



Principles and Policy on
Global Warming

**ACTU Position Paper
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The central challenge

Global warming is the pre-eminent policy challenge of our time.

The scientific evidence is overwhelming:

- Human economic activity is causing global warming.
- The present and future rise in global temperature is significant and severe
- Today's emissions will affect climate for decades to come.

Eleven of the last twelve years rank among the 12 warmest years on record since 1850¹. Continued greenhouse gas emissions at or above the current rates will cause further warming.

Australia's ecosystems; cropping, forestry and livestock; water resources; public health; settlements and infrastructure; and weather will suffer consequences, increasing in severity as the temperatures rise.

Unless decisive action is taken now to reduce greenhouse gas emissions, the planet we bequeath to future generations will be harsher and more hostile to the human condition than that which we have inherited.

Global warming has profound economic and social consequences.

Environment, economy, and society are the three faces of policy – integrated and inseparable – in any program of sustainable global development.

To reduce poverty, raise living standards, create decent jobs, provide opportunity for all, this modern truth is inescapable: the environmental consequences of our production and consumption must be reckoned alongside the efficiency of its generation and the fairness of its distribution.

The costs of reducing global emissions will be high. But the cost of not reducing emissions is far higher, as the Stern Report has established. Decisive action to reduce global emissions is necessary for continuing sustained economic growth.

Concerted national and international effort and investment targeting reduced emissions carry great potential for better jobs and higher incomes. Scientific knowledge, technological change, industrial restructure and renewal, and continuing social change can and must deliver a healthy, sustainable future.

Sustainable growth and quality jobs will be delivered by investment in new technologies, energy efficiency, and demand management. The imperative is to invest in both existing and emerging technologies to meet present and future demand from the developed and the developing world. Industry must face up to

¹ Intergovernmental Panel on Climate Change Fourth Assessment Report.

global warming and be accountable for investing in sustainable jobs rather than raising the fear of job losses and expecting government handouts.

Greenhouse gas emissions are at the core of global warming.

The sources of these emissions are many. The burning of fossil fuels for static and mobile energy production, along with urban waste, deforestation, and agriculture all contribute.

Accordingly, the response must be varied too. There is no magic bullet available to solve the problem. The battle must be waged on all fronts, and the time to do it is now.

What Australia must do

1 International: *Sign up to Kyoto*².

Australia must ratify the Kyoto Protocol immediately. The failure of the Australian Government to do so is a blight on our international reputation and appallingly short-sighted.

The Kyoto Protocol aims to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human interference in the world climate system. Ratifying Kyoto is a necessary first step in combating climate change, but it is far from sufficient. Kyoto is not comprehensive - it does not adequately deal with all sources and sinks of greenhouse gases and it does not deal with the social justice implications.

Signing up to Kyoto will establish Australia's climate change *bona fides* and secure us a seat at the negotiating table with the international community. Australia can then assist to ensure that the Protocol develops into a comprehensive, effective and realistic international action plan.

The Howard governments' failure to ratify Kyoto is denying Australian businesses access to billions of dollars in international investment and trading opportunities. These are opportunities that would generate employment opportunities in Australia.

The Kyoto Protocol places accountability for emissions at point of energy use or emission creation. This is where accountability should lie. Reversal of this position - placing accountability at point of extraction - would have quite perverse consequences. Such an approach would, for example, transfer responsibility for a large proportion of US emissions from oil use to the Middle East. It would hold Australian coal miners directly accountable for the emissions of their (export) customers, with any resultant shortfall in Australian exports simply being met by third countries filling the breach in world supply.

Australia should support retention in any extended global greenhouse protocol, of accountability for emissions resting at the point of emission creation.

Investment in climate change solutions will involve massive sums and should be benchmarked against ethical investment principles such as those promoted by the United Nations.

² The Kyoto Protocol is an amendment to the United Nations Framework Convention on Climate Change (UNFCCC) which Australia has ratified.

2 National: *Invest, engage, educate, regulate*

Australia should not delay implementing greenhouse gas abatement measures within its national borders. By moving sooner rather than being dragged along later, Australia will lead other nations and secure its international competitiveness in the long run.

As we meet the global warming challenge, Australian society and economy will change. This is neither a new phenomenon nor one to be feared; continuing social and economic change has been our reality since Federation.

Establishing clear targets provides certainty for industry and consumers. Without targets, an important imperative to action is lacking.

The union movement supports the commitment by the federal parliamentary ALP to work to achieve a 60% reduction in Australia's greenhouse gas emissions below the 2000 level by 2050.

Other targets, including an extension of the Mandatory Renewable Energy Target (MRET) for power generation from the present 1% to 10%, with further extension beyond this over a reasonable time frame, are also warranted and supported.

All stakeholders should be engaged in addressing global warming. The ACTU endorses the proposed *national climate change summit* to be hosted by federal Labor. An incoming federal Labor government should establish a standing consultative body to provide advice on and test policy initiatives – economic, social and environmental. Further development of benchmarks for mandatory programs should be a matter for this consultative body. The union movement stands ready to participate constructively in any such body.

Market mechanisms and role of government: Market mechanisms have a critical role in the transition to a sustainable low emissions future. An effective response to the climate change challenge is unlikely without a price on carbon and a robust market in net emissions rights. Market mechanisms promote flexibility and creativity in meeting the challenge, and assist to find least cost solutions.

However, market measures alone are unlikely to be sufficient to achieve the necessary environmental, social, and economic changes required. They will likely work most effectively when supplemented by direct regulation in particular instances. Any carbon trading scheme should be open, clear, transparent and benefit the community. It would be a grave misallocation of resources for a carbon trading scheme to become a cash cow for the major financial institutions. Any such scheme must be underpinned by appropriate legislation and external scrutiny to avoid profiteering, corrupt practices or other distortions, which would damage public confidence.

Indeed, it is the responsibility of government to intervene to establish a market - a national emissions trading scheme – either providing the basis for or through the setting of a carbon price.

In establishing a national emissions trading scheme, government intervention might take many forms. Government can:

- issue or auction emission permits; and/or
- levy taxes; and/or
- set mandatory renewable energy targets; and/or
- establish emission accounts for firms and/or individuals; and/or
- directly require or prohibit certain things – such as prohibiting incandescent light bulbs and requiring their replacement with compact fluorescents in Australia by 2010, or mandating the installation of smart meters in conjunction with all new air conditioner installations

The union movement supports establishment of a national emissions trading scheme.

The development of comprehensive strategies to address global warming must be supported through strong industry policy to provide long-term jobs in Australian industry. Such a strategy should include local content rules and purchasing policy that encourages local production.

Where revenues are raised from issuing of permits or environmental taxes they should be used to fund research and monitoring, assist industry innovation and development, promote structural change in industry, achieve shifts in social practices, and improve labour adjustment through training and skills initiatives and other measures.

Renewable energy: Wind, solar, geothermal, tidal, biomass, small-scale hydro, and hybrid combinations of these power generation methods are all examples of renewable energy sources with great potential for reducing emissions of greenhouse gases and other pollutants. None are devoid of environmental and amenity consequences, though all result in vastly less greenhouse emissions per unit of power produced.

The renewable energy sector has a critical and central role in a comprehensive greenhouse abatement program, in supplying green energy to existing industries. The growth of wind, solar and other renewable sources such as geothermal and solar-thermal power sources provides immense scope to existing industries to diversify their energy technologies and deploy renewable energies. These new technologies will also be of benefit to our manufacturing sector.

Renewable energy sources have tremendous potential to create additional jobs in development, installation and operation phases. Increasing the share of

renewable energy in the total energy mix is possible without damaging existing industry and with continuing growth in high quality jobs, as the EU experience demonstrates. The exponential growth in renewable capacity in South Australia and other states is further evidence of the central role of alternative energy in tomorrow's Australia.

Fossil fuels: Burning of fossil fuels is the primary source of carbon dioxide emissions into the atmosphere.

A successful transition to a sustainable low emissions future starts not from an abstract clean sheet but from our present economic base. Ignoring this reality invites profound social cost and dislocation which is avoidable under a realistic effective change program.

Australia's abundant reserves of natural gas provide an important intermediate step in supplying additional energy for the economy while contributing to reduced greenhouse emissions.

Today, coal is a significant part of Australia's economy and society. Modern lifestyles rely on safe, reliable, low cost electricity. The low price of electricity in Australia is based on the availability of coal and its efficient extraction and use. Coal is by far Australia's biggest export earner. Other important Australian exports also rely on low cost energy produced from coal-fired power stations our resource intensive processing industries and manufacturing sector. Further, Australian black coal is relatively "clean" by world standards in that it is low-sulphur (sulphur being a cause of acid rain), high in energy content and low in impurities that impair burning and cause particulate pollution.

There is high demand for Australian coal and it is a key component of global energy supply and security, especially given the lack of security for much current oil supply. As a responsible member of the global community Australia has no right to unreasonably withhold the supply of energy to those who need it.

It follows that a major commitment is required to substantially reduce emissions from the continuing use of coal and other fossil fuels in power generation. Measures include the deployment of new technologies (such as *Integrated Gasification Combined Cycle*) in new coal-fired plants; and continuing development of *carbon capture and storage (CCS)* and related technologies. Retrofitting of existing coal and gas-fired power plants needs major consideration.

Subject to satisfying the following concerns, the union movement strongly supports CCS and notes its endorsement as an important element in meeting the greenhouse challenge, in the Stern Report and the Al Gore film *An Inconvenient Truth*. However, it is recognised that these technologies are currently immature

in the sense that they require extensive demonstration and commercialisation at large scale, without imposing unreasonable costs or risks on future generations.

Provided that this effort occurs, CCS offers realistic medium to long term prospects of large reductions in carbon dioxide emissions on a cost-effective basis. The ACTU supports a sustained national program to retrofit and or replace old technology with new efficient plant capable of utilising CCS technologies on a large scale.

Nuclear power: The ACTU and unions do not support nuclear power. Apart from the unsolved issue of waste and the consequent legacy of risk for future generations, nuclear only becomes economically viable with large increases in the price of energy. Construction of nuclear power plants is extraordinarily expensive and involves investment gestation periods in the order of 15 years – a far longer and more rigid timetable than attaches to renewable alternatives. The further cost and potential risk at the point of decommissioning (contaminated) plant at the end of its economic life underscores the negative consequences of an energy source that is neither necessary nor desirable for Australia.

The price of energy will rise over coming years. This will greatly increase the economic viability of the renewable energy sector in Australia. Our comparative abundance of sunshine and wind is a major advantage and there are good prospects for major expansion of geothermal capacity to complement CCS and clean coal technologies.

Transport: Transport is the third highest emitter of carbon dioxide emissions into the environment (contributing 14%, compared to stationary energy (47.6%) and agriculture (19.2%)).

While renewable, low emission energy sources offer practical and viable alternatives in the generation of static energy, alternatives to fossil fuels as a mobile power source appear limited with present technologies. This is particularly true for motor vehicles.

Vehicle fuel efficiency has vastly improved over recent decades. There is great scope – and clear social imperative - for this trend to continue, with deployment of new light weight construction materials for private and commercial vehicles, engineering innovations, smaller more efficient engines, and other developments.

Natural gas offers a significantly lower emission fuel; while biodiesel, and ethanol may have a role as alternate fuels, it is critical to have regard to their whole-of-cycle emissions including the use of fertilisers and fuels in their production. In the longer term, hydrogen fuel cells may develop into a genuine alternative mobile fuel source. Hybrid vehicles have a role to play, though it will be imperative to reckon their whole-of-cycle emissions and the decommissioning costs at the end of their economic lives, as with all vehicles..

Any transport plan must encompass increased public transport infrastructure. Public transportation systems must be integrated in urban planning. The contribution of transport to emissions reduction encompasses both public and private transport modes, and must properly consider the effects on both job creation and the environment.

Shipping supports 28% of the Australian domestic freight task but contributes just 2% of total greenhouse gas emissions from the transport sector. Shipping produces low emissions on a tonne kilometre basis relative to other transport modes. Maximising the use of shipping in the national transport task should be integral in a greenhouse gas abatement strategy, but the Howard government has neglected it.

The ACTU supports policies that encourage investment in Australian shipping to ensure the nation has a modern and efficient shipping fleet which adopts the latest in propulsion and design technologies to reduce shipping's contribution to greenhouse gas emissions. The LNG trade is critical to Australia's economy and its contribution to the clean energy focus of Australia and its global LNG customers. Australian LNG should be carried in Australian registered and Australian crewed vessels.

Buildings: Commercial buildings are a large and rapidly growing source of greenhouse gas emissions in Australia, accounting for about 17% of stationary energy emissions.

"Green buildings" are resource efficient in energy and material use in construction and occupation, with design features using light, heat and shade to the maximum effect. Reform of building codes for new buildings, and subsidising retrofitting of energy efficient features in the established stock, must be a core element of a comprehensive emissions reduction program.

Agriculture: Australia is the driest continent. Expert scientific opinion predicts that global warming will make Australia drier still.

We have over-allocated water resources to the point where over a quarter of our river systems along with local streams, lakes and water catchments, mainly in southern and eastern Australia, are exploited beyond sustainable extraction limits.

An essential response to the consequences of global warming includes vastly improving our conservation and use of water, including large scale re-use of treated effluent, aquifer storage and retrieval of stormwater run-off, and other initiatives. We can repair our precious lands and rivers if we make a concerted national effort now.

Globally, methane emissions from rice production and animal husbandry contribute significantly to greenhouse gases, challenging the developing world in particular. Improving agricultural practices is part of the solution and global unions involved in this sector will continue to agitate for the development of sustainable agricultural practices.

Opportunities for earth repair industries can generate jobs in regional and rural Australia and should form part of the agenda for developing and supporting union cities and towns.

Public Health: Global warming will have implications for public health. Increases in temperature will see a rise in heat related illness and death, with the elderly and poor most at risk. The predicted increase in extreme weather events will also impact hardest on the most vulnerable in our society, as the hurricane tragedy in New Orleans illustrates..

The spread of vector borne diseases and the wider transmission and reintroduction into Australia of diseases such as dengue and Ross River virus is predicted as the climate warms.

The Howard Government has overseen a reduction in the level and quality of health services provided to Australians and has placed Medicare and the public health system under great strain.

To prevent a public health crisis and to treat climate victims, Australians require a first-rate public health system with significant investment in health care, research and development and emergency response services. Not to do so is a failure in public health policy by government.

Research and development: There is a clear role for government in the public (global) interest, in fostering research and development in both the public and private sectors. In the private sector, there is great potential for sustainable job creation in, for example, the development of green car and new solar technologies. In the public sector, the role of bodies such as the CSIRO, the Bureau of Meteorology, Geoscience Australia, the Australian Institute of Marine Science, the Antarctic Division, and the universities will be critical.

Union Action

Unions in developed and developing nations understand the strength of collective action and the strength that comes from partnering with civil society. The challenge of climate change requires collective action across society – embracing the young and the old, urban and country, working people and their families and communities.

Australian trade unions will lead by example in reducing our environmental footprint and taking the necessary steps to reduce our greenhouse gas emissions.

The ACTU will facilitate a standing task force representative of the union movement, with industry working parties. Union action plans will be developed to identify key issues and areas for research and development, and opportunities for unions to progress sustainable employment and practices, including fair and effective transition programs.

The ACTU will continue to foster social partnerships and relationships with community groups, business and the research community, and will participate in representative national consultative forums established to meet the challenge of global warming.

Activating Workers in the Workplace

The ACTU endorses and adopts these fundamental principles supporting workers' engagement and action on global warming:

- *Right to participate:* Workers have the right to participate in decision making related to environmental concerns in their workplace, exercised through the joint health and safety committee or workplace safety and health representatives, or through new environmental committees.
- *Right-to-know:* Workers have the right to be aware about the environmental hazards in the workplace. i.e. the right to know about workplace emissions, technological choices, plans for energy saving, use and efficiency.
- *Whistleblower protection:* A worker may not be held liable or be disciplined for reporting workplace practices that are honestly believed to pose an environmental risk.
- *Right to refuse dangerous work:* A worker may not be held liable or be disciplined for refusing to perform work that he/she honestly believes may pose an immediate or serious threat to his or other workers' health.
- *Right to refuse work which harms the environment:* A worker may not be held liable or be disciplined for refusing to do work that he/she honestly believes may pose an immediate or serious threat to the environment.

Worker support for global warming abatement policies will be strengthened if employment and livelihood issues are placed at the centre of policy and decision-making.

This is important because it will lead to a reduction of greenhouse gases at the production level and along the life cycle of products. Since workplaces consume vast amounts of energy and other resources and generate wastes, it is crucial that clear workplace targets for energy efficiency and waste minimisation be linked to industry and national carbon reduction and waste reduction strategies.

Some actions trade unions can commit to include:

- Coordinating workplace campaigns including bargaining (eg. What is the employer doing about reducing their contribution to global warming?)
- Establishing workplace environment committees
- Adding sustainability to the agenda of branch council/executive meetings and having a Climate Policy
- Coordinating industry wide campaigns (eg green buildings, transport, CCS, Just Transition programs)
- Empowering workers to participate in local, national and international fora on global warming

Activating Workers at Home

Trade unions can provide the tools and information to assist members to be more responsible consumers of products and services in particular water, energy and other natural resources, and to be aware of consumer labels.

Through the ACTU's member services arm, Member Connect, the ACTU will commit to providing working families with low cost, high quality consumer products and investment options that will reduce their domestic environmental footprint.

The ACTU supports the following three principles for a more sustainable lifestyle:

1. Reduce : cut energy consumption

Change hot water to solar; choose energy efficient appliances and use sparingly; swap lighting to efficient globes; turn off standby power; and insulate homes, seal drafts, install smart meters, and swap air-conditioning systems for fans and windows.

Consider ways to reduce petrol consumption and air travel. Take public transport, bicycles or walking paths wherever possible. Choose a small, efficient car and look at car share schemes or car pooling.

2. Renewable : Green Power

Choose 100% Green Power or have solar panels or other renewable energy devices installed. This makes the home electricity use carbon neutral.

3. Go carbon neutral

Carbon neutral programs can offset house and transport emissions beyond the gains made by energy efficiency or by using renewable energy.

Education

Global warming science is complex but as we have seen in the film An Inconvenient Truth, the science can be translated into an accessible message.

Trade Unions have the capacity to deliver clear messages to the public about the key elements of global warming and sustainable development. Trade unions can raise awareness in the wider community by providing leadership on issues of sustainability. The union movement shares common values about a sustainable future with the wider Australian community and we have the opportunity to drive this debate.

Education about sustainability enables people to build the knowledge, values and skills to take part in decisions about the way we act, locally and globally, to improve the quality of life now, without damaging the planet for the future. Integrating sustainability issues into union education and training will ensure unions and members act sustainably now and into the future.

Education programs should encourage union members to implement sustainable living techniques in their personal and domestic environment as well as in their workplaces.

Our relationships with academics and scientists will be a valuable resource in the development and delivery of education materials.

A formal engagement point might be integrating the social, economic and ecological principles of sustainability into general delegates' organising and occupational health and safety training. This would sit alongside more general membership awareness programs.

And by working with government, industry, local communities and training providers, trade unions can participate in the development of Just Transition programs to retrain and reskill workers' into jobs in the renewable energy industry.

Trade unions will continue to lobby governments to adequately resource global warming education programs in primary and secondary schools, TAFE and tertiary institutions.

The ACTU will develop a membership education and action kit on global warming inclusive of possible clauses for bargaining in the workplace.

Conclusion

Global warming presents us with a social and economic imperative to act, now. Australian unions are committed to playing a constructive role in meeting the challenge.