

Latrobe Valley Plan 2013

Converting the Valley to Renewable Energy in an orderly process in Ten Years

by Peter Gardner
(based in part on his 2013 election platform)

Why this plan is necessary?

Global warming is the greatest problem mankind has ever faced. It is affecting us now making heat waves, droughts, floods and bushfires more common and more severe. "Extreme is the new normal. The wild weather that greeted the New Year is here to stay. All eyes have been on Australia in recent weeks as a blistering heatwave triggered huge wildfires. But Australia's fires are just the most dramatic of a cluster of ongoing extreme weather events, including droughts in the US and Brazil and a lethal cold snap in Asia. ... Scientists have warned for years that extreme weather would become more common, and now it is." (New Scientist 19/1/2013) We are in a climate emergency. Urgent action is required at all levels of government. Not only are the Valley brown coal generators the most polluting in the country but a large part of Gippsland is covered with licences and claims for the mining and export of brown coal, and the exploitation of coal seam gas, shale oils and gas. It has been pointed out by a number of eminent scientists including James Hansen of NASA that to exploit even a fraction of these fossil fuels will eventually make large parts of the planet uninhabitable. It is therefore imperative that we move from an economy based on fossil fuels to renewable energy sources as quickly and as painlessly as possible.

What a deferral of this plan means?

The longer it takes for the coal based economy to be replaced the more disruptive and costly these changes will be. It is almost certain that – like the link between smoking and lung cancer – when the connection between coal based power and deleterious effects of climate change are proved that the generators will be facing class actions in the courts. When the worst of climate change is widely known they may eventually face criminal proceedings. These are companies that must have been aware of the risks of climate change when they originally purchased the generators.

What does the plan involve?

An orderly transfer of power supply from the coal based generators to renewable energy and a transfer of employment from the coal based generators to the manufacture and erection of a range of renewable energy sources. These are detailed below.

What needs to be done?

I have maintained for some years that we are in an emergency situation regarding climate change and that in the longer term it threatens human existence on earth. As the combustion of coal is by far and away the major source of human generated CO₂ - the major greenhouse gas – it follows that the generation of electricity from coal must be replaced as speedily as possible to prevent this. The first item on my election platform states: "Replace all current coal fired electricity generators within 10 years with a mix of renewable energy principally solar and wind."

How can this be done?

By the creation of a Federal Energy body that will plan, oversee and facilitate the replacement of coal based generation and the rapid uptake of renewable energy by

1. Subsidising solar rooftop on domestic and commercial establishments on a one for one feed in tariff (FIT) basis - this can be done immediately and will have the effect of continuing the current boom in rooftop solar.
2. Planning and initiating exploration for and exploitation of geothermal energy in the valley, building pilot plants and eventually full size generators to utilise as much of the existing infrastructure as possible making use of the geothermal resource below the coal seams. The valley is considered an attractive source of this energy.
3. Planning and constructing a commercial size solar thermal generator in the north west of the state and manufacturing as much of the necessary plant locally some of which should be in the Latrobe valley.
4. Working on the design and manufacture of small pyrolysis generators and their proliferation throughout country districts so that they are affordable, portable and able to both generate electricity from waste and produce biochar.
5. Facilitating the expansion of the wind industry on a community owned or part owned basis so that the profits from generation are not all remitted overseas.
6. Supporting the Eureka community cooperative to manufacture solar thermal/PV panels (also known as solar hybrid and PVT) and their erection on businesses and institutions that demand a ready supply of hot water eg dairies, hospitals.
7. Maximise conservation and efficiency of energy
8. Other actions outlined by best science

Some of these actions are explicitly outlined in my election platform.

Other Parts of my platform with an effect on coal mining include the following actions which will also help finance the transition below.

1. Cancel subsidies to the mining Industry (\$10 billion pa)
2. Put a new Carbon levy on carbon exports –principally on, and commencing with, coal, coal seam gas and shale gas and oil
3. Put a new Carbon levy on carbon imports principally on energy intensive imports like aluminium
4. Redistribute the funding currently allocated to Carbon Capture and Storage projects to renewable energy development

How will it be financed?

1. Financing for these projects will have priority as in a 'war economy'.
2. The elimination of all subsidies to the mining industry - \$10 billion – and the transfer of these funds to the renewable energy program.
3. A 'war economy' will be less wasteful and more regimented
4. Unemployment and the costs thereof will be all but eliminated
5. Bank finance will be readily available for government backed projects for renewable energy. Finance for fossil fuel projects will become more difficult to obtain as it becomes clear that these investments are highly risky and will eventually become stranded assets.

6. The carbon tax imposed at the mine head for all fossil fuel exports will generate some income at the same time as discouraging most new investments in this area.
7. The carbon import levy will create income as well as making some Australian industry more viable.
8. As some segments of the mining industry lose their favoured status the exchange rate of the Australian dollar will drop making most industry and agriculture internationally more competitive.
9. Divestment by government bodies including superannuation funds in the fossil fuel industry and encouraging this process in other institutions.
10. Create government backed 'carbon' or 'green' bonds to soak up private funds.

Some of the Economic Effects

1. More employment in the valley – there should be no unemployment anywhere in the country. Everyone who wants to work should be able to find employment. As now with the mining industry the best paid jobs will be for the most skilled and those in remote areas.
2. Employment on mining projects will gradually be replaced by employment on the construction of solar thermal generators and other renewable energy projects many of which will be in isolated localities.
3. Expansion of manufacture in the valley which may include components for the solar thermal, wind, geothermal and biochar industries as well as the manufacture and installation of solar hybrid panels.
4. Massive expansion of the apprenticeship system.
5. Most renewable energy projects are compatible with current agricultural land use and do not require large open cut mines or extensive pipelines and roads as does Coal Seam Gas.
6. Communities and individual landholders will benefit from the renewable energy projects with only minimal, or no, loss of agricultural land.
7. There may be union gains in some sectors and losses in others.
8. The coal generator companies will be losers unless they can expand or diversify into renewable energy (as AGL) or manufacture.

Procedure

1. Retirement of Generators will be in an orderly manner and done a) in conjunction with workers and unions so as to b) avoid disruption to the power supply by threats from management about closures, shutdowns. Any such threat or action should be considered a criminal action. Such threats should be countered in the first instance by the unions remaining in their work place. Retiring workers will not be replaced and the oldest and dirtiest plants will be shut down first as the new renewable energy comes online.
2. The initial emphasis should be on a) energy conservation b) energy efficiency c) rooftop solar program and d) wind. The latter will occur initially in the states most receptive to their adoption, notably SA, Tasmania and possibly WA.
3. The uptake of full scale solar thermal and geothermal plants will take some years to be fully operational

Timetable

Year 1

- * one for one FIT for all domestic and commercial rooftop solar installation
- * creation of a new Federal Energy Department with extensive powers
- * immediate savings in government departments through conservation and efficiency. All government departments to adopt a carbon budget and aim for carbon neutrality within 4 years.
- * massive power savings in efficiency and conservation expected in the first few years
- * wind projects encouraged in receptive states
- * planning begins for geothermal, solar thermal and other longer term projects. Many of these projects will be state owned.
- * manufacture of Eureka PVT panels – first installation on a local dairy before the end of the year
- * extensive drilling to locate best geothermal reserves
- * first coal fired generator – probably Hazelwood – closed by end of year

Year 2

- * first pilot geothermal plant operating. Work on second commences.
- * solar pvt panel manufacture and installation in full swing. Dairy farmers and hospitals offered no interest loans to take up this technology
- * manufacture of various renewable components in full swing
- * first small solar thermal plant near Mildura comes on line. Work on second commences.
- * second Bass Strait cable laid to take wind energy from King Island and north west Tasmania to the mainland
- * pyrolysis generators begin operating in shire waste disposal areas and at other places around countryside

Year 3

- * second Valley generator closed
- * all above continued and expanded
- * High Voltage DC cable between West and East Australia commenced
- * intensive forestry plantings on low value land as a carbon capture and storage project

Year 4

- * third Valley generator closed
- * all above continued and expanded
- * low CO2 steel construction commenced
- * low CO2 cement manufacture commenced
- * more than 20% of energy production from renewables

Year 5

- * last valley generator closed
- * all old/dirty coal fired generators across country closed by now
- * gas generators remain to cover emergency power shortages
- * all above continued and expanded
- * High Voltage DC cable finished
- * more than 30% of energy production from renewables

Year 6

- * expansion of the most favourable and economic forms of generation
- * construction across the country of these plants
- * wind energy major provider of power in SA,WA and Tas.
- * Tas and SA completely on renewable energy supplying excess power to Vic. NSW and Qld.
- * solar thermal and geothermal works now concentrated in outback

Year 7

- * high speed rail links constructed to new outback energy sources
- * High Voltage DC cable constructed to new outback energy sources
- * more than 40% of energy production from renewables

Year 8

- * new outback towns emerge
- * more than 50% of energy production from renewables

Year 9

- * more than 70% of energy production from renewables

Year 10

- * due to early energy initiatives the valley remains one of the leading industrial hubs of the country transporting parts through the new fast & efficient rail system
- * by year's end the country has been converted to sustainable renewable energy with a few gas plants still on standby for emergencies. Most standby power is provided by geothermal energy in the valley and elsewhere and from hydroelectric plants in Tasmania and on the mainland.
- * conservation, efficiency, renewable energy, and carbon capture and storage projects including forestry, biochar production, and new forms of cement and steel manufacture mean that Australia is beyond being 'carbon neutral' and is now reclaiming some of the CO₂ it previously put into the atmosphere

For full details of Peter Gardner's 2013 Election platform as a 'climate emergency Independent' in the seat of Gippsland go to

<http://petergardner.info/outline-of-political-issues/>

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