

## **Notes to go with Geoff Perrott's slide show – February 2007.**

### **Slide 1**

Looked at why we should be worried about climate change.

Over 2000 scientists agree that there is a greater than 90% chance that humans are to blame for most of the observed warming in recent decades.

Taking into account things like global terrorism too.

### **Slide 2**

29 August 2005, Katrina

Looked at Hurricanes and whether or not they are signs of accelerating climate change and if it could happen / affect Herefordshire.

Some of the facts from the 2005 hurricane season:

- The most intense hurricane ever recorded in the Atlantic The most hurricanes ever – 27 (previous record 21 in 1933).
- The most “category 5” hurricanes ever (wind speeds of 173mph).
- The most intense hurricane ever (as measured by atmospheric pressure). More than 1000 people killed. Thousands more displaced & homeless.
- The most active season ever recorded in the Atlantic and in hurricane history.

### **Slide 3**

### **Slide 4**

Photo: Geoff Perrott

### **Slide 5**

Photo: Geoff Perrott

### **Slide 6**

Looked at Global trends.

### **Slide 7**

### **Slide 8**

Looked at the possibility of the “conveyor belt” switching off.

### **Slide 9**

Conclusion: It's unlikely to stop, however, it may slow down.

The temp difference in the UK would be about 3-5 degrees C lower within 10 years of a hypothetical switch off.

**Slide 10**

Then went on to look at sea level rise and melting ice caps and glaciers.

The Arctic Ocean could be ice free in summer by 2050.8 That has now been revised to 2040.

**Slide 11**

Moved to the Southern Hemisphere and looked at the break up of the Larson B ice-shelf.

Collapse of the West Antarctic ice sheet and Greenland = about a 6 metre rise - could happen within a 100 years

**Slide 12**

Global retreat of glaciers.

**Slide 13**

There are other factors which we need to take into account when looking at the effects of global warming. The disappearance of Lake Chad is not purely down to climate change, siphoning off for massive irrigation has a large role to play. But the combined effect irrigation and increasing severity of droughts (climate related) will have potentially devastating impacts on the poorest countries ... first!

**Slide 14**

Add to that the increase in global population and associated increase in demand on resources.

**Slide 15****Slide 16**

1. Why CO<sub>2</sub> is important ... CO<sub>2</sub> has not gone above the 300 part per million (ppm) in the last 400 000 years.
2. Track temperature and see the correlation between CO<sub>2</sub> and Temp.
3. Where CO<sub>2</sub> is today = 380 ppm.
4. Where it'll be in 2050 if we do nothing to restrict fossil fuel burning.

**Slide 17**

Natural factors do not explain the recent warming.

**Slide 18**

Add fossil fuel burning and things look a little different.

**Slide 19****Slide 20**

Then did a hypothetical footprint exercise.

**Slide 21**

How green is my Chancellor?

EXCERPTS only

Pre-Budget report: point-by-point

**The main points from Chancellor Gordon Brown's pre-Budget speech in the House of Commons:**

- Mr Brown said the government's aim was to "unleash" the economy.
- Economic growth this year is expected to be 2.75%, rising to between 2.75% and 3% next year, he added.
- By mid-2007 Mr Brown said he expected inflation to be at its 2% target.
- He said 10 years ago, Britain was bottom of the G7 league for national income per head but was now second only to the US.
- China and other economies were competing on skilled workers, so the UK's had to "out-innovate" competitors.
- The "new priority" was "world-leading" investments in areas such as transport and education, Mr Brown said.
- Councils will get £30m to encourage community ownership of community assets.
- From next year, most carbon-zero new homes will be exempt from stamp duty.
- From February, air passenger duty will rise from £5 to £10 for most flights.
- There will be an inflation rise in fuel duty from midnight. The fuel duty escalator will not be restored. The rise will come to 1.25 pence.
- Tax discounts for biofuels will be extended.
- A further 300,000 households to be offered free insulation and free central heating.
- Planning decisions on major infrastructure projects are to be made by an independent planning body.
- Capital investment in education next year will be £8.3bn, on transport £9.6bn and on housing nearly £8bn.

**Slide 22**

Herefordshire Partnership is taking this issue seriously.

**Slide 23****Slide 24**

What our action plan says.

**Slide 25**

What the Nottingham Declaration says.

**Slide 26**

List of things happening in the County – not a comprehensive list.

**Slide 27**

List of things happening in the Council – not a comprehensive list.

## **Slide 28**

Looked at challenges and issues in Herefordshire and the UK such as:

- Energy conservation (first!)
- Flooding
- Wind power
- Solar power
- Hydro power
- Biomass (Ledbury consumes about 17 000 megawatt hours of electricity each year. This could be supplied from 1000 hectares of planted energy grasses, saving 6000 tonnes of CO2 emissions per year).
- Opportunities for the agricultural sector.
- OTHER:

### Home insulation

£1 of heat escapes for every £3 spent on heating our homes in the UK. Proper insulation reduces heat loss by up to 60%.

### Health

In the last 20 years, obesity levels have trebled and the percentage of children travelling to school by car has increased from 16% to 27%.

### Rural Transport

On average, rural households spend nearly £14 more per week on transport than urban households.

## **Slide 29**

Planning is important:

The Communities and Local Government (formerly the ODPM) have said: The aim is to put tackling climate change at the heart of the planning system and the way we build new homes.

Why? Because ...

Currently, the energy used to heat, light and run our homes accounts for 27 per cent of all of the UK's carbon emissions - around 40 million tonnes. To help tackle this, the Government is proposing that all new homes be zero carbon by 2016.

## **Slide 30**

Looked at some possible solutions (including this "zero carbon house".)

And the reasons why we should act now and do something about climate change.

## **Slide 31**

Concluded with ideas for action and some quotations.

## **Slide 32**

Geoff Perrott's details.