

General Election 2019: Liberal Democrat manifesto science and education policies

Please note that we have summarised the party's main manifesto only. You can find the manifesto in full [here](#).

Climate and energy

Liberal Democrats:

- Amend the current HGV road user levy to take account of carbon emissions.
- Support innovation in zero emission technologies, including batteries and hydrogen fuel cells, supplementing government funding with a new "Clean Air Fund" from industry.
- Reduce the climate impact of flying by reforming the taxation of international flights to focus on those who fly the most, while reducing costs for those who take one or two international return flights per year.
- Introduce a zero carbon fuels blending requirement for domestic flights.
- Convert the rail network to ultra low emission technology (electric or hydrogen) by 2035 and provide funding for light rail and trams.
- As part of the £130 billion infrastructure projects, the party will aim to "empower all regions and nations of the UK and developing the climate-friendly infrastructure of the future."
- Introduce an emergency ten year programme to reduce energy consumption from all the UK's buildings.
- Providing free energy retrofits for low income homes.
- Build all new homes to zero carbon standards.
- Deliver a ten year emergency programme to cut greenhouse gas emissions substantially straight away, and phase out emissions from the remaining "hard-to-treat" sectors by 2045 at the latest.
- Ensure 80% of electricity is generated from renewables by 2030, cut energy bills and emissions by insulating homes, and prioritise bringing 3.5 million households out of fuel poverty by 2025.
- Ban fracking.
- Require all companies registered in the UK and listed on UK stock exchanges to set targets consistent with the Paris Agreement on climate change.
- Establish a department for climate change and natural resources.
- Establish UK and local citizens' climate assemblies to engage the public in tackling the climate emergency.
- Create a statutory duty on all local authorities to produce their own zero carbon strategy.
- Provide an additional £12 billion over five years to support these commitments, and ensure that the National Infrastructure Commission, National Grid, the energy regulator Ofgem, and the Crown Estate work together to deliver their net zero climate objective.

- Require all new homes and non domestic buildings to be built to a zero carbon standard (where as much energy is generated on-site, through renewable sources, as is used), by 2021, rising to a more ambitious “Passivhaus” standard by 2025.
- Increase minimum energy efficiency standards for privately rented properties and remove the cost cap on improvements.
- Adopt a zero carbon heat strategy.
- End support from UK Export Finance for fossil fuel related activities, and “press for higher environmental standards for export credit agencies throughout the OECD.”
- Support the Paris Agreement and lobby for all countries to commit to net zero climate goals by the 2020 UN climate conference in Glasgow.
- Set a binding, EU wide net zero target of 2050, and continuing to take part in the EU’s internal energy market, to “provide access to clean energy sources while keeping costs low.”
- Refuse to enter any trade agreements with countries that have policies counter to the Paris Agreement, “including the Mercosur-EU free trade agreement because of the Brazilian government’s actions in the Amazon.”
- Argue for an end to all fossil fuel subsidies worldwide and provide aid to developing countries to help them transition to clean sources of energy.

Environment and ecology

Liberal Democrats:

- Ensure that the environment is protected for future generations and create urgent action to tackle the climate emergency.
- Establish a general corporate duty of care for the environment and human rights.
- Guarantee an office of environmental protection that is fully independent of government.
- Increase government expenditure on climate and environmental objectives.
- Introduce legally binding targets for reducing the consumption of key natural resources and other incentives for businesses to improve resource efficiency.
- Introduce a “Nature Act” to restore the natural environment through setting legally binding near-term and long-term targets for improving water, air, soil and biodiversity, and supported by funding streams of at least £18 billion over five years.
- Invest in large scale restoration of peatlands, heathland, native woodlands, saltmarshes, wetlands and coastal waters.
- Provide greater resources for international environmental cooperation on climate change and on actions to tackle illegal and unsustainable trade in timber, wildlife, ivory, and fish.
- Significantly increase the amount of accessible green space, including protecting up to a million acres, completing the coastal path, exploring a ‘right to roam’ for waterways and creating a new designation of national nature parks.
- Give the Local Green Space designation the force of law.
- Protect and restore England’s lakes, rivers and wetlands through reform of water management and higher water efficiency standard.

- Create a new British overseas ecosystems fund for large-scale environmental restoration projects in the UK Overseas Territories and sovereign bases.
- Establish a £5 billion fund for flood prevention and climate adaptation.
- Increase the budget for the Department for the Environment, Food and Rural Affairs, ensuring that agencies such as Natural England and the Environment Agency are properly funded.
- Work within the EU to ensure that future trade agreements require high environmental and animal welfare standards.

Agriculture and fisheries

Liberal Democrats:

- Reduce “basic” agricultural support payments to the larger recipients and “redeploy the savings to support the public goods that come from effective land management.”
- Ensure that “sustainability lies at the heart of fisheries policy.”
- Improve standards of animal health and welfare in agriculture, including a ban on caged hens, and promote the responsible use of antimicrobials.
- Develop safe, effective, humane, and evidence-based ways of controlling bovine TB, including investing to produce workable vaccines.

Water and air

Liberal Democrats:

- Legislate for the right to unpolluted air, and take urgent action to reduce pollution especially from traffic.
- Pass a clean air act, based on World Health Organisation guidelines, and enforced by a new air quality agency.
- Extend ultra low emission zones to ten more towns and cities in England.
- Ensure that all private hire vehicles and new buses licensed to operate in urban areas are ultra low emission or zero emission vehicles by 2025, and invest £2 billion to support this transformation.
- Establish a Blue Belt of marine protected areas covering at least 50% of UK waters by 2030, in partnership with UK overseas territories.
- Introduce high standards for flood resilience for buildings and infrastructure in flood risk areas.
- Introduce a “National Fund for Coastal Change” to allow local authorities to efficiently manage their changing coastlines.

Waste

Liberal Democrats:

- Ban non-recyclable single-use plastics.
- Extend the forthcoming EU 'right to repair' legislation for consumer goods.
- Extend deposit return schemes for all food and drink bottles and containers.
- Establish a statutory waste recycling target of 70% in England.
- Extend separate food waste collections to at least 90% of homes by 2024.
- Initiate negotiations within the UN for a legally binding international treaty on plastics reduction.

Health and biomedicine

Liberal Democrats:

- Move the departmental lead on drugs policy to the Department of Health and Social Care and invest in more addiction services and support for drug users.

Food and drink

Liberal Democrats:

- Introduce a "National Food Strategy."
- Support producers by broadening the remit of the Groceries Code Adjudicator and supporting them with access to markets.
- Develop a strategy to tackle childhood obesity including restricting the marketing of junk food to children, and closing loopholes in the Soft Drinks Industry Levy.
- Require labelling for food products, in a readable font size, and publication of information on calorie, fat, sugar and salt content in restaurants and takeaways.
- Restrict how products high in fat, salt and sugar are marketed and advertised by multiple retailers.

Animal Research

Liberal Democrats:

- Enshrine the principle of animal sentience in UK law "to ensure that due regard is paid to animal welfare in policymaking."
- Minimise the use of animals in scientific experimentation, including by funding research into alternatives.

Research funding and higher education policy

Liberal Democrats:

- Identify and seek to solve skills gaps such as lack of advanced technicians by expanding higher vocational training like foundation degrees.

- Reinstatement grants for the poorest students.
- Establish a review of higher education finance in the next parliament.
- Increase national spending on research and development to 3% of GDP.
- Publish a roadmap to achieve 3% of GDP on research and development by the earliest date possible, via an interim target of 2.4% of GDP by no later than 2027.
- Support innovation with a goal of doubling innovation spending across the economy, increase the Strength in Places Fund and creating more 'Catapult' innovation and technology centres.
- Introduce a new two year visa for students to work after graduation and a major expansion of high quality apprenticeships.
- Establish a student mental health charter which will require all universities and colleges a good level of mental health provisions and services for students.

Schools education policy

Liberal Democrats:

- End "teaching to the test" by scrapping mandatory SATs and replacing existing government performance tables of schools with a broader set of indicators.
- Triple the Early Years Pupil Premium to £1,000, to give extra help to disadvantaged children who are at risk of falling behind from the very beginning of their education.
- Require all early years settings to have a training programme for staff, with the majority of staff working with children who are at risk of falling behind.
- In the run, each early years setting should have at least one person qualified to graduate level.
- Reverse cuts to school funding, allowing schools to employ an additional 20,000 teachers and reduce class sizes, restoring them to 2015 levels per pupil.
- Allocate additional funding to local authorities to support pupils with Special Educational Needs and disabilities.
- Introduce a "curriculum for life" in all state-funded schools.
- Establish an "independent body of education experts" who will use the most up-to-date educational evidence to oversee any future curriculum changes.
- Replace existing government performance tables with a broader set of indicators.
- Replace Ofsted with a new HM Inspector of Schools.
- Protect the availability of arts and creative subjects in the curriculum and act to remove barriers to pupils studying these subjects, including by abolishing the English Baccalaureate as a performance measure.
- Teach the "core skills" required for children including critical thinking, verbal reasoning and creativity.
- Give local authorities with responsibility for education the powers and resources to act as Strategic Education Authorities for their area, including responsibility for places planning, exclusions, administering admissions including in-year admissions, and SEND functions.
- Introduce "Young People's Premium" to help children from lower income families to remain in education and training beyond the age of 16.

- Set a requirement for schools to introduce gender-neutral uniform policies and break down perceptions of subject gender-appropriateness.

Diversity and inclusion

Liberal Democrats:

- Extend the Equality Act to all companies with more than 250 employees, requiring them to monitor and report on gender, BAME and LGBT+ employment levels and pay gaps.
- Extend the use of name-blind recruitment processes in the public sector and encourage their use in the private sector.
- Set targets for improving diversity in public appointments and require reporting against progress with explanations when targets are not met.
- Develop a free, comprehensive unconscious bias training toolkit and make the provision of unconscious bias training to all members of staff a condition of the receipt of public funds.
- Develop a government-wide plan to tackle BAME inequalities and review the funding of the Equality and Human Rights Commission to ensure that it is adequate.
- Establish a national fund for projects that work in schools to raise the aspirations of ethnic minority children and young people.