

Hope in God's Future

Draft Methodist Conference
Statement 2009

Summary

1. Approaching God in the context of climate change

The theological task is to reflect on modern scientific accounts of the threats presented by climate change in the context of affirming the triune God as creator and redeemer of the universe. The scientific analyses of climate change and the role of human carbon emissions are well-grounded. It is now intellectually and morally irresponsible to fail to acknowledge and address the urgent need for radical cuts in greenhouse gas emissions in order to prevent intolerable damage to human populations and mass extinctions of many plant and animal species.

2. Encountering the Word of God

Reading the Bible in the context of climate change gives a vision of hope in God's faithfulness to creation, a call to practise love and justice to our human and other-than-human neighbours, and a warning of God's judgement of those who fail to do so. In this context, closing our ears to the voices of those most vulnerable to climate change would be nothing less than giving up our claim to be disciples of Christ.

3. Responding to God's Word

What is required of God's people in the industrialized world is repentance. The first step towards this change of heart and practice is confessing our complicity in the sinful structures that have caused the problem.

4. The body of Christ in the World

A core component to Christian discipleship is now a commitment to lifestyles consistent with levels of carbon emissions the earth can sustain. The church must commit itself to the UK government target of reducing carbon emissions by a minimum of 80% by 2050 and to urgent action to meet appropriate interim goals, as well as assisting members of its congregations to make similar changes and engaging with government to enable national and international change.

1: Approaching God in the context of climate change

To you, our God, we bow the knee
in praise and worship; honour be
to you for all around we see,
your glorious work in land and sea.

1.1 The Christian doctrine of creation

The foundation of the Christian doctrine of creation, and therefore the starting point for theological reflection on the issue of climate change, is the great affirmation of Genesis 1.31: 'God saw everything that he had made, and indeed, it was very good.'. In this statement we see both that the universe, our solar system and all life on earth are entirely dependent on God for their origin and continuing existence, and that all these things were declared good by their creator. The opening of John's gospel identifies this creative work with the Word of God, incarnate in Jesus of Nazareth, showing that the reconciliation of all things to God in the life, death and resurrection of Jesus cannot be separated from God's act of creation (Col. 1.15–20; Eph. 1.9–10). Creative and redemptive work also belongs to the work of the Spirit, recognized by Christian theologians as sweeping over the face of the waters in the beginning (Gen. 1.2) and inspiring a groaning creation as it awaits redemption (Rom. 8). God, Creator and Redeemer, Father, Son and Spirit,² is the transcendent and immanent source, sustenance and salvation of all creation.³

1.2 The scientific understanding of climate change

In this theological context, we approach the current scientific understandings of recent and future changes in the earth's climate. In the second half of the twentieth century it was recognised that 'global

1 Hymn 'To you, our God, we bow the knee' written for this report by Rosalind Selby, to be sung to the Celtic version of the tune to 'When I Survey the Wondrous Cross', Complete Mission Praise no. 1126, © Rosalind Selby 2008.

2 In this report we avoid using masculine pronouns for God, but for scriptural and ecumenical reasons retain, alongside other names, the traditional Trinitarian formula which includes masculine referents.

3 While the working group compiling this report has reflected on the teachings of other faiths as part of its work, it has not been possible to rehearse these within the scope of this report without the risk of failing to attend to the particularity of different faith traditions. Some references to relevant reading may be found in the attached list of study resources.

atmospheric concentrations of CO₂, methane (CH₄) and nitrous oxide (N₂O) have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values determined from ice cores spanning many thousands of years⁴ – carbon dioxide levels being around 30% higher than pre-industrial values by the year 2000. The Intergovernmental Panel on Climate Change (IPCC) is tasked with drawing together observations and climate modelling studies, together with assessing potential impacts of future climate change resulting from human activity. After over 15 years of concerted research, the fourth report of the IPCC published in 2007 concluded that ‘Warming of the climate system is unequivocal’⁵ and that ‘Most of the observed increase in global-averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic [human induced] GHG [greenhouse gas] concentrations.’⁶ In predicting future climatic changes, the IPCC set out several scenarios, projecting temperature rises by the end of the 21st century ranging from just under 2°C (compared to the end of the 20th century) for a gradual reduction in GHG emissions after 2040, to 4°C for continuing increasing GHG emissions.⁷

Associated with these global temperature increases, the IPCC also judges climate change will cause:

- increased frequency of heat waves over most land areas (very likely);
- increased occurrence of heavy precipitation events over wet areas (very likely);
- increased tropical cyclone activity (likely);
- decreases in water availability and droughts in semi-arid areas (high confidence);
- the North Pole to be ice free in summer months by 2050, although recent trends in decreasing ice coverage have been faster than model predictions, suggesting that the rate of climate change, at least in some areas is faster than projected;⁸
- gradual sea level rise of seven metres over a timescale of 1000 years, although ‘more rapid sea-level rise on century timescales cannot be excluded’, affecting ‘major changes in coast lines and inundation of ... river deltas and low lying islands’.⁹

⁴ IPCC, ‘Summary for Policymakers of the Synthesis Report of the IPCC Fourth Assessment’, (2007), 5.

⁵ IPCC, ‘Synthesis Report Summary’, 2.

⁶ IPCC, ‘Synthesis Report Summary’, 5.

⁷ IPCC, ‘Synthesis Report Summary’, 7–8, Figure SPM-5 and Table SPM-1.

⁸ IPCC, ‘Synthesis Report Summary’, 13, Table SPM-3.

⁹ IPCC, ‘Synthesis Report Summary’, 13.

All of these changes will have significant impacts upon all human populations and the wider ecosystem of the earth. The Stern Review notes that ‘the poorest developing countries will be hit earliest and hardest by climate change, even though they have contributed little to causing the problem’.¹⁰ In Africa, for example, agricultural production is projected to be severely compromised as early as 2020, and food production in other areas will be compromised. Progress toward achievement of the UN Millennium Development Goals is likely to be impeded and by the mid 21st century there are likely to be 200 million refugees as a result of climate change.¹¹ For global warming as low as 1.5°C, it is estimated that 30% of species face an increased risk of extinction, while for warming of 3.5°C, 40–70% of species may become extinct.¹²

While there was some legitimate debate during the early stages of the development of scientific models of climate change regarding their accuracy, there is now an overwhelming scientific consensus that the analysis provided in the IPCC report is robust and reliable.¹³ Even in the most optimistic scenario identified in the report, where there is international action to bring rapid and significant cuts in greenhouse gas emissions, the associated rise in global temperatures of 2°C by the end of the 21st century will make many areas of human population uninhabitable and cause the extinction of many plant and animal species. It is important to note that while much progress has been made in understanding climate change, the scientific view continues to develop. Some new research released since publication of the IPCC report suggests climate change will occur even faster than the IPCC estimates.¹⁴ Regardless of whether this is eventually accepted into the consensus scientific view, the conclusions of the current IPCC report are sufficiently robust to suggest that it is now morally irresponsible to fail to act on this analysis of our current situation.

10 Stern Review Report on *The Economics of Climate Change* (London: Cabinet Office – H. M. Treasury, 2005), URL: < http://www.hm-treasury.gov.uk/sternreview_index.htm>, xxvi.

11 IPCC, ‘Synthesis Report Summary’, 11, Table SPM-2, 18; N. Myers, ‘Environmental Refugees: An Emergent Security Issue’, Paper presented at the 13th Economic Forum, Prague, 23–27 May 2005, URL: <http://www.osce.org/documents/eea/2005/05/14488_en.pdf>.

12 IPCC, ‘Synthesis Report Summary’, 13–14.

13 See the DEFRA position on climate change (<http://www.defra.gov.uk/ENVIRONMENT/climatechange/index.htm>); The United Nations Framework Commission on Climate Change (<http://unfccc.int/2860.php>); the United Nations Environment Programme Global Environment Outlook Report (<http://www.unep.org/geo/geo4/media/>); The Stern Review on the Economics of Climate Change (<http://www.occ.gov.uk/activities/stern.htm>); and the Royal Society guide to climate change controversies (<http://royalsociety.org/page.asp?id=6229>).

14 J. Hansen, et al., ‘Target Atmospheric CO₂: Where Should Humanity Aim?’, *The Open Atmospheric Science Journal*, 2 (2008), 217–231, doi: 10.2174/1874282300802010217, URL: < <http://www.bentham.org/open/toascj/openaccess2.htm>>.

2: Encountering the Word of God

We to your word, this live-long day
open our ears and hearts, and minds;
may we be led along the way,
your will and our true selves to find.

2.1 Theological approach

The remainder of our report tackles the question of how these theological and scientific accounts bear upon each other as we work out a theological response to climate change. The approach we have adopted is to:

- recognize the situation we find ourselves in, and the questions our faith provokes in this context;
- bring these questions into dialogue with the Bible and Christian theological traditions; and
- seek to discern the implications of this encounter for changed practice.

Our report also seeks to reflect our practice as Christians, and is structured to reflect many Christian liturgies. We seek to bring the situation of the church, as part of a world facing threats of climate change, into encounter with God's word in the Bible in order to inform and motivate a response by the church and the world.

2.2 Christian hope in the context of climate change

We consider it crucial to begin our theological response to climate change by reflecting upon our situation in relation to the overarching biblical narrative: God creating the universe, God in Christ bringing reconciliation to a world gone astray (e.g. Gen. 3, 4, 6), and God's promised redemption of all things in Christ and through the Spirit.¹⁵ This understanding of the place in which the church finds itself crucially shapes theological thinking about climate change. First, and most importantly, followers of Christ must hope in these days and not despair. If we affirm the goodness of God's creation, God's incarnation in Jesus Christ, and God's promise of redemption, we cannot despair of what will be, because we are called to have faith in God and hope in God's promises. God's creatures do not have the power ultimately to frustrate the purposes of the almighty God we worship; God's sacrifice in Christ was a once-for-all effective action to defeat the sin of God's creatures and to refuse to allow it the final word. In these days between the resurrection of Christ and Christ's return, we are part of a creation groaning in labour pains for the new creation on its way (Rom. 8). These are testing

¹⁵ See paragraph 1.1 above.

times, but faithfulness means not weakening our grip on the hope that has been set before us (Heb. 6.18). We cannot, therefore, countenance a future in which God has abandoned the project of creation and redemption, in which climate change destroys all that God has established or in which human irresponsibility overwhelms God's ability to bring redemption to creation. The basis for Christian responses to climate change is hope in the realization of the reign of God over a renewed creation.

This affirmation of Christian hope in the face of climate change is subject to two kinds of misunderstanding. First, ever since disputes with Marcion and other Gnostics in the early church, some Christians have been tempted to view redemption as an escape from the created order rather than its renewal. This view of the end-times leads to a lack of concern for what happens on earth, for it considers material creation as unimportant in comparison with the higher spiritual reality to which some human beings are destined. This has obvious relevance to debates about climate change. Such a theological view would suggest that actions to mitigate global warming are unimportant. This Gnostic view of creation and redemption has been consistently rejected by Christian theologians from Justin Martyr in the second century onwards. It is inconsistent with the Christian understanding of the incarnation of God in Christ in which God affirms all God has made, the promise of the resurrection of the body (1 Cor. 15) and faith that God will make all things new (Rev. 21.1–8).¹⁶ Christian hope means hope for what God is doing in this world, not that spiritual beings will escape the destruction of the material.

The second possible misunderstanding is that we need not act in relation to the threat of climate change because God will sort out the problem for us. In creation God has given creatures freedom, and human beings bear weighty responsibility. Their good and bad actions have real and serious consequences for others. Hope in God's future does not mean a naïve confidence that bad things will not happen. This is made clear by the biblical narrative of human disobedience of God, originating with Adam and Eve in Eden and Cain's murder of his brother (Gen. 3–4), and rehearsed in a catalogue of human atrocities throughout history and continuing to this day. Hope in God's future is, therefore, not an alternative to wise and moral actions in response to the situations that confront us (Rom. 6.1–2). Christian hope guarantees that such faithful actions will not finally prove to be meaningless and ineffective but will find a place in God's purpose for the redeeming of the world. Hope is thus a reason for bold action in the world in accordance with God's will for creation, not an excuse for inaction.

¹⁶ Tom Wright makes this point in a recent book (*N. T. Wright, Surprised By Hope* (London: SPCK, 2007)).

2.3 The human vocation to love and do justice

The Bible provides no shortage of counsel for how humankind should live in accordance with God's will, bearing significantly on the question of climate change. Jesus summarizes the Jewish law in the commandments to love God and love the neighbour (Mk. 12.29–31). Our love of God is demonstrated in our response to the seventh day of creation, in a Sabbath commitment to worship and interruption of our daily work. This love, in response to the covenant God made with all living creatures after the flood (Gen. 9), cannot wholly be distinguished from the second call to love of neighbour: Luke's gospel follows this two-fold commandment with the parable of the Good Samaritan as an example of neighbourly love (Lk. 10.25–37). This love is linked in Matthew's shocking identification of Christ with those in need in his image of God's judgement of those who fed the hungry, gave water to the thirsty, welcomed the stranger, clothed the naked, cared for the sick and visited those in prison – and of those who did not (Mt. 25.31–46). In this account those in need are particularly identified with Christ. This priority is echoed in Jesus' 'Nazareth manifesto' where he declares he has been anointed by the Spirit to bring good news to the poor, release to the captives, recovery of sight to the blind, to let the oppressed go free and to proclaim the year of the Lord's favour (Lk. 4.18–19). The beatitudes similarly announce God's blessing on the poor, the mourning, the meek, those who hunger and thirst for righteousness, the merciful, peacemakers and the persecuted. Luke follows this with a catalogue of the woes to fall on those who are rich, full, laughing, and well-regarded by others (Mt. 5.3–12; Lk. 6.20–26). There is no doubt that Christ's disciples should show particular concern for the poor and vulnerable.

The New Testament demand to love the neighbour, with particular attention to the poor, can be seen in continuity with the emphasis in Jewish law and Jewish prophetic writings. Jewish law made particular provision for those in need, as well as establishing economic structures such as the Jubilee to prevent differences between rich and poor becoming too great (Lev. 25.8–17). The prophets protested against oppression of the poor by the rich: the book of Isaiah opens with a vision of cities desolated because of evildoing. God calls Israel to cease doing evil, learn to do good, rescue the oppressed, defend the orphan and plead for the widow (Isa. 1.16–17). Amos declares that because Israel has trampled on the poor and taken their grain they will lose their houses and vineyards (Amos 5.11) and Deuteronomy associates departing from God's law with agricultural catastrophe (Deut. 28.38–40). The judgement Jeremiah prophesies has an ecological dimension in which the mountains quake, the birds flee and the fruitful land becomes a desert (Jer. 4.24–6). God speaks these warnings through the prophets to call God's people back to the acts of love and justice required by their relationship with God: this is a call for changed living to transform Israel's future, rather than

the fatalistic living out of a future fixed by God. The words of the prophets remind us that concern for the poor and vulnerable is not only a matter of love and charity, but of what is due to them under God's law: it is a matter of justice.

2.4 Hearing the neighbour as a test of discipleship

In the context of this biblical demand for love and justice, encountering those whose communities are imperilled by climate change is especially striking. In September 2007 the Pacific Conference of Churches issued a statement from their General Assembly concerning climate change. They understand themselves to be guardians of the Pacific Ocean or Moana, and 'deplore the actions of industrialized countries that pollute and desecrate our Moana'. They declare 'the urgency of the threat of human induced effects of climate change to the lives, livelihoods, societies, cultures and ecosystems of the Pacific Islands' and call on 'our sisters and brothers in Christ throughout the world to act in solidarity with us to reduce the causes of human-induced climate change. We issue this call especially to churches in the highly industrialized nations whose societies are historically responsible for the majority of polluting emissions. We further urge these countries to take responsibility for the ecological damage that they have caused by paying for the costs of adaptation to the anticipated impacts.'¹⁷ The echoes of the anger of the prophets ring loud through this statement. The Pacific Islanders face grave threats to their way of life as a result of the burning of fossil fuels by industrialized nations: we cannot fail to recognize this as the trampling of the poor by the rich criticized by Amos. The demands of justice and love for these neighbours are even stronger than the claim of the man cared for by the Good Samaritan: here are nations left wounded by our negligence in the past, whose injuries we continue to worsen through our irresponsibility in the present. Closing our ears to this call would be nothing less than giving up our claim to be Christ's disciples.

Being able to hear the voice of these communities already threatened by climate change is a blessing to us in shaping a theological response, especially as many who are not able to make themselves heard are also threatened. Among these are communities in sub-Saharan Africa for whom changes in climate have already brought increasingly frequent famines and droughts, as well as those in India, the Americas and Europe who have

¹⁷ Pacific Conference of Churches, 'Statement From the Pcc 9th General Assembly on Climate Change', (2007)

suffered heat waves and storms intensified by global warming.¹⁸

There is also a much larger group of human beings threatened by climate change who have no chance of making themselves heard: those not yet born. As well as alerting ourselves to the demand of love and justice to our present neighbours, we need to understand what it means to treat as neighbours those in following generations. The covenant God made after the flood was with all the creatures in every generation descended from those saved in the ark (Gen. 9): we must not make the mistake of thinking that those alive today have any superiority under the covenant over those to follow us. For some, thinking of children and grandchildren helps to give faces to those who will inherit the earth we leave (cf. Mal. 4.6), but this must be only a first step in appreciating the enormity of the moral demand of future generations. The requirement to develop our moral imaginations in this direction is particularly crucial given that the worst effects of failing to reduce carbon emissions now will be felt by those alive one hundred years and more from now. Christians should resist market-based economic analyses that discount the well-being of future generations in relation to those alive today, and thereby portray as unattractive actions that will benefit future generations but which incur immediate costs.¹⁹

2.5 Attending to other than human neighbours

Attending to biblical depictions of human obedience to God's will also directs our attention to non-human creation. The creatures of each day of the first Genesis creation narrative are declared good (Gen. 1) and the whole of creation in all its diversity is declared 'very good' at the end of the sixth day (Gen. 1.31). After the great flood, God makes a covenant not only with Noah and his family but with every living creature that came out of the ark (Gen. 9.9–10). The law of Israel protects not only human beings,

¹⁸ In 2005, Lord Robert May, President of the Royal Society, drew attention to the findings that 'climate change, largely caused by a rise in greenhouse gas emissions from human activities, may already be responsible for an increase in drought conditions, and hence for a rise in the risk of famine, in eastern Africa where millions are already at risk of hunger' ('Open letter to Margaret Beckett and other G8 energy and environment ministers', October 2005, URL: < <http://royalsociety.org/page.asp?id=3834>>). See also Andrew Simms and John Magrath, *Africa-Up in Smoke? 2: The Second Report on Africa and Global Warming from the Working Group on Climate Change and Development, Vol. 2* (Oxford: Oxfam Publishing, 2006).

¹⁹ For a theological discussion of this issue, see Rachel Muers, *Living for the Future: Theological Ethics for Coming Generations* (London: T & T Clark, 2008); for a detailed philosophical and economic analysis, see John Broome, *Counting the Cost of Global Warming* (Cambridge: White Horse Press, 1992). See also Herman Daly and John Cobb, *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future* (Boston: Beacon Press, 1989).

but the animals they keep, who must not be made to work on the Sabbath (Exod. 20.10) or muzzled while they are treading grain (Deut. 25.4). The Sabbath year is to rest the land and benefit both livestock and wild animals alongside the Israelites and their hired workers (Lev. 25.5–7). When Job questions God's treatment of him he is reminded of the majesty of God's careful provision for every creature, and of God's creation even of creatures like Behemoth and Leviathan who are threatening to humanity (Job 38–41). This attention to creation beyond the human is echoed in the New Testament: where Jesus reminds his disciples of God's concern for birds and lilies (Mt. 6.25–34); the letters to the Colossians and Ephesians emphasize the union of all things in Christ (Col. 1.15–20; Eph. 1.9–10) and the letter to the Romans pictures the whole of creation awaiting its share in the freedom of the children of God (Rom. 8.18–23). This biblical vision of solidarity among God's creatures accords with modern scientific discoveries relating to both the genetic affinity between human and other animals and the radical interdependence of all life on earth.

This biblical regard for creation beyond the human has often been overlooked in interpretations of God's injunction to 'subdue the earth' and 'have dominion' over other animals (Gen. 1.28). This instruction has been seen as giving human beings licence to use other animals as they will, although there is no allowance in these verses for killing animals for food.²⁰ Many biblical commentators on Genesis are now agreed that identifying human beings as the image of God does not name a particular capacity as God-like, but gives them a particular role in relation to other creatures.²¹ Our dominion should therefore be exercised in a way that it images and reflects God's care for creation. This kind of care, made more explicit in the instruction to Adam to till and keep the soil of Eden (Gen. 2.15), has often been described as 'stewardship' of creation, rooted in the image of a person placed in a position of responsibility to manage somebody else's property, finances, or household.²² This picture of a human role on behalf of the rest of creation can help us recognize our responsibility to care for other life, although it is important to recognize its limitations. God is present and active in sustaining

20 *Permission is only given for meat-eating after the great flood (Gen. 9.3). Gerhard von Rad is one of many commentators to reject the interpretation of dominion as unlimited license: see Gerhard von Rad, Genesis (London: SCM, 1972), 60.*

21 *See, for example, Gordon J. Wenham, Genesis, Word Bible Commentary (Waco: Word, 1994), 30; Victor P. Hamilton, Genesis, Nicot (Grand Rapids: Eerdmans, 1995), 135; Walter Brueggemann, Genesis (Louisville: John Knox Press, 1982), 32; von Rad, Genesis, 58 and the detailed discussion in J. Richard Middleton, The Liberating Image: The Imago Dei in Genesis 1 (Grand Rapids, MI: Brazos, 2005), 93–145.*

22 *Calvin's commentary on Gen. 2.15 concludes 'let every one regard himself as the steward of God in all things which he possesses. Then he will neither conduct himself dissolutely, nor corrupt by abuse those things which God requires to be preserved.'* (John Calvin, Genesis, ed. & trans. John King (Edinburgh: Banner of Truth Trust, 1965), vol. 1, 125.

creation from moment to moment. We are not, therefore, stewards acting in place of an absent landlord, but servants called to play our part in response to God's care for creation. This responsibility has obvious relevance to climate change, suggesting that the potential mass extinctions of other species on the planet caused by human activities represent our abdication from a divinely-entrusted duty. Biblical texts testifying to God's concern for creatures beyond the human, together with Israelite law defending them, demand that we should be motivated by love and justice to protect nonhuman neighbours threatened by climate change alongside the human ones.

2.6 Bringing God's judgement upon us

Alongside hope in the future that God is bringing, therefore, comes an urgency to cooperate with God's purposes. Where human beings have wilfully neglected their responsibilities before God, both Old and New Testament texts proclaim God's judgement: Jeremiah prophesies that the rich will not get to enjoy their wealth and Jesus warns those who fail to care for him, embodied in those in need, are not fit for eternal life. The Bible repeatedly tells of a world turned upside-down when God's reign is inaugurated, with those now well-off going hungry and those now first finding themselves last (Mt. 10.30; Mk 10.31). In encountering biblical warnings about the consequences of failing to love and deal justly with those in need, it is hard to escape the conclusion that in continuing to emit carbon at rates that threaten our neighbours, present and future, human and other than human, we are bringing God's judgement upon us. Even here we should not despair: that God judges rather than abandons us is a sign of God's grace and continuing love for us. But in our encounter with God's word in the context of climate change we should be clear that, while we have grounds for hope in the future God will bring if we act in accordance with God's love for all creation, we also have grounds for fear of God's judgement if we continue to fail to respond to the urgent needs of our neighbours. When the rich man, who had ignored Lazarus begging at his gate, asked to be allowed out of hell to warn his brothers, Abraham replied they already had Moses and the prophets (Lk. 16.27–8). Neither can we say we have not heard.

3: Responding to God's Word

Thus knowing holiness and grace,
in humble honesty confess
we all our sins before your face,
and turn our lives to righteousness.

3.1 Confession

In encountering God's word in the context of climate change we have received a vision of hope in God's faithfulness to creation, a call to practise love and justice to our neighbours, and a warning of God's judgement of those who fail to do so. In response our first action must be confession: acknowledging what we have done wrong is the first and necessary step towards the change of direction repentance requires. We must confess that we:

- are heirs to the riches of an industrialized economy that has been instrumental in causing the climatic change already placing our neighbours in peril;
- are so addicted to the fruits of this economy that we find it hard even to want to live lives that do not threaten the future of life on planet earth; and
- know much of the good we should do to live within sustainable boundaries, but struggle to summon the moral will to change.

Our wrongdoing is best understood as complicity in structural sin, a socially embedded and continuing pattern where the rich and powerful exploit those who are poor and powerless, just as they did in the days of the prophets. South African theologian, Ernst Conradie, has argued that the need for white South Africans to confess their involvement in the structures of apartheid is a good analogy for the confession necessary in relation to climate change.²³ Just as most white South Africans had no direct responsibility for the establishment or maintenance of apartheid but were guilty in benefiting from it and failing to challenge its injustice, so we did not originate the industrialized economies that resulted in climate change but are now guilty of enjoying the fruits of systems that threaten the future of God's creatures. Drawing on Barth's work, Conradie notes that our confession is only possible because of our knowledge of God's grace: it is our encounter with God's mercy that enables us to recognize our guilt. Conradie recognizes, however, that for most of us confession is still some way off, because we are not sure that we can envisage or want to live the renewed and reordered lives that

²³ Ernst Conradie, *The Church and Climate Change* (Pietermaritzburg: Cluster Publications, 2008).

would result from being forgiven. Like the rich man who could not bear Jesus' command to be separated from his possessions and sadly turned away (Mk. 10.17–22), we look at the prospect of lives within levels of carbon emissions that the earth can sustain, and decide we prefer our lives of sin. Here, then, is the first challenge to the church: receive God's grace, come to desire a forgiven life, and thus be enabled to confess current wrongdoing.

3.2 Repentance

Authentic confession leads to repentance: a turning from past sin to the way God would have us live. As individuals, churches and nations, we need to work towards this about turn, which is the only hope for the kind of societal changes that will avoid our carbon emissions resulting in catastrophic climate change. If we think of this task of repentance only as an individual matter we are likely to fail in our attempts to bring about the change necessary even in our own lives: repentance of structural sin must have a corporate dimension in which, as churches, we take action collectively and turn our practice around at institutional and individual levels. Beyond this, we need to consider what role we can play as churches and citizens in contributing to a similar turning about of our nation, by entering the political arena to make the case for strong action based on our moral duties to our neighbours.²⁴

Even to sinners like us, God promises forgiveness (Rom. 5.6), and in God's name the church offers absolution from sin. Before us, therefore, is the great and joyous prospect of being welcomed home with open arms by our God (Lk. 15.20), released from our burden of guilt and despair into lives as God's forgiven children. It may be that desire for this newness of life, for lives washed clean of the stain of our sin (Ps. 51), is the strongest motivation for the change of life to which God calls us.

3.3 Intercession

One response of those forgiven by God must be intercession for those threatened by climate change. In confidence in God's good purposes for creation we ask God to:

- protect human populations made vulnerable by changes in climate;
- protect those in generations to come who will inherit the problems we have created; and

²⁴ We outline what signs of repentance might look like in section 4 below.

- protect those plant and animal species whose habitats will be eradicated by global warming.

As our prayers in this area become more detailed, however, they also become more uncomfortable: we pray for:

- nations to recognize the urgency of action in response to climate change;
- politicians to be bold in setting out strategy to achieve the goals that need to be reached; and
- the citizens of nations – and especially nations like ours – to be motivated to support costly action to cut carbon emissions and seek to ameliorate its effects for those it threatens.

Our prayers of intercession, therefore, lead us to pray for continuing change in our hearts and minds, allowing us to play a part in changing the hearts and minds of others, and becoming part of the answer to our intercessions.

4: The body of Christ in the world

Sustained by word and bread and wine,
Christ's body we are fed to be.
May servant life we know was thine
be ours in all humanity.

4.1 United as Christ's body

As participants in the death and resurrection of Jesus Christ, enacted in the sacrament of holy communion, the church is united in its saviour Jesus Christ and nourished to live in holiness as Christ's body on earth. In responding to Jesus' command to eat bread and drink wine as his body and blood in remembrance of him, the material stuff of creation, in the form of grain and grapes, becomes a sign and sacrament of God's presence with us. Through participation in Christ, we are made capable of lives we could not otherwise live. We are transformed from individual disciples into members of his one body, no longer dependent on ourselves but bound together in the life of our Lord. Together we are equipped and enabled to act as God's people in the world, witnessing to what God is doing and serving God and neighbour. Just as the humble bread and wine become sacraments of God's presence with us, so our small acts in response to God's call become signs of God's presence in the world.

4.2 Judging what repentance requires

Before we can identify what actions are necessary at ecclesial, individual and national levels, we must determine what reductions in our carbon emissions are necessary in order to avoid the worst effects of climate change. The IPCC 4th Assessment Report estimates that keeping the globally-averaged equilibrium temperature increase between 2 and 2.4 °C above pre-industrial values will require greenhouse gas emissions to be reduced by between 50 and 85% by 2050 compared to emission levels in 2000, leading to an eventual stabilization of greenhouse gases to between 445 and 490 parts per million (ppm).²⁵ In common with many other interpreters of the IPCC report, the recent first report of the UK Government Committee on Climate Change judges that 'the global danger zone starts above about 2 °C and that global policy should aim to keep ... temperature

²⁵ IPCC, 'Synthesis Report Summary', 20, Table SPM.6.

increases below this'²⁶. However, in making this assessment they note that 'it is no longer possible with certainty, or even with high probability, to avoid this danger zone' and therefore 'strategies for adaptation to temperature increases of at least 2°C' should be planned, with the additional aim 'to reduce to very low levels (e.g. less than 1%) the dangers of exceeding 4°C'²⁷. In light of this judgement, the Committee on Climate Change concludes that global emissions of greenhouse gases would have to be reduced by 50% below current emissions by 2050. Since 'it is difficult to imagine a global deal which allows the developed countries to have emissions per capita in 2050 which are significantly above a sustainable global average' of 'between 2.1 and 2.6 tonnes per capita' for the UK this implies an '80% cut in UK Kyoto (greenhouse gas) emissions from 1990 levels'.²⁸ Towards this end, they set three five-year carbon budget targets which would see a reduction in UK emissions of 42% by 2020,²⁹ achieved through energy efficiency measures and technological developments to de-carbonise power generation and transport.³⁰

26 UK Government Committee on Climate Change, 'Building a Low-Carbon Economy – The UK's Contribution to Tackling Climate Change', December 2008 (London: The Stationery Office, 2008), URL: <<http://www.theccc.org.uk/reports/>>, 20.

27 Committee on Climate Change, 'Building a Low-Carbon Economy', 20. There is a growing body of opinion that is concerned that observed changes in climate, such as ice melt within the arctic circle, are progressing faster than the IPCC models predict. This has led to proposals for stabilization of greenhouse gases at lower concentrations to reduce the risk of passing dangerous tipping points in our global eco-system. Two significant networks are the 350 network, URL: <http://www.350.org>, and the 100 months campaign, URL: <<http://www.onehundredmonths.org>>.

28 Committee on Climate Change, 'Building a Low-Carbon Economy', xiv–xv.

29 Following the EU framework, the figure of 42% is the intended budget reduction relative to 1990 that will apply 'following a global deal on emissions reductions'. Before a global deal is reached an 'Interim budget' requires a 34% reduction by 2020 (Committee on Climate Change, 'Building a Low-Carbon Economy', xix).

30 Recent documents published by the EU and Australian governments also commend the global target of a 50% reduction in emissions by 2050. However, in aiming towards this, they recently adopted less ambitious emission reductions by 2020: the EU up to 30% and Australia 15%. See European Commission, *Combating Climate Change: The EU Leads The Way* (Brussels; European Commission Publication, 2008), URL: <http://ec.europa.eu/publications/booklets/move/75/index_en.htm>) and Australian Government Department of Climate Change, *Carbon Pollution Reduction Scheme: Australia's Low Carbon Future* (Canberra: Australian Government, 2008), URL: <<http://www.climatechange.gov.au>>. Again both these figures refer to 'intended' targets following a global deal on emissions reductions. Prior to this, 'interim' targets of 20% for the EU and 5% for Australia are proposed. For discussion of the viability of a 50% reduction by 2050 see also Ross Garnaut, *The Garnaut Climate Change Review Final Report* (Melbourne: Cambridge University Press, 2008), URL: <<http://www.garnautreview.org.au>>, and K. Anderson, and A. Bows, 'Reframing the Climate Change Challenge in Light of the Post-2000 Emission Trends', *Phil Trans Royal Soc A*, vol. 336, no. 1882 (2008), 3863-3882, DOI: 10.1098/rsta.2008.0138.

Meeting the ambitious target of an 80% cut in emissions will not prevent serious damage caused by climate change: a 2°C rise in global temperatures will make areas uninhabitable by humans, lead to droughts, food shortages and large numbers of environmental refugees, as well as the probable extinction of a third of species on earth.³¹ While it would be good to do more than this³² we cannot aim to do less, even if other nations are not yet ready to take similar action. In recognition of the damage we have already done, and in response to our encounter with God's word and with the voiced and unvoiced claims of our neighbours, we must reduce our carbon emissions to levels that the earth can sustain. It is incumbent on those who have generated the most carbon emissions and derived the greatest benefit from relatively cheap and accessible fossil fuels to pioneer the path towards alternative energy futures.

4.3 Enabling repentance in the church

In the remainder of this section we set out some practical initiatives at the ecclesial, individual and national level that would be both signs of repentance and first steps toward the forgiven and redeemed lives to which we are called. We have argued that confession is the first step towards repentance and changed life and that that is only possible alongside the hope of a good and God-given future in which we can live forgiven lives before God. As churches we must first seek to enable and equip this change of heart, mind and will through prayer, preaching, bible study, discussion and reflection, leading to corporate liturgical acts of confession. On this change of heart all else depends. These actions are the church's preparation for joining in the redemptive mission of God in this area of life. They lead the church to where its members may hear God's universal call to changed lives in response to the threat of climate change.³³ They are a precondition to the church recognizing that a commitment to living within sustainable levels of carbon emissions is central to Christian discipleship in our days. Through our common worship and common life we are transformed, and become a community capable of transformation.

31 See section 1 above.

32 The Operation Noah campaign (<http://www.operationnoah.org/>) judges that the UK must achieve a reduction in emissions of at least 90% by 2030 and supports the proposal of the Centre for Alternative Technology for zero carbon emissions in *Zero Carbon Britain* (Llwyngwern: CAT Publications, 2007), URL: <http://www.zerocarbonbritain.com/>

33 Where 'church member' is used in this document it is intended to refer to regular participants in the worship and other activities of churches, rather than narrower denominational definitions of the term.

4.4 Reducing the carbon footprint of the church

As churches, we must address the carbon footprint of our own activities. We must first move quickly to discover the current level of our carbon emissions and identify a strategy to enable an audit of carbon emissions at all levels of the church, so that local churches, regional structures, and national church institutions become aware of the starting point for action to reduce carbon emissions. Alongside this we must establish a way of supporting church structures at all levels in making reductions in carbon emissions proportionate to the overall reductions necessary by 2050 of at least 80%, with the urgent and immediate interim steps this requires. National churches will need to provide support and incentives for local and regional structures to meet this challenge. We do not underestimate the magnitude of this task but consider it the minimum adequate response to the situation we face, as well as the only morally authentic basis for calling on church members and the nation at large to make similar changes. We recognize the structural factors, internal and external to the churches, that impede progress towards these goals, and the need for churches to work in partnership with local and national government to overcome the barriers to change. Church policy in many areas, including the investment of church funds, will need to be reviewed in the light of this commitment.

4.5 Helping members of congregations to reduce emissions

Alongside actions to address the carbon emissions associated with the corporate life of our churches, we need to identify ways of enabling members of congregations to make changes in their carbon footprint matching the minimum of an 80% reduction target together with appropriate interim goals. Again, the first task is to encourage and facilitate an audit of current carbon emissions, followed by supporting individuals in church or small group contexts to commit to reducing their carbon footprint and identifying strategies to do so. We believe that many will respond to the offer of exchanging a general consciousness of guilt for addressing the topic responsibly and realistically in a group context. The early church began as a movement of small groups of Christians who agreed to be accountable to one another. It may be that, if we can recover this sense of accountability which small groups can foster, many may be enabled to make changes that seemed impossible in isolation. If congregations were able to see the net impact of both corporate and individual commitments to reduce carbon emissions, this might be a significant encouragement and motivation for further action.

4.6 Engaging politically to work for national and international change

Finally, alongside movement towards these changes in the corporate life of the church, we need, as churches, to be prepared to contribute to public political debate about appropriate responses to climate change. Our churches should support the UK government in developing a coherent strategy to cut emissions by a minimum of 80% by 2050 and impress on the government the urgency of this task. Our churches have called for action by the UK even in a global context in which others are not yet ready to make matching commitments.³⁴ The churches must speak prophetically to challenge politics bound by party interest and the horizon of the election cycle; they must also act to build grassroots coalitions so that politicians offering wise and responsible long-term action in response to climate change will find electoral support. Cuts must come from real reductions in carbon emissions from the UK: while support to assist poorer nations in sustainable energy development is crucial, it would be irresponsible for the UK to buy out its responsibility to reduce its own carbon emissions. High on the list of political priorities must be advocacy in support of those poor nations most exposed to the threats of climate change through no fault of their own, where help is owed not only on grounds of charity but also as restitution and reparation for damage done by the activities of industrialized nations. Churches at regional and local levels need to work towards action with local governments. At every level, the corporate commitments of our churches to act in relation to their own carbon emissions will significantly enhance their contribution to this public debate. Effective political initiatives will often come from joint projects with other churches, other faith groups or non-religious groups sharing similar goals, and action to improve understanding between such potential allies and networks is important.³⁵

4.7 Alertness to disproportionate impact on the vulnerable and poor

In making these proposals for the kinds of action churches should engage in as signs of repentance and sacramental living, we recognize that, for many members of church communities, action in response to these issues will

³⁴ Baptist Union of Great Britain, The Methodist Church, the Religious Society of Friends (Quakers) and the United Reformed Church, 'A response to the draft climate change bill consultation of the Department for Environment, Food and Rural Affairs (DEFRA)'. (July, 2007), URL: <http://www.jointpublicissues.org.uk/jpit_climatebilldefraresponse_0707.pdf>.

³⁵ We welcome the Church of England 'Shrinking the Footprint' campaign (URL: <<http://www.shrinkingthefootprint.cofe.anglican.org/>>) and the London Roman Catholic Church 'For Creed and Creation' (URL: <<http://www.london.gov.uk/gla/publications/environment/ForCreedandCreation.pdf>>) as examples of cross-denominational work on this issue.

seem confusing, threatening and unwelcome. Alongside making the case for substantial change, our churches must keep alert to the pastoral implications of the proposed changes for church members. In particular, we must avoid strategies for reducing carbon emissions that have a disproportionate impact on the poor and vulnerable.

4.8 The need for action in relation to other environmental issues

In addressing the issue of climate change, we must also recognize that it is only one of many environmental issues requiring attention by our churches: related issues include concern for:

- threats to biodiversity;
- deforestation;
- water shortages;
- depletion of non-renewable resources; and
- the impact of rapid rises in human population.

Climate change is but one manifestation of the impact of a global industrialized economy. Action in response to climate change will ameliorate the impact of some of these environmental challenges, but it is also required in these other areas.³⁶ Appreciation of the complex interrelationships of environmental issues and other justice concerns is also necessary, such as balancing the economic advantages to poor communities of fairly traded goods from overseas against the carbon costs of such imports. Attention to the challenge of climate change should not be at the expense of concern for other justice issues affecting the poor.

³⁶ The Eco-Congregation initiative (URL: <<http://www.ecocongregation.org/>>) is one example of an approach to church action on environmental issues taking a range of environmental concerns into account.