



10 Steps for a Safe Climate

Tasmania's Contribution to Preventing Dangerous Climate Change

Preface

The world is facing a climate emergency. Uncontrolled burning of fossil fuels, together with excessive land clearing and deforestation, have led to dangerous concentrations of greenhouse gases accumulating in the atmosphere, trapping heat, and these processes are accelerating. As a result, the world's climate is becoming increasingly energetic and unstable. Extreme events like droughts, storms, floods and wildfires are becoming more frequent and more severe, while sea levels rise, snow and ice disappear and vulnerable species and communities are pushed to extinction. We are now dangerously close to a 'tipping point' that could lead to runaway climate change, leaving a legacy of an unsafe climate for our children. The world's premier climate science institution, the IPCC¹, has warned that global greenhouse gas emissions must begin to fall within the next five years.

Tasmania is highly vulnerable to these climate changes. Major industries and exporters, such as agriculture, horticulture, forestry, fishing, aquaculture, tourism and power generation, face risks both from climate change itself and from poorly considered climate responses. Many small businesses, communities and families that rely upon these major employers are threatened in their turn. It is therefore not surprising that some respond with anger or even denial when faced with the reality of climate change. While understanding such emotions, we need as a community to summon the maturity to act in our own best interests and as the science demands to prevent dangerous climate change.

For the most part, the actions that are needed will bring greater benefits than costs: better planned and more liveable cities and regions, better quality housing, better access to services, less road congestion, more resilient communities, more secure jobs, reduced vulnerability to global economic shocks, less pollution and an increasingly valuable global reputation as a 'clean and green' haven for tourism and sustainable development.

Yet we should not imagine that responding to climate change will be free of cost. All investments in a better future (just as with schools and hospitals) require an upfront cost in return for greater benefits over time, and that is why we must place fairness at the centre of our climate response. We must be prepared to assist the vulnerable businesses, communities, families and individuals to make the necessary adjustments demanded in a sustainable, low-carbon future. As a global citizen, Tasmania must also extend the hand of friendship to vulnerable citizens – climate refugees – in our region and around the world.

¹ Intergovernmental Panel on Climate Change

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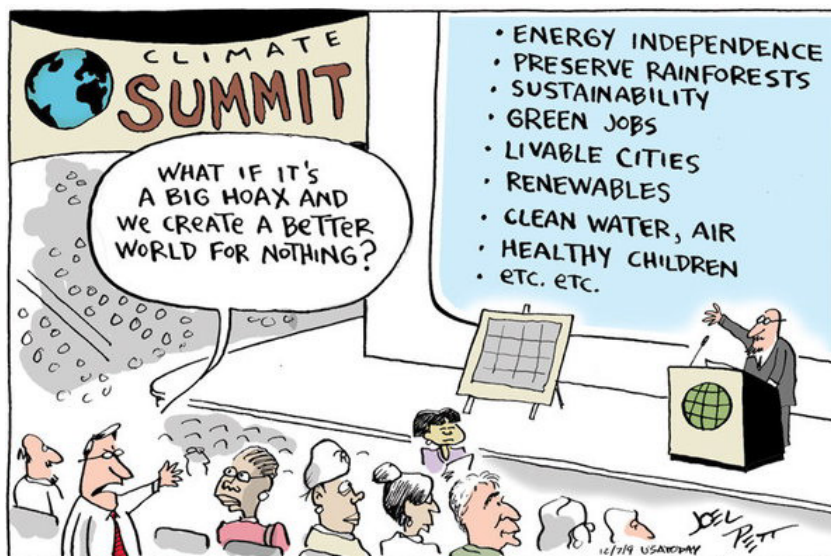


Despite clear scientific evidence about the dangerous acceleration of climate changes, and despite the benefits that would flow from a concerted climate response, the Australian and Tasmanian governments have thus far failed to act decisively and as the science demands. That is why Climate Action Hobart – a local community group dedicated to securing a safe climate for us all – has documented *10 Steps for a Safe Climate*.

The fruit of an open community Climate Forum in October 2009, which attracted more than 60 participants from around the State, *10 Steps* has now been endorsed by local climate groups in the North and North-West of the State in addition to the South. This community plan is offered to the Tasmanian Government and people with the plea that all groups in society – political parties, community groups and businesses – embrace and commit to this plan as a way of contributing to a safe climate for all Tasmanians and playing an appropriate role in a global climate solution. Tasmania is well placed to lead the world.

The journey to a safe climate will demand more than *10 Steps*, and no-one can predict where the potholes will lie on the road ahead. We hope and expect this community plan to evolve and expand over time. Yet a journey of thousand miles begins with a single step... and so we call upon the Tasmania Government, on behalf of the Tasmanian community, to commit publicly to taking these *10 Steps* together with the community, trusting that the road ahead will become clearer with each step we take.

Climate Action Hobart
January 2010





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Step 1) A Carbon-Neutral State by 2050 - with a year-by-year roadmap

Action: The Tasmanian Government must commit to the long term goal of becoming a carbon neutral State by 2050; that is, to generate no net emissions by that year. At the same time, action is required in the short term. Therefore the Government must also set a target of 60% reduction in greenhouse gas emissions by 2020 over 1990 levels. Achieving these targets demands a clear, detailed and comprehensive plan with annual targets from 2010 onwards and annual public reporting so that progress can be monitored. Implementation of this plan must be consistent with the Just Transitions strategy below.

Rationale: To achieve a safe climate, in which concentrations of greenhouse gases in the atmosphere fall to 350ppm or below in line with the best available science, global emissions must peak by 2015 and decline by at least 80% by 2050. Emissions in Tasmania have already fallen by 24% since 1990 - at least as measured by the National Greenhouse Gas Inventory - and therefore the task is to ensure that they never again rise, but rather continue to fall at an accelerated rate. With economic and population growth, and increasing reliance on fossil fuels for our power generation as well as transportation, this outcome cannot be assumed. A detailed and comprehensive plan is required, including annual reduction targets and ensuring transparency through annual public reporting.

Tasmania, with its renewable energy and forestry resources, has the potential to become not only carbon-neutral, but even carbon-positive as a State, sequestering emissions and producing renewable energy for export to the mainland. Such a strategy would position Tasmania as a truly global leader in climate change, attracting clean development, jobs and tourism. It will also require the nurturing of our tertiary and research institutions and innovative, low-carbon businesses, helping to position the State to participate actively in the sustainable, low-carbon economic development of the 21st Century.

Step 2) Protecting Tasmania's Carbon-Rich Native Forests

Action: The Tasmanian Government must act immediately to protect Tasmania's native forests as permanent and resilient carbon stores. This would include immediately ensuring that no new logging operations take place in intact natural forests in Tasmania, and commissioning a fully independent accounting methodology for carbon emissions and storage associated with current forestry operations in the State. Recognising that protecting forests in this way will require changes in employment patterns and new skills, a core element of this initiative is for the Tasmanian Government to work with the whole community to devise a genuine and community-owned transition strategy for the forestry industry, to preserve employment during and after a



switch from large-scale logging native forests to existing plantations and other activities.

Rationale: Protecting Tasmania's carbon dense forests - along with other such forests around the world - provides the most rapid and secure step towards a safe global climate. Scientific studies show that native forests in Tasmania are some of the most carbon-dense in the world, storing up to 2000 tonnes of carbon per hectare, more than three times the amount stored in regularly-logged plantations. With the forestry industry in Tasmania disputing these numbers, an essential step for honesty and transparency in this sector is that a fully independent study be undertaken as a matter of urgency, to set out for the Tasmanian people the carbon emissions and storage associated with current forest usage. This study would become the basis of transparent annual accounting and public reporting of carbon emissions from this sector.

At the same time, genuinely sustainable forest harvesting - on a limited scale and focusing on high-value timber products and use of existing plantations - is an important economic opportunity for the State, fully consistent with sustainable tourism and development. Therefore the Tasmanian Government must articulate a detailed strategy for transitioning the forest industry in Tasmania onto a truly sustainable footing. Such a strategy must be developed through an open, transparent and accountable process to ensure that all community and environmental as well as commercial interests are considered. Instead of subsidising the purchase of our native forests by the wood-chipping companies, the state government needs to use this money, along with seeking federal funds, to finance a transition plan that guarantees jobs in the management and protection of our native forests and in the plantation timber industry.

Step 3) Reducing Energy Use by 20% by 2020

Action: The Tasmanian Government must initiate an economy-wide energy savings plan, encompassing all fuels and all sectors, with a target of reducing total energy use in Tasmania by at least 20% by 2020 over 1990 levels. To ensure the target is met with both equity and economic efficiency, a sectoral approach should be taken, informed by the technical and economic potential for different sectors to achieve reductions. Immediate opportunities include:

- moving to 6-star housing standards at the same time as the rest of Australia; that is, in May 2010;
- immediately ending Tasmania's self-imposed exemption from the National Hot Water Strategy (designed to promote solar and low carbon hot water heating);
- as with other States and the Federal Government, the Tasmanian Government should require 5-star NABERS office accommodation for all government agencies;
- training 'energy services' providers to facilitate the transition process;
- ending power price subsidies to major electricity users in the State;
- providing financial assistance for housing retrofits that lead to significant efficiency improvements (eg, a minimum of 2 stars improvement);
- creating incentives through registration charges for fuel efficient vehicles, and disincentives for inefficient vehicles;



- a 'cash for clunkers' program designed to remove older, inefficient and often unsafe vehicles from Tasmania's roads.

Rationale: Energy use in Tasmania is increasing by around 2% a year and is a major source of greenhouse gas emissions, with increasing reliance upon Basslink and gas-fired power generation for electricity and continued rises in fossil fuels in the transport sector and in industry. In terms of electricity, two thirds is used by industry and one third by households and smaller businesses. Reducing energy use is the most cost-effective way to reduce emissions, as energy savings pay back.

Tasmania has a history of low-cost energy - indeed of deliberately attracting energy-intensive industry to the State, or 'hydro-industrialisation'. Power is heavily subsidised to the largest energy users in the State and therefore they have not been under any pressure to reduce their energy use. Yet studies show that with the right pricing and regulations, industry can quickly make major reductions in energy use².

Tasmania has some of the lowest energy standards in its housing stock despite its colder climate. Too much energy is required to heat our houses in winter, risking the health and well-being of those on lower incomes and in lower quality housing. As energy costs will rise with carbon pricing, these issues will be aggravated unless action is taken to improve the energy performance of our houses. A major program to retrofit existing housing, including rented properties, would complement higher standards for new houses. Tasmania should adopt 6-star housing at the same time as the rest of Australia, (May 2010), with a plan to achieve zero energy housing by 2020.

Likewise, the stock of commercial buildings in Tasmania has largely been constructed in an era without any energy performance requirements, leading to wasteful energy use in almost all commercial buildings. A major retrofit and 'tune up' program is needed.

Tasmania's vehicle fleet is the oldest in the country and, as a result, relatively inefficient. The Tasmanian Government could improve incentives for energy efficiency new vehicles by rewarding purchasers of such vehicles with low registration charges, while imposing higher charges on inefficient vehicles. This initiative would require no investment by the Tasmanian Government. To address the legacy of inefficient cars on Tasmania's roads, a 'cash for clunkers' program should be initiated to provide financial incentives for older, inefficient cars to be removed from road (and recycled). Other transport initiatives are set out below.

As part of this legacy, Tasmania has few energy service providers skilled in energy savings. Therefore, one part of a comprehensive energy savings plan for the State will involve training and skill enhancement, with the major benefit that it will lead to additional employment and investment in the energy conservation sector.

² See, for example, SEAV, Armstrong, G. and Saturn Corporate Resources, 2003, *Preliminary Assessment of Demand-Side Energy Efficiency Improvement Potential and Costs*.



Step 4) 100% Renewable Electricity by 2020

Action: The Tasmanian Government needs to commit to a detailed plan for Tasmania to become a Renewable Energy Island with 100% renewable electricity by 2020. This would require coal power imports through Basslink to be phased out and a massive investment in wind and solar technologies and supporting network infrastructure to meet Tasmania's energy requirements as well as to export to the Australian mainland. The Tasmanian Government must prohibit the use of biomass from native forests or new dam-storage hydro for power generation. Reducing energy use will help achieve this target more rapidly. A generous net feed-in tariff would both stimulate investment in distributed renewable energy while rewarding energy conservation.

Rationale: Tasmania is blessed with world class renewable energy resources including long sunshine hours, wind, hydro, wave, tidal and potentially geothermal energy. With climate change, Tasmania has witnessed a long-term decline in output from its hydro-power generators due to prolonged drought, and has invested in Basslink and gas-fired power generation to increase energy security - but at the expense of rising greenhouse gas emissions and increased vulnerability to carbon pricing. There are also opportunities to optimise the existing hydropower system, including capturing run-of-river energy. Tasmania has a moral duty not only to develop these resources for its own use, but also - combined with the strategy of reducing energy consumption in Tasmania - to export our surplus to reduce emissions on the mainland. This strategy will unleash a new wave of investment and sustainable employment creation in our State, drawing on skills and research from our tertiary institutions and contributing to our status as a clever State. With 100% renewable energy, and eventually emissions-neutral status as an island, Tasmania will for the first time be able to lay claim to a genuine 'clean and green' status, attracting sustainable tourism from around the world.

Step 5) Sustainable Cities and Regions

Action: The Tasmanian Government must commit to a radical overhaul of the State's planning schemes with the aim of a) articulating a positive vision of sustainable urban and regional development - through a process of genuine community engagement and consultation; b) reflecting that vision is simple, clear planning schemes and State Policies; c) banning investment in developments that conflict with that vision - providing certainty for investors and the community; d) encouraging investment in urban and regional renewal, leading to liveable, sustainable cities and regions. Such a strategy must be driven by the State in order to recognise the resource and capacity limitations of - and the potential for adverse competition between - local governments.

Rationale: The strategy would be expected to encourage multiple-use zoning; to encourage people to live within walking distance of work. It would encourage progressive increases in urban density but not at the expense of open greenspace or high-rise towers. The research is clear that appropriate design and high-quality architecture will encourage higher density urban living, where privacy is respected and where access to shops, services and greenspace is an integral part of the development/redevelopment. Eventually, this strategy will significantly reduce the demand for



travel, as well as urban and commuter congestion, while at the same time rebuilding strong, healthy and diverse communities. The strategy would require clear and binding State policies to ensure that the vision is given full effect throughout the State. It will also require support and education of the planning community, local government, property developers and the general public to ensure that expectations are clear and issues resolved in an open and constructive manner. Note that this action is complementary to Step 6) - Public and Low Carbon Transport, and Step 4) - Saving Energy in particular.

Step 6) Investing in Public and Low Carbon Transport

Action: The Tasmanian Government must commit to a radical overhaul and major investment in public transport across the State, with the ultimate aim of reducing the demand for travel and achieving emissions-free transport. Key elements would include:

- a major investment in safe walking and cycling infrastructure connecting key dormitory suburbs with urban and employment centres;
- a major investment in a low-emission bus fleet and related infrastructure (bus shelters, bus lanes, etc). Bus fares must be set at a nominal level (not exceeding \$1 for an adult fare) in recognition of the climate, public access and congestion benefits of public transport and to encourage ridership;
- a major renewal of rail services in the state, encompassing both freight and, where viable, rapid passenger transit services. As with the bus system, and in recognition of their environmental and public benefits, rail services must be rapid, reliable and affordably priced to encourage usage;
- a concerted strategy to discourage private car use for commuting, involving encouragement for car-pooling, higher parking fees, financial incentives for workers and employers that promote public transport, and an expansion of bus and cycling lanes;
- the State Government should work with the transport industries to encourage a rapid and progressive move away from fossil fuels to renewable electricity or (at a limited scale) genuinely sustainable biofuels and lower-carbon fuels (such as natural gas) where necessary (for example in heavy vehicles).

Rationale: Public rail transport fulfils a social need, reduces traffic and can contribute to the reduction of unnecessary road deaths in Tasmania. Fares make up only 25% of Metro's income. For a modest cost, the Tasmanian Government could remove one of the barriers to public transport uptake, gain immediate increase in public transport patronage and promote public transport as a preferred mode of travel. Public rail transport is a lower emissions and climate friendlier option than private road transport and contributes to liveable cities and towns. Electric rail is a mainstream technology, while electric vehicles are becoming more widely available and more user-friendly due to innovations in battery technology and weight-saving materials. At the same time, vehicle manufacturers are being slow to bring products to the market for fear of the commercial risks. The Government has the opportunity to partner with appropriate companies to lower these risks by guaranteeing investment in the necessary infrastructure and by leading the market with the conversion of its own vehicle fleet. The Government could also provide positive incentives for the



conversion of private fleets and vehicles, such as preferential parking for electric vehicles and investment in recharging infrastructure. This action is complementary to Step 5 - sustainable cities and regions, and Step 2 - 100% Renewable Electricity by 2020, in particular.

Step 7) Just Transitions to a Low Carbon Future

Action: The Tasmanian Government must initiate a sector-by-sector, company-by-company 'just transitions' program to design and implement tailored solutions appropriate to the specific needs of large emitters in the industrial and commercial sectors. The aim of the program is to radically reduce, and eventually eliminate, greenhouse gas emissions through a wide range of strategies including resource efficiency, process optimisation and redesign, and fuel switching, while preserving or enhancing employment.

Rationale: Large companies in Tasmania are major emitters of greenhouse gases, notably those involved in the production and processing of cement, minerals and metals. No two companies have exactly the same production processes or market circumstances, and therefore individualised solutions are required to both radically reduce or eliminate emissions while preserving or growing employment. A 'just transitions' program would provide financial support contingent upon achievement of specified emissions reductions in the following areas: a) carbon footprinting, audit, diagnostic and advisory services (to enable businesses to fully understand their opportunities for emission reduction); b) assistance to secure process redesign and optimisation services; c) targeted investment assistance (subject to business case); d) where necessary, support for retraining and workforce skills upgrades.

Step 8) Local and Sustainable Production and Consumption

Action: The Tasmanian Government must set out a strategy that aims a) to support the local and sustainable production of food, materials and other produce on just terms to producers and consumers, and b) to promote sustainable consumption patterns and lifestyles. Elements of the strategy will include:

- action to ensure that planning schemes provide positive support for food production farms, community and market gardens, and local growers markets;
- preserving high-valued soils from residential or other forms of development;
- a comprehensive certification and labeling scheme for Tasmanian (as well as regional and organic) foods and other domestic produce;
- assistance to transition food production systems away from fossil fuels and to reduce greenhouse gas emissions from livestock;
- the immediate elimination of the most dangerous agricultural chemicals and progressive transition to a chemical-free State;
- sustainable aquaculture systems, and financial support for conversion of mainstream farming to organic or permaculture based systems;



- financial support for local small businesses engaged in local production, while ending support for multinational businesses to locate in the State;
- a sustained media campaign and strategy to promote sustainable consumption and lifestyles, including mandatory disclosure of the full carbon impact of products and services in advertising.

Rationale: High energy, high resource use and high consumption lifestyles are actively promoted through advertising, while the environment and other costs associated with these lifestyles are hidden from consumers. At the same time, production systems in the state are often unsustainable and vulnerable to the impacts of climate change. A comprehensive strategy to promote sustainable production and consumption in all sectors of the Tasmanian economy is required.

For example, agriculture is a major source of emissions in Tasmania, while the footprint of the sector is larger still when transport, fertiliser use and supply chain linkages are taken into account. At the same time, Tasmania is a major food producer and exporter and this will become an increasingly important function as climate change impacts on food production in Australia and globally. Perversely, however, many foods are imported into Tasmania that are or could be produced locally. Also, Tasmanian farmers are often economically exploited, notably by major supermarket chains, in many cases making their enterprises unviable, leading to the sale and often permanent conversion of their productive land to other uses. Commercial exploitation also limits the funds available for food producers to invest in more sustainable production systems. Finally, Tasmanian consumers are poorly served by an absence of reliable, Government-endorsed certification and labelling systems that would enable them to express their preference for local and sustainably produced foods.

Step 9) Closing Resource Loops and Eliminating 'Waste'

Action: The Tasmanian Government must articulate a Strategy for waste minimisation, recovery, re-use and recycling, that aims to 'close the loop' in resource use, eventually eliminating all 'waste'. Given that Tasmania both imports and exports products, the Tasmanian Government must also advocate nationally for appropriate national policies such as product stewardship and extended producer liability, and eco-redesign and design-for-recovery (or other 'cradle-to-cradle' resource strategies).

Rationale: This action recognises that there is no such thing as 'waste' - waste is the result of poor product design and/or inadequate facilities for the recovery and reuse of the resources embodied in 'waste' streams. Waste is a major source of greenhouse gas emissions in Tasmania, all of which could be avoided. At the same time, land for landfill sites is becoming increasingly rare, while new waste processing technologies are available that allow for the efficient recovery of resources even at modest scales and at low cost.



Step 10) Climate Justice and Education

Action: The Tasmanian Government must commit itself to working actively in the national and international climate debate to achieve climate justice not only for Tasmanians, but for all global citizens. This will include: a commitment to report transparently to the Tasmanian people on the climate impact of all government decisions and the extent to which progress is being made to reduce emissions sector by sector in Tasmania; a commitment to firstly identify and secondly rollback all subsidies to climate polluting activities and companies in Tasmania; advocating faster stronger action on the part of the national government; and doing our fair share to assist those countries most affected by climate change, including resettling 'climate refugees' in Tasmania. It will also include working actively to dispel common climate change myths and to educate the Tasmanian people about the real threats posed to us by climate change.

Rationale: The work of transforming Tasmania into a truly sustainable State demands mutual trust and a high degree of cooperation and collaboration. This will not be achieved where secrecy, corruption of due process, subsidies to polluting activities and poor standards of public accountability are allowed to flourish. The Tasmanian people expect transparency and accountability from its political leaders with respect to the consequences of their decisions on climate change.

In addition, since climate change is by definition a global issue, Tasmania must work with the Australian Government and the international community to help deliver climate justice for us all. The Tasmanian Government must stand up to the Australian Government in pointing out the inherent flaws of the Carbon Pollution Reduction Scheme, for example, and help to have it replaced with strong, adequate and equitable climate policies.

Finally, the developed countries, including Australia and the state of Tasmania, have accounted for at least 80% of the stock of anthropogenic greenhouse gases released to the atmosphere in modern times. We must therefore accept the majority of the blame for anthropogenic climate change, and seek to mitigate the damage we have done by, at a minimum, assisting to resettle those peoples in the developing world displaced by climate change.