



Uniting Church in Australia

**Submission
Department of Climate Change**

Carbon Pollution Reduction Scheme Green Paper

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Contents

1 	Introduction	3
2 	Summary of Recommendations and Responses	5
3 	General Comments	8
4 	Supporting Low-Income Households	10
5 	Support for Industry	17
6 	Supporting Developing Countries	25
	Appendix 1 Uniting Church Statement on Climate Change	30
	Appendix 2 Other Resolutions	33
	Appendix 3 Measures of Financial Stress	34

1 | Introduction

The Uniting Church's commitment to the environment arises out of the Christian belief that God, as the Creator of the universe, calls us into a special relationship with the environment – a relationship of mutuality and interdependence which seeks the reconciliation of all creation with God. We believe that God's will for the earth is renewal and reconciliation, not destruction by human beings.

Since its inauguration, the Uniting Church in Australia has been concerned about the continued existence of all creatures and plant life. In its first public statement in 1977, the Uniting Church in Australia expressed what would be an abiding concern with the wellbeing of the planet and for the rights of future generations:

we are concerned with the basic human rights of future generations and will urge the wise use of energy, the protection of the environment and the replenishment of the earth's resources for their uses and enjoyment.¹

We believe that the natural environment, however, is not merely a resource for the benefit of human beings but has intrinsic value as part of God's good creation. In 1991, the Sixth Assembly of the Uniting Church declared that "Nature has a right to the protection of its eco-systems, species, and populations in their interconnectedness."²

The Uniting Church regards human-induced climate change as a most serious threat to the future and integrity of life on earth. In 2006, the Assembly Standing Committee of the Church resolved to adopt the statement *For the Sake of the Planet and all its People: A Uniting Church in Australia Statement on Climate Change* (see Appendix 1). The statement declares:

It is increasingly the case that some humans consume the earth's resources whilst other humans pay the price. Australia must acknowledge that it has a responsibility to reduce our reliance on fossil fuels. As long as we remain prepared to abuse the atmosphere and entire ecosystems for the sake of short-term economic gain for a few, we undermine our own future.

The Uniting Church in Australia believes that it is important for the Australian Government to set and commit to meeting serious targets for greenhouse gas emission reductions primarily through the promotion of renewable energy sources, measures to reduce energy demand and promotion of energy efficiency measures.

The statement also highlights the Church's particular concern with the fate of some of our most vulnerable Pacific neighbours. Our partner churches in the Pacific have called on their sisters and brothers in the church throughout the world to act in solidarity to reduce the causes of human induced climate change by ratifying the Kyoto Protocol, reducing energy use and developing clean, renewable energy sources.

¹ Uniting Church in Australia, Inaugural Assembly (1997), *Statement to the Nation*

² Uniting Church in Australia, Sixth Assembly (1991), *The Rights of Nature and the Rights of Future Generations*, Resolution 91.14.18

In 1977, the Church stated that “(a) Christian responsibility to society has always been regarded as fundamental to the mission of the Church. In the Uniting Church our response to the Christian gospel will continue to involve us in social and national affairs.”³ In this statement, we also pledged “ourselves to hope and work for a nation whose goals are not guided by self-interest alone, but by concern for the welfare of all persons everywhere”. It is in this spirit that the Uniting Church in Australia makes this submission on the Carbon Pollution Reduction Scheme Green Paper consultation.

³ Uniting Church in Australia, Inaugural Assembly (1997), *Statement to the Nation*

2 | Summary of Positions and Responses

The Uniting Church in Australia supports

1. the introduction of the Carbon Pollution Reduction Scheme (CPRS) as an effective and important strategy for reducing Australia's greenhouse gas emissions
2. the uptake of renewable energy, energy efficiency measures and demand management as the preferred options for reducing greenhouse gas emissions
3. assistance to low-income households through the tax and transfer system and also through energy efficiency assistance
4. the commitment to increase payments to people receiving pensioner, carer, senior and allowance benefits
5. the commitment to assisting all households with energy efficiency, as reductions in the energy use of middle and higher income households will be important in achieving reductions from the household sector
6. the provision of support to assist strongly-affected workers and communities
7. the inclusion of transport in the scheme
8. the inclusion of all fugitive emissions (including those from open-cut coal mines) and emissions from industrial processes (including synthetic greenhouse gases but with a threshold of no higher than 5kt CO₂ –e/year being applied)
9. the aim of moving to 100 percent auctioning of permits
10. the establishment of a Climate Change Action Fund
11. the provision of assistance to the most emissions-intensive, trade-exposed (EITE) industries
12. the reduction in assistance per output given to EITE firms over time to safeguard against firms delaying reductions in their emissions
13. the review every five years of assistance to EITE activities
14. policy incentives such as rebates, feed in tariffs and an expanded Mandatory Renewable Energy Target to ensure significant investment in and uptake of renewable energy
15. an increase in the Renewable Energy Target to 45 000 GWh by 2020

The Uniting Church in Australia recommends

1. permit revenue be allocated in a manner that prioritises the needs of the poorest in Australia over those of business and shareholders
2. unemployment benefits be specifically included in plans to increase income support payments

3. the Government to continue and expand its engagement with the many community organisations already assisting low-income and disadvantaged Australians to improve their energy efficiency to determine how these groups can best be assisted
4. the implementation of measures to reduce the long-term vulnerability of Australian households to increasing world oil prices
5. long-term planning to encourage the production and purchase of more fuel-efficient cars, improve public transport services and support for the development of alternative fuels
6. the establishment of an independent body to monitor and report on energy price impacts for citizens, particularly disadvantaged households, as well as monitor price rises arising from the embedded costs of energy in goods and services
7. the development of a definition of 'fuel poverty' and the establishment of an 'energy hardship baseline' to enhance the capacity for measuring impacts of rising energy costs and enable the work of the proposed independent monitoring body
8. a proportion of permit revenue be allocated to climate change assistance for developing countries. We support the mechanism proposed by the Garnaut Review, of an International Low Emissions Technology Commitment, and the proposal that funding commitments apply as a percentage of GDP above a certain level of per capita income.
9. climate change assistance to developing countries be accounted for in addition to rather than as part of existing aid programs
10. a proportion of permit revenue be allocated for research into low-emissions technology
11. the Climate Change Action Fund give preference to the use of renewable energy sources
12. matched funding grants for private investors should not be technology neutral
13. compulsory levies be placed on well-established and profitable industries, and that these funds be made available for research, development and commercialisation of low-emissions technologies for these industries.
14. research and development funding be delivered to areas of the greatest potential for emissions reductions, rather than delivering the greatest profits to businesses
15. the ratio of funding for research, development and commercialisation should be varied, based on criteria of the level of expected emissions reduction and the long-term sustainability of the technology to lead Australia to a permanent low-emissions future
16. no additional government research and development funding above that already committed should be given to carbon capture and storage. Such funding should be provided by the coal industry itself.
17. EITE activities be required to reduce their emissions
18. the Government ensure that threshold levels for assistance to EITE activities do not provide incentive for an industry to hang-back on reducing their emissions

19. direct assistance not be given to existing coal-fired electricity generators through the Electricity Sector Adjustment Scheme. This will reduce the incentive for consumers to switch to renewable energy generators and hinder the expansion of the renewable energy sector in Australia. The Government should allow the costs of the CPRS to be passed on to consumers, with assistance then given to low-income and vulnerable consumers
20. the Government establish a process similar to the California Renewable Energy Transmission Initiative, to identify the transmission projects need to accommodate the uptake of renewable energy
21. additional measures such as rebates to make solar hot water the cheapest and easiest option for consumers

3 | General Comments

The Uniting Church in Australia congratulates the Government on its ratification of the Kyoto Protocol and its commitments to reducing Australia's greenhouse gas emissions and co-operating internationally for global solutions to the threat and effects of dangerous climate change. We welcome the public consultation processes of both the Garnaut Review and the Department of Climate Change Green Paper as significant opportunities for Australians to explore our shared hopes and aspirations for the future and the values and priorities which should drive public policy.

Human-induced climate change does indeed represent what has often been described as the greatest ever market failure. Should global greenhouse gas emissions continue to rise along a 'business as usual' trajectory, the result will be catastrophic environmental damage and concomitant devastation for people all over the world. The Uniting Church welcomes the proposal for an emissions trading scheme for Australia as one important strategy in the necessary transformation to a 'green' economic system, that, while market-based, is designed to serve all people and contribute to the wellbeing of the planet and future generations.

As Christians, we are called to witness to the gospel of life, justice and peace. The Uniting Church's advocacy is focussed first and foremost on its call to stand with and serve people who are marginalised through poverty, oppression and persecution. We believe that we are called to work within society to seek life-affirming solutions to the problems created by systems, structures and policies which are based on values such as greed and individualism and which promote consumerism, materialism and economic inequity. Our comments on the Green Paper reflect our commitments to uphold the integrity of the planet as God's good creation and serve the needs of people who suffer the effects of poverty and social marginalisation. For the Uniting Church, social justice and environmental sustainability are inherently connected to each other and must always take precedence over the desire for increasing profits and the amassing of wealth by a relative few.

The following principles will, therefore, underline our comments and responses to the directions and proposals offered in the Green Paper:

- We must urgently do all we can to reduce our greenhouse gas emissions.
- We must ensure our capacity to adapt to the already irreversible effects of climate change.
- As a priority we must ensure that low-income households and people affected by poverty do not suffer further as a result of the introduction of the Carbon Pollution Reduction Scheme.
- The protection of the environment for its own sake and for the sake of our children and future generations should take precedence over maintaining and growing the already large profits of big industry.
- The coal industry should not receive any special consideration above that already committed. The coal industry in Australia has had many years to prepare for and adapt to the need to reduce greenhouse gas emissions and has failed to do so.
- The development and use of renewable energy sources is a greater priority than cleaning up existing carbon polluting energy industries.

- We must begin to transform our economy from one based on fossil fuels to a 'green' economy that reflects respect for the limited resources of the planet and the need for justice and equity among all people.

The Uniting Church's submission focuses on three key issues:

- 1 support for low-income households (section 4);
- 2 support of industry (section 5); and
- 3 support for developing countries (section 6).

4 | Supporting Low-income Households

The Uniting Church seeks to assist the most marginalised and vulnerable people in our community. It is the needs of the most disadvantaged that we are called to voice in the climate change debate. The Church is therefore particularly concerned with the potential impact of the Carbon Pollution Reduction Scheme (CPRS) on low-income households.

We believe that priority should be given to compensating low-income households for the disproportionate economic impact the CPRS will have on them. This should partly occur through assistance to improve the efficiency of their energy use. However we believe direct compensation through the tax and transfer system will also be necessary. The Uniting Church therefore supports the Government's commitment to use the funds raised by the CPRS to help low-income households adjust to the increase in energy costs that will result from the Scheme.

We also welcome the commitment to assist all households with energy efficiency measures, as reducing energy consumption in middle and higher income households will be crucial for achieving emissions reductions from the household sector. This is an acknowledgement of the need to achieve both equity and greenhouse gas reductions in the functioning of the CPRS.

From Consumer Price Index (CPI) data it is evident that over the last 5 years (and longer) costs of education, health, petrol and fruit and vegetables have grown at a much faster rate than CPI. While food, housing and health costs have grown at a rate equal to or below average earnings, they have increased at faster rates than those of the minimum wage.

Another useful way to measure whether households are coping with the ability to pay for the basics of life is to consider measures of financial stress⁴. Appendix 3 shows this measure in further detail. It is a matter of significant concern that over half of all households in the poorest 30% of the Australian income distribution could not raise \$2000 in an emergency, and 40% have difficulty paying for essential services, specifically gas and electricity. Also of note from this data is that 13.5% of the poorest 30% of households go without meals, due to financial hardship, and 14.9% of all households were unable to pay their electricity bills on time in 2003-4.

The Uniting Church is concerned that the CPRS will be socially regressive and further disadvantage low-income households, for the following reasons:

- cost pressures on low-income and disadvantaged Australian households are considerable and growing, with cost increases over recent years being the greatest for essential goods and services;
- any increase in energy prices will disproportionately impact the budgets of low-income households because they spend a higher proportion of their disposable income on energy bills than wealthy households;

⁴ ABS, Household Expenditure Survey, 2003-04

- low-income households spend a higher proportion of their income on other essentials such as food and fuel, which are particularly susceptible to price rises from emissions trading; and
- many people who suffer disadvantage live in areas where reliable public transport is scarce or non-existent and so cannot easily switch to alternate modes of transport as fuel costs rise.⁵

Although we acknowledge that adequately addressing the impacts of the scheme will not be possible until the scheme design details are finalised and the Government has determined the trajectory of emissions reductions, there has already been good research in this area demonstrating the need for this issue to receive considerable policy attention. Research commissioned by the Brotherhood of St Laurence, for example, has shown that a carbon price of both \$25 and \$50 per tonne would take a much higher proportion of income from poor households than from the wealthy.⁶

Given that essential goods and services such as energy and food have a low elasticity in demand (particularly in the shorter term), if prices go up low-income households will either under-consume (cut back below a reasonable standard and tolerate a lesser standard of living) or be cut off from supply (as they will be unable to pay their bills).⁷ Higher energy bills after the introduction of emissions trading will increase the stresses on low-income households in this regard, and compensating payments and allowances to counteract this are required.

4.1 | Payments for low-income Australians

We support the Government's commitments to increase payments to people receiving pensioner, carer, senior and allowance benefits and believe this assistance is of the highest priority. We note that unemployment benefits have not been specifically mentioned here by the Government, and urge them to include this group of low-income Australians in their final plans for increased income assistance. We also welcome the Government's commitment to increase assistance to low-income households through the tax and transfer system, and the decision to include a consideration of the effects of the CPRS in the terms of reference for the Henry Review.⁸ We note the argument in the Garnaut Climate Change Review Draft Report, that if emissions permits are sold at auction, the revenue should be ample to cover full compensation to the bottom half of the income distribution.⁹ We believe that permit revenue should be allocated in a manner that prioritises the needs of the poorest in Australia over that of business and shareholders.

We support the Government's commitment to review annually the adequacy of payments to beneficiaries and recipients of family assistance. However, we also urge the Government to establish an independent body to monitor and report on energy price

⁵ Australian Conservation Foundation, Australian Council of Social Service and Choice (2008), *Energy and Equity - Preparing households for climate change: efficiency, equity, immediacy*, available: <http://www.choice.com.au/files/f132489.pdf>

⁶ Brotherhood of St Laurence (2007), 'National research shows impact on poor of climate change', Media release, 16 June, <http://www.bsl.org.au/main.asp?PageId=5000>

⁷ Australian Conservation Foundation, Australian Council of Social Service and Choice, op. cit., p.7

⁸ Department of Climate Change (2008), *Carbon Pollution Reduce Scheme – Green Paper*, p.278

⁹ Garnaut Climate Change Review (2008), *Draft Report*, p.477

impacts for citizens, particularly disadvantaged households, as well as monitoring price rises arising from the embedded costs of energy in goods and services.

Energywatch in the UK provides a useful model as to how this independent monitoring body could be structured.

Energywatch works closely with the regulator, Ofgem, to ensure that company performance issues are monitored and where appropriate, the evidence is provided to trigger investigations and/or enforcement action. We also work constructively with companies, initiating changes to the policies, processes and systems that will make them more responsive to the needs of their customers. We deliver services in partnership with a range of other caring organisations and advice giving bodies.¹⁰

We also urge the government to develop, with community organisations, a definition of 'fuel poverty' that is appropriate for application in Australia. The proposed monitoring body would then report regularly on levels of fuel poverty in Australia and provide advice about the most effective measures to reduce fuel poverty.

Professor Sue Richardson and Associate Professor Peter Travers in a 2002 report dealing with applicability of the concept of 'fuel poverty' in Australia prepared for the essential Service Commission of South Australia, wrote,

The UK defines fuel poverty as being the need to spend more than 10% of household income on fuel in order to keep the house comfortably warm. It is analogous to the concept of housing poverty—identified where a household spends more than 25% of its income on housing. The interesting aspect of this definition is that a household is classified as fuel poor (or not fuel poor) on the basis of what it *needs* to spend to keep warm, not on the basis of what it does actually spend. This differentiates it from the concept of housing poverty, which is based on what households actually spend.

The UK policy gives priority to identifying and then ameliorating fuel poverty among what they term vulnerable groups. These are households that contain children, the elderly or people who are sick or disabled.¹¹

The reports recommendations included an approach for monitoring 'fuel (energy) driven hardship', starting with establishing a hardship baseline. The first recommendation was:

A base line should be established, using the latest data from the Household Expenditure Survey, that shows:

the proportion of households in the bottom 10-50 % of the distribution of household disposable income that spend more than:

6%

8%

10% of income on fuel.

¹⁰ www.energywatch.org.uk

¹¹ Professor Sue Richardson & Associate Professor Peter Travers The National Institute of Labour Studies, *Fuel Poverty: A Concept With Power in South Australia?* October, 2002

The proportion of households in the bottom 10-50% of the distribution of household disposable income that, due to a shortage of money, were unable to heat their home.

We believe that this proposal has great relevance in the context of a Carbon Pollution Reduction Scheme. The report also proposed that ABS increase the sample size for both the Household Expenditure Survey and the General Social Survey, to enable energy spending to be accurately determined for key household groups.

We recommend that alongside a definition of 'fuel poverty', an 'energy hardship baseline' be established for Australia to enhance the capacity for measuring the impacts of rising energy costs, with the ABS extending its surveying of household energy expenditure. Both of these initiatives would enable the work of the independent monitoring body proposed above.

4.2 | Other assistance programs for low-income Australians

Low-income households generally cannot adapt to higher energy prices by lowering their consumption levels without sacrificing their standard of living. A recent report from ACROSS, Choice and ACF found that

price increases, at moderate levels, are an ineffective instrument for demand management, especially at lower levels of consumption and in households with limited capacity to reduce or shift load. However, low income households generally are incentivised to lower their energy bills as much as any household, given the capacity to do so.¹²

Low-income households should be given every opportunity to improve the efficiency of their energy use. Although the circumstances of individual households vary, low-income Australians typically are less able to use energy efficiently than those households with higher incomes. These households lack an ability to save the capital needed to invest in energy-efficiency measures for their homes, and are often renting in private or government housing and so are not able to make these investments (as it is the responsibility of the landlord). Furthermore, many also live in poorly-insulated homes, and have older, less-efficient appliances and vehicles. Improvements in energy efficiency will be of dual benefit for low-income households, reducing both their energy bills and their contribution to Australia's greenhouse gas emissions.

Low-income households may need specific, targeted assistance in improving their energy efficiency, given their different economic and social circumstances. For instance, household energy audits offered to all households may not be suitable for low-income or disadvantaged groups (due to language barriers or difficulties with gathering the required information on energy consumption, for example). Specific programs need to be designed to suit the needs of these groups.

We welcome the Government's commitment through the Department of Environment, Heritage and the Arts to engage with the many community organisations already

¹² Australian Conservation Foundation, Australian Council of Social Service and Choice (2008), op. cit., p.8

assisting low-income and disadvantaged Australians with measures to improve their energy efficiency, and urge the Government to expand on this engagement. One example this work is Kildonan Energy Efficiency Project, run by UnitingCare agency Kildonan in Victoria. This project provides energy audits to households in energy hardship. Kildonan has found that:

- the energy efficiency of existing housing stock needs to be addressed;
- energy-efficient appliances need to be made more affordable; and
- in order for energy audits to be effective, the cooperation of energy retailers is essential in order to provide the necessary information.¹³

4.3 | Support for all households

Low-income households produce fewer emissions than middle and higher-income households as they, on the whole, use less energy. In real dollar terms, low-income households spend about half as much on electricity and gas as the wealthiest households.¹⁴ This trend is a product of the financial and consumption decisions low-income Australians are forced to make and means that targeting the energy use of middle and higher income households is important for achieving emissions reductions in the household sector.

There is an argument that any action to reduce the impact of the price increase undermines the aim of the emissions pricing (reducing emissions-intensive consumption) because the incentive to reduce consumption disappears. Moderate price increases, however, on their own have been found to be relatively ineffective for reducing consumption on essentials that are relatively price inelastic.¹⁵ In addition, the CPRS will be introduced into an economic environment in which consumers are already experiencing increases in fuel, electricity and food costs. These are also the goods and services that will be most affected by the scheme. Continued increases in these prices after the introduction of the scheme may undermine its success, as households may not easily distinguish between the various causes of price rises.¹⁶

Assistance and incentives should therefore be available to all households, and we support the Government's commitment to "the introduction of energy efficiency measures and consumer information to reduce energy use and save on energy bills."¹⁷

Households in different cities and regions across Australia will require different strategies and assistance, given their different circumstances and consumption patterns. Households in cooler parts of Australia will have a greater need for energy-efficient heating than others, whereas some warmer areas have a greater need for energy-efficient air conditioning, for example. Policies should be developed in a flexible manner so as to cater for the needs of all Australians.

¹³ Phone conversation with Marie Andrews, Kildonan Energy Efficiency Project Program Manager, 3 September 2008

¹⁴ *ibid.*, p.7

¹⁵ *ibid.*

¹⁶ Garnaut Climate Change Review, *op. cit.*, p.470

¹⁷ Department of Climate Change, *op. cit.*, p.278

The needs of regional and rural areas need particular consideration, as Australians living in these areas are likely to be significantly impacted by emissions trading. The sustainability of energy-intensive industries and the communities that depend on them for economic viability may be threatened, particularly in the absence of any policies to assist these industries and communities with structural adjustment. These regions require specific, tailored responses, as the Garnaut Climate Change Review Draft Report points out.¹⁸

Higher fuel prices also have the potential to burden whole communities that live in outer-urban and rural areas, as these communities have less transport alternatives and longer distances to travel to work, recreation and other services.¹⁹ Although the cut in fuel excise proposed in the Green Paper may provide small, short-term relief, long-term planning for encouraging the production and purchase of more fuel-efficient cars, improving public transport services²⁰ and supporting the development of alternative fuels is essential. A very high priority for expenditure from the “Building Australia Fund” that was created in the 2008-09 Commonwealth Budget needs to be expanding public transport infrastructure, particularly for outer suburban and regional areas.

We urge the Government to engage with the heavily-affected regions and communities in a substantial and constructive manner in order to identify strategies to help them adjust to the changing economy.

4.4 | Energy efficiency assistance

The Uniting Church believes that investments in energy efficiency measures should be the Government’s main form of assistance available to all households, particularly in the short term, as energy efficiency is the quickest and most cost-effective way to reduce greenhouse gas emissions and lower household energy bills.²¹

A joint report by ACROSS, Choice and ACF²² determined that in 2030, an energy efficient household operating with higher energy costs and a carbon price of \$50/tonne would still be \$200 a year better off than a ‘business as usual’ household that did not have to pay for emissions. The energy savings for the energy efficient household would outweigh the increase in costs of each unit of energy consumed.

Of particular importance is targeting those households which have, for various reasons, not exploited the opportunities for improving energy efficiency already available. These market failures are discussed in both the Green Paper and Garnaut Climate Change Review Draft Report (and include, for example, a lack of time, information or ability to assess each opportunity and make an informed choice), and we support the Government’s commitment to addressing these issues.

In particular, we believe the Government should support:

¹⁸ Garnaut Climate Change Review, op. cit., p.4770

¹⁹ *ibid.*, p.474

²⁰ Hatfield-Dodds, S. and R. Denniss (2008), *Energy Affordability, Living Standards and Emissions Trading: Assessing the social impacts of achieving deep cuts in Australian greenhouse emissions*, report to The Climate Institute, CSIRO Sustainable Ecosystems, Canberra, p.25

²¹ Australian Conservation Foundation, Australian Council of Social Service and Choice, op. cit., p.3

²² *ibid.*

- increased investment in information programs highlighting the most effective means and benefits of improving energy efficiency. Although many governments around Australia are already providing information to the public, resources allocated in this area have so far been small in comparison to other public information campaigns relating to health, road safety and other priority issues;²³
- an extension of mandatory energy efficiency labelling to a wider range of appliances and phasing out of those appliances that are the least efficient;
- expanding and more widely advertised government rebate programs;
- tax concessions or subsidies for energy-efficiency retrofits of existing properties; and
- stricter mandatory energy and water efficiency standards for new buildings.

²³ *ibid.*, p.16

5 | Support for Industry

We support the Government's recommendation that all fugitive emissions (including those from open-cut coal mines) should be included in the CPRS from the commencement of the scheme, providing incentives for open-cut coal mines to develop more accurate ways to measure their fugitive emissions.²⁴

We also support the inclusion of emissions from industrial processes.²⁵

We support the inclusion in the scheme from commencement of synthetic greenhouse gases, applied to the importers of synthetic gases and any future domestic manufacturing of synthetic greenhouse gas emissions, with an emissions threshold of 5 kt CO₂ –e/year.²⁶ We are not supportive of a higher threshold being applied, to minimise any competitive distortions between those companies above and below the threshold.

We support the Government's aim of moving to 100% auctioning of permits.²⁷

5.1 | The Climate Change Action Fund and other research and development support

We note the observation of Professor Garnaut that “the successful development and deployment of new low-emissions technologies across all sectors will be important in minimising the costs of adjustment to the emissions trading scheme.”²⁸ Further, “Australia is particularly well positioned to develop and deploy a wide range of new mitigation technologies, particularly in the energy sector.”²⁹ We also note Garnaut's assessment that:

An emissions trading scheme will also spur private sector research and development activities by creating the long-term demand-pull for more low-emissions products and processes. However, there may be only limited impacts on early research activities since most early research is publicly funded.³⁰

Garnaut notes that as the emissions trading scheme delivers rapid and significant changes in the economy, “there will be a special requirement for high rates of technological improvement in low emissions technologies.”³¹

We note the finding of McKinsey and Company in their modelling of Australia achieving a 30% reduction in greenhouse gas emissions by 2020 based on 1990 levels that in order to achieve such an outcome there was a need to fast-track the commercialisation of key technologies.³²

²⁴ Department of Climate Change, op. cit., pp. 103-104

²⁵ *ibid.*, p. 104

²⁶ *ibid.*, p. 105

²⁷ *ibid.*, p. 20

²⁸ *ibid.*, p. 403

²⁹ *ibid.*, p.403

³⁰ *ibid.*, p. 406

³¹ *ibid.*, p. 407

³² McKinsey & Company (2008), *An Australian Cost Curve for Greenhouse Gas Reduction*, p. 6

Inadequate support for research and development for low-emission technologies may result in the Australian community paying higher costs in relation to an emissions trading scheme than they would have to otherwise pay. As noted by Garnaut:

If, as a result of market failures, there are suboptimal levels of investment in low-emissions technologies, then inferior, more expensive substitutes will need to be deployed to reduce emissions. This inefficient response will lead to a carbon price that is higher than it would otherwise be.³³

Further:

Correction of these market failures is a strong economic justification for government policy intervention. Economic studies have emphasised the role of innovation policy in delivering least-cost emissions reduction.³⁴

We support Garnaut's view that funds for research into low-emissions technology could come from the revenue generated by auctioning emission permits under the CPRS. As he stated in his Draft Report:

It is sensible to use permit revenue to fund early research because there are strong links between the early research effort, the long-term cost of mitigation and the carbon price. More early research in low-emissions technologies should, over time, lower the long-term cost of mitigation and thus the carbon price.³⁵

We are supportive of the Government establishing a Climate Change Action Fund. The purpose of the fund is to assist business transition to a cleaner economy, by providing in partnership funding for a range of activities including:

- capital investment in innovative new low emissions processes;
- industrial energy efficiency projects with long payback periods; and
- dissemination of best and innovative practice among small to medium sized enterprises.

Where possible, the Climate Change Action Fund should give preference to the use of renewable energy sources. We support this fund being resourced to the level that will meet with Garnaut's recommendation that at least \$3 billion is spent per annum on research, development and commercialisation of low-emission technologies.³⁶ We also note Garnaut's advice to Government that:

The significant challenge of deep cuts to emissions suggests that Australia's early research agenda needs to focus more strongly on early research into low-emissions technologies, to shorten the lag between the introduction of the emissions trading scheme and the response of the research community.³⁷

³³ Garnaut Climate Change Review, op. cit., p. 406

³⁴ *ibid.*, p. 407

³⁵ *ibid.*, p. 411

³⁶ *ibid.*, p. 403

³⁷ *ibid.*, p. 410

We support Garnaut's recommendation that "To achieve an effective commercialisation effort on a sufficiently early time scale, an Australian system of matching grants should be available where private investors demonstrate externalities, low emissions and innovation."³⁸ However, we do not support his view that matched funding should be technology neutral³⁹, as this ignores that certain industries that are well established will have larger reserves of funding to invest in their sector than new and emerging industries that may represent a more sustainable transition to a low-emissions future. So, for example, the coal industry is likely to have far more funds available to pursue research and development into options to reduce emissions from coal than the solar energy industry will have available to develop new technologies to increase the ability of solar energy to take up more of the electricity supply in Australia. Yet a move to coal technologies that result in lower emissions is far less likely to move Australia to a long-term sustainable low-emissions electricity sector and are likely to be, at best, transitional measures. Thus, matching grants that are completely technology neutral may result in valuable research and development funds being sub-optimally spent in areas simply based on which industries have capital available to conduct research and development.

We would support the idea that compulsory levies be placed on well established and profitable industries, such as the coal industry, to make these funds available for research, development and commercialisation for low-emissions technologies for these industries. We note that even Garnaut suggests that voluntary levies, such as the Coal 21 Fund, could be extended and we believe by making these a mandatory levy will encourage certain industries to greater research and development efforts for low-emissions technologies.⁴⁰

We are not supportive of Garnaut's recommendation that the funding of research and development in low-emission technologies should only be aligned to Australia's "national interest".⁴¹ The "national interest" is a vague term that is open to wide interpretation. It is in the "national interest" that a global agreement on climate change is reached that keeps average global temperature rise below 2°C. To achieve this, Australia must play its fair share in the global agreement. Spending on research and development is best directed to those areas that will have the most impact on reducing global emissions and Australia's emissions as long-term and sustainable solutions. Australia should not be directing research and development funding into areas that may deliver the greatest profits to Australian businesses, where such areas result in lower emission reductions than alternative technologies. Further, research and development funding is best not spent on areas that offer only transitional assistance to a low-emissions future, such as Carbon Capture and Storage and nuclear energy, where alternative technologies already exist and are in need of research and development assistance.

We do not support Garnaut's suggestion that Government matched funding for research, development and commercialisation should be the same ratio regardless of the technology.⁴² Instead we believe that the ratio of funding should be varied based on criteria of the level of expected emissions reduction and the long term sustainability of the technology to lead Australia to a permanent low-emissions future. This may mean,

³⁸ *ibid.*, p. 403

³⁹ *ibid.*, p. 419

⁴⁰ *ibid.*, p. 420

⁴¹ *ibid.*, p. 412

⁴² *ibid.*, p. 423

for example, that some projects receive \$2 of Government funds for every \$1 the private investor is putting into the project.

We are deeply concerned that carbon capture and storage does not attract any additional government research and development funding to that already committed. Such research and development funding should be provided by the coal industry itself. The technology is yet to be proved on a large scale and we note that the Energy Supply Association of Australia has assumed that by 2020 carbon capture and storage will still only be in the demonstration phase.⁴³

5.2 | Emission-intensive trade exposed activities

We support the Government providing assistance to the most emissions-intensive, trade-exposed (EITE) businesses to minimise 'carbon leakage'. At its worst, an EITE business could move operations off-shore to a place with no restrictions on carbon emissions and run its business in a way that increased emissions over that of when its operations were in Australia.⁴⁴ The net impact in such circumstances would be an increase in global emissions. However, we do not believe that EITE activities should be completely exempted from any requirements to reduce their emissions. The challenge for government is to provide settings that will mean EITE businesses will take all reasonable steps to reduce their emissions, while at the same time ensuring that the settings do not force such businesses off-shore. However, it may need to be accepted that some of the worst performing EITE businesses in terms of emission levels in a particular industry may move off-shore if any requirements are placed on them. This will need to be accepted, as the alternative would be to have no requirements on any EITE business, allowing whole sectors to avoid taking reasonable action to reduce their emissions.

We support the Government's proposed safeguard that the allocation of permits to EITE businesses be on the basis of the most emissions intensive activities that lead to the production of trade-exposed products, rather than on the basis of a firm or industry level.⁴⁵

We support the proposal in the Green Paper that assistance to EITE activities be provided on the basis of industry average activity emission intensities, rather than the intensity of a particular firm or facility. We agree that this will provide an incentive for businesses to reduce their emissions leading up to the introduction of the scheme and would reward those firms that have already taken action to reduce their carbon footprint.⁴⁶ However, the Government needs to ensure that the threshold levels do not provide incentive for an industry to hang-back on reducing their emissions. If an industry calculated that crossing the emission intensity threshold for assistance by reducing their emissions would cost more, by the loss of the assistance, than is saved by reducing the costs of paying for emissions then it will be in the interests of an industrial sector to collude to not reduce their emissions to below the emission intensity threshold. The

⁴³ Energy Supply Association of Australia (2008a), *The impact of an ETS on the energy supply industry*, Executive Summary, p. 2

⁴⁴ Department of Climate Change, op. cit., p. 293

⁴⁵ *ibid.*, pp. 27, 303-304

⁴⁶ *ibid.*, p. 28

Government's proposal to reduce the rate of assistance per unit output given to these firms over time at a pre-announced rate will provide a safeguard against this happening, as the value of the assistance will reduce while the cost of continuing to produce emissions at the same intensity will increase.⁴⁷

We support the Government's proposal that any assistance given to EITE activities under the CPRS be reviewed every five years⁴⁸ to assess its impact on Australia meeting its mitigation targets, the impact on non-assisted sectors and households and if the assistance has provided a disincentive to businesses conducting EITE activities to take all reasonable steps to reduce their emissions.

5.3 | Strongly affected industries

We are not supportive of the Government's proposal to provide direct assistance to existing coal-fired electricity generators through the Electricity Sector Adjustment Scheme (ESAS). It is unclear to us why it is not possible for coal-fired electricity generators to pass on the costs of the CPRS to consumers. The Government should allow such costs, including losses against capital assets to be passed on to consumers. It should also provide Government funded concessions to low-income and vulnerable consumers, to ensure that such people are able to purchase the electricity they need.

To provide direct assistance to coal-fired electricity generators gives them a subsidy that allows them to be more competitive against renewable energy generators than they would be if full market forces were allowed to operate. This means that consumers will have a reduced incentive to switch to renewable energy generators, which is likely to hinder the development and expansion of the renewable energy industry in Australia.

The Green Paper correctly highlights that investors in coal-fired electricity generation should have already factored in that it was likely that there would be increasing costs associated with coal-fired electricity generation as the world moved to address the causes of climate change.⁴⁹ To provide further assistance to coal-fired electricity generators rewards those investors who made reckless investment decisions, gambling that Australia would continue to make a minimal contribution to the global effort to mitigate greenhouse gas emissions.

The Government has already acknowledged that it has provided a \$500 million subsidy to the coal-fired electricity generators through the Clean Coal Fund.⁵⁰ We also note that the Victorian Government has provided \$182 million from 2008 to assist the coal industry through the Energy Technology Innovation Strategy.⁵¹

We support the proposal in the Green Paper that the Government provide additional support to assist affected workers and regions with structural adjustment as a result of the CPRS.⁵²

⁴⁷ *ibid.*

⁴⁸ *ibid.*, p. 296

⁴⁹ *ibid.*, p. 30

⁵⁰ *ibid.*, p. 29

⁵¹ Garnaut Climate Change Review, *op. cit.*, p. 417

⁵² Department of Climate Change, *op. cit.*, p. 26

5.4 | Renewable energy

We support the uptake of renewable energy, energy efficiency measures and demand management as the preferred options with the least amount of risk in order to reduce Australia's greenhouse gas emissions.

We are supportive of a range of policy incentives such as rebates, feed-in tariffs, and an expanded Mandatory Renewable Energy Target to ensure significant investment in and subsequent uptake of renewable energy. We do not support leaving it purely to the market. Garnaut notes that issues with the existing electricity transmission networks will make it very difficult for renewable energy sources to compete with existing coal-fired power stations, unless there are major changes in the transmission infrastructure.⁵³ He notes that this will occur even in circumstances in which the renewable energy source would be highly competitive once compatible infrastructure has been established. He further notes that the extent to which consumers will be able to express a preference for low-emissions electricity generation "will be strongly dependent on the availability of appropriate network infrastructure to support the delivery of new technologies."⁵⁴ This latter point justifies Government playing a role outside of the emissions trading scheme to ensure electricity transmission networks allow renewable energy sources to compete more readily with electricity generated from coal fired power stations. We support Garnaut's view that:

in addition to the identification of options, financial incentives are necessary to overcome the free-rider issues of transmission augmentation. Incentives can reduce the likelihood of transmission extensions being hindered by early-mover problems, and help to ensure that augmentation is undertaken at a socially optimal scale.⁵⁵

We would be supportive of the Australian Government establishing a similar process to the California Renewable Energy Transmission Initiative, to identify the transmission projects needed to accommodate the uptake of renewable energy.⁵⁶

We note that the Energy Supply Association of Australia also offers a view supporting Garnaut's conclusion with a view that by 2020 "geothermal generation based on hot dry rock resources is proven and commercial and the only factor slowing its take-up is the rate at which new plant and interconnection into the market can be built."⁵⁷ They have predicted that by 2020 geothermal energy will provide in the order of 1500 MW nationally.⁵⁸

We support the Government's promise to increase the Renewable Energy Target to 45,000 GWh of renewable energy by 2020. The stationary energy sector has seen an increase of 47% in emissions since 1990⁵⁹, and is the fastest growing source of

⁵³ Garnaut Climate Change Review, op. cit., pp. 427-428

⁵⁴ *ibid.*, p. 428

⁵⁵ *ibid.*, p. 433

⁵⁶ *ibid.*, pp. 433-434

⁵⁷ Energy Supply Association of Australia, op. cit., p. 2

⁵⁸ *ibid.*, p. 4

⁵⁹ Australian Greenhouse Office, National Greenhouse Gas Inventory 2006

emissions.⁶⁰ Australia's current Mandatory Renewable Energy Target of 9,500 GWh by 2010, has not been significant enough to drive investment in renewable energy or significantly shift reliance on coal-fired electricity generation. The Renewable Energy Target provides a strong incentive for investment in renewable energy.

Recent modelling from Greenpeace Australia suggests that it is possible for 40% of Australia's electricity needs to come from renewable sources by 2020 if energy efficiency measures are also included to curb an increase in stationary energy.⁶¹

Greenpeace maintains that it can be in no way certain that a CPRS will be sufficiently mature by 2020 to take over as the main policy mechanism to ensure renewable energy development, due to the scheme and possibly the targets being periodically reviewed and the carbon price fluctuating from year to year. Investor certainty is a critical element of a renewable energy policy driver. An MRET or Feed-in Tariff can provide industry with a clear, long-term investment signal, enabling it to enter into long-term power purchase agreements.⁶²

Modelling commissioned by the Energy Supply Association of Australia (ESAA) through ACIL Tasman found that "the modelled emissions permit prices are not sufficient on their own to bring the required amount of renewable energy to market in the study period."⁶³ The permit prices modelled were \$20 per tonne of CO₂-e in 2010 rising to \$45 to \$55 per tonne in real terms by 2020 to achieve reductions of 10% and 20% respectively in emissions from the electricity sector below 2000 levels by 2020.⁶⁴ This modelling points further to the need for Government assistance outside of the CPRS to establish renewable energy as a greater part of Australia's electricity supply in a move to a long-term sustainable low-emissions future. However, we also note that McKinsey & Company found in their modelling that a 30% reduction in Australia's greenhouse gas emissions by 2020 based on 1990 levels was possible with measures having a volume weighted average cost of \$45 per tonne CO₂-e and all measures having a cost of less than \$65 per tonne CO₂-e.⁶⁵

We also note the finding of the ESAA that capital investment in electricity generation will need to increase from \$13 billion in the business as usual case, to \$33 billion or \$36 billion to achieve cuts in emissions from electricity generation of 10% and 20% respectively by 2020 based on 2000 emissions as the base year. These figures include \$23 billion to achieve the MRET of 20% renewable electricity generation by 2020.⁶⁶

⁶⁰ Department of Climate Change, op. cit., p. 99

⁶¹ Greenpeace International, European Renewable Energy Council (2008), *Energy [R]evolution: A Sustainable Australia Energy Outlook*, available:

http://www.greenpeace.org.au/energyrevolution/pdf/energyRevolution_full.pdf. The Energy [R]evolution model exploits energy efficiency potential in electricity generation, resulting in a drop in total generation of 10%, as opposed to a projected increase under business as usual of 44%.

⁶² Greenpeace Australia Pacific, 'Submission to the COAG Working Group on Climate Change and Water consultation paper, Design Options for the Expanded National Renewable Energy Target Scheme'

⁶³ Energy Supply Association of Australia (2008b), "care required in setting emissions reduction targets for the energy sector", Media Release

⁶⁴ Energy Supply Association of Australia (2008a), op. cit. p. 2

⁶⁵ McKinsey & Company, op. cit., pp. 6, 9

⁶⁶ Energy Supply Association of Australia (2008a), op. cit., p. 3

On the positive side the modelling showed that the existing MRET could be met adding only 5% in real terms to retail tariffs by 2020.⁶⁷

We further note the finding of the ESAA that the MRET renewable energy certificates will continue to be needed, as the modelled carbon price was not sufficient to achieve the 20% MRET.⁶⁸ Further, we note that the ESAA modelling concluded that the rate of investment needed to even achieve the modest emission reductions in emissions from the electricity sector was higher than what has ever gone before in the sector.⁶⁹ If this modelling is correct, then it further justifies government intervention to ensure adequate future investment in electricity sector, especially in low emission electricity generation.

We also note that Garnaut identifies that solar photovoltaic electricity generation is currently not treated fairly in the electricity market:

Solar photovoltaic generation that provides energy during high demand periods is significantly undercompensated for its lower levels of losses, network benefits and timing of supply. This will increasingly be the case as temperature rises, since daytime peaks in demand as a result of air conditioner use would correlate more strongly with solar photovoltaic output.⁷⁰

We also support Garnaut's recommendation that the Australian Government adopt a feed-in tariff based on gross-metering to account for the benefits of embedded generation (lower transmission losses, deferred costs for network augmentation and displacement of high-cost generation during peak periods).⁷¹

5.5 | Solar hot water

We support the rapid uptake of solar hot water where possible and the use of heat pump or five star gas hot water systems where solar is not viable. We also support the proposed phase out of electric hot water units.

We further support having additional measures (such as rebates) to make solar hot water the cheapest and easiest option. This would have the additional benefit of supporting those on low incomes through cost savings as well as a direct greenhouse reduction benefit.

⁶⁷ *ibid.*, p. 4

⁶⁸ *ibid.*, p. 4

⁶⁹ *ibid.*

⁷⁰ Garnaut Climate Change Review, *op. cit.*, p.436

⁷¹ *ibid.*, p.437

6 | Supporting Developing Countries

The Uniting Church believes that a proportion of revenue from the auction of CPRS permits must be allotted to climate change assistance for developing countries. Such an allocation is excluded completely from the Green Paper.

Assisting developing countries with reducing their emissions (mitigation), adaptation and the transfer of technology are obligations under both the UN Framework Convention on Climate Change and the Kyoto Protocol.

Article 4.3 of the UNFCCC states that:

The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with this Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties.

Article 4.4 specifically states that:

The developed country Parties and other developed Parties included in Annex II shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.

Article 4.5 of the UNFCCC states that developed country Parties and other developed Parties included in Annex II shall:

...take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other parties, particularly developing country Parties, to enable them to implement the provisions of the Convention.

Article 4.7 states:

The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

Australia is listed in both Annex I and Annex II of the UNFCCC.

Article 10(c) of the Kyoto Protocol states that Parties shall:

Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies.

Article 11 goes on to state:

1. In the implementation of Article 10, Parties shall take into account the provisions of Article 4, paragraphs 4, 5, 7, 8 and 9, of the Convention
2. In the context of the implementation of Article 4, paragraph 1, of the Convention, in accordance with the provisions of Article 4, paragraph 3, and Article 11 of the Convention, and through the entity or entities entrusted with the operation of the financial mechanism of the Convention, the developed country Parties and other developed Parties included in Annex II to the Convention shall:
 - a. Provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in advancing the implementation of existing commitments under Article 4, paragraph 1(a), of the Convention that are covered in Article 10, subparagraph (a); and
 - b. Also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of advancing the implementation of existing commitments under Article 4, paragraph 1, of the Convention that are covered by Article 10 and that are agreed between a developing country Party and the international entity or entities referred to in Article 11 of the Convention, in accordance with that Article.

The implementation of these existing commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among developed country Parties. The guidance to the entity or entities entrusted with the operation of the financial mechanism of the Convention in relevant decisions of the Conference of the Parties, including those agreed before the adoption of this Protocol, shall apply *mutatis mutandis* to the provisions of this paragraph.

To date, international funding efforts have been woeful. Since September 2007, the rich and high-polluting countries have increased their contributions to the Least Developed Countries Fund (LDCF) by only US\$9.54 million (\$10.6 million) bringing the total pledged to US\$172.84 million (\$192 million).⁷² Only US\$91.84 million (\$102 million) has actually been delivered to the LDCF. Australia's contribution to the LDCF has been only \$7.5

⁷² These figures are sourced from the Global Environment Facility, as of May 2008

million in 2007.⁷³ Oxfam's estimate for urgent adaptation needs which should come from this fund is at least US\$2 billion (\$2.2 billion), leaving a yawning gap between what's needed and what has been delivered.⁷⁴

Under the Kyoto Protocol the key opportunity for adaptation financing is the Adaptation Fund (AF). However, in its current state, it will never be able to provide the level of funding required because revenue raised is limited to one mechanism; a 2% levy applied to the Clean Development Mechanism (CDM). Initial funding is unlikely to be available before 2010. The total funding this is expected to raise by 2012 is only US\$80-300 million per annum.⁷⁵ The global costs for adaptation in developing countries are estimated to be in the tens of billions of dollars per annum.⁷⁶ The Garnaut draft report quotes the World Bank estimate that the incremental annual costs of adaptation to projected climate change to be in the range of US\$10 billion to US\$40 billion per year, a third of which is associated with public finance.⁷⁷ Given the paucity in financing available, and the need for developing countries to access billions more, there is much debate about how additional funding should be raised and disbursed.

Garnaut's Draft Report correctly states that the unquantified assurances for technology transfer to developing countries under the UNFCCC and Kyoto Protocol have not been translated into action. He states; "Some technology transfer has occurred under the Kyoto Protocol's Clean Development Mechanism, but nothing on the scale required to underpin broad-based mitigation [emission reductions] in developing countries".⁷⁸ The report goes on to state that under the UNFCCC on average less than US\$1 billion (\$1.1 billion) a year was allocated to climate change projects between 1991 and 2004.⁷⁹ Garnaut states that "Developed country governments and international development finance institutions will need to step into the breach to provide developing countries with financing to kick-start the move to a low-emissions future" until such time as developing countries are able to participate in the international trade in emission rights.⁸⁰ He goes on to state that "Such financing would provide critical technology – existing and new – to support the transition to a low-carbon economy, but could extend beyond the energy markets to other areas such as reducing deforestation".⁸¹

Garnaut notes the UNFCCC estimate that by 2030 additional global investment and financial flows of US\$200 billion annually will be needed, with flows to developing countries in the order of US\$100 billion annually to finance mitigation that leads to constraining emissions at 2030 to current levels. Garnaut notes that "While the bulk of these investment flows are expected to come from the private sector, until international carbon markets are established there will be a need to be greater reliance on public sector funding".⁸² Garnaut notes that it is Australia's obligation, as a high-income country, to provide its share to adequate global funding for this purpose.⁸³

⁷³ Garnaut Climate Change Review, op. cit., p.316

⁷⁴ This figure is based on a scaling up of all existing National Adaptation Programs of Action (of which there are 31 as of June 2008) to all 49 Least Developed Countries.

⁷⁵ Garnaut Climate Change Review, op. cit., p.316

⁷⁶ Oxfam International (2007), *Adapting to climate change*, Oxfam Briefing Paper 104

⁷⁷ Garnaut Climate Change Review, op. cit., p.317

⁷⁸ *ibid.*, p.310

⁷⁹ *ibid.*, pp.310-311

⁸⁰ *ibid.*, pp.312-313

⁸¹ *ibid.*, p.313

⁸² *ibid.*

⁸³ *ibid.*, pp.313-314

The current inadequate funding contributions to adaptation and mitigation come as communities in developing countries are experiencing first hand the deep injustice of the impacts of climate change. Rich nations, including Australia, have for decades emitted a disproportionate share of greenhouse gases into the atmosphere, and yet it will be the poorest and least responsible countries and communities that will be worst affected by the affects of climate change caused by these emissions. Climate change is already beginning to undermine poverty reduction and sustainable development objectives under the Millennium Development Goals (MDGs), and is set to get worse. It cuts across all development issues and seriously threatens the lives and livelihoods of poor people around the world. It affects all sectors of development from food and water security, to health and sanitation, to displacement and migration, and conflict and disasters.⁸⁴ Developing countries are more vulnerable to climate change because they are more dependent on their natural resources than developed countries, and have a lower capacity to cope with environmental hazards and shocks.⁸⁵

On our own doorstep, low-lying Pacific communities need support in adaptation. The small island states of the Pacific are especially vulnerable to the impacts of climate change, sea level rise and extreme weather events. In 2007 damages from severe flooding alone in Northern Fiji cost FJ\$10m (\$7.1m). In Tuvalu king tides destroyed many homes and contaminated food supplies. In the 2004-5 cyclone season the Cook Islands incurred millions of dollars of damage from five cyclones in one single month, heavily affecting its economy and infrastructure.⁸⁶ Fresh water is an extremely limited resource in most Pacific island states and many rely on a single water source. Any changes to the replenishment of this source or contamination by saltwater (from rising sea levels or leakage from storm surges) would then have catastrophic consequences for the viability of Pacific communities.⁸⁷ Pacific Island societies are highly dependent on their natural environment with communities, infrastructure, agricultural land and tourist resorts are all concentrated in coastal zones. The rapid poverty reduction that is needed to help poor communities build resistance to the stresses of climate change is threatened by the onset and intensification of climate change effects.

This issue is of particular concern in the Uniting Church due to our close relationship with our partner churches in the Asia Pacific region. This concern was highlighted in a recent open letter from several Australian religious leaders (including the President of the Uniting Church, Rev. Gregor Henderson) to the Australian Government, which called for greater action to reduce Australia's greenhouse gas emissions and greater assistance for Pacific island communities to help them adapt to the effects of climate change. Australia, as the wealthiest developed nation and largest greenhouse gas emitter in the Pacific region, has a responsibility to lead the way in not only reducing its own emissions, but also to provide financial assistance to nations in the region struggling to adapt to climate change.

Whilst we acknowledge the recent advances made by the Government in this area (including the *Adaptation to Climate Change* initiative), we also believe that the large

⁸⁴ Oxfam International, op. cit.

⁸⁵ UNDP Human Development Report 2007, UNDP: New York

⁸⁶ Naicker, J.R. (2007), 'What to pay for – Climate Change or Development', *Just Change: Critical Thinking on Global Issues*, Issue 10, October, p.2

⁸⁷ IPCC (2007), *Up in Smoke? Asia and the Pacific – the threat from climate change to human development and the Environment*, Fifth Report from the Working Group on Climate Change and Development, p.82

amount of revenue expected from the auction of permits represents a unique and vital opportunity to meet our obligations to developing countries under the UNFCCC and the Kyoto Protocol, including to our neighbours in the Pacific. To ensure adaptation projects are culturally, socially, and environmentally sustainable, we believe they must be developed with the meaningful engagement of developing country communities themselves. We also support the view, as presented in the Garnaut Draft Report, that Australia must ensure climate change assistance is accounted for in addition to rather than as a part of existing aid programs.⁸⁸

We support Garnaut's proposed International Low Emissions Technology Commitment as one possible mechanism for developed countries to meet part of their obligations to developing countries under the UNFCCC and Kyoto Protocol. We welcome the proposal that funding commitments would apply as a percentage of GDP above a certain threshold level of per capita income. It was suggested that the threshold for funding commitments could coincide with the threshold for classification in the high-income group of countries (US\$11,000 per capita), so that a country just entering the group would initially have only minimal funding commitments. Garnaut suggests that Australia's 2007 share within the parameters he has suggested would be \$2.8 billion, or 0.26% of GDP, which would be public sector funding to spend on research, development and commercialisation of new low-emissions technologies which could be acquitted at home or abroad.⁸⁹ Garnaut explicitly suggests that money from an emissions trading scheme could be used for this purpose⁹⁰, and we believe it is difficult to see Australian Governments being willing to make this level of necessary investment in the global solution to climate change if it does not come from funding out of the sale of permits in the emissions trading scheme.

We note the estimate of Make Poverty History, of which we are a member, that Australia's fair share of adaptation funding for developing countries would be US\$1.5 billion (\$1.7 billion) on an annual basis by 2015 in addition to Australia providing its promised 0.7% Gross National Income (GNI) for development aid to address poverty.⁹¹ We note that the current Australian Government is only committed to increasing overseas aid to 0.5% of GNI by 2015.

⁸⁸ Garnaut Climate Change Review, op. cit., p.317

⁸⁹ *ibid.*, p.314

⁹⁰ *ibid.*, p.315

⁹¹ Make Poverty History (2008), *See the Bigger Picture. Act on Climate Change*, pp. 12-13

Appendix 1 | Statement on Climate Change

FOR THE SAKE OF THE PLANET AND ALL ITS PEOPLE: A Uniting Church in Australia Statement on Climate Change

*Assembly Standing Committee, Uniting Church in Australia
November 2006*

Resolution

06.101 It was resolved to:

- 06.101.01 adopt the statement “For the Sake of the Planet and all its People: A Uniting Church in Australia Statement on Climate Change” (below);
- 06.101.02 encourage Uniting Church members, congregations, groups, agencies and councils to
- a) model ways of living and working that minimise the production of greenhouse gas emissions;
 - b) seriously and regularly include matters of environment and lifestyle change in prayer and worship, study, and communal decision making; and
- 06.101.03 encourage Uniting Church members to
- a) advocate for government to implement policies that significantly reduce our dependence on fossil fuels and increase our use of non-nuclear renewable energy sources;
 - b) engage in dialogues, shared learning and action with non-government environment action groups.

FOR THE SAKE OF THE PLANET AND ALL ITS PEOPLE: A Uniting Church in Australia Statement on Climate Change

In its first public statement in 1977, the Uniting Church in Australia expressed what would be an abiding concern with the wellbeing of the planet for the rights of future generations:

*we are concerned with the basic human rights of future generations and will urge the wise use of energy, the protection of the environment and the replenishment of the earth's resources for their use and enjoyment.*⁹²

The natural environment is, however, not merely a resource for the benefit of human beings but has intrinsic value as part of God's good creation. In 1991 the Uniting Church declared that, “Nature has a right to the protection of its eco-systems, species, and populations in their inter-connectedness”.⁹³

The Uniting Church's commitment to the environment arises out of the Christian belief that God, as the Creator of the universe, calls us into a special relationship with the creation – a relationship

⁹² *Statement to the Nation*, Inaugural Assembly, Uniting Church in Australia, 1977

⁹³ *The Rights of Nature and the Rights of Future Generations*, Sixth Assembly 1991, Resolution 91.14.18, Uniting Church in Australia

of mutuality and interdependence which seeks the reconciliation of all creation with God.⁹⁴ We believe that God's will for the earth is renewal and reconciliation, not destruction by human beings. The foundational document of the Uniting Church in Australia, the *Basis of Union*, expressed this as the very heart of the Church's mission:

*God in Christ has given to all people in the Church the Holy Spirit as a pledge and foretaste of that coming reconciliation and renewal which is the end in view for the whole creation. The Church's call is to serve that end.*⁹⁵

Since its inauguration the Uniting Church in Australia has been concerned about the continued existence of all creatures and plant life and believes that nature is not to be plundered and abused. We must acknowledge, however, that the church has been complicit in the abuse of creation. We have lived out a doctrine of the domination of nature by accepting and engaging in practices that have failed to safeguard the integrity of creation. We have supported systems and structures that exploit the natural environment in the service of human greed. We make this confession and we renew our commitment to move towards sustainable non-exploitative living, believing that God's creation—the earth itself and all the life that it supports—is precious and the earth's resources exist for the good of all now as well as future generations.

The Uniting Church regards climate change as a serious threat to the future and integrity of life on earth. The scientific evidence on global warming and its potentially disastrous impacts is now indisputable. Also beyond dispute is that the burning of fossil fuels and subsequent creation of greenhouse gas emissions and our worldwide failure to plan for a sustainable future is seriously exacerbating the problems we face. The threat posed by climate change therefore challenges the way we live in a fundamental way. If we are to meet and overcome the challenge we must think creatively about the organisation of our social and economic institutions, our relationship with each other across national and cultural boundaries and our relationship with the environment.

It is increasingly the case that some humans consume the earth's resources whilst other humans pay the price. As one of the world's major producers of greenhouse gas emissions on a per capita basis, Australia must acknowledge that it has a responsibility to reduce our reliance on fossil fuels. As long as we remain prepared to abuse the atmosphere and entire ecosystems for the sake of short-term economic gain for a few, we undermine our own future. It is important that Australia's social, economic and environmental policies begin to reflect that social justice and ecological justice are not competing interests, but have shared solutions.⁹⁶ It makes good economic and political sense to spend money ensuring the long-term well-being of our natural world – there can be no security for humanity without a healthy ecosystem.

The Uniting Church in Australia believes that it is important for the Australian Government to set and commit to meeting serious targets for greenhouse gas emission reductions primarily through the promotion of renewable energy sources, measures to reduce energy demand and promotion of energy efficient measures. It is essential that this work be done in partnership with state and local government, business, industry and civil society.

The Church has a long history of concern with the nuclear fuel cycle⁹⁷ and remains unconvinced about the use of nuclear power as a solution to global warming. We believe that the continued research, development and implementation of renewable energy are absolute priorities for

⁹⁴ Submission to the Federal Environment and Heritage Committee Inquiry into a Sustainability Charter, UnitingCare NSW.ACT, May 2006

⁹⁵ *Basis of Union* (1992 edition), paragraph 3, Uniting Church in Australia

⁹⁶ *No Security Without Justice*, a resource for Uniting Church members for the Federal Election 2004, Uniting Church in Australia National Assembly

⁹⁷ *Nuclear Fuel Cycle Policy*, Assembly Standing Committee, Resolution 00.22, Uniting Church in Australia, March 2000

governments and industry in order to minimise greenhouse gas production. As a matter of urgency we must reduce our dependence on fossil fuels.

The impact of climate change will affect some of the world's poorest people first. The Uniting Church is particularly concerned with the fate of some of our most vulnerable Pacific neighbours. Our partner churches in the Pacific have called on their sisters and brothers in the Church throughout the world to act in solidarity to reduce the causes of human induced climate change by ratifying the Kyoto Protocol, reducing energy use and developing clean, renewable energy sources.⁹⁸ Lives, livelihoods, societies, cultures and ecosystems of the Pacific Islands have already been affected by rising sea levels, diminishing agricultural space, diminishing reserves of fresh water and changing weather patterns including more frequent and unpredictable storms. The Uniting Church has called on the Australian Government to prepare to provide assistance for the peoples of the Pacific as they are forced to leave their homes and their land.⁹⁹ Solutions must be found which ensure that the unique cultural and linguistic heritages of the various Pacific Island nations are not lost.

The situation in the Pacific is a clear signal to us that in order to secure our future, we must change how we live as nations, communities and individuals. Now is the time that governments, business, community and faith-based organisations must commit to working together to address the impacts of climate change for the sake of our planet and all its people.

⁹⁸ *The Otin Taai Declaration*, The Pacific Churches' Consultations in Climate Change, March 2004

⁹⁹ *Tuvalu and the Impact of Global Warming*, Tenth Assembly 2003, Resolution 03.18.01, Uniting Church in Australia; *Global Warming and its Impact on Pacific Nations*, Eleventh Assembly 2003, unconfirmed minute, Uniting Church in Australia

Appendix 2 | Other Uniting Church National Assembly resolutions on climate change and the environment

ALTERNATIVE ENERGY SOURCES

*Assembly Standing Committee, Uniting Church in Australia
March 2000*

It was resolved to:

Resolution 00.22.10-11 [extracts]

welcome the steps taken by government to encourage business enterprises to explore alternative energy sources through programs such as “the Greenhouse Gas Abatement Programme”, the “Incentive to Switch to Lower Sulphur Fuels” and the 100% excise credit for rail transport;

call on government to initiate a more active program including:

- direct government initiatives in developing models of energy use which minimise production of greenhouse gases and increase the use of environmentally benign, renewable resources;
- tax credits for those working towards development of renewable, environmentally acceptable alternatives, and tax penalties on those who fail to meet targets set by government for reduced pollution;
- significant increases in the provision of subsidy support for initial research, development and implementation of potentially viable alternative energies, with a view to becoming a leader in research, development and implementation of environmentally benign, renewable alternatives;
- target government purchases towards enterprises consistent with these policy objectives;

TUVALU AND THE IMPACT OF GLOBAL WARMING

*Tenth Assembly, Uniting Church in Australia
July 2003*

The Assembly resolved:

03.18.01

- (a) (i) to call on the Australian Government to immediately sign and ratify the Kyoto Protocols in relation to global warming, especially because this has affected the nation of Tuvalu and other Pacific countries;
(ii) to call on the Australian Government to offer the guarantee of special immigration status to the people of Tuvalu, for immigration to Australia when their nation loses its viability for human habitation;
- (b) to express our solidarity with the Christian Church of Tuvalu in this predicament and to call on our people to remember the people and church of Tuvalu in their prayers.

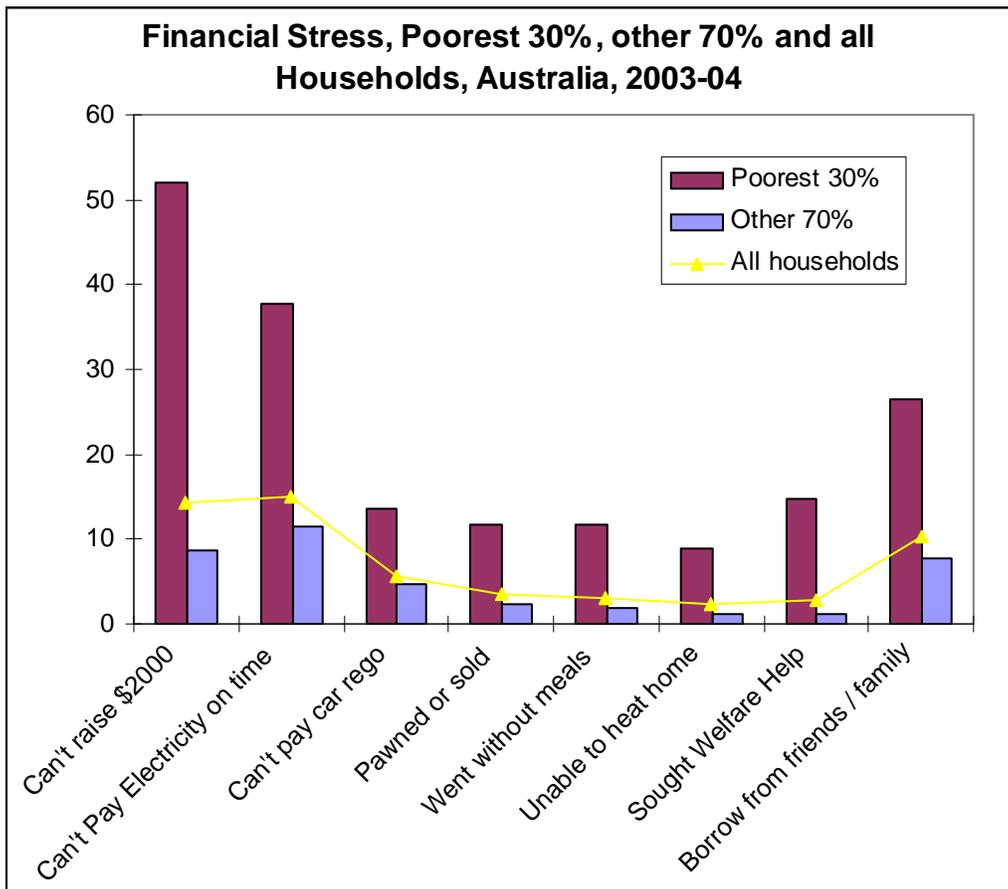
Appendix 3 | Measures of Financial Stress¹⁰⁰

The graph below shows financial stress levels for selected indicators for the poorest 30% of the equalised household income distribution. It also gives comparisons for the remaining 70% of households.

Of significant concern is that over half of all households in the poorest 30% of income distribution could not raise \$2000 in an emergency, and 40% have difficulty paying for essential services, specifically gas and electricity.

Also off significant concern from this data is that 13.5% of the poorest 30% of households went without meals, due to financial hardship.

Inability to heat the home was a problem for 8.9% of the poorest 30% of households across Australia, although this measure is likely to be higher for the colder, southern states.



¹⁰⁰ ABS, Household Expenditure Survey, 2003-04