How to Pay for
The Green New Deal

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Britain can afford a rapid low carbon transition to make the nation a better place and tackle the climate emergency. Debate in the 2019 election campaign in the UK has focussed on whether spending plans proposed by political parties are affordable. This, we argue, is to fundamentally misunderstand the way that government investment works. What matters is not what government borrows to invest, but what it invests in and how.

A huge, positive programme of work is needed to prevent climate breakdown. We call such a plan the Green New Deal. This briefing answers the question of how to pay for it, and challenges the arguments raised in the 2019 election campaign debate.

A Green New Deal costing around £100 billion a year could, we think, be financed by a government using a judicious mix of new credit and existing savings. It also means we can create a safe place for our pensions and savings, which could be supported by small changes to existing tax incentives, while investing in our collective future by modernising our infrastructure to meet the challenges of climate and social crisis.

There are other things that can provide funding, too – ending the subsidies currently given to fossil fuels, cancelling investments like the £80 billion HS2 is likely to cost and instead investing it in a wider range of improvements to the rail network spread across the country.

We can afford to do everything that is needed to transform the country to meet the challenges of climate change and inequality. As the economist John Maynard Keynes explained, we can afford what we can do. The finance can be made available for a bold transformative programme, that will need to be carefully phased according to contribution to emissions reduction, and the need to train skilled workers. Our biggest challenge is to design, develop and deliver the programme. In other words, thinking about how the money is to be spent to create an economy that delivers wellbeing for all of us within critical ecological limits, is as, if not more, challenging as financing the Green New Deal.

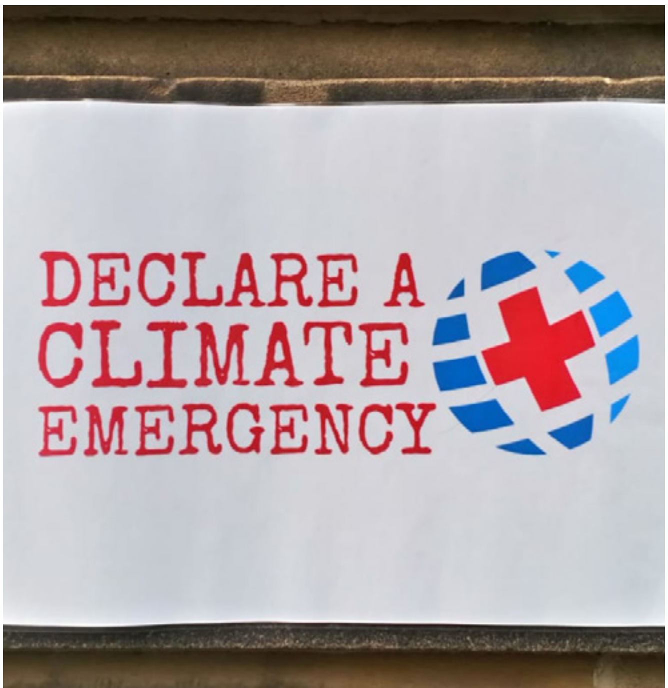
The Green New Deal Group

Introduction: A growing consensus for the Green New Deal

We have just over a decade to take the action needed to prevent irreversible damage from climate breakdown. Political parties and campaigns around the world are gathering programmes of measures described as a Green New Deal. In the US, the programme looks set to take centre stage in the next US election, while in the UK the Green Party and the Labour Party have placed a transformative Green New Deal at the heart of their manifestos. Think tanks and academics, including the Green New Deal Group, have fleshed out policy proposals that show what could be done, and how our lives can be transformed for the better.

Proposals differ in the detail, but all advance a Green New Deal would transform almost every aspect of life in the UK, revolutionising the way we produce and consume energy, warm our homes, offices and public buildings, grow the food we eat, the way we work and the way that we travel. We will need to transform industry too, re-engineering industrial processes, recycling and re-using existing materials to create a circular economy while building an economy that is rich in repair and re-use. Research and development will be needed at the cutting edge of these technologies, helping us create the economy of the future. Training, upskilling and reskilling will be needed, too, to make sure that there is a place for everyone in the Green New Deal, particularly those in today's high emission sectors, and those excluded from full participation in today's economy.

After years where we have been told that we can't spend on the things that we need – like transforming society so that it is fairer and we can live within our environmental means – because "the markets wouldn't allow it", or because "we can't afford it", many people question whether we can afford to update our inefficient systems and outdated technologies and find new ways of doing things. As this briefing shows, not only can we pay for the Green New Deal, doing so would deliver multiple benefits, transforming all our lives for the better.



1. How to pay for the Green New Deal: mobilising new credit and existing savings

The financing of the Green New Deal is intricately linked to the spending needed to deliver the transformational programme, as it is with any project. We start with calculations of what a project might cost, what benefits it could generate, and then explore ways of financing it.

Financing will only become available when Green New Deal projects are defined, developed and costed, and the relevant financing institution considers the extent, timing and potential benefits of the project. While, groups across the UK have developed plans for the transformation of the housing, energy and transport sectors over the next ten years, these projects will not operate at full capacity immediately. Financing and spending on projects would need to be adjusted and tapered as capacity increased.

There are essentially just two ways of financing investment in the Green New Deal, as there are for any government investment in infrastructure: by accessing new credit and by drawing on existing savings.

Credit is available to both the government and private sectors from the traditional banking system. Commercial banks provide credit to individuals and businesses, but can also provide credit to the government. During the Second World War when significant funding was needed, High Street banks helped pay for the war effort by lending to the government. They received valuable assets (collateral) – 'Treasury Deposit Receipts' (TDRs) – in exchange for that finance.

At the level of the whole economy, the Bank of England provides credit to the government by influencing and managing first the bond market and second, the rate of interest. It does this by purchasing government bonds at low rates of interest and placing these bonds on its balance sheet. Because of the way the bond market works, this action removes bonds from the market, and thereby raises the price, while lowering the yield (or interest) on the bond.

This helps the government finance its spending at low cost, while at the same time influencing lower rates of interest for all borrowers. A government set on implementing the Green New Deal can therefore rely on both the Bank of England and on commercial banks for the credit needed to invest in the transformation of our infrastructure and society. To put it another way, the government is able to draw on its version of credit financing for the purchasing power it needs – just as a credit card provides individuals and firms with purchasing power, even though they may not have savings in their credit card account.

Alternatively, a government committed to a Green New Deal could draw on existing savings held by individuals, but most importantly, by banks, pension funds, insurance companies and other savings institutions. For example, on average UK savers put £70 billion a year of their surplus income into accounts that enjoy tax incentives (ISAs). £100 billion a year is placed in various pension funds which also benefit from various forms of tax relief. The managers of pensions funds, insurance companies and banks, as well as ordinary savers, are keen to deposit their savings with the government because it's the safest place to invest and because the range of bonds issued by government generate future income for savers over the short, medium or long-term.

What this means is that a Green New Deal costing around £100 billion a year could be financed by a government using a judicious mix of credit and savings. It means government can finance and invest in essential green and renewable energy, transport and land use systems, while simultaneously creating a safe place for pensions and savings.

2. Tax and the Green New Deal: real returns on investment

There are a range of ways in which the taxation system can be adapted to contribute to the Green New Deal. Government could introduce changes to tax incentives for pensions and savings, directing investment into Green New Deal projects, for example. A Green New Deal government should also introduce measures that end tax avoidance by wealthy corporations and individuals, or even increase taxes for the biggest polluters – the 10 per cent of the population responsible for 50 per cent of emissions.

However, we believe firmly that to finance the Green New Deal, there is no need to increase taxes on the vast majority of the population. Tax revenues are not a source of finance for investment – they are a consequence of investment.

Micro-economists working at, for example, the Institute for Fiscal Studies, the Office for Budget Responsibility and the Treasury, persist in the myth that government spending is financed by tax revenues. This is not the case. Spending comes first, and taxes follow. As we all know from our own experience, once employed we are paid usually (but not always) at the end of the month. Income is a consequence of employment. Employment also generates income for government – in the form of tax revenues. To increase tax revenues, the best policy would be for government to expand well-paid, skilled employment.

Tax revenues can be used to finance the repayment of the government borrowing financed through the creation of bonds (credit) if that is required, but they cannot be a major source of the finance required for Green New Deal projects.

3. Mobilising savings and pensions for the Green New Deal

The latest data on UK wealth /savings comes from 2016 and according to the Office for National Statistics[1] is as follows:

	£ billion	% of total
Property Wealth (net)	4,516	35.5
Financial Wealth (net)	1,630	12.8
Physical Wealth	1,230	9.7
Private Pension Wealth	5,354	42.0
Total Wealth (including Private Pension Wealth)	12,730	100.0

Data from HM Revenue & Customs shows that ISA wealth now exceeds £600 billion.[2] This suggests that at least 72 per cent of all UK savings are in tax incentivised savings schemes. Annual contributions to ISAs amount to around £70 billion a year[3] while pensions contributions amount to more than £100 billion per annum.[4] If the Green New Deal is to cost £100 billion a year for a decade it will cost less than 10 per cent of UK national savings.

What is also important to note is how much tax reliefs for pensions and savings cost a year. Pension tax reliefs on new and existing savings, provided to encourage people to invest in their futures, cost £53.7 billion a year[5] whilst ISA tax relief costs £2.9 billion a year.[6] In other words, the UK spends more than £56 billion a year subsidising savings. That is over half the annual cost of the Green New Deal.

What we propose is that the rules for giving these very expensive tax reliefs are changed. We stress that we are not suggesting that they are abolished: instead we are proposing that the conditions attached to them are altered. What we propose is that in exchange for the tax relief the government provides for users of these savings mechanisms, all ISAs must be invested in Green Bonds and nothing else whilst at least at least one quarter of all new pension fund contributions must be invested in Green New Deal investments.

To reach this point, changes to the conditions would need to be phased in to ensure that there was capacity for the bonds to be invested well. Some work, for example the roll out of a programme of home insulation and the replacement of heating systems, could begin almost immediately, but it will take time to reach full capacity for Green New Deal projects. For energy transformation, where government policy has undermined the sector, through cuts to incentives for solar power, or blocks on onshore wind, for example, training and apprenticeships will be needed to support the roll out of Green New Deal projects.

These investments could be bonds issued by government nationally and locally, and through a new National Investment Bank, but they could also be issued by the private sector provided there was full certification that the funding was used to provide new capital creating new vprojects and work in delivering Green New Deal related projects. The result is that we think that the vast majority of the annual investment in the Green New Deal could be delivered at no additional tax cost to that expended in providing these reliefs now. Any additional costs we deal with in Section 7.

4. Green New Deal bonds: the vehicle for investment

Finance for the Green New Deal will be mobilised when government and/or a new National Investment Bank, local authorities and other government related agencies issue bonds – loan finance – to fund the Green New Deal. The safety of these bonds will be guaranteed by Britain's 30 million or so taxpayers, and by the additional tax revenues generated by the expansion of well-paid jobs created by the Green New Deal.

By financing investment through loans, governments create assets (government bonds or 'promises to pay') which can generate income (via interest payments) over time for institutions like pension funds and insurance companies and individual savers. What is then vital to understand is that while the government will effectively pay the interest on these bonds to, for example pension funds, those payments will ultimately return to taxpayers in the form of future pension payments.

The government's borrowing capacity will depend on how much income it expects to generate. If, as has been the case for the last ten years, under policies for austerity, the government consciously cuts the nation's income (with 'austerity' policies that suppress wages, lower the income of firms and lead to insecure work) the nation's debt will inevitably keep rising. However, if the government expands the nation's income by borrowing and investing in projects that create jobs – which is what the Green New Deal would do – then tax revenues will in turn help to 'balance the books' and reduce the debt. As a result, Green New Deal financing creates a virtuous cycle.
The government's capacity to borrow, to pay down its debts and 'balance the books' will improve markedly if it invests in our future and increases national income while simultaneously slashing our carbon emissions.

5. Government borrowing for investment: the need for more active co-ordination

The rate of interest rate paid by the UK government on its borrowing can be, and is, strongly influenced by the actions of the Bank of England. To better manage the economy, and support the Green New Deal, the Bank of England would need to be more involved in decisions about bond issuance in order for it to use its influence over the rate of interest for all loans, not just central bank loans, in both the private and public sectors.

Currently only those institutions (like banks and pension funds) that are eligible to borrow from the Bank of England benefit from the low rates set by the Bank. All other rates are set by the 'invisible hand' of financial markets. In other words, rates on all other loans are set by commercial banks and depend on their power to extract future income from their clients in the form of high rates. This means that in the real world, rates of interest on loans made by High Street banks for individuals, SMEs and other firms are higher than the rates set by the Bank of England. This is not fair. Worse, it leads to higher rates of extraction of both nature social and human assets – in order to finance debts. For both ecological, economic and social justice reasons, this form of usury must be ended.

The Bank of England could influence rates on all loans by carefully issuing bonds over different time periods and at different levels of riskiness, to satisfy demand from all a range of investors. Because the issue of bonds by the Bank of England has a macroeconomic impact, the Bank of England could in this way influence interest rates on all loans – short and long-term loans; safe and risky loans – and also loan rates relative to inflation. Using its powers over Treasury bond issuance, the Bank of England could help ensure interest rates stay low for all borrowers in the private and public sectors – not just those few banks and financial institutions eligible to borrow directly from the Bank of England.

To ensure that interest rates for all borrowers are kept as consistent and as low as possible the Bank of England needs a new mandate. This new mandate, would require it to deliver full employment at long term, low rates of interest – to facilitate both the delivery of the Green New Deal, and the long-term stable management of the economy.

But the Bank of England could also do more. In its transactions with banks and other financial institutions, it could insist that it will only accept green assets (collateral), not brown (fossil fuel) assets, in exchange for central bank reserves (central bank 'money'). We would need to clearly define green assets, but the European Union and other institutions are already working on a 'taxonomy' of green and brown assets. When there is greater clarity, the Bank of England will be in a position to use its powers to redesign its own collateral framework, and by doing so put pressure on banks and companies to abandon brown assets in favour of green assets.

6. The annual cost to the government of borrowing to invest

The annual cost of interest on each year's worth of borrowing at this level would be, in the region of £2 billion a year, at most. That, and any additional funding for the ongoing cost of running these projects (if required) would be paid for from the additional tax that would be generated by those working in the long-term, secure, well trained and well-paid employment that the investment in the Green New Deal would create.

7. Guaranteeing the security of Green New Deal investors

There is one final issue that we think is important to note. We know that what all savers want to know is that their funds will be secure. For many people in the UK that security for their savings is now provided by what is called the Financial Services Compensation Scheme. This government run scheme means that anyone who has up to £85,000 in a bank deposit account is guaranteed to be repaid by the government if that bank fails. Those involved know the value of a government guarantee for their savings. What we suggest is that the Green New Deal would involve a similarly guarantee. Every single Green New Deal approved bond or deposit or loan would be backed up by the government to the same limit of the Financial Services Compensation Scheme. Green New Deal savings would, then, be safe. And of course, precisely because the guarantee has been issued it is highly unlikely that it will ever be called upon.

8. Removing taxpayer-funded fossil fuel subsidies

There are other ways that government can mobilise finance for the Green New Deal, by shifting investment and subsidies from the kinds of activity we need to do less of, like burning fossil fuels, to the kinds of things we need more of, like renewable energy.

The UK currently has the highest level of taxpayer-funded subsidies for fossil fuels of any country in Europe – around £10 billion a year,[7] according to the European Commission. Tens of billions[8] planned for new roads, could instead be invested in improving public transport, and much of the £80 billion allocated to HS2[9] (around £7 billion has been spent to date, largely on preparatory work) could instead be invested in improvements to the rail network as a whole[10] improving all journeys and ease overcrowding, particularly in the North of England.

As we have shown the finance is available for the Green New Deal, what is needed is the political will to make it happen. This calls for a courageous confident government working with an active and engaged population. The times we are living in call on us to be bold, and make use of all our skills, knowledge imagination and resources. We don't need to wait. We have the solutions. We need the political will to mobilise the resources that we need nationally and locally, and to make sure that other communities around the world have them too. The Green New Deal needs all of us. Government and society, public and private, working together here and around the world. There is still time, and everything to gain, but we must act now and as we have shown how to pay for it is not an issue. The finance needed is available for the Green New Deal.

BOX: A NOTE ON GREEN QUANTITATIVE EASING

One of the responses to the economic crisis of 2007/8 was that the Bank of England had by August 2016 electronically created £435 billion to purchase government debt (assets) from banks and other institutions in an attempt to help them clean up their balance sheets, and spread their investment portfolios more widely. This process is called 'quantitative easing'. This better spread of asset portfolios did not materialise: the funds were not used to invest in new assets. Instead they were used to inflate the values of existing assets – property, stocks and shares, works of art and other assets, largely owned by the wealthy. It has been suggested that the funding in question might have been better directed towards delivering a Green New Deal. We do not think this is necessary at present although it remains an option in extreme circumstances. The funding sources mentioned in this report should be sufficient to fund a Green New Deal, even in the event of an economic downturn, when savers inevitably turn to the government to find a safe haven for their funds. However, if a government ever did feel the need to pursue a policy of quantitative easing again we would strongly recommend that it be used to guarantee the liquidity of the market for green bonds of the type we have referred to in this briefing.

Endnotes

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the green new deal group

The Green New Deal Group

Meeting since early 2007, the Green New Deal Group's membership is drawn to reflect a wide range of expertise relating to economics and politics, and the climate, nature and inequality crises. The views and recommendations of the briefing are those of the group writing in their individual capacities.

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