

The Last Parliament

Priorities for urgent action
on climate change

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Green Alliance

Green Alliance is an influential, independent organisation working to bring environmental priorities into the political mainstream. We work collaboratively with the three main parties, government, the third sector, business and others to ensure that political leaders deliver ambitious solutions to global environmental issues.

The Last Parliament Panel, an independent group of experts, was convened by Green Alliance as part of the work under its political leadership theme, which focuses on securing high level political action to tackle climate change and other environmental problems.



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The Last Parliament

The UK's new Parliament, to be elected in 2010, has a historic responsibility. It is the last Parliament that can take action to avoid runaway climate change. The science tells us that global emissions of carbon dioxide need to peak during the current decade and decline steeply thereafter. Failure to stabilise emissions within this timeframe will drastically reduce our chances of keeping warming within the crucial threshold of two degrees centigrade.

Politicians elected in 2010 will need to lead the UK toward its low carbon future, work to raise the ambition of other developed countries, and support developing countries to move to a low carbon trajectory and adapt to a changing climate.

Reducing greenhouse gases brings benefits beyond a stable climate. There are huge economic

opportunities for countries that can lead the way in low carbon technologies and approaches. Moving away from fossil fuels builds energy security. Increasing the energy efficiency of housing improves quality of life and has health benefits too. Community level energy provision and carbon cutting helps to create sociable, resilient neighbourhoods.

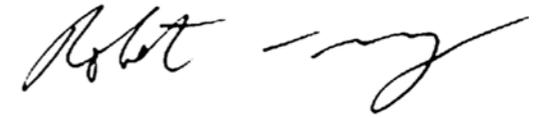
The new Parliament in 2010 is the last window of opportunity to seize these opportunities, and act to prevent serious, irreversible climate change. In other words, it is the Last Parliament.

That is why we have come together, as individuals from different backgrounds, with different experience and perspectives, to urge new Parliamentarians to seize their historic responsibility and set an ambitious agenda for action.

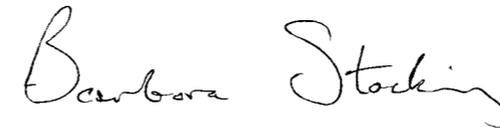
Signed by the Panel members



Jonathon Porritt (chair), founder director of Forum for the Future and former chair of the Sustainable Development Commission



Robert May, Oxford University and member of the Committee on Climate Change



Barbara Stocking, chief executive, Oxfam GB



Stephen Hale, director, Green Alliance



James Cameron, vice chairman and executive director, Climate Change Capital



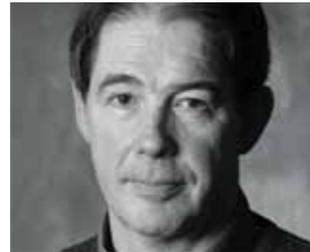
Steve Holliday, chief executive, National Grid

About the Last Parliament Panel

The Last Parliament Panel was convened by Green Alliance. All members served in a personal capacity, and this report is the product of the Panel's deliberations over a three month period. The Panel met three times between December 2009 and February 2010.

This report offers the new Parliament a clear set of priorities, and shows where progress is needed. It does not attempt to provide a comprehensive blueprint of policies to tackle climate change.

A short film of the Panel's deliberations, presented by Sir Trevor McDonald, accompanies the report and can be downloaded from www.green-alliance.org.uk/lastparliament



Jonathon Porritt

Jonathon Porritt, founder director of Forum for the Future, is an eminent writer, broadcaster and commentator on sustainable development. He stood down as chairman of the UK Sustainable Development Commission in July 2009 after nine years. He is co-director of The Prince of Wales's Business and Environment Programme and a non-executive director of Wessex Water and of Willmott Dixon Holdings. He is a trustee of the Ashden Awards for Sustainable Energy and was formerly director of Friends of the Earth and co-chair of the Green Party.



Barbara Stocking

Barbara Stocking joined Oxfam GB as chief executive in May 2001. Since January 2008 Barbara has been chair of the Steering Committee for Humanitarian Response (SCHR). She is also a member of the UN Inter Agency Standing Committee for Humanitarian Action (IASC), and of the Food and Agriculture Organisation (FAO) High Level External Committee on Millennium Development Goals. Barbara was previously a member of the top management team of the National Health Service.



James Cameron

James Cameron is Climate Change Capital's vice chairman responsible for strategic and sector development and representing the firm at the highest levels of business and government. Prior to CCC he was counsel to Baker & McKenzie and was the founder and head of their Climate Change Practice. James has spent much of his legal career working on climate change matters, including negotiating the UNFCCC and Kyoto Protocol as an adviser to the Alliance of Small Island States. He has held academic positions at Cambridge, London, Bruges and Sydney and is affiliated with the Yale Centre for Environmental Law and Policy.



Stephen Hale

Stephen Hale has been the director of Green Alliance since June 2006. Prior to joining Green Alliance he was a special adviser at the Department of Environment, Food and Rural Affairs from 2002-06, focusing on climate change. He worked in the private sector as an adviser on environmental and social issues from 1997 – 2002 and is a trustee of Christian Aid.



Steve Holliday

Steve Holliday is chief executive of National Grid plc and has also been a non-executive director of Marks & Spencer plc since 2004. Steve is also currently chair of the Talent and Skills Leadership within Business in the Community. Prior to joining National Grid he was on the Board of British Borneo Oil and Gas. Steve spent much of his early career with Exxon, where he held senior roles in the refining, shipping, logistics and international gas parts of the business.



Robert May

Lord (Robert) May holds a professorship jointly at Oxford University and Imperial College, London and is a fellow of Merton College, Oxford. He was until recently president of The Royal Society (2000-05), and before that chief scientific adviser to the UK Government and head of the UK Office of Science and Technology (1995-2000).

Priorities for the Last Parliament

The new Parliament will have up to five years to establish the UK as a climate leader, and to reap the economic, social and security benefits that this will bring.

Parliament can be proud of its track record. The Climate Change Act is world-leading legislation, committing the country to binding carbon budgets. The Committee on Climate Change will hold the government to account, setting carbon budgets and advising on ways to meet them.

The challenge now is to steer the UK through the transition to a low carbon economy and society. This will bring tremendous benefits for the UK. But it is also necessary to prove the case for low carbon development to emerging economies, and to catalyse action among lagging industrialised countries, thus helping to build the necessary political conditions for a new international climate treaty to be agreed within the Parliament's lifetime.

As a panel, we believe that there are five priority areas for action:

First, the new Parliament must **build support for action on climate change**. It must be absolutely clear about what the science tells us, where uncertainties remain, and the likely consequences for our society and economy. Politicians must emphasise that there are clear benefits to a low carbon future, including energy security and economic resilience.

Second, the Parliament must ensure that the UK and EU **lead the international community toward a comprehensive agreement on climate finance**. \$100 billion a year was pledged at the Copenhagen summit, but it is very unclear how this pledge will be honoured. At the next international meeting in Mexico, there must be concrete agreement on sources, governance and national contributions. The UK should work to develop new international revenue instruments to raise funds for climate change adaptation and mitigation in developing countries. All funding must be additional to existing aid commitments.¹

Third, politicians must **set out a route map for low carbon infrastructure renewal**, with detailed, costed plans for the next 10-15 years. This should cover electricity, heat and transport, and prepare for smart grids. Regulators such as Ofgem must work with government to align regulatory structures with carbon budgets, and set clear expectations. The equivalent of 55 per cent of current electricity generation capacity will need to be developed over the next ten years. This provides an opportunity for a comprehensive shift to low carbon electricity.²

Fourth, the Parliament must **unlock finance for low carbon growth**, by ensuring a stable carbon price and long term incentives for investment, and by establishing a Sustainable Infrastructure Bank to lower the cost of investment capital. The bank would focus on leveraging private finance into low carbon solutions. This should be accompanied by a phased withdrawal of government subsidy for high carbon investments.

Last, there is a need to **green our communities, through an immediate drive to upgrade existing housing stock**. A new mechanism is needed, which allows local companies, voluntary bodies, community groups and local authorities to bid for funding, replacing the current CERT scheme. The German model shows what is possible. There the government has a programme to bring 30 million dwellings up to the highest standards of energy efficiency by 2020, through a system of loans, grants and tax incentives. Local authorities should be tasked with catalysing local action on climate change, working with third sector groups, who, with the right skills and resources, can transform communities.

This report contains detailed recommendations on how these priorities can be achieved.

1. Building support for action on climate change

The basic facts of climate change are beyond dispute. The Royal Society states that “it is certain that greenhouse gas emissions from the burning of fossil fuels and from land use change lead to a warming of climate”, and that “continuing climate change, even at the current rate, will lead to very significant impacts”.³ These impacts include sea level rise, more frequent and intense heatwaves, floods and droughts, especially in vulnerable areas around the world. The recent review conducted by the Met Office confirms that our planet is already changing rapidly, and “reveals a consistent picture of global change that clearly bears the fingerprint of man-made greenhouse gas emissions”.⁴

There is less certainty about the scale and pace of change over the long term, and about the possible feedbacks that could accelerate warming, such as reduced CO₂ absorption from sea and land, and methane emissions from melting tundra. However, there is very strong evidence that significant carbon reductions are needed by 2020 if we are to lessen the risk of catastrophic climate change.⁵

We should not expect the science to be settled, fixed and unchanging; our understanding of the complexities of the climate system is constantly evolving. However, there is a remarkably high level of scientific consensus about the causes, current effects and likely future effects of climate change.

The recent rise in doubt and scepticism over the science needs to be acknowledged. Securing political consent for the bold transformative measures needed will depend on developing stronger engagement and understanding, both of climate science and of climate solutions.

Representatives of all parties in the next Parliament must be absolutely clear about what the science of climate change tells us, and the likely consequences for our society and economy, now and in the future. It will need to create a tangible and desirable vision of a low carbon future, emphasising the benefits of energy security and economic resilience.

The alternative to a successful low carbon society is not a successful high carbon society: it is economic

stagnation, as other countries cash in on new opportunities; loss of both economic and political credibility, as the UK fails to deliver on its ambitious carbon targets; and potential economic and social instability as access to hydrocarbons (particularly oil and gas) gets harder, with no obvious alternatives.

The task for the new Parliament is to lead the way in what it says, and in what it does, setting an enabling framework that makes low carbon the obvious choice and by engaging with people’s values and aspirations. Businesses will act if there are clear incentives in place, and if there are economic opportunities in carbon reduction. Individuals will act if they see others doing likewise, and if their neighbourhoods make low carbon living easier.

Recommendations:

1.

Priority should be given to policies which have clear, positive impacts on individuals in the UK and the rest of the world. Government must demonstrate the practical and economic benefits of cutting carbon whilst empowering and incentivising individuals to act.

2.

Policy should be driven by the targets set out in the Climate Change Act, and should be clearly linked to the scientific consensus that informs those targets. Targets should be met through domestic cuts wherever possible, with offsetting (buying carbon credits from overseas) to fill short term gaps.

3.

Government must lead the way on its own estate, which would save public money too. A recent assessment by the Sustainable Development Commission showed that government has made progress on energy efficiency, but it is still a long way from the far-reaching carbon cuts necessary.⁶ The public sector should achieve carbon savings at least equivalent to national carbon budgets and, ideally, beyond this level.

4.

Parliamentarians will need to act as role models, in their own lives and in their constituencies, instigating and supporting projects to tackle climate change, and leading by example.

2. International leadership

It is in the UK's own interest to support a strong global response to climate change. We live in an interconnected, globalised world. We need to support the moral but deeply practical view that we have intensely shared interests with the rest of the world. Our futures are connected, and we need to behave that way in our politics.

The UK has played a crucial role in international climate discussions, from the Gleneagles Summit of 2005, to the Stern Review and in the run-up to the 2009 Copenhagen climate change summit. Will UK leadership on climate change falter, or can the next Parliament help us to achieve more, both for co-ordinated international action and for practical change?

The outcome of the Copenhagen summit was disappointing. The uncertainties now surrounding global climate action make it imperative for the UK and EU to show leadership internationally. A robust internal EU position is essential if Europe is to play its part. The UK must take a leading role to shape the internal debate and to build a new European consensus, to reach out to the key players in a new deal: the US, China and others.

A comprehensive, binding agreement is both necessary and possible within the term of the next Parliament.

We need credible actions to match political rhetoric. The EU must lead by example, showing developing nations that it is possible to reap benefits from reducing carbon. Industrialised countries should accept ambitious binding targets, to allow developing countries the space to find new, low carbon development pathways.

A significant part of the UK's international role should be to ensure poor people suffer as little as possible, and that climate change is used as an opportunity to transform our relationship with developing countries. Temperature rises have uneven impacts across the world, with the poor and vulnerable in the world's poorest countries being hardest hit and least able to respond. Based on current trends, Oxfam estimates that up to 375 million people per year may be affected by climate-related disasters by 2015.⁷

In particular, climate change is already adding to the challenges of food security. Food production in the

developing world will be adversely affected by climate change. Reduced crop yields become even graver when combined with population growth and low economic growth. For example, on the Indo-Gangetic plain, where 15 per cent of the world's wheat is grown, the most favourable environment for growing wheat is projected to shrink by more than half by 2050, threatening the food security of about 200 million people.⁸ It is crucial to provide finance for farmers to adapt to and manage these new risks.

Recommendations:

1.

The UK should make a strong commitment to the EU moving unilaterally to an initial 30 per cent reduction target by 2020, as a step towards meeting the necessary 40 per cent EU target. The Parliament should also ensure the UK promotes the reorientation of the EU budget towards energy and climate change.

2.

The UK must maintain its leadership role on climate finance, to help developing countries adapt to the effects of climate change, and support low carbon development. At Copenhagen, \$100 billion a year by 2020 was pledged, together with \$30 billion Fast Start Finance. However, it is very unclear how these pledges will be honoured, and at the moment they are empty promises. At the next international meeting in Mexico, there must be concrete agreement on sources, governance, and national contributions, and all funding must be additional to existing aid commitments.⁹

3.

To ensure that finance is forthcoming, the UK must lead the way in ensuring agreement on innovative funding mechanisms for international climate action. There should be detailed investigation into the options concluding this year with a decision on sources and a credible roadmap for getting to \$100 billion. Possibilities include an international price for carbon, pricing the carbon impacts of shipping and aviation and a tax on financial flows.

4.

The UK must ensure the delivery of the \$30 billion of Fast Start Finance in a transparent, timely and equitable fashion. In particular, the UK must push for a monitoring and reporting system for donor countries.

3. Low carbon infrastructure for the UK

Achieving deep carbon cuts, and benefiting from low carbon economic growth, will mean radical changes to the UK's infrastructure, including energy generation and distribution, transport networks, water, waste, ICT and buildings. Infrastructure provision is ad hoc at the moment. It is up to government and regulators such as Ofgem to set a clear strategy and route map for infrastructure renewal, with appropriate incentive structures and financing mechanisms.

In the case of energy networks, for this infrastructure to be delivered as efficiently as possible, network companies must be encouraged to anticipate future demand and co-ordinate the development of networks. This will ensure the efficient configuration of networks (both onshore and offshore) to deliver generation connections required in the short term, as well as those likely to be required in the longer term. It is vital that these networks are delivered in the most cost-effective way to minimise costs to UK consumers and the UK economy.

Much of the existing national infrastructure will also need to be renewed over the coming decade.

Policy Exchange has calculated that around £500 billion will need to be spent on infrastructure before 2020, and the equivalent of 55 per cent of current electricity generation capacity will need to be developed over the next ten years.¹⁰

Major decisions on infrastructure must be compatible with national carbon goals. The new National Policy Statements, which guide planning decisions on major infrastructure projects, need to be carbon-proofed, and must minimise delays in connecting new low carbon sources of energy. The Infrastructure Planning Commission, which takes decisions on individual projects, must be required to see carbon emissions as a material concern.

One of the most pressing infrastructure changes required is the co-ordinated development of a smart grid for electricity, to facilitate the efficient integration of electric vehicles and more intermittent sources of renewable energy whilst maintaining security of supply. Combined with smart metering and effective energy pricing market signals, the smart grid will inform and empower people to optimise energy use in homes and businesses.

Infrastructure is also needed to provide low carbon sources of heat, including heat pumps, biomass and biogas. In transport, there is a need for investment in the rail network, and the shift to low carbon models of agriculture will require changes to infrastructure too.

Financing infrastructure investment will be a major challenge in the new Parliament. In the next section, we set out some potential mechanisms for investment.

Recommendations:

1.

An infrastructure route map to 2050 should be developed, with detailed, costed plans for the next 10-15 years. This will enable us to predict and plan infrastructure needs for energy generation (including offshore generation and European interconnection), carbon capture, and low carbon transport networks.

2.

As part of this, by 2015, the UK should be well on the way to a smart grid, with a number of demonstration towns already connected, to demonstrate the end-to-end benefits of smart grid infrastructure.

3.

National Policy Statements governing infrastructure planning, and decisions made by the new Infrastructure Planning Commission, must ensure fast-paced connection of low carbon generation, and must be compatible with national carbon targets.

4.

Regulatory policy for energy networks must be refreshed so that network companies are able to build infrastructure in a co-ordinated and strategic manner to minimise the cost to consumers.

5.

To incentivise all companies to consider the carbon consequences of investment decisions, a standard methodology for carbon accounting and reporting should be developed, then made mandatory for all businesses, regardless of size.

4. Financing change

The transition to a low carbon economy is an investment challenge, but also an unprecedented economic opportunity. The shift will require far-reaching investment in technology, infrastructure and skills. The potential benefits are huge: becoming a global leader in low carbon technology and systems will bring vital economic advantage to the UK. China is already investing heavily in renewable energy and carbon capture technologies, with plans to invest in excess of \$440 billion in the next ten years, but the UK's approach is cautious.¹¹

A clear, far-sighted investment strategy creates the right conditions for green jobs. Germany's renewable energy sector is a good example. The German government has made a number of efforts to support low carbon energy, such as a feed-in tariff policy for renewable energy generation. The policy has been highly successful, resulting in 14 per cent of electricity now coming from renewables, with aims to increase this to 30 per cent by 2020. Wind energy in particular has been growing at a fast rate and Germany has for a number of years been the world leader. Growth in the manufacture and implementation of low carbon technologies has created 280,000 jobs.¹²

As well as directing funds towards low carbon investment, it is vital to look again at the flows of public funding and policy that are supporting high carbon investment. A recent report by the World Economic Forum on the state of the alternative energy sector globally stated that substantial obstacles remain, in the shape of perverse subsidies and other policy distortions and barriers to entry that favour incumbent, usually dirty forms of energy.¹³ A recent review by Green Alliance illustrates there are many potential options for reducing spending and tax breaks in a way to accelerate the transition to a low carbon economy in the UK. It identifies ways to reduce the UK's deficit by £12 billion over four years.¹⁴

The challenge now is to use public policy to set the right framework for low carbon investment and innovation. The low carbon economy will not be realised through public funds, or through private interests, but through government action to create a financial environment that rewards low carbon investment. Part of this includes more effective and consolidated public intervention to leverage private investment into low carbon energy, energy efficiency and new transport infrastructure.

Recommendations:

1.

The UK should develop an effective, long term mechanism that creates a value for the carbon that is reduced, meaning that investment returns are linked to carbon reduction. This will entail a combination of price-based mechanisms such as trading and carbon taxes, combined with appropriate regulation and incentivisation. An official Commission for Green Taxes should be tasked with establishing the best combination of measures to meet carbon targets and ensure benefits for the UK economy.

2.

A Sustainable Infrastructure Bank should be created. The bank would form one of the major institutional pillars of the UK's low carbon transition. The bank should not focus on distributing public funds. Rather, its aim should be to lower the cost of capital. It could issue green bonds to provide cheap, guaranteed finance for low carbon investment. There are various potential models, including the European Investment Bank. The important elements of an effective sustainable infrastructure bank would be: a firm statutory mandate on climate change to facilitate the transition to a low carbon economy; adequate

scale to meet the low carbon investment needs of the UK; focus on leveraging private finance, for example by underwriting risk; and the bank must be run by finance professionals.

3.

Linked to the bank, there should be government-backed investments aimed at individual consumers, such as green ISAs and pensions. This would provide a way of engaging individuals and consumer-focused companies in green investment.

4.

The new government should undertake a comprehensive review of publicly backed investment and other support, to uncover the carbon intensity of current investment strategies. Following the review, there should be a phased withdrawal of government subsidy for high carbon investment and support.

5. Resilient communities

The new Parliament will need to find ways to take carbon saving out into every community, making low carbon the norm. Government communications campaigns (such as the current Act on CO₂) must be supported by practical demonstrations of low carbon approaches in each community, enabled by government but led by local interests. Local authorities will be crucial to this drive, acting as catalysts and co-ordinators of action.

Priority should be given to policies that create an immediate, visible change within communities, to develop a stronger public mandate for continued investment. More involvement of voluntary and community groups, not as delivery agents, but as partners in strategy-setting, funding and communication of local carbon reduction initiatives, should help to engage communities. Action on climate change should not be seen as government-led. Government should set the framework, but allow communities and voluntary groups to experiment, innovate and find solutions.

For household energy saving, the German example of an energy efficiency masterplan shows what can

be achieved. Following a two-year pilot programme, the federal government instigated a programme to bring all homes built before 1984 up to the highest standards of energy efficiency by 2020. With radical improvements to around 30 million dwellings, this will have a significant impact on Germany's overall carbon emissions. The programme is funded through loans, grants and tax incentives, with investment channelled through a publicly-backed investment bank.¹⁵

In the UK, a significant amount has been achieved by a range of policies, including the Carbon Emissions Reduction Target (CERT), the Renewables Obligation, building regulations and the Climate Change Levy. These measures will be reinforced by the new feed-in tariffs and Carbon Reduction Commitment. However, this proliferation of policy initiatives has created a system of unprecedented complexity, and there is a need to ask fundamental questions about policy and funding models. In addition, it is not clear whether carbon savings from households are the responsibility of the Department of Communities and Local Government or the Department of Energy and

Climate Change. There needs to be clear accountability, through departmental carbon budgets.

As part of the shift to more resilient communities, transport policy should shift to a focus on green travel patterns, providing personalised travel advice to encourage the use of public transport, active travel and car sharing. The success of the Sustainable Travel Demonstration Towns has shown clearly what can be achieved here.¹⁶

Recommendations:

1.

The new Parliament should introduce an energy efficiency retrofit masterplan, to overhaul all homes by 2025, following the German model. Households would be incentivised to invest in energy generation and saving, through feed-in tariffs, soft loans ('pay as you save') and planning policy measures (such as a requirement for 'consequential improvements', whereby planning for significant extensions or alterations is conditional on an energy efficiency upgrade of the whole structure).

2.

This masterplan would be achieved in part through restructuring the delivery of energy saving. Expenditure should no longer be channelled through energy supply companies (as in the current CERT scheme). Instead, local companies, not-for-profit organisations and local authorities should all be eligible to bid for funding to invest in energy services, with a focus on fuel-poor households.

3.

Local Authorities should be given the responsibility and powers to co-ordinate local action on climate change. The performance frameworks on climate change should reflect this. Local carbon budgets should be set, in line with national carbon budgets, and Local Authorities should be provided with the resources to manage these carbon budgets.

4.

Voluntary and community groups should be central to carbon saving initiatives within communities, including energy saving and transport initiatives. They should be given the powers and funding to act, working alongside local authorities.

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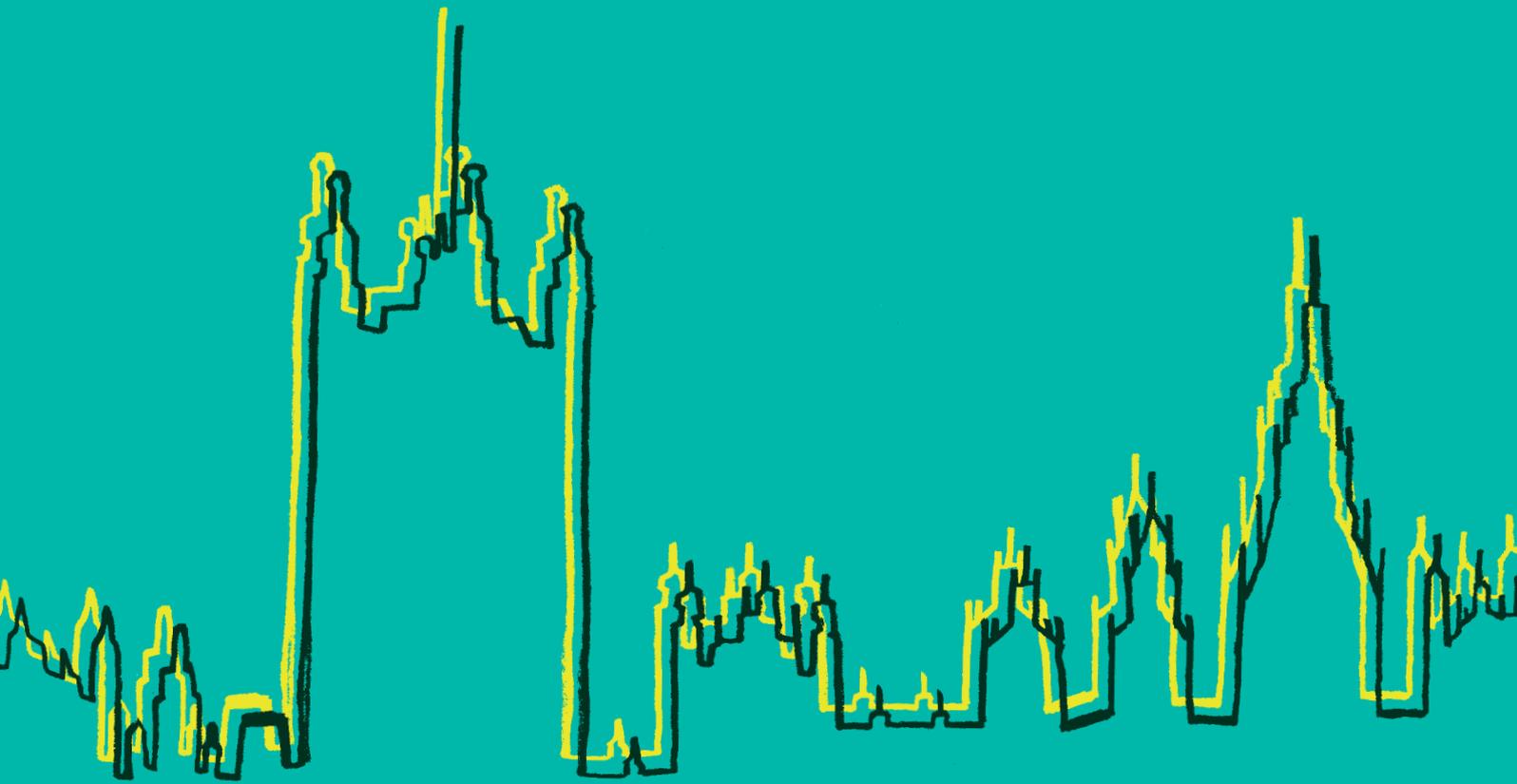
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