

Thank you Chris for your kind introduction and to Bob Ward from the Grantham Institute and the London Climate Change Partnership for organizing this event. It's great to join such an impressive line up of speakers here today, as well as have the opportunity to speak to such a diverse group of people working to make sure our cities are preparing for, and adapting, to climate change.

I'm also pleased that this event is taking place in London's first Climate Action Week. Because this week is all about bringing people together from different sectors and focusing on the solutions that we need to address our climate emergency. This event is a fantastic example of that and we have a whole host of other events taking place this week. In fact we have 150 of them, from learning lessons on adaptation from Bangladesh, Cape Town and Ghana, to increasing food resilience and linking up adaptation and mitigation actions.

And we also have over thirty events this week just focussed on climate change adaptation and resilience. I think it really shows the climate hub that has developed here in London. Indeed, we released new figures this week that show, in London, the total sales in the low carbon goods and services sector has grown from around twenty-one billion pounds to nearly forty billion pounds over the last decade. That's a total increase of ninety per cent, with a twenty per cent increase between in the last two years alone.

1. The challenges for London

Now, we know that mitigating climate change, cutting our emissions as fast as we can, is absolutely critical. That's why the Mayor has declared a climate emergency and has prepared one of the world's first 1.5 degree compatible plans. But here in London we believe that adapting to climate change is equally important and the two must be looked at together to maximise efficiencies and minimise investment risk. Because put quite simply, as we all know, we are already at a point where we are experiencing some level of climate

change impacts. And we also know that on our current global emissions trajectory, the risks will only increase.

If we don't take action, and soon, London's infrastructure, including our transport, communications, and energy supply are going to suffer ongoing direct and indirect impacts from climate change. And this will affect the very resilience of our businesses and economy that depends on this infrastructure being resilient.

To give you some idea about what that risks looks like here in London:

- The Thames Barrier currently protects two-hundred billion pounds worth of property from tidal flooding. More than thirty-seven thousand homes are at high or medium risk of tidal or river flooding, and 1.3 million people are living and working in areas of tidal and fluvial flood risk in London.

- We are also vulnerable to less predictable flooding from heavy rainfall events, with nearly two-hundred thousand residential and commercial properties including around a third of London's eighty thousand basement properties at medium or high risk. This is due to increasing areas of impermeable surfacing, such as roads, roofs and pavements, as well as a Victorian drainage system that wasn't designed to cope with the demands of the current and future population.

But it's not just flooding that London is vulnerable to. We know that London is only ever two dry winters away from drought. In its extreme, the risk of drought to London is estimated at three hundred and thirty million pounds per day.

And climate projections show that we could face increased summer mean temperatures of up to five degrees by the 2050s. This means

that temperatures we see as heatwaves today – like last Saturday’s - will start to become normal temperatures in years to come. This will have a significant impact on the health, wellbeing and productivity of people, the operation of our infrastructure, and the ability of our buildings to cope.

Last summer there were over four hundred and twenty excess deaths in London due to heatwave events. We know that for every degree increase over twenty degrees Celsius, ambulance call outs increase by one per cent. As seen in Paris just last week, new summer temperature records are being set requiring urban areas to change the way they operate. Schools were closed, parks were open later and Parisians were encouraged to stay indoors and reduce amounts of exercise during the extreme heatwave episodes.

And as our city grows, if we don't take action, there are likely to be even more knock-on effects and disruption caused by climate-related impacts.

So the case couldn't be clearer for the need for action here in London.

2. London's Adaptation Action

So the Mayor is taking action to adapt our city to our changing climate. Last Summer we published a London Environment Strategy that includes policies and proposals to address the specific threats to London and Londoners from our main climate risks and reflected the risks for London in a 1.5C warming scenario. But as these risks cut across lots of areas of London's economy and communities, we've also integrated it into the Mayor's wider transport, economic development and planning policies, so we have a holistic approach.

So for example, to help us manage and reduce the risk of surface water flooding, we're funding the creation of more green spaces that are better at holding and slowing down rainwater to reduce surface water flooding. We've already awarded £2.1 million to six major green space projects across London through our Greener Cities Fund. These projects include opening up rivers to reduce flooding and improving biodiversity through new reed beds, wetlands and meadows.

Just this week we announced that the Mayor is committing funding to Groundwork's Our Space Awards which provides grants to help Londoners green and improve community spaces. The Mayor's funding will help green the grey, removing paving and unused concrete, and reducing the risk of surface water flooding.

Also, the London Plan, which is the development plan for London, has robust policies to ensure that new development includes more

measures like green roofs to help absorb and slow rainwater to reduce flooding.

Our transport system is also vulnerable to flooding, so the Mayor's Transport Strategy contains measures to improve the quality of our streets, including by increasing sustainable drainage to reduce the risk of flooding from heavy rain. Transport for London is also working to make London's transport networks more resilient, including by modifying stations to address flood risk, like at Elephant and Castle and Old Street stations where floor levels have been raised.

And we are working with our partners at the Environment Agency to ensure London remains well defended against tidal flooding. We have ensured that neighbouring authorities safeguarded the land needed for a new Thames Barrier which is likely to be needed in the 2070s.

And to help Londoners prepare and respond when we inevitably do have surface water flooding, we ran London's first Flood Awareness Week last November to help Londoners understand their risk to flooding, how to prepare for it and what to do if their homes are flooded.

We also have tough policies to adapt to increasing temperatures and overheating. The London Plan includes a cooling hierarchy to ensure that overheating is addressed first through the development and design of buildings rather than through retrofitted air conditioning which will pump out heat to exacerbate the urban heat island effect. This includes encouraging better ventilation and solar shading on buildings.

And we're working closely with sector experts across health, food, and transport to help them understand and develop plans to address the impacts of our changing climate. Sectors are working to

understand where they are most at risk by mapping the flood risk of their assets such as buildings and stations. With the food sector, we are looking at the potential impacts of food supply disruption, which could happen more frequently in the future with climate change. With one in five Londoners having low or very low levels of food security, the challenge will be to find ways of mitigating the impact on vulnerable populations.

Climate change impacts will also be an important part of the resilience strategy we are developing as part of the 100 Resilient Cities programme, and Fiona, Sadiq's Deputy Mayor for Fire and Resilience, will tell you more about that.

But as well as all this work that is being led here at City Hall, there is a wealth of activity being led by our partners, and indeed many of you here in the room today. And this work is critical because we know that we cannot achieve our objectives alone.

So we are proud to host the London Climate Change Partnership, which not only provides invaluable research and information to London's adaptation community, it also helps to identify actions to make the city more resilient. The partnership leads the work I have already mentioned with sectors across London, facilitates sharing of expertise and best practice and promotes London's work on adaptation nationally and internationally. Even when government cut funding for these nationally, which saw a number of these valuable regional partnerships dissolve, we continued to fund it here in London because we understood its importance.

But I have to say I am concerned about whether government really does recognise its importance. Central government needs to prioritize adaptation to ensure that London's ambition is replicated throughout the country. One of London's main risks is surface water flooding, affecting over two hundred thousand homes and workplaces. Government's current national funding model for flood

risk does not address this as they prioritise large scale flooding from rivers. The Mayor has called for a revision in the way they distribute flood risk funding, allowing surface water management projects to be funded, ensuring Londoners are better protected.

On overheating, to date, government's response has been inadequate. In their upcoming review of building regulations this must be tackled with clear standards and a robust regulatory framework being introduced to protect Londoners from the risk of overheating. The impacts of government continuing to ignore this issue are costly retrofit works and negative impacts on the health of residents.

3. Conclusions and challenges

So the Mayor wants to see better government policy not just for London but for the whole of the UK. Because our challenges aren't

unique to London and we know that we can't solve them on our own. That's why events like this are so important to not only help us all to understand some of the challenges and risks far better, but also to share ideas and solutions to address them.

Some changes will take time, but by forcing us to think in the longer term, climate change adaptation enables us to make decisions now that leave us more resilient, more sustainable, and ultimately better off in the future.

Thank you.