Professor Lord Hunt, Ladies and Gentlemen, I am delighted to open this important scientific meeting on the impacts of climate change on urban areas.

As you know, the overwhelming majority of scientific opinion supports the view that human activities are changing the Earth’s climate. There really shouldn’t be any argument now about the reality of climate change.

Since records began over 150 years ago, the 10 warmest years globally have all occurred since 1990. Global temperatures are expected to continue to rise, between 1.4 and 5.8°C by 2100.

Global sea level has risen by 1–2 mm yr\(^{-1}\) during the twentieth century, and sea level is expected to rise this century by anything from 80 to 880 mm—sea levels will continue to rise for at least a century even after we stabilize greenhouse gas concentrations.

Across Europe, several dramatic floods hit the headlines during the last decade. And, probably the hottest summer in a thousand years in Europe killed 35,000 people prematurely in 2003, predominantly in Central Europe, with over 600 deaths here in London. The heatwave set many records, including a new UK record high temperature of 38.5°C (over 101°F). It seems that European cities will need to learn a lot from US experiences of urban heatwaves and health risks.

Summers like 2003 are expected to become the norm in Europe, within our children’s lifetimes—which I find a frightening prospect myself—and coastal regions everywhere will have to cope with new challenges in an era of steadily rising seas, and possibly more intense storms.

In 1800, approximately 3% of humans lived in urban areas. Now, it is one-half, and by 2030, it is calculated that over 60% of us will be city dwellers. Overwhelmingly, these city people will be living close to the coast.

These demographics alone are reason enough to concern ourselves with the impacts of climate change on urban areas. So I am pleased to see all you eminent scientists and decision makers gathered here to look hard at this issue, building on a highly successful meeting held in Houston, Texas, in February last year. That meeting concluded, for adaptation strategies to be successful, it is vital to generate a public acceptance that climate change is real and a significant risk to urban populations.

In 2002, the London Climate Change Partnership commissioned a study of the risks and impacts of climate change to London. Their report, *London’s Warming*, showed that London is particularly sensitive to future temperature increase, not
least owing to the large urban heat island effect it generates—the city centre can be up to 8°C warmer than the surrounding countryside!

Low-lying London is also exposed to a greater risk from future flooding than any other part of the UK. But, rather perversely perhaps, London is one of the driest capitals in the world. Climate change this century is expected to increase the frequency of both drought and heavy rainfall events in Southeast England. You may have noted today that two more water companies have imposed hosepipe bans.

*London’s Warming* was not all doom and gloom. It identified opportunities for London from climate change in tourism and recreational activities, and in the financial sector. I am encouraged that the Mayor of London is currently producing a first Climate Change Adaptation Strategy for a world city and that climate change is the central theme in the review of the London Plan. The adaptation strategy should propose a range of policies and actions to help London adapt to inevitable change over the next few decades. Also in the current review of mayoral powers, the mayor has asked the government to place a duty on the City of London to take climate change into account in relation to the various planning and strategic powers.

We take the science seriously—my department sponsored a major scientific conference in early 2005 to consider how to avoid dangerous climate change. Early this year, we published the accompanying book in the UK and will launch it in the US in about a month, at the CSD conference. I hope that if you haven’t yet had a chance to read it, you will soon. The message that came from that conference hosted by the Hadley Centre is crystal clear—that climate change is likely to be even worse than we previously thought and we need to act now.

The global scientific community made an important contribution to the debate in 2005. The G8 science academies published a joint statement on climate change, reasserting not only that climate change is real, but also that human activities are the root cause.

This key message was then taken forward by the G8 heads of government, who met in Gleneagles in July. For the first time, the G8 leaders all agreed that human activity is a major contributory factor to climate change and agreed to act with resolve and urgency and produced both a Plan of Action to increase the speed with which we reduce greenhouse gas emissions and a new Dialogue on Climate Change, Clean Energy and Sustainable Development.

The UK presidencies of the G8 and the EU have come and gone but climate change has not. We now have to build on this solid policy foundation. The work that we are setting in motion now will make a lasting difference in the face of a changing climate.

There are major challenges ahead. We need to go even further in reducing emissions to tackle global warming, while maintaining secure and reliable energy supplies. To address this challenge, the government has initiated an Energy Review. The Review will be looking at what measures are needed by 2020 and beyond to tackle climate change and ensure secure and affordable energy supplies in the UK.

What we can’t do is leave it until the eleventh hour and then have to take drastic measures to reduce emissions very quickly: this will entail great economic cost. By comparison, the cost of taking action now is thought to be relatively small. But we do
not yet know enough about the economics of climate change. So I am delighted that
the Chancellor asked Sir Nick Stern to carry out a Review on this issue. I am sure it
will be an important contribution to the policy development.

Tackling climate change is about businesses and individuals taking responsi-
ability for their carbon emissions. This will only happen if people are made aware of
the impact of their activities and given the means to take action themselves.

The UK Government has committed to offset air travel emissions through a
new Carbon Offsetting Fund, developed by my department. I will be announcing
this initiative formally.

This new fund will purchase emissions reductions, or credits as they are
known, from projects set up through the Kyoto Clean Development Mechanism.
These credits can then be cancelled to offset emissions arising from government
air travel.

This voluntary initiative indicates that we are serious in our leadership in the
government in accounting for the climate impacts of its day-to-day activities.
Over a 3-year period to April 2009, the fund will offset nearly 500 000 tonnes of
carbon dioxide, making this one of the largest voluntary initiatives in the UK
today. I also believe we’re the first of any government in the world to have made
this commitment.

Offsetting is in its early stages but we see its potential in communicating to
individuals the impact of their travel or other activities, increasing awareness
and highlighting more sustainable options. By buying offsets individuals can take
direct action to mitigate emissions. It is not an answer in itself to combat climate
change, but it does mitigate day-to-day travel.

Apart from reducing emissions, we also need to ensure that we are able to
adapt to climate change already occurring—and future climate changes we are
already committed to.

The government set up the UK Climate Change Impacts Programme
(UKCIP) in 1997 to coordinate stakeholder-led research on the impacts of
climate change. The pioneering step of bringing stakeholders into the heart of the
research process has been central to its achievements. We have committed a
further £3.5 million over 5 years to UKCIP to develop strategic research on the
impacts of climate change across the UK, and guidance tools that you need for
adaptation.

I’d also like to draw your attention to our Climate Change Programme. It sets
out an ambitious package of policies that will further reduce UK carbon dioxide
emissions by the equivalent of 7–12 megatonnes of carbon by 2010.

This will mean a reduction in carbon dioxide emissions of 15–18% below 1990
levels by 2010; and will move the UK close to its domestic goal of a 20%
reduction in carbon dioxide emissions by 2010.

It will also mean a reduction in greenhouse gas emissions of 23–25% by 2010
and will put the UK way beyond its Kyoto Protocol target of a 12.5% reduction
in greenhouse gas emissions by 2008–2012. That makes us one of the world
leaders in meeting and succeeding our Kyoto commitment. We are of course
focused on our voluntary domestic target of a 20% cut in CO₂ by 2010. We
believe that we can do that. The figures are very much dependent on some of the
changes in society and impact of measures that we already have in place. Also,
the final figure is set as part of the EU Emissions Trading Scheme.
The programme also confirms my department’s intention to proceed with the development of a *National Co-ordinating Framework* for action to adapt to unavoidable climate change.

I would like to end by emphasizing the commitment of my government to addressing the seriousness of this issue. This conference is an important opportunity for the science community to inform policy and decision makers and discuss with them the threat and the challenges we face in urban environments.

I wish sincerely to thank you Lord Hunt and your US co-organizers for inviting me to open the conference. I am sure that you and all the participants will find it fruitful and I look forward to hearing the outcomes of your discussion, which I believe are essential in how we shape the debate, how we can formulate policies and how we can focus on actions that make a real difference, in terms of combating climate change in urban environments, and in the future.

Thank you very much.

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