10 Reasons to take Climate Change seriously – Now!

1. It is beyond dispute that human activity – mainly fossil fuel burning – has greatly increased greenhouse gases in the atmosphere – **30%** more carbon dioxide and **100%** more methane over the last 100 years and rising fast, plus nitrous oxide and a range of industrial gases.

2. The extra greenhouse gas adds to warming – by definition! There *is* some disagreement among climate scientists about the *amount* of this warming and the extent to which it affects current and future climate. But the majority of researchers believe that man-made greenhouse gas is a major factor in current warming and weather extremes. Even without hard proof, it is the **risk** that is the big concern. Our emissions have been described as "the largest uncontrolled scientific experiment in history". We (the world) would be wrong to think that we can safely delay taking action.

3. Greenhouse gases stay in the atmosphere for long periods – some for decades, some for hundreds or thousands of years – our emissions are effectively **irreversible**, making it even *more* urgent to tackle them.

4. If the thresholds or a **"tipping point"** is passed, the climate could destabilise, resulting in uncontrollable "runaway" warming with spiralling emissions and temperatures. There are several effects which could contribute to this, including CO2 from burning trees and from warming peat soils; lost ice no longer reflecting the sun, methane released by melting permafrost.

5. Ironically, sulphur pollution in the atmosphere (the cause of acid rain) has been "dimming" the sunlight and has been *holding back* warming, especially since the 1950s. As sulphur emissions from industry, vehicles and power generation are cleaned up, warming is expected to increase at a still faster rate.

6. More droughts, storms, floods, wildfires and extreme temperatures are occurring (three times more than in the 1960s according to insurers) and are causing much suffering in many parts of the world: hunger, homelessness, disease, injury, loss of life and livelihood. This increase in extreme weather is expected to keep getting worse due to our emissions.

7. Some say: "But the climate has *always* changed". This is true – due to changes in the strength of the sun, the shape of the Earth's orbit, volcanic and other effects. But this doesn't mean that *we* can't change it too – potentially severely and in a short timescale. Research which has taken natural factors into account indicates that only man-made greenhouse gas can explain the extent of warming, especially since 1975 (half of our total emissions since the Industrial Revolution have occurred in the last 40 years). Our emissions are the ***new*** factor – these can be expected to have an increasing effect on *top* of other influences.

8. The possibilities focussed on by some sceptics, that the Kyoto Protocol is in part politically motivated or that scientific institutions are biased to attract funding, do not disprove that man-made greenhouse gas is a major factor in climate change. Human affairs often include hidden agendas – most of the prominent sceptics receive funding from oil and mining companies!

9. Global warming due to man-made greenhouse gas is **not** a recent invention of environmentalists looking for a new religion, as some sceptics have claimed. It was first highlighted by Irish scientist John Tyndall in the 1860s and then by Arrhenius, a Nobel prize-winning Swedish chemist in the 1890s. The current concern stems from scientists' warnings which became widespread in 1987/8.

10. An **urgent part** of addressing the problem is that we **all** act together – governments, families, individuals, businesses, schools – in striving to reduce energy consumption throughout our lives. We should be positive and "do our bit", feeling good about it and influencing others by example. And we in the UK need to set a better example to developing countries. We must all recognise that to ignore the risks is to take **too big a gamble** with others' wellbeing and that of future generations.

web: www.climate-concern.com e-mail: contact@climate-concern.com tel: 01325 378452