

DECEMBER 10 2009

CHECK AGAINST DELIVERY

Thank you Hilary for those kind words of introduction.

First of all let me welcome you very warmly indeed to this launch of the Adaptation sub-Committee of the Climate Change Committee.

Our role complements that of the CCC.

The CCC works on mitigation, whilst we work on adaptation.

Our job is to advise the government on preparing for climate change and for monitoring the government's progress in implementing its plans.

We aim to ensure that our advice, which will be based on the Climate Change Risk Assessment carried out by HRW, is robust. It will be based on thorough, objective analysis of probable climate scenarios, risks, impacts and their potential consequences: economic, social and environmental.

We will also learn relevant lessons from other countries, and utilise the work of organisations in the UK such as Foresight, RCEP and the Environment Agency.

I am not going to live long enough to see the potentially very serious effects of climate change, and the same is probably true of many of you in this room.

But my two-month old grandson Josh will experience the changes. All of us have a moral responsibility to people like Josh in future generations to do whatever we can to sort out the mess we have made of our planet.

We have enjoyed unprecedented affluence at the expense of the environment, but our grandchildren and their children will pay the price. And they are not making new planets at the moment, so this is the one we have to hand on.

This is why I was delighted to be invited to join the CCC and Chair its Adaptation sub-Committee.

I am most fortunate to have an outstanding group of people working with me on the Adaptation Committee.

The old quip about the difference between a supermarket trolley and a board – the trolley has a mind of its own – certainly does not apply here.

The Board members are: Barbara Young, Graham Wynne, Martin Parry, Andrew Dugolecki, Jim Hall, Sam Fankhauser, Anne Johnson and Tim Palmer.

Between us we span a very wide range of relevant expertise from public health to climate modelling, from engineering to economics, from environment to agriculture.

From where I sit, although there is still much research to be done, the science of climate change is convincing.

And even if Copenhagen results in an agreement to curb global emissions that meets the scientists' hopes, the climate is going to change.

The climate system is like a tanker: you cannot turn it around quickly. 20% of the carbon dioxide we are emitting today will be around in 1000 years.

Therefore, whatever progress is made on mitigation, we should prepare for the inevitable changes in our climate during the coming decades.

This morning's report from the Met Office suggest that even if emissions peaked in 2020 and reduced at 5% per year for the rest of the century (almost inconceivable as before the recession they were rising at 3% a year), we would have only a 50:50 chance of limiting warming to 2 degrees C.

And many climate models suggest that if we go beyond 2 degrees, we enter very dangerous territory indeed.

The earth has warmed up by three quarters of a degree since 1850, and we can see the effects of this in the UK already.

The equivalent of the canary in the coal mine – the seasonal patterns of nature – have already changed.

Spring comes about 2 weeks earlier and autumn two weeks later. The geographical distribution of species is changing.

Nature is adapting, just as we will have to adapt.

In fact when my Oxford colleagues reported earlier this year how certain birds are changing their breeding season, the BBC headline “Great Tits Cope Well with Warming’ was briefly the most visited story on their website!

Whilst we cannot say that individual events, such as the Cumbria floods of last month or those of July 2007 are a result of climate change, they may well be a sign of things to come.

The latest climate projections for the UK by the Met Office’s Hadley Centre (UKCP09), indicate that we can expect drier hotter summers, especially in the South East, and warmer wetter winters, especially in the West.

These projections are based on the best available science, but they still have a substantial degree of uncertainty around them. So we have the challenge of preparing for change, without knowing precisely what it is that we are preparing for.

That is one reason why we need to start with three ideas in mind:

Flexibility, so that the adaptation strategy can be adjusted as we learn more about the future climate

Resilience, to ensure that the functioning of our society is able to cope with a range of possible futures

“Least regrets”, so that we focus on doing things that would be good to do in almost any future scenario.

So, for instance it would be a good idea to improve our efficiency of water use in the home. The Environment Agency, and earlier this week, the Walker Report, suggests that metering should be universal, and would cut use by at least 10%.

Given that the South East is already water stressed, and is almost certainly going to become much more so, this is a sensible plan.

I also find it bizarre that we water our gardens and wash our cars with purified drinking water. Fitting grey water recycling to all new houses would add an estimate £3k to the cost (per year or per installation?) and save up to a third of water use.

For areas that will have too much water, we also need to think about where new homes are built.

One in six homes in England is at risk of flooding according to the Environment Agency, and we should expect more frequent extreme events such as the Cumbrian floods in the future. If we continue to build in flood prone areas, misery for householders and costs to the economy will increase.

Adaptation is not all about costs, although there is no doubt that significant investment will be needed. In some areas, such as tourism and agriculture, there may be real commercial benefits, provided we prepare in the right way.

Is our tourism infrastructure ready for a surge in demand as the summers become hotter and drier?

Even if the UK is a net beneficiary from climate change, some of the most important impacts on us may arise as a result of impacts elsewhere.

For instance about half the food we eat comes from overseas, and climate change could have major implications for global food production.

If the global temperature rises by 4 degrees, which is not unlikely, some models predict that the Mediterranean will be more like the Sahara.

Some of you may be rushing to sell your holiday home right now, but you might also want to think about the implications for the UK of migration, food production and tourism.

Finally, it goes without saying that preparing for climate change involves everyone: business, central and local government, the voluntary sector and individual citizens.

Opinion polls show that about half the citizens of the UK are sceptical about climate change, so there is a mountain to climb in terms of public engagement.

And what's more, some people think that the idea of the South of England becoming more like the Mediterranean is great: "Climate change – bring it on".

But without preparation, living and working in 40 degree summers, not to mention travelling on the underground, may not be the dream ticket it appears to be.

So the ASC wants to work with all of you to ensure that not only does the Government have the best possible advice on adapting to climate change, but also that individual citizens are aware of the importance of preparing for a different climate in the future.

Let me end by thanking you all once again for coming.