

It happens to be an emergency...

## Climate action now!



### Warnings that can't be ignored

*Climate scientists have been warning us about global warming for decades. But in the last few years, alarm bells have been ringing more loudly.*

Previously it was assumed that gradual increases in carbon dioxide (CO<sub>2</sub>) and other heat-trapping gases in the atmosphere would produce gradual increases in global temperatures. But now scientists predict that an increase of as little as 2°C above pre-industrial levels could trigger environmental effects that would make further warming—as much as 8°C—inevitable (see Box 1).

#### ***Box 1: Triggers for runaway global warming***

Runaway global warming could occur if self-perpetuating cycles ("positive feedbacks") accelerate global warming out of control. Increasing temperatures could trigger these feedbacks, which in themselves cause more global warming so that the process of global warming becomes self-fuelling and self-perpetuating. Here are some examples:

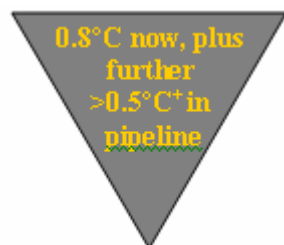
- As icecaps melt there is less reflective white surface on Earth, so the land and water beneath absorb the sun's heat instead of reflecting it. This reduces the amount of ice that grows back over winter, leading to even less reflection of sunlight and more warming. Arctic sea ice is expected to disappear by the middle of this century.
- Water vapour is a powerful natural greenhouse gas. As the Earth's temperature rises, more water evaporates, which contributes to further warming.
- Methane, a greenhouse gas 20 times more powerful than carbon dioxide, is frozen in vast quantities in the permafrost (frozen ground) of Siberia, Canada and Alaska. Thawing of the permafrost has already been observed. As temperatures rise, more methane will be released, triggering further warming and hence more methane release, and so on.
- Decomposition of organic carbon in soils increases with rising temperatures, releasing more CO<sub>2</sub> into the air. This could make forests emit carbon instead of absorbing it.
- Ocean warming and slowing of the Gulf Stream reduces CO<sub>2</sub> absorption, leading to higher concentrations in the air and further warming.
- Warming leads to forest die-back and fires, releasing more CO<sub>2</sub> and causing more warming.

In the words of James Hansen, head of NASA's Goddard Institute, "We either keep the warming small or it is likely to be quite large".

**Find out more:** Mark Diesendorf, *Greenhouse solutions with sustainable energy*, UNSW Press, 2007; Carbon Equity Project, *Avoiding Catastrophe*, at <http://www.carbonequity.info/PDFs/Avoidingcatastrophe.pdf>; Lynas, M., *Six Degrees: Our Future on a Hotter Planet*, at <http://www.marklynas.org/sixdegrees>.

Worse still, a 2°C increase is highly likely if greenhouse gas concentrations reach 450 parts per million (ppm) (see Table 1). They presently stand at 430ppm and are increasing by 2-2.5 ppm per year.

**Table 1: Probabilities of Global Warming**



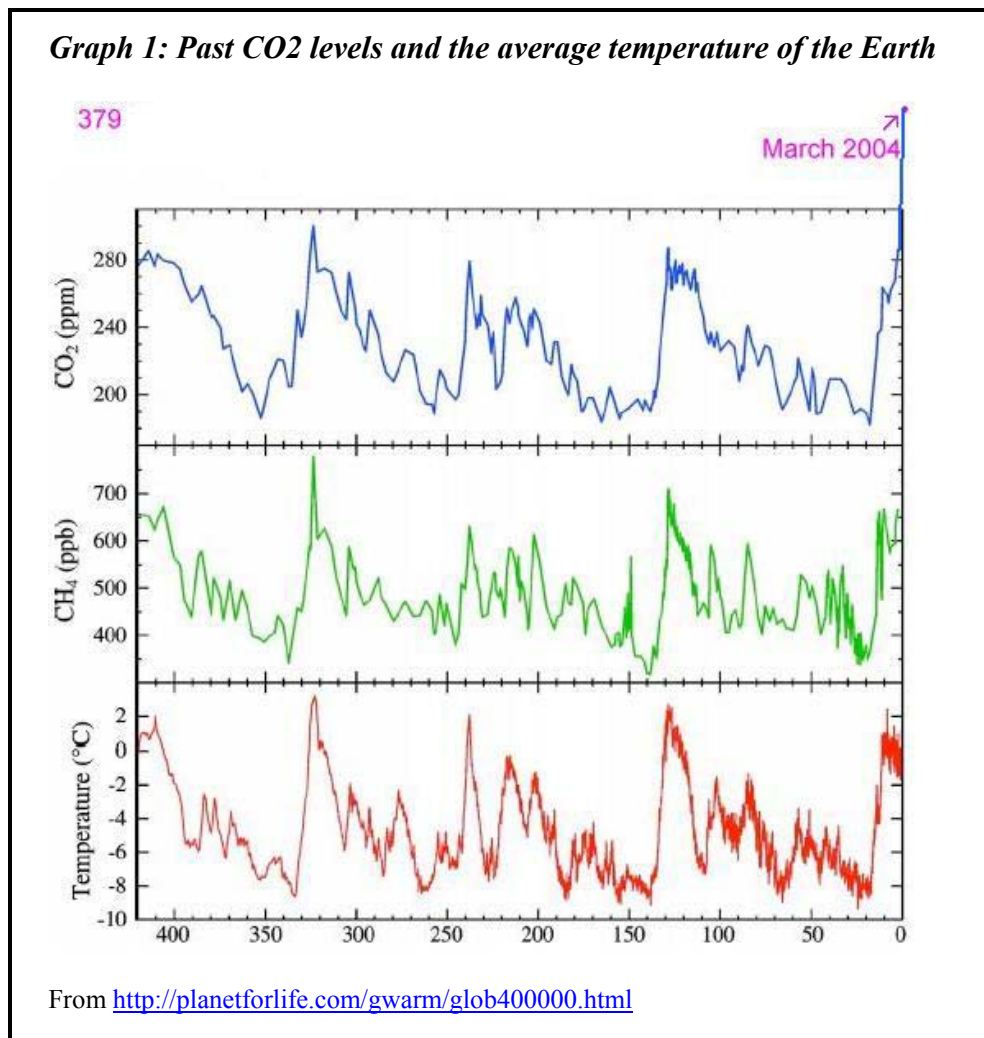
PPM CO <sub>2</sub> e	Acid	1.5°C	2°C	3°C	4°C	5°C	8+°C
300			?	(most likely 0%)	(most likely 0%)	(most likely 0%)	0%
350		?	?	?	?	?	?
400		50%	57%-33%-13%-8%	34%-3%-1%-1%	17%-1%-0%-0%	3%-0%-0%-0%	?
430			<b>We are here - according to Stern Review</b>				
450		100%	78%-78%-38%-26%	50%-18%-6%-4%	34%-3%-1%-0%	21%-1%-0%-0%	?
490?		100%	96%-96%-61%-48%	61%-44%-18%-11%	45%-11%-4%-2%	32%-3%-1%-0%	?
500		100%	99%-99%-77%-63%	69%-69%-32%-21%	53%-24%-9%-6%	41%-7%-2%-1%	?
550		100%	99%-99%-77%-63%	69%-69%-32%-21%	53%-24%-9%-6%	41%-7%-2%-1%	?
<b>Species loss</b>		?	15-40%	60%	90%	90%	90%
<b>Runaway warming to approx. 6-8°C, (maybe more?)</b>		No	No	Maybe	Likely	Very likely	Very likely
<b>Mode of climate change</b>		Serious	Dangerous	Catastrophic			

This table, modified from the Stern Report, shows the likelihood that a given level of greenhouse gases (expressed in “carbon dioxide equivalent” – CO<sub>2</sub>e) will result in global warming over a certain temperature. For example, greenhouse gases that level off at 550ppm CO<sub>2</sub>e give a 63-99% chance of exceeding a 2° warming compared to pre-industrial temperatures. The figures are drawn from a wide range of studies. The red shading indicates a 60 per cent chance of exceeding the temperature level; the amber shading a 40 per cent chance; yellow shading a 10 per cent chance; and the green shading a less than a 10 per cent chance.

See [http://www.hm-treasury.gov.uk/media/9/1/Chapter\\_8\\_The\\_Challenge\\_of\\_Stabilisation.pdf](http://www.hm-treasury.gov.uk/media/9/1/Chapter_8_The_Challenge_of_Stabilisation.pdf)

Such accelerated warming would create the hottest Earth since the human race evolved (see Graph 1). In the earlier stages, an additional 2 billion people would be at risk of insufficient water, 95% of coral reefs would be lost, the Amazon rainforest and other important ecosystems would be destroyed forever, and a super-drought would spread to the world's largest food producers, causing widespread famine and an unprecedented refugee crisis.

The collapse of the polar ice caps would result in a sea level rise of up to 25 metres, and massive devastation to coastal and island communities and major cities. The rate of species loss could match those of previous mass extinctions. Needless to say, not only civilisation, but the very survival of humanity would be threatened.



**Find out more:** Intergovernmental Panel on Climate Change (IPCC) Working Group 1 Fourth Assessment Report, *Climate Change 2007: The Physical Science Basis – Summary for Policymakers*, at <http://ipcc-wg1.ucar.edu/wg1/wg1-report.html>; *Avoiding catastrophe*, at <http://www.carbonequity.info/PDFs/Avoidingcatastrophe.pdf>; *The 2° target*, at <http://www.carbonequity.info/PDFs/2degree.pdf>.

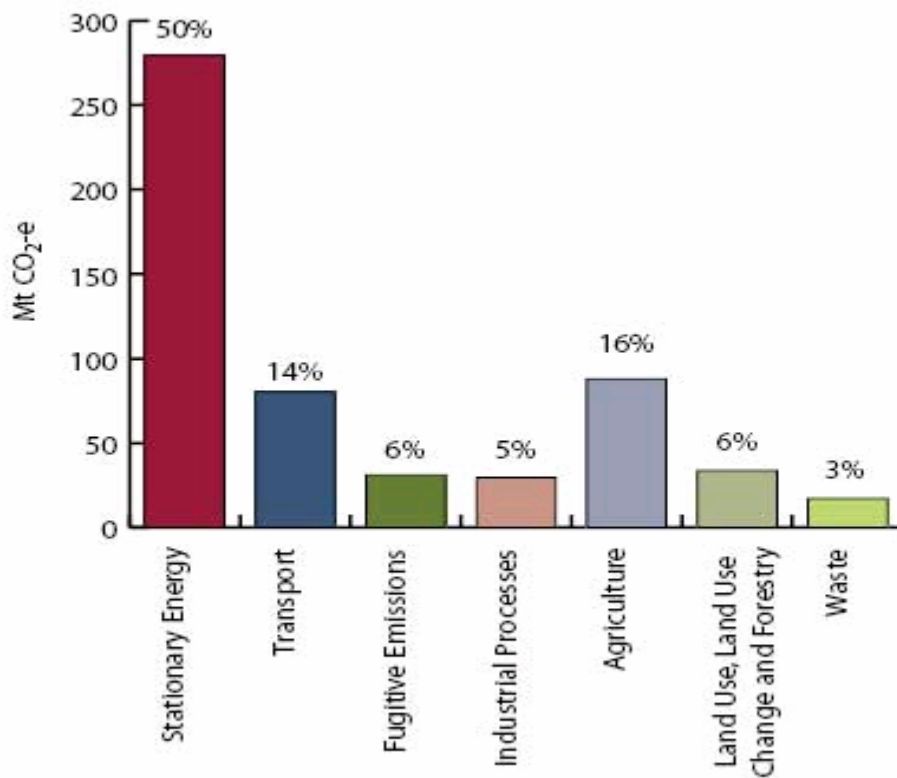
## Australia—greenhouse gas emissions junkie

Each year human activity is pumping out twice as many greenhouse gas (GHG) emissions—8 billion tonnes as against 4 billion—as the world's forests, land and oceans can absorb.

Moreover, there is a time lag between greenhouse gas release into the atmosphere and the final impact on global average temperature. Since the late 1880s, this has risen 0.8°C and the GHGs now in the air will cause a further 0.5-0.6° rise over coming decades. This puts us dangerously close to the temperatures at which runaway warming will occur. The harmful effects are already being seen in droughts, floods, cyclones, heat waves and rising sea levels.

While Australia's share of world GHG emissions is small, around 1.4%, our highly industrialised economy has the highest GHG emission rate *per person* in the world: 5.63 tonnes of carbon each year (see Graph 2).

**Graph 2: Australia's greenhouse gas emissions by sector in 2005.**



From Australian Greenhouse Office 2005 inventory <http://www.greenhouse.gov.au/inventory/2005/index.html>

The global average is 1.27 tonnes and the world environment can absorb only 0.62 tonnes per person. Just to get Australia's emissions down to a level the Earth can absorb would mean cutting emissions by 90%.

Yet, despite knowing the serious risks since the 1980s, the Australian government and resource industry lobbyists (the "greenhouse mafia") have sabotaged international negotiations in order to protect the profits of a small number of big polluters like BHP Billiton and Rio Tinto.

**Find out more:** Hamilton, C., *Scorcher - the dirty politics of climate change*, Black Inc. Agenda, 2007; Australian Greenhouse Office, at <http://www.greenhouse.gov.au/inventory/index.html>; *Avoiding catastrophe*, at <http://www.carbonequity.info/PDFs/Avoidingcatastrophe.pdf>; *The 2° target*, at <http://www.carbonequity.info/PDFs/2degree.pdf>.

## **We have no choice but to make every possible effort**

*The urgency of the situation cannot be overstated: global warming and climate change are already upon us. Bringing greenhouse gas emissions under control will require deep changes and immense effort at the global level: a revolution in the economy and industry as big as mobilising for world war.*

Climate change scientists say we have a window of around 10 years to make the necessary infrastructure and investment changes that can produce these emissions cuts. In the words of the May 2007 report of the Intergovernmental Panel on Climate Change (IPCC), "It is technically and economically feasible to stabilise greenhouse gas concentrations in the atmosphere".

But getting there in time is the greatest challenge. It means adopting policies adequate to the climate crisis, and creating the social and political movement capable of making sure they are actually introduced. **This charter outlines the Socialist Alliance's view of those policies and the strategy we need to implement them.**

## **Set the greenhouse gas reduction targets that the planet needs**

*Any GHG emissions reduction target fails the test if achieving it still gives us runaway global warming. This is the central problem of the UK's 2006 Stern Review, which adopts a limit for greenhouse gas concentration of 550ppm, even though, in Sir Nicholas Stern's own words, this would produce "at least a 77% chance—and perhaps up to a 99% chance, depending on the climate model used—of a global average temperature rise exceeding 2%".*

The only responsible limit is one that gives a chance of holding the temperature rise beneath 2%. That means a maximum greenhouse gas concentration of 450ppm.

**To achieve it the Socialist Alliance calls for a 60% reduction of Australia's emissions (compared to 1990 levels) by 2020, including 95% of power station emissions, and a 90% overall reduction by 2030.**

We need mandatory emissions reduction targets of 4-5% per year now. We propose immediate economy-wide and sector-by-sector planning for all greenhouse gases, to meet these targets on time or before. We must be able to review and change these targets as scientific forecasts are updated.

Businesses, local councils and government departments should all be included in such an audit, and networks like that of the local councils committed to reducing their overall GHG emissions to zero strongly encouraged.

**Find out more:** Baer, P. and Mastrandrea, M., *High Stakes – Designing emissions pathways to reduce the risk of dangerous climate change*. Institute for Public Policy Research, November 2006, at <http://www.ippr.org/publicationsandreports/publication.asp?id=501>;  
Macintosh, A., *Australia's 21st Century Carbon Budget: How much have we consumed?* The Australia Institute Research Paper No. 45, July 2007, at <http://www.tai.org.au/documents/downloads/WP104.pdf>

## **Ratify Kyoto and negotiate a much stronger treaty**

*The rich industrial countries are mostly responsible for greenhouse gas emissions, but poor under-developed countries like Bangladesh and Kiribati are hit first and worst by climate change.*

The rich nations must assist poor nations to develop economically along a road that avoids high-pollution industries. This aid is not charity, but repaying our ecological debt. Many poor nations will have trouble just dealing with the symptoms of climate change without massive technical assistance.

Australia must also accept a large share of environmental refugees displaced by rising sea levels, especially from the Asia-Pacific region.

The government must immediately ratify the Kyoto treaty and push for a new international treaty that aims for 90% emissions reductions on 1990 levels by 2030. The industrialised nations are the only ones able to lead the way—Australia must become a leader, not a saboteur, of serious international climate action.

**Find out more:** *Adapting to climate change: what's needed in poor countries and who should pay*, at <http://www.oxfam.org.nz/imgs/pdf/adapting%20to%20climate%20change.pdf>

## **Attack energy inefficiency - aim for zero waste**

*All the experts agree that the easiest cuts in GHGs come from increasing efficiency and reducing waste. More efficient appliances, insulating homes, better recycling, building public transport instead of private cars, marketing locally produced goods—there are many simple but effective changes that are possible right now.*

But these changes will never be introduced on the scale necessary if left to the individual consumer's response to appeals to save energy, and to the sticks and carrots of energy price hikes and tax rebates.

To begin the transition to sustainability, it is essential to set energy efficiency as a national goal, and then develop targets, standards, regulations and national and local campaigns to achieve it.

Take as an example Venezuela and Cuba's elimination of incandescent light bulb use. In both countries this goal was achieved by having teams of young volunteers move from house to house, installing government-supplied, low-energy replacement bulbs for free. It's the sort of approach that's needed for the immense job of making Australia's 5.5 million houses and blocks of flats energy efficient.

A government committed to energy efficiency would launch a sustainable energy household conversion plan, with annual targets for solar power and heating installation compulsory for energy utilities. (As explained below, these would have to be returned to public ownership to do this.) Such a plan would build on and promote the various community initiatives already dedicated to goals like creating "zero emission" housing, schools and other facilities.

It would require the same approach from business, and with a systematic energy audit and set compliance deadlines, would close down or take over firms that won't upgrade to low emissions technology and processes.

It would also monitor and establish strict standards for the energy use of business products. Businesses operate in a competitive capitalist economy, have a vested interest in selling as much as possible and are unlikely in most cases to implement climate-friendly techniques unless strong regulations are introduced.

Integral to the plan would be the phasing out of the \$8.9-9 billion in fossil fuel subsidies, especially to energy-hungry industries like aluminium refining. Industries that are heavy users of energy would be required to generate their power sustainably or alternative materials would be found and these industries closed or cut back.

All products require energy to be manufactured. Waste of energy and resources are built into the entire economy. More profits are made from designing products *not* to last and pollution produced along the way is released to become someone else's problem. Even traditional recycling largely ignores manufacturing waste and assumes relatively few

products can be re-used or recycled at the end of their lives. Most consumer products - with all the energy and raw materials that have gone into their production - one way or another become landfill.

In a zero waste economy, products are designed from the start with an ability to be repaired, re-used and disassembled for recycling. One way to do this is extended producer responsibility, where manufacturers must take back their used products (cars, TVs, computers, etc.) and re-use the components. Another way is leasing schemes, where appliances are repaired and updated, thus extending their working life.

**Find out more:** Barry Commoner, *Making Peace with the Planet*, Pantheon Books, 1990; Richard Levins, Cuba - ecologists by necessity, *Seeing Red*, No. 5, March 2006; *The death of recycling*, at <http://greenlefts.blogspot.com/2007/04/death-of-recycling.html>; on fossil fuel subsidies, at [http://www.isf.uts.edu.au/publications/CR\\_2003\\_paper.pdf](http://www.isf.uts.edu.au/publications/CR_2003_paper.pdf).

## **Phase out coal, no nuclear**

*Governments and the coal industry are spending millions of dollars researching "clean coal" technology. This entirely experimental technology would involve capturing carbon dioxide from coal burning and burying it underground, where it would remain a threat to future generations.*

Coal burning now accounts for around 36% of Australia's GHG emissions; mining and handling coal adds even more. A plan for phasing out coal mining and export must be developed, and must involve creating new jobs for miners, as well as transitional assistance to help affected countries meet their energy needs through renewables.

No new coal mines or coal-fired power plants should be approved from now on, and all existing approvals (such as for the Anvil Hill mine) should be revoked.

The nuclear lobby and its friends in the Coalition and ALP began the push for expanding the mining of uranium when its price started to rise—well before concerns about global warming reached their present height. They then cynically used concerns about climate change to promote their agenda.

But expanding the nuclear cycle is not a solution to climate change. The storage of nuclear waste remains dangerous, and there will always be the risk of disastrous accidents like at Chernobyl and Three Mile Island. Huge amounts of energy and water are used in uranium mining and power generation, and the development of nuclear technology risks further nuclear weapons proliferation. Apart from all this, the time needed for approval and construction of nuclear reactors is much too long to reduce our reliance on fossil fuels within the next two decades.

Aboriginal communities have resisted the expansion of uranium mining and the dumping of nuclear waste on their traditional lands. The federal Coalition government's decision to

take control of Aboriginal settlements in the Northern Territory and scrap the permit system that gives Aboriginal people a say over whether mining can take place on their lands is another victory for the nuclear lobby at the cost of Aboriginal land rights.

Socialist Alliance opposes Australia's participation in the nuclear fuel cycle. We oppose the federal government's racist land grab.

**Find out more:** Rising Tide fact sheet, at <http://www.risingtide.org.au/cleancoal>; Howard takes total control of Aboriginal destiny, at <http://www.greenleft.org.au/2007/715/37127>

## **Renewables can and must be our main energy source**

*A large number of specialist studies have established that Australia could meet its basic energy needs from a combination of non-fossil fuel sources like solar, wind, biomass derived from agricultural wastes, tidal and geothermal (hot rocks beneath the Earth's surface).*

Countries like Spain and Denmark already produce more than 20% of their energy from solar and wind power. By contrast, Australia's state and territory governments have adopted totally inadequate Mandatory Renewable Energy Targets (MRET), while the federal government, under pressure from the greenhouse mafia, has wound back its existing MRET, which had delivered a totally inadequate increase in renewables.

At the same time as massive government subsidies continue to be given to dirty fuels like brown coal, renewable energy technologies are being starved of adequate funds.

This strangulation of serious research and development funding for renewables is very convenient for the fossil fuel and nuclear mafias. It prevents from coming true the scenario they most dread—the speedy development of renewable technologies with falling unit costs that increasingly compete with their polluting money-spinners.

The quickest way to guarantee that renewables are taken up at the speed needed to keep greenhouse gas concentration in check is not to leave this job to the market and private industry—even “green” industry- but to create an adequately funded, public renewable energy facility; a “Snowy River scheme” of alternative energy research, development and implementation.

**Find out more:** Mark Diesendorf, *Greenhouse Solutions with Sustainable Energy*, UNSW Press, 2007; Saddler et al, *A Clean Energy Future for Australia*, Clean Energy Future Group, 2004, at [http://wwf.org.au/publications/clean\\_energy\\_future\\_report/](http://wwf.org.au/publications/clean_energy_future_report/); Beyond Zero Emissions' alternative energy scenario for Victoria, at [http://beyondzeroemissions.org/files/Victorian\\_Stationary\\_Energy\\_Scoping\\_BZE\\_v1.13\\_15Feb07.pdf](http://beyondzeroemissions.org/files/Victorian_Stationary_Energy_Scoping_BZE_v1.13_15Feb07.pdf); Hamilton, C., *Scorcher - the dirty politics of climate change*, Black Inc. Agenda, 2007

## **Towards a new agricultural model—go organic, protect the forests**

*Our current agricultural practices—based on highly mechanised planting and harvesting of single crops and on artificial fertilisers—consume huge quantities of fossil fuels. This not only creates pollution, but when fossil fuel supplies start to diminish, food security along with the climate will be threatened.*

Australia must start a transition to carbon-neutral and organic farming. The use of dry areas to grow crops that consume too much water, such as rice and cotton, must end.

All organic waste, including green waste and sewerage, should be composted and the methane gas by-product harnessed for use as an energy source. This ensures rich soil and avoids methane gas escaping into the atmosphere from landfills, which currently occurs.

Food production should be decentralised and localised to reduce the energy needed to transport and refrigerate foods. The Socialist Alliance supports the growth of urban agriculture, especially as many cities are built on our most fertile lands.

Existing farming communities should be encouraged with income, resources and training to make the transition to organic agriculture.

Land clearing and outdated forestry practices such as old-growth logging are the biggest cause of greenhouse gas emissions in Tasmania, and account for 6% of national GHG emissions. Moreover, native forests that have not been logged store up to three times more carbon than forests that have been logged.

To increase this “carbon sink” capacity, extensive programs of native-forest planting must be initiated.

Biodiversity and the survival of native ecosystems must be promoted in order to preserve our food supplies and the diversity of native species that make up the “web of life” on this continent.

**Find out more:** *Cuba: fighting capitalism's climate crisis*, at

<http://www.greenleft.org.au/2007/718/37262>;

*Healing the Rift: Metabolic Restoration in Cuban Agriculture*, at <http://inhabitable-earth.blogspot.com>.

## **Make public transport free and frequent**

Transport is responsible for 14% of Australia’s greenhouse gas emissions, a figure that just keeps growing. Road transport accounts for by far the largest share, around 90% of the total. The longer we continue with this transport model—where cars carry 80% of people to work and trucks carry 60% of goods—the worse things will get.

The CSIRO says that to reverse this trend we have *to put public transport at the centre of our city development plans*. Not surprising, given that trains are 40 times more energy efficient than cars! But how?

Obviously, we won't switch away from car and truck use unless there's huge investment in public transport to make it a real option for the millions who don't use it now. A system that people want to use will have to provide frequent services and place everyone within 10 minutes walk of a service, especially in outer metropolitan regions.

It will have to be a publicly owned, integrated system of heavy rail, light rail, ferry and bus services.

But even that wouldn't be enough. To jump start the switch to public transport it has to be free.

That's what transport authorities have always done when they really need people to use the public system, as in the 2000 Sydney Olympics. It's what has happened in the Belgian city of Hasselt; within a year of introducing free bus fares, patronage increased by 870%.

The natural reaction to this proposal is to think that it would cost a vast amount of money. However, this reaction fails to measure the total (economic, social and environmental) cost and benefit of public transport against the total cost and benefit of the alternative—continuing to shift people and goods by private car and truck.

On that scale, public transport wins hands down—every 10% switch out of car and truck and into public transport would reduce the costs of air pollution, greenhouse gas emission, car accidents, traffic congestion, motor vehicle waste disposal, noise pollution and road maintenance by an order of \$1.4 billion at least.

Free and frequent public transport combined with policies that stimulate cycling and walking is the only serious approach to curbing greenhouse gas emissions in the transport sector.

### ***Rail vs road – some points to consider***

- A modern, small automobile with two passengers generates almost 25 times the air pollution per passenger mile as a four-car commuter train at 35% capacity.
- Two sets of commuter rail tracks will handle the passenger traffic of at least six lanes of highway.
- A new light-rail line costs about a third of a new highway or loop road, and recent developments in track-laying technology can take 60% to 70% off that cost.
- Trains are faster, quieter and smoother than buses. In addition, they avoid traffic jams and most accident scenes.
- Rail deaths and injuries are almost nothing compared to those in automobiles.
- Rail cars and locomotives have lasted up to 100 years with decent maintenance.
- Railroad tracks are cheaper and easier to maintain than roads and highways.

**Find out more:** Socialist Alliance transport policy in the 2007 NSW elections, at [http://www.socialist-alliance.org/elections/NSW2007/Public transport policy for NSW 2007.pdf](http://www.socialist-alliance.org/elections/NSW2007/Public%20transport%20policy%20for%20NSW%202007.pdf)

## Carbon trading schemes won't solve the crisis

*Mainstream political debate on global warming is dominated by discussion of "emissions trading" systems. These involve "capping" national GHG emissions at a target level and issuing permits or "credits" to polluting industries that tell them how much carbon dioxide they are allowed to emit over a certain time.*

These schemes are riddled with loopholes. In theory, the total amount of carbon that can be released is reduced each year, the price of carbon rises and those who don't make the change to carbon-saving technologies pay the price.

In practice, the schemes are very difficult if not impossible to police and the price of carbon is set far too low to force business to abandon its polluting practices quickly enough to have anything like the impact on overall emissions that is needed.

For example, the CSIRO has calculated that carbon would have to trade at between \$350-\$575 a tonne to produce the (inadequate) level of carbon emission reductions targeted in the Stern Review. At the other end of the spectrum, John Howard has threatened Australia with a "Garrett recession" if carbon ever reaches the ALP's (very distant) target of \$50 a tonne.

Carbon credits are also given out for "carbon offsets", like planting a forest somewhere, regardless of whether the plantation would have gone ahead anyway or if another forest was cut down in order to plant it! These credits permit companies to carry on polluting, all the while continuing to profit. Planting forests is in any case not a permanent, or even measurable store of carbon (whereas digging up fossilised carbon fuels is basically permanent).

If the credits are given out by governments instead of being sold or auctioned, and if the caps are too lenient, industries suffer no penalties and can go on polluting as usual—which is what has happened with the European Union's scheme over the last two years.

**Find out more:** Dag Hammarskjold Foundation, Gar Lipow, in Socialist Alliance's *Climate Change Dossier*, at [http://www.socialist-alliance.org/resources/idb/AV\\_Vol\\_7\\_No\\_1.pdf](http://www.socialist-alliance.org/resources/idb/AV_Vol_7_No_1.pdf); *Australia's Climate Change Policy*, at [http://www.pmc.gov.au/publications/climate\\_policy/docs/climate\\_policy\\_2007.pdf](http://www.pmc.gov.au/publications/climate_policy/docs/climate_policy_2007.pdf).

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***How much would it cost to beat global warming? Who pays?***

In his 2006 review, Sir Nicholas Stern calculated that the cost of fighting global warming would probably be only 1% of global product per year - \$US350 billion in 2005 terms.

But Stern's target for greenhouse gas emissions is 550ppm, which means a 77% to 99% chance of average global temperatures rising by more than the critical 2°C limit.

So how much would a plan to keep greenhouse gas concentrations below 450ppm really cost? Would it be affordable?

Below are some examples that show that, although we need an emergency mobilisation of economic and human resources to fight global warming, these resources do exist.

<b>Sustainability project examples</b>	<b>Cost</b>	<b>Expenditure comparison</b>	<b>Cost</b>
<b>World</b>			
Average annual cost of replacing coal power with 1.5Mw wind turbines over 10 years (1,334,000 turbines)	\$233 billion	Total annual world non-renewable energy subsidies (1995-98 averages)	\$235 billion
Total annual cost by 2050 of reducing greenhouse gases to 25% of current levels ("average" case = 1% of world product)	\$350 billion	Annual US military expenditure	\$492 billion
Total annual cost by 2050 of reducing greenhouse gases to 25% of current levels ("pessimistic" case = 3.5% of world product)	\$1225 billion	Annual world military expenditure	\$975 billion
Annual cost of "climate-change proofing" buildings and infrastructure (advanced capitalist countries) plus annual cost of climate change adaptation measures in developing countries	Up to \$250 billion	Annual resources available if advanced industrial countries devoted 1.5% of GDP to climate change (1.5% = level of Marshall Plan for post-World War 2 reconstruction)	\$450 billion
Alternative energy generation costs (photovoltaic) in cents per kilowatt/hour	37-76 (2003)	Potential alternative energy generation costs (photovoltaic) in cents per kilowatt/hour	6-11 (2040)
<b>Australia</b>			
Convert base Victorian energy generation to wind power	\$22 billion	Planned spending on Joint Strike Fighter and Super Hornet fighter	\$22.6 billion
Implement free public transport in New South Wales	\$1.1 billion annually	Health cost of air pollution in New South Wales	\$1.5 billion annually
<p><b>Sources:</b> Stern Report, Zero Emissions Now, IPCC, Earth Policy Institute, Danish Wind Energy Association, Bureau of Transport and Regional Economics, Robert Socolow, Stephen Pacala and Jeffery Greenbach, Greenpeace and European Renewable Energy Council.</p>			

## **No solution without public ownership and democratic control**

The principle of “polluter pays” means that the assets of polluting companies should be directed to cleaning up the mess they have made. Individual consumers do use polluting products but they are rarely responsible for the decisions that result in the pollution occurring: it is the big industries that must bear the costs.

The first measure to ensure a just solution is to take over industries that will not stop polluting, placing them under public ownership and scrutiny. In this way, those operations that are essential can be identified and kept (and cleaned up) while non-essential aspects can be scaled back or shut down. The profits that these public enterprises will still make can be re-invested in further programs.

Private power companies have a vested interest in making us all use more energy, whereas what is really needed is less use of energy and clean power targets that can be met with renewable sources.

But Australian governments have successively privatised public utility after public utility, handing vital infrastructure over to the private-profit sector. Public ownership and control over the vital area of energy generation and distribution is essential to bring this sector under an overall plan for greenhouse gas reduction and environmental sustainability.

**Find out more:** Barry Commoner, *Making Peace with the Planet; The power of community: how Cuba survived peak oil* (video), at <http://www.powerofcommunity.org/cm/index.php>.

## **Guarantee jobs, involve workers in the fight for a liveable environment**

*As old industries die, their workers are normally thrown on the scrap heap of unemployment. For example, as oil prices rise and cars become too expensive, the fossil-fuel based auto industry may well shrink to a boutique luxury service and masses of workers lose their jobs.*

The same can be said for unsustainable agriculture, coal mining and similar industries. A plan for a transition to a sustainable and just economy is therefore essential, such that these workers would be called on to become the driving force and moral guarantor of the new sustainable society, not left behind with the de-commissioned machinery.

Workers are critical to identifying and eliminating waste and pollution in the workplace, closing down old industries and opening new ones. The transition also needs government-funded “climate action brigades”, teams of people who can go door-to-door to provide practical assistance and resources to assist households and communities improve their energy efficiency.

The massive program of converting energy infrastructure that the Socialist Alliance proposes will call for a large number of workers, requiring extensive redeployment and

training. We will also need an expansion of public education, made free, to help us reach the necessary research and development goals.

Working people and their unions can also show the way to sustainability to the rest of society by producing model projects, like high standard, carbon neutral, sustainable housing—proof that the combination of appropriate technology with workers' skills will be key in the transition.

**Find out more:** Wainwright, H., *The Lucas Plan*, Schocken Books, 1981; *Cutback, Restructuring of Sugar Industry: Cuban Workers Explain How it Affects Them*, at <http://www.globalexchange.org/countries/americas/cuba/1663.html>.

## **Change the system, not the climate!**

*None of what we have outlined is going to happen unless it is fought for by an informed and mobilised community. In the words of climate scientist James Hansen: "The alternative scenario is feasible, but it is not being pursued. Our best hope? The public must become informed and get angry."*

Australia's greenhouse mafia won't accept these measures. For years they funded climate sceptics to produce reports that threw doubt on the reality and severity of the problem. Now, faced with overwhelming community concern, organisations like the Business Council of Australia are concerned to preserve their members' polluting capital for as long as possible behind a new thin coat of "greenwash".

The Coalition government has been their faithful servant, by working internationally to undermine the Kyoto protocol and by refusing to take action that would reduce the profits of the coal, aluminium, electricity, forestry and other major greenhouse polluting industries.

The ALP is also influenced by the big polluters, fixated on the quackery of "clean coal" and allowing more uranium mining. It advocates targets for emissions reductions by 2050 that, while better than the no-target Coalition, would mean Australia emitting 6-10 times (per person) the Earth's estimated capacity to absorb carbon.

Both major parties cynically claim to be protecting jobs, despite the decline in working conditions in some industries (e.g. speed-ups and health and safety declines in coal mining), and job losses in others (e.g. forestry).

**The Socialist Alliance says that the planet and future generations are more important than corporate profits.**

By knowingly spreading disinformation, standing over elected governments and resisting change despite the risks to all people and our planet, these corporations have lost the right to control the resources they are wasting.

The community cannot afford vested interests like theirs to continue to determine policy. To replace their control of policy will require a movement that is independent of either of the major parties, but is strong enough to put pressure on whichever party is in government.

Just as previous mass movements forced the Australian government to withdraw from the war in Vietnam and stop plans to dam Tasmania's Franklin River, so the movement to avert climate catastrophe must mean more than just voting for change. It will need to campaign in the streets, workplaces, schools and universities to win wide public support for the changes that need to be made.

Imposing those changes also means challenging the capitalist market, which has failed to protect future generations and can no longer be allowed to stop us from averting climatic disaster. The measures outlined above are not only absolutely necessary to prevent global warming getting out of control, they also lay the basis for a society that is sustainable on an ongoing basis, because they subordinate production to human and environmental imperatives. We call that democratically planned and ecologically sustainable system "socialism", but whatever name it goes by it's what the planet and its peoples need.

### **The Socialist Alliance 10-point climate action plan**

1. Aim for 60% overall emissions reduction, including 95% power station emissions reduction, by 2020, and 90% overall emissions reduction by 2030. Immediate comprehensive planning, including annual targets of 4-5% or more, to meet these targets on time or sooner.
2. Ratify the Kyoto treaty and initiate a further international treaty and mutual assistance program to bring other countries together to meet a global target of 90 % emissions reductions on 1990 levels by 2030. Focus on cutting rich industrial nations' emissions as a priority, and supply non-polluting means of industrial and social development to poorer countries.
3. Start the transition to a zero-waste economy. In the first place, establish an energy auditing department to investigate industrial energy waste and recommend legislation or other measures to end it, including improving or banning wasteful consumer products such as those with built-in obsolescence. Engage workers in industry to redesign their products and jobs sustainably, in consultation with the appropriate technical experts.
4. Set a minimum 10-star energy efficiency rating for all new buildings. Require the fitting of all feasible energy efficiency measures to existing houses upon lease changes, building renovations, etc., and subsidise owner-occupiers for the costs. Allow renters to use the same system. Immediately begin a program to install photo-voltaic solar panels and solar hot water heaters on home roofs, subsidised or owned by the electricity

authority. Give commercial buildings a deadline to meet six-star energy standards within two years, and 10-star standards within 10 years.

5. Bring all power industries under public ownership and democratic control. Begin phasing out coal mining and power immediately. Ensure a fair transition plan (including guaranteed jobs and retraining on full pay) for coalmining and power-station worker communities, with new sustainable industries being built in their areas and paid redundancies offered. Run the maximum possible base-load power from existing natural gas and/or hydro power stations instead of coal, as an interim measure until renewable energy can take over. Coal to be used only for predicted energy peaks in the short term until renewable energy sources replace first it, and then the natural gas power stations as well.

6. Bring the immense manufacturing potential of the auto industry under public control. Re-tool this industry for manufacturing wind turbines, public transport vehicles and infrastructure, solar hot water, solar photo-voltaic cells, etc., and for converting existing cars to electric power. Subsidise the conversion of private cars to electric, plus buy back and recycle unneeded vehicles.

7. Immediately begin constructing wind farms in suitable areas. Fund research into further wind, solar photovoltaic cells, geothermal, concentrating solar thermal, biofuel (from waste), wave and tidal generation sources, with pilot solar-thermal and geothermal plants set up immediately. Create a power grid with distributed, diversified electricity generation for stability and efficiency.

8. End industrial farming based on fossil-fuel fertilisers, pesticides and fuels. Restrict farming areas to ensure that riverine, forest and other indigenous ecosystems return to healthy states. Assist farming to be transferred to organic practices and decentralised to include urban farming. This process must be undertaken at a rate that ensures food security, and guarantees continuing work and livelihood for farming communities.

9. Stop logging old-growth forests and begin an urgent program of re-forestation and protecting biodiversity to ensure a robust biosystem that can survive the stress of climate change and provide an increased carbon sink.

10. Make all urban and regional public transport free and upgrade the network to enable all urban residents to use it for all their regular commuting. Nationalise and upgrade interstate train and ferry services, while making them cheaper than air travel. Reduce reliance on air travel while ensuring equal but limited access, and aim to replace air travel with trains (and ferries on Bass Strait). As much freight as possible to be moved to rail. All rail and light rail to be electrified, other public transport and freight to run on electric motors or biofuels from waste where possible. Encourage bicycle use through more cycleways, bike racks on public transport and more public shower facilities. Implement free or very cheap bicycle rental networks, as in Barcelona and other European cities.