with tariffs to support households on low incomes and to encourage efficient water use; this includes legislating to allow water companies to move to compulsory metering if this is the most beneficial option for customers and the environment.
- Legislate for the comprehensive reform of water abstraction licensing, so that the regime is placed on a sustainable footing, with all unsustainable licences revoked.
- Restore the three-quarters of English rivers that are not in good ecological health and protect unique and iconic chalk streams.

- Designate an ecologically coherent network of marine protected areas in English and non-devolved waters, and ensuring sites are protected through appropriate management by 2020, while working with coastal communities to support sustainable economic activity.

Towards sustainable agriculture and food

- Press for further reform of the Common Agricultural Policy, including linking farm subsidies to reducing greenhouse gas emissions, improving land management practice for natural carbon sequestration, and providing conservation services, access to the countryside, wildlife-friendly farming, and flood control. This will mean delivering better environmental outcomes and maintaining support for small sustainable farmers, particularly those in upland and less favoured areas.
- Introduce a National Food Strategy to guide British farmers to produce and consumers to eat healthy, sustainable and affordable food.
- Use public procurement policy to increase the use of locally and sustainably sourced, healthy and seasonal food in public institutions such as schools and hospitals.
- Fully implement the recent reforms of the Common Fisheries Policy and, alongside industry and stakeholders, develop a national vision and timetable for economically, socially and environmentally sustainable UK fishing businesses, communities and fish stocks.
- Fully implement and enforce the EU regulation on illegal, unregulated and unreported fishing, blocking entry of illegally caught fish into the UK and EU markets.

5 Better places to live: sustainable communities

Summary:

- Construct a million and a half new homes, to verified ‘nearly zero energy’ standards, encourage the building of new sustainable settlements in order to protect existing communities and ensure much higher standards of house design and performance.
- Reform planning law and guidance to introduce the concept of landscape-scale planning, protect and enhance urban green spaces, require local authorities to produce Local Ecological Plans, and create a uniform, predictable and effective system of biodiversity offsetting.
- Develop means of standardised electronic contactless ticketing to encourage the use of public transport, develop the Local Sustainable Transport Fund, devolve responsibility for local rail services and trunk roads to local authorities, encourage alternatives to personal car ownership, and pass an Active Travel Act to promote cycling and walking.

Everyone has a right to a decent home – but Britain currently suffers from a shortage of affordable high-quality housing, with negative effects on the economy, communities and families. We therefore aim to facilitate the provision of 1.5 million new homes during the course of the next Parliament. This rapid building programme must deliver not just decent homes, but communities with the facilities that people need – particularly good public transport, and encouragement for cycling and walking – and this must not be at the expense of existing communities, countryside or green belt.

While brownfield sites do offer some capacity, this is insufficient and is often not in the areas of greatest need. Meeting the need largely through densification and incremental additions to existing towns and villages too often leads to poorly planned developments, urban or suburban sprawl, with inadequate infrastructure and the loss of valuable open spaces such as sports fields and allotments. Green spaces in towns and cities serve a crucial purpose, not just in providing an attractive environment but in enhancing the health and well-being of local people – and, as climate change takes effect, having a crucial role in moderating summer temperatures. All of these aims require radical reform of planning policies.

Building more and better houses

- Construct a million and a half new homes, over the five years of the next Parliament, to verified 'nearly zero energy' standards, minimising energy bills for the occupants, and potentially creating and sustaining directly more than 300,000 jobs across the whole country, with many more in the wider economy.
- Release finance for this house-building programme by revising public borrowing accounting rules to exclude local authority borrowing against the Housing Revenue Account from government borrowing figures (the approach taken almost everywhere else in Europe), extending the scope of the Bank of England's quantitative easing programme to include the purchase of social housing-issued bonds and giving housing associations the power to offer long-term, low-interest rate mortgages on the properties they sell.
- Encourage the building of new sustainable settlements – ranging from one or two major new cities to smaller communities of 10,000 or so homes – in order to protect existing communities and ensure much higher standards of house design and performance, by:
 - Requiring local authorities, where the need is sufficient, to establish sub-regional planning partnerships large enough to facilitate the planning of these new settlements.
 - Using the increase in land values resulting from planning consents to provide the resources to build high-quality, well-designed homes complete with the necessary infrastructure and facilities – including adequate public transport and cycle routes – to create communities where people want to live, learning from the proven benefits of garden cities.
 - Commissioning a national study to identify the most sustainable sites for one or more major new cities, and using the New Towns Act to designate these and set up development corporations to implement their development; the relevant local authorities to be consulted on details such as the boundaries for development and design and to be given places on the development corporation board.
- Improve the quality and speed of development by increasing competitiveness in the house-building industry by requiring development options taken on land to be recorded by the Land Registry, so ensuring transparency; using community land auctions where appropriate to provide development land; and taking measures to ensure that small builders and self-builders are provided with a significant proportion – at least 25 per cent – of development land.

Planning for sustainability

- Radically reform planning law and guidance to introduce the concept of landscape-scale planning; local authorities will be given the responsibility for working together to agree Landscape Policies to protect and enhance natural geographical areas such as river basins, moors, flood plains or islands.
- Protect and enhance urban green spaces and encourage their use, recognising their role in health, welfare and climate change mitigation by:
 - Requiring each local authority to produce a Local Ecological Plan alongside their local plan, including standards for access to quality green space and for sustainable urban drainage.
 - Where necessary, require local authorities to enhance open spaces – including sports grounds, children’s play areas, parks and allotments – but especially the often unused and bleak areas that blight the surroundings of many residential estates.
 - Encouraging greater participation by local residents in the management of local open spaces.
 - Protecting and enhancing the urban tree cover that is so valuable in combating the heat island effect.
 - Requiring all new developments above five properties to include communal green space.
- Create a uniform, predictable and effective system of biodiversity offsetting for developments, so that impacts of growth on the natural environment result in a net gain for the natural environment elsewhere, with a level playing field for all businesses and confirming that some habitats and landscapes are irreplaceable.
- Ensure that 50 per cent of the England Coast Path is in place by 2020.

Promoting sustainable transport

- Develop means of standardised electronic contactless ticketing to encourage the use of public transport by enabling both through-ticketing using different modes and fare structures that reduce the costs of multi-mode journeys, with the long-term aim of enabling a single smartcard to give easy access to public transport throughout the UK; extend open data requirements to all transport operations and agencies so as to enable door-to-door information and ticketing apps and to manage performance transparently.

- Develop the Local Sustainable Transport Fund to promote investment in local transport projects that reduce emissions and promote local growth, and new solutions to strengthen local bus infrastructure and increase bus use.
- Devolve responsibility for local rail services and trunk roads to local authorities or groupings of them, and allow them to integrate these with other local public transport; establish a programme of new or reopened rail lines and stations to connect more communities that are currently off the rail network, and fill in missing links where appropriate
- Prepare for the introduction of a UK-wide revenue-neutral system of road pricing and support local authorities introducing road pricing in congested areas.
- Encourage alternatives to personal car ownership by requiring all substantial residential developments to establish car clubs, guaranteed for at least five years, and providing financial support to local authorities establishing their own car clubs.
- Pass an Active Travel Act, giving duties to local authorities to promote cycling and walking and develop networks of safe and attractive priority routes for pedestrians and cyclists, including:
 - Implementing the ‘Get Britain Cycling’ proposals to support cycling, including a cross-departmental Cycling Action Plan, better funding for cycling, a statutory requirement that cyclists’ needs are considered at an early stage of all new development schemes, cycle-friendly improvements across existing roads, improved HGV safety standards and widely available cycling training; and replacing a portion of car parking spaces with cycle parking spaces.
 - Implementing the recommendations from Living Streets for more 20 mph zones in towns, better pedestrian crossing times and improved pavement infrastructure to promote walking, as well as helping people in wheelchairs.
- Introduce a national distance-based lorry charging scheme, as in other countries, with revenue used to green and improve standards in road haulage and to shift freight from road to rail and water.

(See also our proposals for promoting low-carbon transport in Section 2.)

6 Local power and responsibility

Summary:

- Encourage the spread of City Deals, reform LEPs, expand the Regional Growth Fund and the Local Sustainable Transport Fund, decentralise central government infrastructure and investment and introduce a statutory duty on local authorities to develop and implement low-carbon and natural capital plans.
- Encourage local authorities to set up Small Business Zones, provide start-up finance for local institutions and community organisations, require the big banks to provide funding for a new local lending and deposit infrastructure and create a better infrastructure for new local banks.
- Direct a proportion of local authority pension funds into local energy and sustainable food investment, use public procurement policy to maximise local economic impact and take planning decisions based on which developments maximise the way local earnings stay circulating locally.
- Set a target of more than half of households and businesses generating renewable energy, give local authorities responsibility for energy efficiency programmes and encourage them to set up their own electricity generation capacity, give communities the chance to invest in, and profit from, local renewable energy projects, and help local people share in the bulk buying of energy.

The fact that UK is one of the most centralised states in Europe helps to explain the growing disconnect between the UK's government and its citizens. The Localism Act gave important powers to communities, and City Deals have allowed a few cities to draw down the powers they needed to be ambitious and entrepreneurial – but both have worked, where they have worked, *despite* the continuing power of the centre. We need a major decentralisation of power because administration from the centre is now so complex and interconnected that progressive reform has become almost impossible. Local organisation can be overseen democratically by those who are most affected and have most knowledge of what works, and local economies can be more self-sufficient and use energy and resources more efficiently and sustainably.

The centralised machinery of government actively frustrates local energy, and the existing institutions – finance institutions, energy vehicles and certainly banks – are not designed to support projects by small, community organisations. To shift this problem, we need devolved powers and we need to develop effective and trustworthy institutions that can make things happen for local people, when they need it. We also need to

develop the progress made in community budgeting, so that budgets come together at local level to encourage local innovation and responsiveness, not least to the challenge of climate change.

Decentralising power and responsibility

- Encourage the spread of City Deals, through which urban local authorities take greater responsibility for decisions that affect their area; many have already shown considerable innovation in low-carbon and environmentally sustainable developments.
- Reform Local Enterprise Partnerships (LEPs) to ensure they are democratically accountable, and encourage them to work together and, where appropriate, with regional bodies.
- Expand the Regional Growth Fund and the Local Sustainable Transport Fund, and place a duty to achieve (and to report on) environmentally sustainable development and community well-being on all bodies receiving support from them.
- Decentralise as much central government infrastructure and investment as possible to combined authorities in metropolitan areas, with similar powers to those in London, and require them to develop integrated, demand-reduction-led approaches to energy and transport, with support from the Green Investment Bank and from EU structural funding.
- Introduce a statutory duty for every local authority to develop and implement low-carbon and natural capital plans, in line with national targets, and provide funding for drawing up and implementing these plans.

Strengthening local institutions

- Encourage local authorities to set up Small Business Zones to provide a space where new businesses, co-ops and social enterprises are encouraged and where local spending can kick-start a more diverse and robust local economy that will also boost local employment, reinforced by partnerships between public institutions such as universities and hospitals.
- Provide start-up finance for local institutions and community organisations – particularly energy supply mutuals – that can build local know-how and use local people to achieve their full potential (see further below).

- Require the big banks to provide funding for a new local lending and deposit infrastructure, including community development finance institutions and community banks, to support sustainable local business where they are unable to do so (as revealed in the new geographical lending data).
- Create a better infrastructure for new local banks, including a legal structure for co-op banks and a new stakeholder banking licence, which is easier to issue, and has conditions attached – a regional licence, a social purpose and membership of one of the stakeholder banking shared risk networks.

Using local spending better

- Direct a proportion of local authority pension funds into local energy and local sustainable food investment, either via a new bank set up for the purpose (as Cambridgeshire has done) or by starting ‘collective agencies’ along the lines of those used in Scandinavia for local authorities to raise finance on the bond markets.
- Use public procurement policy to purchase from a diversity of sources, to maximise local economic impact in struggling places, and minimise environmental impact, using local labour, goods and services to fulfil public sector contracts, in addition to stimulating local economies, and the sustainable local sourcing of materials.
- Take planning decisions based on which developments maximise the way local earnings stay circulating locally; that means creating jobs with living wages, encouraging local enterprises, and giving them a level playing field against big retailers which pay low wages and suck money out of the local economy.
- Develop a real high-street-first policy which makes car-based out-of-town developments much less common – and make sure there is a level playing field for local retailers compared to the chains and big online retailers, both in terms of taxation and of regulations such as take-back and end-of-life disposal requirements.

Promoting community energy

- Set a target of more than half of households and businesses sharing in the renewable energy revolution, either through installations in their own home or business, or through sharing in community investment; raise the level of feed-in tariff to support projects up to 20MW, so that communities, small businesses, schools, hospitals and farmers can invest in larger scale projects, and ensure the current feed-in

tariff bands support the deployment of community and not just domestic-scale electricity.

- Give local authorities responsibility, and funding, for rolling out energy efficiency programmes, and encourage them to set up their own electricity generation capacity.
- Build on Ed Davey's new community energy strategy to give communities the chance to invest in, and profit from, local renewable energy projects, including establishing a reliable incentive for renewably generated heat, and requiring commercial developers to set up a mechanism for communities to own a portion of their schemes; and require grid connection within three months for community energy projects.
- Help local people share in the bulk buying of energy, and similar new developments in the 'sharing economy', and help public buildings, such as schools, universities, hospitals, local authority buildings and leisure centres, take up low-cost finance available for energy-efficiency retrofitting.

7 Embedding long-termism

Summary:

- Set a long-term framework for policy, including zero-carbon Britain by 2050, and proper natural capital accounting, and require all public bodies to account for their impacts on carbon emissions and natural capital.
- Establish an independent regulatory advisory board, with the goal of promoting sustainable development, and pursue environmental tax reform.
- Create a Cabinet Committee to lead policies for sustainability, establish a single environment department, break up the Treasury, create an Office for Environmental Responsibility, and reform the Natural Capital Committee into a statutory body.
- Extend mandatory corporate reporting on social and environmental impacts to all large companies, reform stock market listing rules, require state-owned pension funds to adopt a long-term approach, and require institutional investors to integrate environmental, social and governance factors into their investment analysis.

Short-term thinking in government and industry has served the country badly, exacerbating threats to human welfare and piling up problems for future generations. Government needs to send long-term signals about the future direction of policy to reduce investment costs (by lowering risk) for the major transformation of infrastructure and technology which we propose. The current government has failed to establish this long-term certainty, despite the best efforts of Liberal Democrat ministers; the Prime Minister has provided little leadership on environmental issues, while the Chancellor has been overtly hostile to the green agenda and the Treasury has obstructed key policies to deliver a zero-carbon Britain; Defra's ability to prepare for climate change has been systematically undermined.

A new approach is needed, including retaining and reinforcing the framework for policy created by the Climate Change Act and its carbon budgets, and replicating elements of this approach for natural capital, including natural resources and biodiversity. It also requires appropriate government regulation (in place of the Conservative obsession with deregulation at all costs) and tax reform, and mechanisms to ensure that the principles of environmental sustainability and the objectives of a zero-carbon Britain and the protection and restoration of natural capital are embedded into all aspects of government policy and decision-making. Finally, it requires mechanisms to guarantee that companies and investors are fully aware of the long-term implications, environmental and social, of their decisions and actions.

Getting the policy framework right

- Set a target for a zero-carbon Britain that does not contribute at all to global warming – making the British economy carbon-neutral overall by 2050.
- Use the carbon budgets established under the 2008 Climate Change Act to set a clear pathway to a zero-carbon Britain, including more than halving UK emissions compared to 1990 levels by the mid-2020s (given lower GDP growth than anticipated, the fourth carbon budget target can and should be made more ambitious).
- Measure success by real wealth – the sum of natural, human and economic capital – rather than rely on GDP growth alone, including giving equal prominence to the well-being index as to the quarterly GDP index; deliver a Natural Capital Budget Statement each year at the same time as the Budget, to ensure that economic prudence is matched with care for the environment.
- Construct a system of natural capital accounts to increase understanding as to how and where natural capital should be maintained and augmented; and create much more detailed material flow accounts for the UK economy that will track the flow of different materials through the economy, to facilitate their retention of value and their appropriate management at the end of product lives.
- Require all government agencies, local authorities and devolved administrations to account for the impacts on carbon emissions and natural capital of their actions and explain how they will contribute to meeting the carbon budgets and natural capital targets.
- Ensure that capital expenditure by public institutions is based on the lifetime costs of projects and not simply their initial price.
- Review the forecasts, modelling and appraisal frameworks for transport and other projects to ensure they give priority to reducing carbon and improving the environment and air quality and reflect fully climate change forecasts and budgets.

Effective regulation and tax reform

- Replace the Regulatory Policy Committee, with its narrowly-focused agenda of deregulation for business, with a Dutch-style independent regulatory advisory board, with the overarching goal of promoting sustainable development, removing rules which hinder green action and improving regulations which drive low-carbon and resource-efficient innovation.

- As explained above, maintain the landfill tax and increase the aggregates tax; reform aviation tax and introduce a national distance-based lorry charging scheme; commission the Natural Capital Committee to investigate the potential for other resource taxes; and recycle revenue collected from the Carbon Price Floor and the EU Emissions Trading Scheme into making Britain's homes energy-efficient
- Reverse the Treasury's unilateral redefinition of environmental taxes, which excludes more than 90 per cent of revenue from the standard definition of green taxes.

Governing for the environment

- Produce a single, comprehensive strategy to show how every government department and agency can deliver policies for environmental sustainability; draw up agreed sets of zero-carbon and natural capital objectives across government; and create a Cabinet Committee to lead and coordinate policies for sustainability.
- Establish a single environment department to champion policies for sustainability.
- Break up the Treasury, which in practice acts as a brake on innovation and long-term thinking. Like most other developed economies, the UK should have separate finance and economics ministries; the latter, merged with the Business Department, would have a clear mandate to support the development of a sustainable, low-carbon, resource-efficient economy.
- Create an Office for Environmental Responsibility, independent of government (modelled on the Office for Budget Responsibility), with the capacity and duty to report publicly on the long-term implications of policy decisions on the environment.
- Reform the Natural Capital Committee into a statutory body (modelled on the Committee on Climate Change), charged with advising government on the sustainable use of the country's natural assets.
- Provide additional support from the National Audit Office to the Commons Environmental Audit Committee, to enhance its ability to provide external scrutiny of the government's performance on sustainability.
- Reverse the Conservatives' tendency to undermine or politicise expert bodies such as the Food Standards Agency or Natural England.

Setting high standards for corporate behaviour

- Extend mandatory corporate reporting on social and environmental impacts to all large companies, whether listed or not, in line with current EU-wide proposals; this reporting to include water use, pollution, waste and biodiversity impacts and exposure to unsustainable commodities in their supply chains, alongside the recently introduced requirement to report on greenhouse gas emissions.
- Reform stock market listing rules to require an objective assessment of the environmental impacts of realising the assets on which share valuations often depend (of particular relevance to fossil fuel companies, whose assets could often not be realised without triggering catastrophic environmental impacts); encourage pension funds and other institutional investors to review their holdings in the light of this assessment.
- Require state-owned pension funds such as those of local authorities to adopt a long-term approach in their investment decisions, as recommended by the Kay Commission, and legislate if industry-led approaches to all their findings are not fully adopted; also consult about enhancing the voting power of long-term shareholdings in corporate take-over battles.
- Require institutional investors, including asset managers, to integrate environmental, social and governance factors into their investment analysis, as part of their prudential management of client assets.
- Consult on how unused corporate patents can be released by large companies, focusing first on those with high sustainability potential, to encourage innovation, entrepreneurship and support for small firms, with the option to legislate if performance does not improve.
- Establish a non-judicial redress mechanism for victims of corporate human rights abuses from overseas where a UK-linked business is accused of violating human rights or damaging the environment, with the option that the UK courts should be able to hear cases if this mechanism does not prove effective.
- Combat corporate tax avoidance by requiring country-by-country disclosure of revenues, profits and number of employees in the annual accounts of UK-based multinational companies.

8 Cooperating globally

Summary:

- Work to secure agreement on a new global climate treaty, argue for EU target for greenhouse gas reductions of at least 50 per cent by 2030, and ensure the UK sticks to its climate and development commitments.
- Argue for an EU and global target of halting net global deforestation by 2020, reform EU policies on biofuels for transport and biomass for power, and provide greater resources for international environmental cooperation, particularly in the areas of illegal trade in timber, wildlife and fish.
- Ensure development aid, free trade and investment agreements support rather than undermine environmentally sustainable investment, argue for environmental objectives to be fully integrated into the post-2015 development framework, and establish a Global Low-Carbon Technology Project.

Liberal Democrats have always adopted an open and internationalist approach, particularly crucial when it comes to environmental policy. Pollution is no respecter of national borders, and wildlife and ecosystems are not restrained by political boundaries. Challenges such as climate change or deforestation are too massive for individual countries to be able to tackle them alone. The UK by itself would be a small player on the international scene, but in acting through the EU it magnifies and projects its influence.

An open international approach is also necessary because the UK needs to sell new green and low-carbon technologies into international markets, a process made easier by common EU or international standards (for example for energy efficiency), and to attract foreign direct investment – and skilled scientists and engineers – into new technology and infrastructure. And countries incurring the costs of investment in different ways of doing things (e.g. investing in low-carbon technology and infrastructure) need to have the confidence that others will too, otherwise their ambition will be constrained. Common environmental standards, such as the EU's Nature and Water Directives, ensure that no EU member state can undercut UK business by harming the natural world.

Constructing the international framework against climate change

- Work to secure agreement on a new global climate treaty at the 2015 UN climate conference, including commitments from all countries to reduce emissions, with

the richer countries taking the lead, supported by a well-financed Green Climate Fund to assist poorer countries to tackle and adapt to climate change.

- Argue for the EU to adopt an ambitious 2030 climate and energy package, including at least a 50 per cent greenhouse gas reduction target by 2030, mandatory member state renewables and energy efficiency targets, reform of the EU Emissions Trading System (including the cancellation of excess allowances, measures to reduce the number of allowances, and the creation of market management mechanisms), and the use of EU funds to support low-carbon investments, particularly in the poorer eastern European states.
- Ensure the UK sticks to its fourth carbon budget target for reducing its own greenhouse gas emissions, maintains its international development spending (with a growing proportion being dedicated to global public goods, including climate change mitigation and adaptation), and continues to play a leadership role within Europe and internationally on global efforts to combat climate change.
- Pursue additional actions outside the UN climate talks, including full support for the Climate and Clean Air Coalition in tackling 'short-lived climate forcers', including hydrofluorocarbons (which should be added to the Montreal Protocol), black carbon (for which aid money should be devoted to replacing polluting cookstoves and vehicles) and methane.
- Collaborate with other nations to fund research into measures to remove carbon permanently from the atmosphere, such as the use of biochar in agriculture.

Protecting forests and biodiversity

- Argue for an EU and global target of halting net global deforestation by 2020 – including providing additional resources for improved forest law enforcement and governance and sustainable agriculture, closing the loopholes in the EU Timber Regulation (which excludes illegal timber from the EU) and starting to remove crops associated with deforestation (such as palm oil, soy or beef produced unsustainably) from international trade.
- Reform EU policies on biofuels for transport and biomass for power, which are helping to drive deforestation; in particular, end all support for food-crop-based biofuels after 2020.
- Revise EU and UK development strategies to ensure they fully support the international goal of at least halving the rate of loss of all natural habitats by 2020.

- Provide greater resources – financial, technical and human – for improved international environmental cooperation, particularly in the areas of illegal trade in timber, wildlife and fish; and making poaching and wildlife trafficking ‘serious crimes’ under the terms of the UN Convention against Transnational Organised Crime.
- Argue for the creation of a marine nature reserve in the large area of Arctic Ocean in international waters (around the North Pole), promote the highest possible environmental standards for UK companies operating in the region and press for a ban on EU-flagged vessels undertaking industrial fishing activities in the previously unfished areas of the Arctic.

Promoting global sustainable development

- Scrutinise UK and EU development aid to ensure it supports rather than undermines environmentally sustainable investment; extend the UK Aid Transparency Guarantee to include transparency over the environmental impacts of aid investments.
- Argue for environmental objectives to be fully integrated into the post-2015 development framework, including through the Sustainable Development Goals.
- Include clauses on promoting green growth and trade in environmentally sustainable products in EU free trade agreements, and ensure that the Transatlantic Trade and Investment Partnership with the US (currently under negotiation) does not reduce any EU or US environmental standards.
- Review and where necessary modify EU bilateral and regional investment agreements to ensure they support rather than hinder sustainable development.
- Campaign for the establishment of a Global Low-Carbon Technology Project, collaborating across borders and sectors to mobilise resources for renewable energy and energy efficiency on a global scale, and creating preferential arrangements for trade and investment which support this aim.

Following on from *The Green Book: New Directions for Liberals in Government* comes *The Green Manifesto*, a comprehensive set of proposals for the policies the Liberal Democrats need to adopt and campaign on to retain and increase support among green-minded voters.

Written by leading parliamentarians and activists, *The Green Manifesto* sets out a new approach for the party. It requires rebuilding the economy and society on a truly sustainable basis – one that will improve people’s quality of life and enhance living standards, now and for generations to come. It requires an active state which uses regulation, taxation and direct intervention to implement a long-term strategy for the transformation of the economy and society to a sustainable footing.

The Green Book called upon Liberal Democrats to treat the environmental crisis as a core challenge of economic and social policy, rather than as a discrete problem. It was described by Matthew Spencer from Green Alliance as proposing ‘ambitious environmental policy to resolve centre-ground concerns of restoring growth and creating a stronger economy’.

Now *The Green Manifesto* puts that agenda into practical policy proposals.

Containing sections on:

- *Our approach*
- *A competitive and green economy*
- *Protecting consumers, empowering citizens*
- *Better places to live: the natural environment*
- *Better places to live: sustainable communities*
- *Local power and responsibility*
- *Embedding long-termism*
- *Cooperating globally*