



AUSTRALIAN FABIANS

Victorian Climate Change Summit

Submission based on suggestions by
Members and supporters
Of the Australian Fabian Society
(Victorian Branch)

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Preamble

Around forty members and supporters of the Australian Fabian Society gathered for a consultative workshop using an electronic meeting system on Wednesday July 2 to add their suggestions as a contribution to the Victorian Climate Change Summit process.

None of the suggestions contained here may be construed as in any way policy on the part of the Society, but merely represent the suggestions gathered in the workshop on the part of individuals and simply have the strength of that individual contribution.

In order to gauge the type of individual involved, however, a warm up exercise identified the following list of traits or attributes the group gave with regards to any discussion on climate change: the need to consider the resource implications, prevailing ignorance around the issues, daunting energy saving imperatives, community and political apathy, prevailing blind faith, massive denial, the necessity for personal lifestyle change, the critical need for immediate action, the dangers of burying your head in sand, the challenge to be self sufficient and, the feeling of being disenfranchised from the process.

The group took up three of the key issues raised within the Summit, namely,

- Reducing emissions in the energy and transport sectors
- Positioning Victoria to capitalise on the transition to a low-carbon economy
- Assistance required for households to manage rising costs

David Spratt, co-author of Code Red, set the scene by listing some of the major impending indicators of the crisis including the melting of the Arctic ice, the devastation throughout the sub-continent of India and related countries with melting of glacial reserves within the Himalayas and the release of greenhouse gases through the melting of the frozen permafrost forests in Siberia. He made a case for the urgency to act and stressed that the issue was not a technical or physical issue but one of awareness and commitment on the part of decision-makers at political, corporate and community levels.

The path ahead is reaching tipping point fast and the future for our next generations depends on critical action now. World and local leaders need to adopt the urgency of a war footing in which the means of production can be redirected to tackle these issues, just like the production lines of the US were converted to a war materials until that war was over. It is by far the most important issue facing humankind today.

Executive summary

Victorian needs to think big, plan big - be ambitious and get in early! We need to lift our game, at all levels - we're in danger of being left behind. Our leaders need to be informed and committed and to get real about the scale and urgency of the current crisis. The recent decision to build a new brown coal-fired power station flies in the face of such urgency and the commitment to a high energy desalination plant in the face of lower cost alternative solutions does nothing to inspire confidence.

We already have the technology and the knowledge, but we need to build political awareness and a consequent commitment to action. Part of this shift in thinking requires a change from economic drivers which are focused on purely on 'profit' to those focused on our 'planet's survival'. It is crucial to make alternative energy solutions a major priority.

We will be required to reconfigure our human settlements to integrate sustainable living, transport and sustainable commerce. It is also important to remove 'Waste' from the English language - nothing should be considered waste but new uses found and deployed.

It should only take a moment to 'Walk a mile in our great grandchildren's shoes' in order to see what we need to do now and why we need to commit to it. But governments would need to move onto a war time footing and replace the 'War on terrorism' by redirecting those massive resources to the prospect of saving the planet. Politicians need to not only be informed but committed to action now. If needs be, let's hold their grandchildren as hostages. (Hang on - their grandchildren already are!)

Changes to the rewards and sanctions systems in our society to address these issues, including legal action by consumers against carbon pollution offenders are required. It's time to name and shame, perhaps even 'carbon and feather' recalcitrants.

Let's convert the Latrobe valley into a sustainable energy solution producing zone by refocusing on geothermal electricity from there as well as Geelong. We are beyond the tipping point BUT we could have a song that keeps our spirits alive..."There are Blue birds over - the stagnant smoke stacks of Latrobe'.

A determined attitude by all levels of government must be backed by community and corporate engagement and commitment. Some actions might include a Triple Bottom Line Taxation system as proper business practice, creating the necessary CNG and Hydrogen Vehicle Refueling Infrastructure, providing deep subsidies for Solar Power, Water Capture and Green Vehicles as well making sure Australia keeps track of the uranium it exports. We need to police that export or suffer the consequences!

We must exercise our people power but expect our politicians to take a lead.

1. What it would take on the part of federal, state or local government to prepare Victoria for a low-carbon economy:

- Some decent leadership which is prepared to position Victoria to capitalise on the transition to a carbon balanced economy
- The first priority is the necessary political will along with an understanding of the issues and the science to stop building coal-fired power plants. Expose Premier Brumby to other options around the world.
- Politicians should take the lead in educating the community to value the right decisions - even when it hurts! Let them approach these issues by imagining the future from the point of view of their own grand children and their survival.
- We need a government with real 'vision' and more transparency on the details of each decision, just because they are afraid that such information will be used against them.
- The development of Furfanol as a diesel replacement (biofuel) is receiving a lot of attention in many countries, particularly Brazil, but in terms of research funding is not even on our radar. There needs to be an explosive increase in understanding on the part of politicians and decision-makers in industry, also freedom from lobbying by the vested interests.
- Governments need to take a lead in ensuring that the whole community needs to be made aware of serious consequences and have a war cabinet on climate change with regular bulletins. For example local government could make people aware by have this reflected in their building regulations and by requiring strict recycling, including water.
- The federal government should provide effective global support for all countries to ensure they can also avoid carbon based economies. Such government support is required to make us an export leader in renewable technologies and carbon reduction programs.
- Remove tax breaks on company cars, travel and carbon cost and develop effective demand policies and incentives for de-carbonisation.
- Preserve and expand forests as carbon sinks and use less paper to save trees.
- Introduce effective efficiency standards for appliances with a trade-in option as a recycling measure.
- Some of the steps that could be taken would be to facilitate the change from 97% coal-based electricity to alternative energy, pay more for solar generation from households to the grid and require the production of electric cars as well as subsidizing the purchase, and re-position Australia to manufacture small cars for commuting to make use of the factories and skills currently being abandoned.

- Create an Investment Watchdog, or perhaps a Cabinet submission requirement, within Victoria that ensures any infrastructure investment decisions must have their associated carbon emissions considered. There should be a veto power to ensure misguided investments are not made.
- Ensure a strong democracy in which a fundamental mind shift amongst the population is engendered. In shifting those attitudes, people need to be encouraged to make actual changes rather than just agree.
- Government should give people the opportunity to achieve their own targets by their own options provided there is greater provision of information and greater leadership at all levels of government. We need to redefine such issues as emissions trading, taxes, tariffs etc. in plain terms and as an environmental responsibility. People should be in a position to assess their own 'carbon footprint' including the embedded carbon in their day to day purchases.
- Introduce a carbon trading scheme without any exclusions and which represents all carbon emissions but assess very critically any carbon trading schemes whereby administrators, brokers and others make profits, where big emitters can continue emitting and where offsets are problematic. Carbon taxes may be preferable and less invidious and open to manipulation.
- Promoting an economy that does not rely on producing waste is more essential and can work faster. We need carbon trading instituted under a responsive government which has a real understanding and acceptance of the necessity for de-carbonising the economy and the society and a political commitment to a safe climate and to de-carbonising the economy by rationing carbon emissions.
- We should be allowed to trade 'environmental responsibility' against 'social responsibility' as a percentage in dollars.
- Introduce a binding and effective Climate Protection Act which, among other things, promotes policies to assist in the retrofitting of existing housing stock and all buildings and adopts an effective and real solar feed-in tariff, not the current fiasco.
- Fund community education which leads to public action based on positive visions and an acceptance of the urgency of situation which requires rapid transition with the need to live modestly focusing on 'quality of life without waste' rather than consumerism as users.
- Shut down the Latrobe valley brown coal-fired power stations and convert them to natural gas - NOW and let's have no more new coal plants!
- Promote our manufacturing capacity for solar thermal reflectors and absorbers in the Latrobe valley and have the government accept some responsibility for the consequent retraining of workers. This could include the cheap 'low technology' backyard equipment which is being used in some third world countries.

- Electrify our transportation systems and options and re-tool automotive manufacturing to produce a plug-in hybrid electric vehicle, particularly two-person cars for two-car households.
- Solar panels need to be at a grid parity price by 2015 government and there is a need to build this solar industry early through government subsidies and access to no or low interest loans. Alternatively, we could take the French approach and provide tax incentives for investment companies to install and own the solar panels on businesses and domestic households on the basis that their costs are amortized over time through the householder and with the excess eventually being sold back to the public grid as an ongoing revenue stream to the investor.
- Shift more power to localised government and groups.
- Make the Victorian energy efficiency target a national scheme and cover all sectors to end growth in energy production to meet growing demand
- Repower coal plants with a gas saving of 50% on Victorian emissions which is done all the time in the USA for NO_x (oxides of nitrogen) and SO_x (Sulphur oxides) EPA requirements
- Australia's housing policy should be the same as the UK Labor's Zero Carbon Homes by 2016 policy commencing in 2009 with special considerations during the phase-in period.
- Use heat pumps instead of natural gas to heat houses and spaces that are already exceptionally well insulated – for example the use of reverse cycle air conditioning which is five times more efficient than gas.
- Federal government's emissions trading system should go beyond vested interests and also go hand in hand with targeted assistance for new forms of renewable energy, national standards for building efficiency, along with education and information campaigns.
- The States need to adopt measures to move away from dependence on brown coal, e.g. revisiting urban and state planning initiatives, re-skilling the workforce, supporting the introduction of new industries, considering new priorities in transport options.
- Local government is in a position to provide a wide range of services and assistance to communities and residents at the consumer end.
- Governments should provide full support for compressed natural gas vehicles and the necessary infrastructure requirements as a precursor to a transition to hydrogen and Hythane technologies.
- If the federal and state governments had have put the money into CNG hybrid vehicles and assisted in the developing of the necessary support infrastructure, we might get there. Many countries, where they can, are moving to CNG. The problem is the limited range of a tank full of fuel, but as hybrids are more

efficient in city traffic, there would be an extended range and an ideal application.

- Education is needed on reducing carbon and why this is so important as well as how we can still enjoy a quality of life without waste.
- Accept and plan to meet global obligations beyond Kyoto along with the responsibility to make changes, because we are a wealthy country.
- Background information which underlies decisions needs to be transparent and public. Commercial-in-confidence should not apply as a principle in government transactions, except where there is a question of national security.
- Take over public transport again and reverse the privatisation schemes of the past decade, but ensure the management is competent, enterprising and experienced and the workforce is honest, motivated, acknowledged and enjoy high morale.
- Every house should be in the position to have solar panels – both by subsidising their installation and by removing the recent means testing.
- Consider strict new housing building and infrastructure requirements that allow no more McMansions. Domestic housing plans should be capped at 23 squares and should allow for flexible heating arrangements that allow isolated heating of small rooms.
- Stop encouraging population growth for economic purposes alone. This is scandalous in a world heading for 9 billion given the available resources, particularly water.

2. Specific steps that could be taken to position Victoria in order to capitalise on the transition to a low carbon economy:

- Assist start up green companies and create an industry of exporting pollution solutions to South East Asia. Subsidise or provide low/no interest loans to industries organised around the concept of managing waste commercially.
- Build some early large scale solar thermal plants so that we can build the skills to project manage the rest of the world's transition to renewable energy. The energy efficiency of solar hot water systems is very high and domestic installations are very heavily subsidized in many countries (including China), while solar power has still a long way to go.
- Encourage farmers to sequester carbon into the soil and in streams and river beds. Research the ways in which carbon can be used more usefully.
- Set up model satellite self-contained, sustainable, dormitory cities on the train lines within reach of Melbourne.

- Designate suburbs in housing commission areas with public housing stock to be converted to medium density living such as terraces, but retaining a percentage of open public space, so that public transport initiatives can be focused and viable.
- Offer incentives to develop the use of geothermal approaches and the use of tide and wave action to generate electricity.
- Commit to no more freeways – instead, divert more money to public transport
- Convert all existing cars to liquid natural gas in the interim while moving to LNG hybrid solutions.
- Recycle/reuse sewerage for food and water use rather than focus on desalination plants. We should be recycling water and harvesting storm water initiatives as opposed to desalination plants which are coal/energy intensive.
- Provide support to a call from Dr Edward de bono to establish a permanent Idea's Think Tank, like an ongoing 2020 summit - or rather a permanent 'Tank to think in'. Existing possibilities could also be used for this purpose:
 - Ozideas2008 be used(<http://www.ozideas.org.au>) It has a facility to write in, which could be expanded to a facility for people to put up their own comments
 - The Global Ideas Bank of the UK-based Institute for Social Inventions has categories for contributions and comments (<http://www.globalideasbank.org/submissions.html>)
 - The website of the non-profit Australian Centre for Social Innovations also welcomes contributions, at <http://home.vicnet.net.au/~ozideas>
 - Radio, TV and press can have send-in features for 'social inventions', not limited to potentially commercially profitable as at present.
 - Schools can have 'social inventing ' as Creative Non-fiction writing' in English studies – which could be expanded to this purpose.
- Re-tool and re-train for the needs of a low-emissions future and not continue with a future based on yesterday's ideas. Brazil, for instance, has one of the world's fastest growing economies and 65% of its total energy needs is from non-fossil sources. Hydro energy is number two, the others are all bio fuels, from different sources and used in different ways. It is already at a level regarding moving away from fossil fuels, which possibly no other country will meet and achieved it while still achieving economic growth, but we could try.

- Develop new instruments for measuring and then broadcasting any carbon reducing initiatives on a large scale across the community and industry sectors.
- Even though it's in NSW, support the thermal chimney project out of Mildura for the technology insights it might provide for a similar approach within Victoria.
- Pour significant amounts of money into post-carbon research, innovation and manufacturing opportunities.
- Save significant amounts of money by discouraging waste – of food, and of production and sale of short-life non-repairable built-in-obsolescence goods.
- Value our extraordinarily carbon-rich native forests as standing carbon sinks & stores
- Design new university titles and roles such as Professor of Environmental Thinking etc.
- Kids are even smarter and often more informed than politicians! However, government education has a role to play with a syllabus in schools which educates people in science of climate change. Take up the Global Green Plan Foundation's idea of having school students teach their families how to simulate living in 2030 for a week with half of everything. (www.globalgreenplan.net)
- Trial De-Gaz solutions within our dairy industries to reduce methane emissions from cows and stop subsidizing dairy and start assisting other food which is more energy and water effective.
- Support R &D investment and have the courage to invest in big renewable developments as well as recognising that small actions by 21 million people can have enormous results too.
- Subsidise existing green businesses and use them as role models giving speeches in schools to highlight emerging career opportunities for students.
- Government should hold interactive forums and listen to the renewable, retrofit and transport sectors - and then respond.
- We will require new infrastructure to service the new economy, for example, gaseous refueling stations including Compressed Natural gas, hydrogen and Hythane (a blend of hydrogen and natural gas) and juice points at which you can plug your car in to distributed ports. It would be necessary to undertake a lifecycle assessment in deciding to build this infrastructure.
- Halt the destruction of open space and farmlands for new housing estates, we require this open space for producing food closer to cities to cut transportation costs and to avoid the energy costs in urban sprawl.
- Source funding for green business development as well as Eco-villages and sustainable, intentional communities.

- Transport planning impacts on transport energy, it shouldn't be considered an afterthought. Don't build another massive 10 billion dollar 'white elephant' freeway and convert Eastlink as soon as possible to contain a branch line off the Doncaster train line swinging around to Ringwood station. Light rail should be included in all freeways/toll ways.
- Close down coal-fired power plants and open cuts and free up 30% of Melbourne's high quality water - which is also the same amount as the proposed desalination plant.
- Refit all city high rise with high efficiency toilets and water taps with a saving around 8% of Melbourne's water consumption
- Run a third pipe from Carrum East water treatment plant to irrigate all the golf courses, race courses, parks and recreational facilities freeing up an estimated 10% of Melbourne's water at the dams.
- Stop licensing private interests to use Melbourne groundwater that may not be renewable.
- Re-establish industries such as the building of electrified public people movers such as trains and trams as a specialised manufacturing capacity within Victoria and modify existing industries to capitalise on new environmentally friendly technologies e.g. Electric cars
- Promote service industries such as Environmental Auditors and services that provide help on the practical things - e.g. Installing skylights that are open to sunlight etc.
- Universities should offer innovative environmentally skills related courses to train a new workforce of environmental professionals
- We need to prevent big business interests from always setting the agenda. Let's set up a reliable, relevant and centralised centre to provide high level information, that is confirmed by engineers and scientists.
- We need to accept that we need to spend 100's of billions to in the next 10-20 years to address carbon emissions. Stop focusing on costs of electricity to pensioners and get real. It's not just about carbon emissions
- Publish daily Victorian carbon emissions and where it originated and amount per capita
- Set out to become a world leader in dual reticulation to allow drinking and showering water alongside grey water for fire brigades and gardens. Israel has a comprehensive dual water supply system, blue (for fresh) and red (for recycled) water.
- The sterile liquid component of human sewage could more generally be diverted for fertilizer, and not be flushed down toilets which would be an immense water-saver.

3. Policies that should be considered by federal, state or local governments:

- Impose a carbon tax with all revenue going straight back to the community (100% dividend) to ameliorate increased costs.
- Don't means test environmental initiatives but rather, support new companies in this area.
- Provide Feasibility grants to trial the use of compressed air engines technology to generate distributed electricity generation onsite and within the household itself.
- Have local councils underwrite the development of commercial waste management and recycling businesses as a social enterprise within their area.
- All packaging must be recyclable and contain a minimum recycled content. Move towards an effective product lifecycle responsibility where both manufacturer and designer take responsibility for their generated waste. For instance, introduce the plastic milk carton recycling technology now available in the UK to reduce milk container landfill and also re-introduce drink container recycling levies at 10 cents.
- Encourage companies to sell services rather than goods, e.g. the Carpet service which takes back and replaces carpet for the term of its life cycle.
- Provide assistance and rebates for insulation and draught reduction efforts etc in households and tax heavily any new buildings that are not designed this way.
- Encourage people to be waste conscious by educating them about food preparation and purchase etc. Education on how to shop for quality, durability and repair ability, not just for the lowest price for something which may last a quarter of the time. Raise the alarm against 'Conspicuous Consumption', which encourages us to waste as a sign of status.
- Support public transport, rail freight etc. not more roads and initiate a staged introduction of more free public transport over and above peak hours. Country rail fares should be priced as comparable as the cost of 4-people in a car – more passengers on a country train does not raise costs.
- Introduce two levels of charges for energy usage to protect low income users and discourage high users.
- Regulate to eliminate disposable nappies or to have them replace by biodynamic nappies which can go into the compost as well as environmentally friendly re-usable, pin-less nappies which are easy to wash.
- Publicize ways that households can save and also stop people buying excessive packaging and 'products' generally!

- Mount a mandatory state-funded energy efficiency program for all households accompanied by low interest-rate loans for retrofitting homes – which could eventually be recoverable from their reduced energy bill savings.
- Institute an uncapped feed-in tariff with net production payment.
- Support the production of electric vehicles (re-charged with clean energy) as well as more pedal-powered or assisted appliances and vehicles.
- Monitor and ban the importation environmentally deleterious products, particularly bottled water.
- Offer extra aid for low-carbon overseas development.
- Impose a luxury tax on petrol or tax petrol until it actually becomes a luxury!
- Introduce an emissions trading scheme that will deliver a 350ppm CO2 equivalent by 2010
- Some of the money government receives from carbon trading permits should be rebated back to individual households - rising living costs need to be properly taken into account
- Provide incentives or rebates to reward households that operate efficiently. For example with household environmental improvements, provide government subsidies and/or tax relief for the installation of solar panels, insulation, shower heads etc. However, the thresholds for solar panel rebate needs to be reconsidered - \$100,000 is too low.
- Retrofitting - this needs to be considered - for example, eaves, blinds - some form of government support and/or advice on how simple measures can reduce power bills through a major media campaign. There needs to be more rigorous requirements in building design including orientation , without adding to the expense. New housing without eaves should be banned except in exceptional circumstances.
- Many prices rise when energy costs rise. We need to understand this relationship when we make long term investments in infrastructure.
- Need to make healthy local food cheaper. Promote the growing of your own food and eat Seasonally, from local sources
- Discourage the building of new single dwellings, right now we encourage large inefficient homes and an urban spread which only means more emissions and transport costs.
- Compulsory means-tested subsidized energy audits for all dwellings and businesses.
- Introduce a personal Carbon Debit card with every individual receiving an initial allowance.

- Discourage excessive cleanliness - a shower every 2 days will normally keep you clean and happy and, if the shower water is not diverted for grey water use, always collect the initial cold water for use in the loo!
- Stop throwing food away - aircrafts, fast food, restaurants and households.
- Remove any support for meat consumption and encourage eating no meat, or small portions only.

4. What it would take for Victoria to prepare for a low-carbon economy from industry's viewpoint.

4.1 By way of encouragement:

- Encourage innovation by keeping it within Australia (e.g. David Mills Ausra) and protect successful local sustainable industries from hostile take-overs.
- Provide funding into infrastructure to assist wind, solar and other alternative energy initiatives.
- Investigate incentives for local production of items in order to reduce carbon miles through transporting. Encourage local 'Australia shops', which showcase locally made products if supermarkets refuse to do so.
- Provide R&D funding for all industries and organisations to make the transition to a zero carbon economy.
- Provide incentives to build solar thermal plants and wind turbines etc to replace coal power plants.
- Incentives for retooling car plants to make PLUG IN hybrid electric vehicles - and nothing else, in order to replace the car fleet in under 10 years
- Shift existing subsidies from fossil fuels to renewable fuels.
- Provide opportunities to get paid to reduce power consumption i.e. VEET (Victorian energy efficient trading scheme)
- Introduce incentives to show how the bottom line is enhanced by energy auditing and efficiency, i.e. Promote awareness, particularly at executive level.
- Tax incentives to promote energy efficient buildings and generally doing the right thing.
- Allocate government contracts which require a commitment to energy efficiency.
- All levels of government take a lead in terms of their own leasing requirements around green leasing.
- Subsidise new green industries e.g. Solar, vegetarian dietary industries

- Provide consumer incentives for purchase of electric, CNG and air powered vehicles.

4.2 By changes in lifestyle:

- Grow and eat locally and stop using bottled water. Refill existing bottles with tap water.
- Consider enough hard-hitting, reality information to create overwhelming FEAR as an incentive to mobilize as in wartime conditions.
- Rethink the question of continually growing/exploding economies...it's so BC man. We need to adapt our economies without a requirement for continual growth.
- Provide access to workers via electrified rail
- Publicise good examples of energy saving.
- Get the family to change habits e.g. Dress adequately rather than turn the heater up or air conditioning on. Australian fashion industry should be encouraged to feature Climate Sensitive dressing, with really warm clothing especially for the elderly, and loose light-colored clothing for hot weather with peel-able fashions.
- Ensure everyone takes care – and accepts personal responsibility!
- Encourage parents and schools to get children to walk to school and revise the need to take home heavy schoolbags daily.

4.3 Through a major paradigm shift:

- Remove 'waste' from the language within industry and the community. Don't allow anything to be considered as 'waste' and find a use for every by-product. Analyze all waste to discover ways of recycling it.
- Develop an ethical background for industry leaders
- Discourage and curtail overconsumption
- Refocus research and marketing on markets or products that help to reduce emission, such as wind turbines, solar thermal & PV, electric transport etc.
- Stop demanding that governments subsidise emission-intense industries to maintain profitability, e.g. Electricity & aluminium
- Require an effective life cycle assessment of all products and services to ensure minimal environmental impacts.
- Redesign and retool industry to produce carbon zero products and re-train workers in a new economy.

- Instant substitution of environmentally safe products for harmful ones now. E.g. Zerocrete
- Regulation to convert coal power plants to fire on gas
- Use technologies and our thinking to deliver a standard of living that we can all live with.
- Victoria has great geothermal resources near Geelong and near La Trobe valley, which need to be exploited.

4.4 Through repositioning initiatives:

- Develop 'pilot' or demonstration exercises in buildings, transportation, communication, and entertainment that show the way to live successfully in a low carbon society.
- Encourage collaborative consortia to create and take integrated sustainable solutions to the market, domestically and internationally based on the self-fulfilling myth of Victoria as the manufacturing centre for green solutions.
- Weigh up the potential effects of tax benefits or penalties to achieve low carbon emission. Tax energy inefficient industries.
- We need political leadership that provides a vision for a green future. Governments should provide a clear framework and time table for decision-making so that industry has certainty for investment.
- Make the market pay for the true cost of various items such as water, air etc but avoid the privatization of either! Note that the dairy industry exports embedded water and Alcoa exports embedded electricity.
- Reserve land near cities for food production rather than hobby farms
- Be allowed to trade environmental responsibilities against their social responsibilities as a combined percentage of their financial worth, where the difference can be offset by reduced state taxes e.g. based upon annual TBL reports.
- Train up a fully informed bureaucracy on carbon reduction policies and programs.
- 'Spank ' an emitter day – hold a 'Name and Shame' day and class actions. Introduce certificates and prizes for poems, limericks and the like that ridicule politicians or policies that encourage waste.
- Cease subsidies for fossil fuel economies NOW
- Primary producer diesel rebate means test at 1 million dollars i.e. farmers only and not miners

- Compulsory reporting of climate risks under ASIC's corporations law etc. Each industry should know what its contribution is.
- Publish the data the Victorian government is collecting on biggest water and power consumers rather than keeping it under wraps
- Government assistance to retrain and reemploy workers in doomed industries.
- Currently large resource users get deep discounts on their consumption. This paradigm works against reducing carbon emissions and needs to be reversed.
- Provide advice in ways of improving energy efficiency e.g. In retrofitting buildings
- Regulate building standards more stringently and institute penalties for non-compliance.
- Ensure outcomes are accurately and fairly measured when incentives are provided. It seems like climate related decisions quickly get complex and confusing, leading to wrong outcomes and inaction.
- We have to accept that there will be multiple solutions to the carbon emission problem. We need to create an environment that supports innovation. This includes the type of financial structure that enables commercialization and subsequent marketing and promotion.
- Victorians seem to live in analysis paralysis, ensure we do the right amount of analysis as well as the right amount of ACTION
- National carbon trading scheme established by 2010, even if it is to be phased in but commencing as of that date.
- Research into greater brown coal efficiency

5. What it would take for Victoria to prepare for a low-carbon economy from the community's point of view:

5.1 In terms of 'leadership'

- Set targets per head for use of essential services water, gas, electricity and waste management.
- Devise a new political system and adapt our economic system to become organised around operating principles that are sustainable.
- Promote a climate of opinion which frowns on waste, e.g. Leaving TV on when no-one is watching and filling up a kettle for just one cup of tea. Encourage a high status for people who use their brains and improve their health by not being lazy.

- Form community groups and organisations to discuss the issues and promote action through local initiatives to produce renewable energy for the local community.
- Form organisations to protest against waste and find ways to present it.

5.2 Through local engagement:

- People need to begin to think of themselves as users not consumers.
- Create an online Innovative Green Ideas Concept Register to give people things that they can do. The community needs to be educated, and to educate itself on the issues and demand and support these initiatives.
- Provide access to a fleet of 'Ideas on Wheels' or 'Suggestion Buses' that drive to a local area, operate like a mobile office and hold community idea forums.
- More small local business and community exchanges for example, local cafes who send their organic waste to local home growers to compost, who then sends back veggies as part of a local trading and exchange system.
- Scouts could replace telephone directory distribution with the collection of obsolete incandescent light bulb as well as the new energy saving lights (which need care in disposal due to more mercury) as their fund raiser
- Introduce green education through community learning centres and neighbourhood houses
- Communities need to get stroppy...especially those near the beach. Get really mad and get going! Agitate, organize and force change
- Campaign to encourage voters to reward far sighted governments at the ballot box, not to just vote on the basis of hip pocket issues
- Tap into Facebook and other new media and technology.
- Listen to the elders of our civilization
- Refocus around living patterns which assumes petrol at \$4 per litre or, better still, imagine there is no petrol available at all! Also consider the effects if Melbourne has a 2 meter sea level rise
- Relocalisation - restoring community economies by keeping trade within the local community, especially food, and not ignoring poor external communities who operate at low carbon emission rates.
- Provide systems to assist and empower communities to develop and deliver their own carbon reduction programs.
- Positive re-localisation initiatives. We need an effective network of sustainability hubs and support facilities and programs to empower individuals within their community by finding them specific roles... Asterix and Obelix style.

- Participatory democracy with more citizens participating in the process with no particular way is the right kind of a process to achieve this change.
- Get more people to reject advertising material including local papers which are nearly all advertising. Maybe government could also lend a hand by regulating the amount of paper waste.
- Facilitate and support/listen to community action groups
- Create schemes to rent out gardens in a share farmer arrangement on lawns, front yards i.e. 1 person in the street farms all the front yards and creates local food sold to the locals gets to remarket 50% of food.

5.3 Through local transport options:

- Community-based and self-organised transport options e.g. Car pooling, Bike and Car Swap initiatives, etc
- Councils and stations should consider allocating car spaces at train stations for the existing Car Swap and for a possible new program along the same lines as Paris where a fleet of carbon-neutral electric cars that drivers can pick up and drop off anywhere in the city are provided by Autolib. From the end of next year, 4000 electric cars will be placed around Paris and its outskirts for drivers in the scheme to help themselves. In less than a year, Paris' army of cheap, on-street hire-bicycles, called Velib, has already transformed transport habits. The company behind that scheme, JCDecaux, is reported to have held talks with the City of Melbourne to launch a similar scheme in Australia which should be embraced.
- Tackle the radial hub transport system in Melbourne with a more comprehensive, imaginative and innovative intermodal linking system to facilitate getting around the metropolitan area more efficiently.
- Refuse cars the right of way so that bikes and walkers can have priority
- Community pooling of vehicles and rates reduction for people with nil or 1 vehicle
- Bicycles hiring and electrical cars - a la Paris. Access public owned bicycles - Bike Swap.
- Localize food transport and work where possible while still preserving access by electrification, preferably using indigenous renewable energy sources.
- Walk up to the shop for milk and bread rather than drive and promote walking to school - e.g. The Walking school bus.
- Make considered choices - e.g. Work close to home or vice-versa to reduce travel where possible.
- Patronize corner shops and community centres to reduce car travel

- REAL dedicated bike paths and secure bike racks at local stations

5.4 Through promotion:

- Taking a leaf from Vic Health's book, promote public events with government sponsorship that set an example in non-wasteful, non-emitting culture and pleasures which demonstrate what Australian imagination and enterprise can do. (The Grand Prix would be the absolute opposite!)
- Promote Green power incentives.
- An E Bay option for goods no longer required or a system to trade surplus equipment with others.
- Community awards for green initiatives – 'Environmental Local Hero' or 'Environment friend of the Year.'
- Have a poster of a family of four surrounded by its unnecessary waste in a year, like the old Life poster of a family surrounded by the food it ate in a year.
- Have a 'Grandparents for the Future' day for people to donate time, money or ideas for the education of the next generation.
- Have David Spratt talk about climate change red on all TV stations
- Initiate programs for good ideas on TV and radio
- Make a 100 dollar computer available to all - One laptop per child!
- Let's do an Orson Wells (War of the Worlds) on the radio. Set up a virtual, but realistic, disaster and use the energy generated to plan our way out!
- Look at Peking for an example of the reality of pollution.
- If we only wait for economic and environmental consequences of global warming to encourage changes, the game is lost! Let's try some slick marketing - to motivate change in perceptions and attitudes to the challenge. Simplify the message on why and how.
- Insulate Community Houses and install community solar and community wind as a demonstration model.
- Carbon emissions need to be visible.
- New electricity and gas meters, showing how much carbon is being emitted, tax high usage
- We need to get information about the severity of the current situation out to the public - this could be along the lines of the campaigns to stop abuse and cigarettes, but people need to know what to do about the problem
- Stricter recycling and recycling capacity should be reflected in the cost of the product.

- Introduce a 'Community thermometer' in local papers to chart the changes within local government areas that embrace a low carbon society.
- Ensure all people have insulation in their houses by law and make sure that people consider the energy cost of their renovations
- Make 'No junk mail' a law.
- Encourage home gardens to collect leaves in autumn and composting etc by highlighting the alternative pleasures that comes with community activities.

6. Some steps households could take themselves:

- Install Heat pumps instead of gas fired heating and insulate - including the sub floor space i.e. that gap under your house. Draught seal everything and use triple layer silver bats and air cell for reflective heat in addition to bulk batts. Double glaze windows and use external blinds. Pull down outside shades during winter as well as summer
- Encourage neighbours to install small solar grids in order to generate self-sufficient neighbourhood power amongst them.
- Develop communal Bar BQ facilities for outside and communal cooking.
- Purchase rain tanks
- Share transport, help with shopping, school runs etc. Pool transport options with neighbours - Car pooling and car sharing
- Low technology appliances that supplement the big power users - e.g. fast hand lawn-mowers for most suburban lawns. Carpet-sweepers, outdoor clotheslines with tumble driers only as an emergency backup, little twin-tubs for everyday hand washing, spinning, and garments that do not need 25 litres or more than 3 minutes use of electricity.
- Hold street parties to discuss neighbourhood initiatives for going green
- De-clutter by giving away items no longer used to op shops or online
- Seek environmental advice on renovations, retrofitting or extensions
- Put in veggie gardens
- Access education programs which help people know what resources they use and waste
- Use your bike and enjoy life
- Housework exercise - make it fun and lose weight
- Wear appropriate clothes for the season

- Monitor what resources are being used on a screen - in real time
- Encourage wood fires using slow combustion wood fires with non green wood.
- Plant more trees on nature strips as local carbon sinks. Incorporate no-mow nature-strips with no-care, no-water plants that do not mind cars being parked on them.
- Harass local MPs endlessly on these issues. Hold a day to conduct a citizen's arrest of non-performing MPs i.e. All of them
- Consume local products and pressure local shops to source goods locally
- Encourage non-emitting transport
- Be energy efficient, e.g. Compact fluorescent lights, solar hot water
- Organise within communities
- Switch to 100% rated green electricity - do it straight away!
- Shut off local streets to cars where possible.
- Manage refuse – cut out bottled water, excess packaging, plastic bags etc.
- Reduce driving ,waste, excessive heating & cooling, standby power, meat consumption
- Re-use items instead of constantly buying new (use Op shops)
- Institute a 'Social Responsibility points' scheme for using public transport, car pooling etc.
- Work less, share more.
- Instigate your own 'One car per household' policy and only green cars
- Transport sharing. Consider any new business opportunity like Dial-a-bike which is happening in Brisbane right now.
- Grow your own food or support the local veggie box scheme. (Aussie Farmers)
- Encourage children to ride bikes and wearing appropriate warm clothing. Change attitudes to acceptable clothing needs indoors
- Build gardens based on permaculture principles
- Take responsibility for your health. Stay fit and healthy in order to keep out of the medical system.
- Less dependence on debt, reduce consumption and re-evaluate personal values to live modestly.
- Consider Grey water recycling
- Solar hot water systems and efficient lighting in houses with proper insulation to make sure buildings are draught free.

- Seek advice on energy friendly renovations – such as the window orientation etc.
- Good house design from the outset with passive solar design, efficient showerheads, the appropriate choice of building materials, effective water capture systems to use grey water
- Composting, gardening and the planting of fruit trees as well as the appropriate plants for shade and water requirements.
- Encourage your local council to take a role in providing advice and education for home renovators on sustainable measures and options.
- Governments should subsidize rain water capture, ahead of considering desalination!
- Stop Coles and Safeway from trying to put local shops out of business
- Take away means tests on all environmental incentives - means testing is just another form of taxation.
- Monitor new meters to self check water and energy usage
- Eat less beans!
- Set heater at a maximum of 20 degrees and cooling at 26 – with the exception of invalids and babies.
- Walk or ride bikes locally
- Go vegetarian or at least reduce meat consumption