

Foreword by Ken Livingstone, Mayor of London

It is almost impossible to exaggerate the danger of climate change. I have no doubt that it is the single biggest threat to the future development of human civilisation.

When scientists talk of the threat of catastrophic climate change they don't just mean the inconvenience of extra flooding or the Tube being unbearably hot in summer. If no action is taken to cut carbon emissions we face temperature rises of over five degrees towards the end of this century. It took a temperature *drop* of just five degrees to cause the last ice-age, so the impact of a temperature increase of the same level would be profound. The map of the world would be changed beyond recognition as sea levels rise, and hundreds of millions of people would be displaced by drought, starvation and the increased ferocity of extreme weather events.

Collectively, we have been complacent about global warming for far too long. It is 10 years since the Kyoto Protocol was signed and still global carbon emissions continue to rise. All of us have a responsibility – actions taken at an individual level can have consequences that are unacceptable for society as a whole. Buying a gas-guzzling 4x4 vehicle is an 'individual choice' but it creates carbon emissions that contribute to global warming and harm everyone. It should be no more socially acceptable than to claim the right to dump rubbish in the street.

Global warming has to be tackled at a city, national and international level. Human civilisation has developed so much that our actions affect the functioning of our entire planet.

I hope for the sake of our children and grandchildren that we can still prevent catastrophic climate change, but to do so we have to act with great speed and decisiveness.

The aim of this plan is to deliver decisive action in London with the urgency that is required.

Nicholas Stern's formidable review for the Chancellor on the 'Economics of Climate Change', published in November 2006, demonstrated conclusively that the cost of swift action to reduce carbon emissions will be small (one per cent or less of national income) but that the costs of doing nothing and then trying to clean up the mess later will be much higher. I fully endorse the approach adopted by Stern.



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This action plan shows that many measures that will deliver the quickest carbon emissions reductions in London will also deliver net financial benefits within a fairly short space of time - improving the comfort of London's homes and offices and putting money back into the pockets of Londoners and London businesses. Those longer run measures that will impose higher costs in the short term, will still work out as a good investment compared with the costs of doing nothing and allowing catastrophic climate change to develop.

The simple message is this: to tackle climate change you do not have to reduce your quality of life, but you do have to change the way you live. The present model of huge energy production followed by huge energy waste - in the losses from power stations, from houses, from commercial property, and from transport - is utterly inefficient and is irreparably damaging the planet. There must be a decisive shift to an economy in which energy is conserved, not wasted, and therefore in which far less energy needs to be produced per unit of economic activity.

The fundamental cause of global warming is the profligacy with which we have exploited global energy resources over the past century. A strategy to cut carbon emissions is essentially about cutting out waste and improving efficiency.

This is a problem everyone has both a stake in resolving and genuinely can do something about through their changing their own behaviour. From turning off appliances when they're not being used, to installing renewable energy supplies to their house, if every Londoner decides to play a part in cutting our carbon footprint the cumulative effect will be considerable.

But even such individual action alone won't be enough. The plan sets out a series of measures that I will take as Mayor, including to enable Londoners and businesses to use energy more efficiently; to change fundamentally the way London is supplied with energy; to maintain London as a world-leader in sustainable transport; and to ensure that new development in our growing city is of the highest environmental standards - fit for a very different future.

London businesses and business leaders have been at the forefront of raising awareness of the threat of climate change and business has a major part to play in reducing London's carbon footprint. This plan sets out a series of ways in which I will support and work with them to make London's business sector a beacon of carbon-friendly commerce.

Indeed, by placing ourselves at the forefront of tackling what is likely to be a defining issue of the twenty first century, London has a real opportunity to develop its own economy. I want London to become the world's leading centre for research and financial development on climate change during the next five years.

To achieve this requires, first, clarity that London is determined to tackle climate change; second, the most sophisticated financial institutions to respond to carbon trading and investment technologies; and third, state of the art scientific and technical research facilities to develop the technologies of the future.

A number of cities can offer some of these solutions, but only London can offer all three. I will do my part by ensuring that climate change continues to be the number one priority for my administration.

This action plan demonstrates that London can make deep and meaningful cuts in its emissions through actions by London public authorities, by businesses, and by individual Londoners. For the next ten years we can meet the target reductions that scientists say are necessary.

The difficult truth, however, is that without action at a national and international level we cannot continue to achieve this through to 2025 and beyond.

Most fundamentally, the government has to take rapid action to introduce a comprehensive system of carbon pricing.

Nicholas Stern called climate change 'the greatest ever market failure', and he was completely right. While the price of a product or service continues to ignore its impact on global warming in the form of carbon emissions it will be impossible to persuade businesses and individuals to take the full scale of actions that are necessary to avert catastrophic climate change.

Working with the government to introduce a comprehensive system of carbon pricing in the UK, in Europe, and internationally will be one of my top priorities.

Action at national and international level is often slow and difficult. That is why we have also established the C40 - a forum of the largest cities in the world, in partnership with the Clinton Foundation, to accelerate emissions reductions among cities.

A parallel development to this has started in the United States - whose government has refused to sign the Kyoto Protocol on climate change. The action of the Mayor of Seattle, Greg Nicholls, in pulling together at first a handful of US cities willing to sign up to the Kyoto Protocol's demands has stirred a change in attitude to climate change in the world's most polluting nation, although there is still a long way to go before the US actually starts to cut its emissions. Over 400 cities and states have now joined Seattle.

Every generation faces at least one great challenge. The challenge of the twenty first century is climate change. It is a challenge that absolutely everyone can play a part in tackling and which we must win. I look forward to working with Londoners to achieve this.

Ken Livingstone, Mayor of London

Foreword by Nicky Gavron, Deputy Mayor of London

As London's deputy Mayor, I have been working closely with the Mayor to make tackling climate change our overriding political imperative. This is because when it comes to practical action cities are centre stage – and London's leadership in this is crucial.

Why? Because most of the world's cities, including London, are growing rapidly. Already cities consume three quarters of the world's energy and are responsible for eighty percent of all carbon emissions. We will fail in our efforts to save the planet if the emissions trend in cities is not reversed. London, as the pre-eminent world city, has a prime responsibility to act. And we are acting.

First, through our planning policies and the London Climate Change Agency we are spearheading a decentralised energy revolution here in London. Remote centralised power stations are the primary cause of climate change: they waste their heat and lose power through national grid transmission. Our solution is to decentralise power, generating it locally so that the heat can be used to warm and cool our buildings. London has a quarter of the country's combined heat, power and cooling capacity. This means we can have a huge impact on reducing emissions and saving money.

Secondly, we are introducing policies and projects which cut across those institutional boundaries which keep the big carbon producing sectors – energy, waste, transport and water – separate. For instance, the treatment of sewage by water companies, or the management of huge organic and residual waste streams, could produce a whole new market in renewable gases and liquid fuels –turning non-recyclable waste into London's largest source of renewable energy. This energy can be used for heating and cooling homes and workplaces and for transport.

Thirdly, a major source of carbon emissions in London is from homes and work places. Here we can all show leadership – personally, professionally and corporately – by taking immediate action to use less energy. Proposals in this plan, backed by strong government action, will make it easier for people to cut their carbon consumption and even become energy suppliers to the grid.

These three major planks of our action plan will only realise their full potential to reduce carbon emissions if government removes the barriers currently holding back the roll-out of decentralised energy and the large-scale production of renewable gases and liquid fuels from waste.



The Mayor and I are working closely with government to turn these proposals into a reality. The UK may only account for two percent of global emissions, but if its cities and citizens are seen to act to cut their carbon emissions and increase energy efficiency, then cities across the world will join us. This is why the Action Plan and London's leadership are vital.

Nicky Gavron, Deputy Mayor of London

Foreword by Sian Berry, Environmental Campaigner

Over 80 per cent of the world's population live in coastal areas or – like Londoners – on the tidal range of major rivers. Rising sea level is just one of the obvious reasons why we have to take climate change seriously.

In the past six years the Thames Barrier has been raised to prevent flooding a staggering 56 times, compared with just three times in the first six years after its construction in the 1980s. Over 150 square kilometers of London lies below high tide level, putting the homes of 750,000 Londoners at risk of flooding.

London could become the greenest major city in the world but that will mean reversing many of the mistakes of the past. We need to design our city so that local shops and services are within an easy walk for all and create streets that are as friendly to cyclists as those in Amsterdam. We need a first-rate public transport system that means people leave their cars behind and get onto zero-emission buses and efficient tube trains that run on renewable energy.

Above all, we have to change the way we use energy at home. We can change planning rules so that we only build zero-carbon homes that are green as well as cheap to run. We can do much more to help homeowners, landlords and businesses to make existing buildings more efficient. Instead of building new nuclear power stations, whose waste has to travel past Londoners' backyards, we can generate electricity and heat locally and move from being energy users to becoming energy producers.

This action plan outlines important steps towards a greener city. Environmentalists in London will be working hard to make sure the ideas in this document are implemented, not left on the shelf next to the fine words and empty promises of the past.

These steps are absolutely necessary, but we know that we need to go much further in the long term. A truly sustainable future demands more radical action than this plan can deliver and, in addition to what we can do for ourselves now, Londoners will need the commitment and support of central government if we are to achieve this. But we can lead the way with our actions in London.

Individuals, businesses and elected representatives can all do their bit to tackle the crisis of climate change. If we all act together, we really can change our world for the better.

Sian Berry, Environmental Campaigner



