

# ENERGY ELECTRICITY

ENERGY INDUSTRIES  
VICTORIA  
AUSTRALIAN DEMOCRATS

2006

## OUR ELECTION COMMITMENT

It is now widely accepted that the emission of greenhouse gases is having a significant impact on the earth's climate and that these gases are likely to cause extreme and damaging climate change if not cut by 60% by 2050 according to the International Panel on Climate Change.

It is also the case that Victoria's economy and our standards of living are heavily dependent on cheap electricity from large brown coal deposits and a largely fossil fuel-based transport system. Demands on these fuels are set to rise substantially. The Democrats commitment:

### Energy Reform

- Introduce a carbon emissions trading scheme covering the stationary energy sector with emissions measured at the smoke stack of the power station. A proportion of the permits to be auctioned with the proceeds allocated to a public benefit fund to promote energy efficiency.
- Remove tax and tariff subsidies to the fossil fuel and energy intense industries and increase tariffs for peak power use.
- Improve and increase user participation with the introduction of time-of-use pricing and smart metering.
- Improve and increase demand side management including distributed generation and "negawatt" bidding – a system

where customers voluntarily curtail their energy consumption at times of high demand.

### Renewable energy

- Augment the Victorian Government's mandatory renewable energy target of 10% by 2016 with a target that continues to grow into the future.
- Set up GreenPower targets for each electricity retailer.
- Introduce targets and feed-in tariffs which allow unused electricity to be fed back onto the grid at a higher price than that of electricity sold to encourage distributed and renewable energy technologies, including domestic photovoltaic (PV) systems and industrial cogeneration.

*Energy is the life-blood of our economies but producing it is destroying our climate, damaging our health and degrading nature. We must make our energy sources and systems climate-neutral, or better yet climate-restorative. This transformation involves much more than just energy efficiency or hybrid engines. We must either put fossil-carbon-based energy systems essentially to rest in our cars, planes and power plants or we must find a way to permanently sequester the carbon and manage the Earth's atmosphere, permanently.*

The Natural Advantage of Nations, Amory B Lovins, Earthscan 2005

## THIS TIME

### AN UPPER HOUSE THAT WORKS

#### The DEMOCRATS VISION for Victoria's electricity system

is one that succeeds in maintaining the benefits of energy – warm houses, industry development and food production – but achieves a 60% cut in CO2 through:

- the progressive replacement of carbon-intense fossil fuels with renewable sources of energy,
  - reduced demand for energy through efficiency and behavioural change,
  - sound long term urban, regional and infrastructure planning to minimise energy waste,
  - meeting peak demand through decentralised and 'embedded' or on-site production, and
  - rejecting any alternative power sources that leave long term toxic waste to future generations.
- Ensure costs for renewable energy connection onto electricity distribution networks are not excessive.
  - Assist wind farm development through sound leadership and assistance with clear planning guidelines and community acceptance.
  - Mandate solar water heaters (SWH) on all new buildings – residential, institutional, commercial, industrial; set progressive targets for SWH units on existing buildings, supported by rebates; and

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**DEMOCRATS**

This election commitment was updated on October 31, 2006  
All our election commitments are available online at  
[www.vic.democrats.org.au](http://www.vic.democrats.org.au)

*Current electricity market arrangements do not appropriately reward the benefits of solar technologies, nor do they provide appropriate price signals for energy efficiency. Current electricity market arrangements do not appropriately reward the benefits of solar technologies, nor do they provide appropriate price signals for energy efficiency.*

Commonwealth's  
2004 Energy White Paper

encourage north facing walls and a roof line inclined at the local latitude, e.g. 38 degrees for Melbourne, in the Building Code.

- Require all heated swimming pools to use solar water heating or high efficiency heat pump technology.
- Provide grants for local government and community based renewable energy, encouraging investment in small scale projects.
- Fund a substantial increase in renewable energy research and development, particularly in photovoltaics, solarthermal, geothermal and biomass.
- Set up an assistance package aiming to substantially build Victoria's renewable energy manufacturing and export industry, including training and skills development.
- Foster the development and uptake of PV panels that are integral to building fabric.

## Energy Efficiency

- Introduce a mandatory 15 percent energy efficiency target to be achieved by 2010 and delivered through a 'white' energy efficiency trading system (operating in parallel with 'black' emission carbon trading and

'green' renewable energy certificate trading).

- Introduce minimum greenhouse emissions standards of 0.6 TCO<sub>2</sub>-eq/MWh for all new electricity generating, permitting high efficiency gas co-generation but excluding coal.
- Progressively tighten the energy efficiency rating system for new houses and incentives for those that improve on the minimum requirements of the Building Code.
- Support and facilitate the retrofitting of existing household building stock through energy audits, rebates and finance packages, to be delivered through local government or community organisations.
- Support and facilitate the upgrade and retrofit of the energy performance standards for existing commercial buildings and incentives for improving on existing minimum energy performance standards.
- Showcase building construction technology that utilises underground heat exchange and ventilation systems as alternatives to air conditioning, double glazing and efficient heating systems.
- Require disclosure of energy performance of all buildings on sale and lease of property.

## The Problems

Victoria's total energy generation capacity is anticipated to grow to 12,450MW over the next 10 years. Victoria's current generation capacity is 8,570MW and it imports around 1,900MW from other states at peak demand. New generating capacity of over 2,000 MW will be needed unless significant energy efficiency is achieved and demand

reduced and re-configured to avoid brownouts and blackouts in summer.

Soaring demand for energy-guzzling appliances has increased Victoria's household energy consumption. It is estimated that one new domestic scale air conditioner, because it adds to peak load, forces around \$13,000 to be spent on new poles and wires to manage the load. Victorians, like other Australians have high 'climate control' expectations and warmer summer temperatures are likely to increase demand for air conditioning in the absence of well planned shading and good natural ventilation built into our housing stock

Victoria's brown coal-fired electricity generators are old, inefficient and polluting. Hazelwood was constructed more than 40 years ago but recently brought out of mothballs to boost capacity.

Despite recent wind farm development, Victoria, like the rest of Australia, is going backwards in terms of the percentage of its electricity that is generated from renewable sources.

The lack of regulated feed-in tariffs in Victoria disadvantages renewable energy generators - commercial and domestic - because energy companies are neither forced to accept the power generated by PV on rooftops or from any other renewable source nor pay tariffs higher than current charges. This makes no sense, particularly for PV generation which largely coincides with the peak loads. Germany leads the way on feed-in tariffs and this has delivered far higher levels of renewable energy uptake than in Australia with a lot less sun. Australia-wide, a feed-in tariff could increase the number of PV units in Australia from 10,000 to 150,000 by 2010.