



Climate Change and the Purposes of God

Session one: Does climate change matter? If so, why does it matter?

Notes for Group Leaders

Purpose of this Session

The primary purpose of this Course is to invite us to think as Christians about the questions posed for us by climate change. It is a course suitable for Lent church groups, or for discussion groups at any time of year.

Clearly there are scientific dimensions to this, but climate change also challenges our values at a political, social, moral and spiritual level. Although we shall think about politics and economics, we shall also keep thinking about how creation care relates to the Gospel of Christ, and how our responsibilities as disciples of Jesus Christ to care for God's earth can be best undertaken.

When David Miliband was Environment Secretary, he said in a speech to the Vatican in 2007:

"Climate change is not just an environmental or economic issues, it is a moral and ethical one. It is not just an issue for politicians or businesses, it is an issue for the world's faith communities."

His Holiness the Ecumenical Patriarch Bartholomew says:

"The crisis we face is ... not primarily ecological, but religious; it has less to do with the environment and more to do with spiritual consciousness."

The Evangelical Declaration on the Care of Creation states:

"Many concerned people, convinced that environmental problems are more spiritual than technological, are exploring the world's ideologies and religions in search of non-Christian spiritual resources for the healing of the earth. As followers of Jesus Christ, we believe that the Bible calls us to respond..."

Group leader notes for session one: Does climate change matter? If so, why does it matter?

What does it mean to live for Jesus Christ today? What are our priorities as human beings and as disciples of Jesus? What difference does our faith make to the way we live in God's world? In our present economic climate, and with changes to our environment happening rapidly, it is right to pause to ask who we are, and what God is asking of us. A primary focus for this course will be on the questions posed for Christians by climate change.

1. There are different views around about climate change:

Where are you on this spectrum of views?

Climate change doesn't affect me at all.	I don't believe humans are causing climate change.	It is all very scary and we cannot do anything.	We must act now, or it will be too late.
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Perhaps your view is different from any of these? Why?

You could ask people to place themselves in a line across the room according to their view, with "It doesn't affect me at all" at one end and "we must act now" at the other end. Ask a few people to explain their position.

There is an extended paragraph on climate science at the end of these notes.

If there are "climate dissenters" present, you could ask whether they are prepared to go along with the possibility of human-induced climate change, and discuss how best we should respond as a precaution.

2. For reflection

Spend some time thinking about:

Psalm 24:1 'The earth is the Lord's and all that is in it.'

How does that make you feel about the way we are using the earth? What analogies can the group come up with to describe the truth (e.g. house-sitting a friend's beautiful home, but having wild parties every night which break the paintings, vases, furniture, killing off the pets...).

Psalm 145:9 'The Lord is good to all, and his compassion is over all that he has made.'

What does that imply for our relationship to other creatures?

Colossians 1:20 'God was pleased to reconcile to himself all things, whether on earth or in heaven, by making peace through the blood of [Christ's] cross.

In this extraordinary paragraph, Paul is saying that all things in heaven and on earth and held together in Christ, and are reconciled to God through the Cross.

The Swiss theologian Hans Kung once wrote: 'The kingdom of God is creation healed.'

? What is it that needs healing?

3. Climate Change and the Purposes of God

Climate Change and the Purposes of God says this: do you agree?

'The likelihood of runaway global warming, which will diminish food security, accelerate the extinction of huge numbers of species, and make human life impossible in some parts of the world, raises questions that go to the heart of our Christian faith.'

? Spend some time thinking through what some of the 'questions that go to the heart of the Christian faith' might include.

For example:

- *Our relationships as human beings with other creatures*
- *Our responsibilities in the rich West to the poorer parts of the world*
- *Our responsibilities to children not yet born*
- *The extent of our reliance on technology to sort it all out.*
- *Our selfishness and greed which seem to make international agreements very difficult*
- *How well are we sharing the rich resources of God's earth?*
- *How do we think about over-consumption and living more simply?*
- *What do we think of our society built so much on exploitative interest and debt?*
- *Does inequality matter? Why?*
- *What do we do with our fears about the future?*

What other questions would you add?

? In what ways does your Christian faith impinge on questions like these?

What should our relationship be with God as both the origin and end of all things? How do we balance our energy and material consumption with the needs of the poorest communities, and of future generations and other species? How do we sustain hope in the midst of fear and denial? How can we encourage global cooperation, challenge unsustainable economic systems and change our lifestyles? These fundamental questions prompt this urgent call to the Church.

4. For further reflection:

If you have time read carefully Job 38:4 – 7, and then scan through the rest of chapters 38, 39,40 and 41.

? What does this section say to you? What does it say about humanity's place in God's creation?

God's question to Job shows that all the other creatures were there for God's pleasure long before humanity came on the scene.

? Why do you think the writer reminds us about:

the lion (38:39), the raven (38:41), the mountain goats (39:1), the ass (39:5), the ox (39:6), the stupid ostrich (39:13-15), the strong horse (39:19), the hawk and eagle (39:26-27), the hippopotamus (Behemoth) (40:15), the crocodile (Leviathan) (41:1), as well as the trees and plants and other vegetation?

? What was Job's response to God? (see Job 42:1-3). *Awe, wonder, humility.*

A Prayer from Percy Dearmer:

O God, who set before us the great hope that your Kingdom shall come on earth and taught us to pray for its coming; give us grace to discern the signs of its dawning and to work for the perfect day when the whole world shall reflect your glory; through Jesus Christ our Lord.

You may choose to say this prayer at the end of each Session - or find a similarly appropriate one to use.

A note on Climate Science

The Inter-Governmental Panel on Climate Change predicts an average global temperature rise of between 1.6 and 5.0 degrees C, depending on many different factors, among them the readiness of governments to take action to reduce emissions of carbon dioxide. At the moment the annual emissions of CO₂ continue to rise. The UN Framework Convention on Climate Change set 2 degrees as a threshold beyond which there is unacceptable risk of dangerous climate change, which could potentially be catastrophic. Some climate scientists are arguing that we are already “beyond dangerous”.

*There is a vast range of literature available. One of the most accessible books is Sir John Houghton’s *Global Warming: the complete briefing* (Fourth Edition 2009, CUP).*

Carbon dioxide in the atmosphere gets trapped over long periods of time in polar ice. Scientist can tell from ice-cores from the Antarctic and Greenland that there has been a very rapid increase in the percentage of carbon dioxide in the atmosphere since the Industrial Revolution.

Before about 1750, the average concentration of CO₂ in the atmosphere was about 280 parts per million – and with some slight fluctuations had stayed there for several hundred thousand years. Now is it 392 parts per million and rising fast.

Chemical analysis indicates that this increase is very largely due to the burning of fossil fuels. Carbon dioxide in the atmosphere acts as a blanket over the earth’s surface, and together with other greenhouse gases such as methane and water vapour, keeps the earth’s temperature about 20^oC to 30^oC warmer than it would otherwise be. Without some carbon dioxide in the atmosphere, we would have extremes of heat and cold like Mars, and life as we know it would be impossible. Over the past 150 years, the average global surface temperature has gone up and down, due to volcanic eruptions, changing radiation from the sun, industrial particles in the atmosphere. However, Sir John Houghton argues that; “the substantial rise in global average temperatures during the last 50 years is well outside the range of known variability and cannot be attributed to any of these natural causes.” Most of the temperature rise is attributed to increasing emission of greenhouse gases from industry, burning fossil fuels, cutting down rain-forests and other human activities.

If the average surface temperature were to rise another 2^oC s in the next half-century, it is expected that there would be more flooding in some areas, more drought in other areas, shortages of drinking water, change in crop yields affecting food security, increasing acidification of the oceans, sea level rise and a changing distribution of insects affecting health.

If the rise were more than 4^oC, these effects would be dramatically worsened; crop yields would decrease very significantly, and more than 40% of earth’s species would face extinction. Worse still, warming on this scale would trigger natural emissions of carbon from drying forests and soils, and the release of methane from melting permafrost, raising

global temperatures still further. If the earth's temperature increases by 4⁰C, it will not stop there but will rise still further.

As Sir John Houghton notes, the temperature difference between the middle of an ice age and the warm interglacial periods (which is where we presently exist) is only about 5–6⁰C. So "likely warming in the 21st century will be a rate of climate change equivalent to, say, half an ice-age in less than 100 years – a larger rate of change than for at least 10,000 years. Adapting to this will be difficult for both humans and many ecosystems."

Having reviewed various technological and economic options both for mitigating and adapting to human-induced climate change, scientist James Hansen concludes:

'The basic matter, however, is not one of economics. It is a matter of morality – a matter of intergenerational justice. The blame, if we fail to stand up and demand a change of course, will fall on us, the current generation of adults. Our parents honestly did not know that their actions could harm future generations. We, the current generation, can only pretend that we did not know.'

It was conversations between James Hansen, and the environmental activist Bill McKibben that led to the creation of a world-wide movement 350.org. This argues that a considerable weight of scientific evidence points to the need for a 'planetary boundary' of 350 parts per million of carbon dioxide in the atmosphere – a level that was reached and passed in 1988. This would require very large reductions in current carbon dioxide emissions. It is why Operation Noah, among others, is calling for a 'zero carbon Britain by 2030.' (See for further information, for example, www.cat.org.uk or www.zerocarbonbritain.com).