

## Answers to Objections regarding Climate Change

### 1. Climate change isn't happening...

Yes it is! Almost every scientist who looks at the climate agrees on this. Even those who are usually described as “climate sceptics” and argue about the causes of climate change agree that the Earth is going through a period where average temperatures over the planet as a whole are on the rise. Of course, that doesn't always mean that temperatures in specific regions are going up – the climate is a complex system and as temperatures go up in some areas, they can go down in others. This is especially true because systems such as ocean currents drive much regional weather and these are being affected by the rising temperatures.

### 2. Climate change isn't being caused by human activity.

This is probably the most common argument made by climate change sceptics. There are many different theories put forward, and it would be impossible to go through them all here (one good, not too technical guide, to some of these can be found at [www.newscientist.com](http://www.newscientist.com) in their feature “Climate Change: A guide for the perplexed”). One common claim is that the Sun's changing output is responsible for the warming; though it is true that the Sun's output is the main driver of our climate, the oscillations in its output over the last 40 years have followed the expected patterns and do not match the change in the average temperatures. The key point, however, is that none of the alternative theories proposed have been supported by independent, peer-reviewed research.

### 3. Carbon dioxide isn't the main cause of global warming and, anyway, humans don't produce enough of it to matter.

It's true that CO<sub>2</sub> isn't the only greenhouse gas, others, such as methane, as also significant. However, the extra amounts of these entering the atmosphere due to human activity, whilst significant (and of increasing concern) are still dwarfed by the effects of CO<sub>2</sub>, which is generally estimated to be responsible for about two-thirds of the warming. It's also true that we produce far less CO<sub>2</sub> than natural sources, but for several thousand years the rates at which natural processes add CO<sub>2</sub> to, and remove it from, the atmosphere have been in balance, keeping overall levels in the air very constant. The extra gas we're adding is like putting a small extra mass on a see-saw – it's still enough to tilt it to one side...

### 4. The Earth's climate has changed before and will change again...

This is true. The Earth's climate does go through periodic changes – 18,000 years ago Scotland was experiencing an ice age, and millions of years before that the weather was sub-tropical. All of these changes led to huge disruption, with many species becoming extinct and other evolving to replace them. In this sense, current climate change is no different – after all, there is little doubt that some species have already been driven to extinction, or become critically endangered, as weather patterns shift. However, the speed at which the changes are happening at the moment does seem to be unusual, and will make it far harder for plants and animals to adapt, leading to more extinctions. And, in the end, we rely on those plants and animals for our food. Even if the changes we are experiencing weren't the result of human activity, we would surely have a duty to help the poorest people to cope with the consequences. And, anyway, this change really is down to us...

## **5. There's nothing that can be done about climate change.**

It's true that it's too late to stop climate change completely. And, if things continue as they are, things will get considerably worse. But, though we are getting perilously close to it being too late, there is still a window of opportunity. Copenhagen was a huge disappointment, but it did result in governments such as the USA and China at least acknowledging the reality of climate change, and the need for urgent action, even if they couldn't agree on the form of that action. With sustained pressure from the grass roots, it may still be possible to get our leaders to take the decisive action needed. Given the dire consequences that will arise if they don't, surely we have an obligation to try?

## **6. My individual actions aren't going to make a difference.**

Firstly, whilst one person acting alone won't make a difference to overall CO<sub>2</sub> levels, lots of people acting together can. Some estimates put the domestic contribution to CO<sub>2</sub> as high as 40% - others feel this may include factors that can't really be considered domestic (e.g. transport of food to supermarkets) but there is no doubt that the choices we make in our homes, our churches and in our transport have a huge cumulative impact. Lots of people making lots of small changes can have a practical effect. Furthermore, as governments and business see more and more people making choices based on environmental considerations, a shift in their attitudes becomes more likely. In the fair trade movement we have already seen how what is, initially, a small, fringe activity can grow into a huge groundswell that can make a real difference to both individual people and economic systems.

On a deeper level, though, surely we have a moral duty to act, even if we are not convinced that our acts will achieve all that we would like? Each of us, as individuals, is called to be a steward of creation. We are responsible to God for the choices we make as to how we fulfil that duty. We may not be able to save the whole planet, but God surely expects that we do not continue to knowingly do damage we could avoid. Furthermore, we are part of God's family, yet we are using far more than our fair share of the Earth's resources, and allowing the consequences to fall disproportionately on the poorest people – our brothers and sisters in Christ. When we stand before God to answer the charge "I was hungry and thirsty and you did not help me", the reply, "Well, I didn't think the little I could do would really matter, so I didn't do anything" is unlikely to satisfy... In the end, we are answerable for our own actions and choices and we are called on to do the best we can in the situation we find ourselves in – what happens beyond that is in other hands than ours.

## **7. Even if we do what we can, it won't matter because of China and India and all the CO<sub>2</sub> they are going to produce...**

If China, India and other developing nations continue to industrialise in the same way as we did, it will lead to much worse climate chaos. However, the technology exists for these countries to choose other models and develop a much greener, and more sustainable, way of working. This will not be cheap, and will require support from the developed nations, in terms of both money and expertise. However, we are only enjoying our relative prosperity because we exploited the resources we had, and caused the vast majority of the climate change now happening. Surely it is only just that we use some of our wealth to support others to make better choices? This is a point we must make loudly and clearly to our political leaders – and our arguments about this will only carry weight if we can show that we care enough to change our behaviour, as well as asking them to change their policies.

## **8. Climate change won't really affect me. In fact it might be good for some people...**

As the climate shifts, some areas may find that things do improve. However, there is little doubt that, for the vast majority, things will get worse. For one thing, many cities are situated near coastlines and, as sea levels rise, huge numbers will be displaced. The world is struggling to cope with current refugee numbers – millions more added to the total will be disastrous. The problems that will be caused by the loss of glaciers that supply drinking water to millions, and

changes to rainfall patterns, are obvious. Even where shifts in climate are such that changes in crops grown, or other adaptations, are possible, it will be hardest for the poorest people, already leading such a marginal existence, to cope. Subsistence farmers are not in a position to see if alternative crops will grow better in the new conditions they face. We in the west have the resources to help us adapt and it may even be true that, for some of us, the impact will not be too severe (though many predictions about the likely changes make this unlikely). As always, it will be the poorest, who have done least to cause the problems, who will bear the worst of the consequences.

#### **9. Geoengineering will enable us to cope with rising CO<sub>2</sub> levels.**

Geoengineering (large-scale projects such as seeding the oceans with iron to increase carbon capture, or spraying sulphur dioxide or salt water into the upper atmosphere to promote high level cloud formation) is an area that's starting to receive some serious attention. However, there are no proposed projects that would mitigate all the effects of our CO<sub>2</sub> emissions. Furthermore, many of these projects are speculative, and years away from being implicated, and even their proponents admit that they don't know what all the side effects might be. At best, it's likely that they will buy us a little more time.

#### **10. Tackling climate change is just too expensive.**

Some of the measures needed to tackle climate change are very expensive. However, the economic costs of inaction are going to be far greater. It's also the case that many of the suggested measures would cost far less than the money spent bailing out the world's banks and yet, when governments could see a clear threat to the world's financial systems, they were able to find the money needed – if they realise that their electorates regard climate change as a more profound and urgent issue, maybe they can find the political will to act on this, too. There is also a simple issue of justice at stake. Even ignoring our emissions of carbon, we in the west use a far greater proportion of the world's resources than those in poorer countries – so much more that, if everyone lived to our standards it would take between 5 and 7 planets to sustain us. Surely the only just and Christian response is to recognise that God's gifts are supposed to be shared equally between all His children, and that we have a responsibility to live more simply and sustainably?

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