



# Minister for Energy and Resources

Submission No: .....148.....

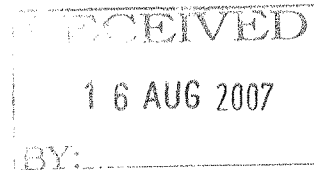
Our Ref: ME002233

The Hon Geoff Prosser MP  
Chairman  
Standing Committee on Industry and Resources  
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Dear Mr Prosser,

## **CASE STUDY INTO RENEWABLE ENERGY IN AUSTRALIA**



On behalf of the former Premier of Victoria, the Hon Steve Bracks MP, I wish to thank you for the opportunity to make a submission to the House of Representatives Standing Committee on Industry and Resources on the issue of renewable energy. Your invitation has been referred to me, as the Minister for Energy and Resources, for response.

Support for renewable energy is central to the Victorian Government's climate change policy. The Government seeks to provide leadership by example, through the current purchase of 10% of the Government's own energy needs in the form of Green Power, and a plan to increase this to 25% by 2010. Wider initiatives to accelerate the uptake of renewable energy and drive the development of the renewable sector in Victoria, are outlined in the Government's Renewable Energy Action Plan (which is available at [www.greenhouse.vic.gov.au](http://www.greenhouse.vic.gov.au)). Details of a number of these initiatives are outlined below.

### **Victorian Renewable Energy Target Scheme**

The Victorian Renewable Energy Target (VRET) scheme provides a market based mechanism for the promotion of renewable sources of energy. The Victorian Government announced the VRET scheme in July 2006. The scheme commenced on 1 January 2007 and will increase Victoria's electricity consumption from renewable sources to 10% by 2016.

Under the VRET scheme, certificates are created by accredited renewable energy generators. Victorian energy retailers and wholesale purchasers must then acquire and surrender these certificates to achieve compliance under the scheme. The Essential Services Commission (ESC) has powers to enforce the VRET legislation, through auditing procedures and the imposition of penalties.

Over its life-span, the VRET scheme is expected to deliver well over 1,000MW of renewable energy generation, over \$2 billion in investment over the next ten years and more than 27 million tonnes of greenhouse gas abatement by 2030. It is also expected to benefit regional Victoria through the creation of new jobs in the renewable energy industry.

Victoria was the first of the States to institute such a scheme. New South Wales and Western Australia are also now looking at implementing similar schemes.

Further information on the VRET scheme is available at [www.dpi.vic.gov.au/energy](http://www.dpi.vic.gov.au/energy).

### **Feed in Tariffs and Advanced Metering**

During the election campaign in November 2006, the Victorian Government announced its commitment to ensure households are paid a fair price for any renewable power that is fed into the electricity grid.

Amendments to strengthen the existing feed-in tariff legislation were introduced into the Victorian Parliament on 19 June 2007. The proposed amendments to the *Electricity Industry Act 2000* (EIA) will extend feed-in tariffs from wind only to include solar, hydro and biomass. Retailers will be required to publish their feed-in tariff offers both in the Government Gazette and on their websites. The aim is to make this information more accessible to the public. Provisions will also be strengthened to enable the tariffs to be referred to the independent economic regulator, the ESC, where they are not considered to be fair and reasonable or where retailers have failed to publish their feed-in tariffs.

A second stage of the process will examine whether further reforms are required to encourage the uptake of renewable forms of generation by householders and small businesses.

In a related measure, the Victorian Government's Advanced Metering Infrastructure project will see interval meters with two-way communications rolled out to all Victorian homes over a four year period commencing in late 2008. These meters record energy usage per half hour, and therefore allow electricity to be priced more dynamically. By encouraging time of use tariffs through the use of interval metering, small scale generation options (such as photovoltaic or wind based systems) will be better placed to capture the full value of the energy they generate.

### **Funding for Research and Development**

Funding of \$10 million has been provided over the next three years for the Sustainable Energy Research and Development Grants (SERD) program, which supports renewable energy technology, particularly in fields such as solar, biomass, energy storage and fuel cells. As part of this funding, the Government recently announced a \$6 million grant to the Organic Solar Consortium to research the next generation of non-silicon, organic solar cells. For further information regarding the SERD program, please refer to [www.dpi.vic.gov.au/energy](http://www.dpi.vic.gov.au/energy).

The Government has also established an \$8 million Renewable Energy Support Fund (RESF). The objective of RESF is to encourage innovative applications of medium-scale technically proven renewable energy technologies in Victoria. It is funded through the Victorian Greenhouse Strategy and can provide funding of up to 20% of the capital cost of projects. Projects must demonstrate innovation and local market development potential in the delivery of renewable energy to Victoria. For further information, please refer to the Sustainability Victoria website at [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).

### **Solar**

The Victorian Government encourages the use of solar and photovoltaic power through a wide range of measures. Support has been provided for both large-scale and smaller scale projects.

Since the announcement of the VRET scheme, Solar Systems has announced the development of a \$420 million photovoltaic power station to be located in north-west Victoria (near Mildura). The Victorian Government will contribute \$50 million in funding towards this project, which will have a capacity of 154MW.

The Government has also provided \$5 million to install photovoltaic panels on 500 schools and community buildings.

The Victorian Government is also keen to promote the use of solar and photovoltaic power in households and has launched a number of initiatives to encourage its uptake. These include the 5 Star building standard for new residential housing, which requires the installation of a solar water heating system or water tank. In addition, the Government offers rebates of up to \$1,500 for the installation of solar hot water systems. For more information, please refer to [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).

As mentioned above, the Government is also strengthening existing feed-in tariff provisions, which will offer fairer prices for households and small businesses that export photovoltaic power back into the grid.

## **Wind**

Victoria is fortunate in having world-class wind resources. In addition to its environmental benefits, the promotion of wind-based technologies is considered an important means of fostering regional growth and investment. Since the announcement of the VRET scheme, over 1,000MW of wind energy projects, valued at almost \$2 billion, have been confirmed. 134MW of wind powered generation is currently operational in Victoria and more than 1,000MW of additional projects have received approval. A number of further projects are currently seeking approval or are undertaking feasibility studies.

The Victorian Government has also supported the use of wind power through the Wind Energy Development Act, which aims to remove barriers to grid connection. In addition, it has developed the *Policy and planning guidelines for development of wind energy facilities in Victoria* and has published a Victorian Wind Atlas. Please refer to the Sustainability Victoria website ([www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au)), for further details.

## **Biofuels**

The Victorian Government believes that the use of alternative fuels, such as ethanol or biodiesel, can help make our energy supplies more efficient, affordable and sustainable. Their development and uptake will help in the reduction of pollution and greenhouse gas emissions, and will reduce reliance on oil imports, making Victoria's energy future more secure. Development in this area will also deliver high quality jobs and thriving, innovative industries across the State, particularly in regional areas.

The Victorian Government has recently completed *Driving Growth: a Road Map and Action Plan for the Development of the Victorian Biofuels Industry*. The road map is available for viewing on the Business Victoria website ([www.business.vic.gov.au](http://www.business.vic.gov.au), follow the "Regional Development", "Business and Industry Services" and "Resource Based Industries" links).

As part of its commitment to the use of biofuels, the Victorian Government will establish a biofuels target of 5% of all fuel consumption by 2010 and will establish a \$5 million Biofuels Infrastructure Grant (BIG) program. Government fleet cars will also be encouraged to use ethanol blended petrol (E10) where possible.

## **Geothermal**

Whilst the development of geothermal energy is still at an early stage in Victoria, the Government recognises that it has the potential to provide an additional source of clean, reliable and renewable energy, alongside developments in wind, solar and biomass. The Victorian Government has recently issued exploration permits to six companies, allowing them to explore approximately 80,000 sq km across Victoria to locate favourable geothermal sites.

A study of Victoria's geothermal resources was undertaken in February 2005, by Sinclair Knight Merz and Professor Jim Cull, Monash Geoscope. A copy of this report and further information relating to geothermal energy can be accessed at [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).

The *Geothermal Energy Resources Act 2005* (GER) will ensure that environmental, social and land use issues are considered from the planning to the decommissioning of GER operations. It will also provide an effective regime to enforce conditions of the title and operation, in particular health, safety and environmental performance.

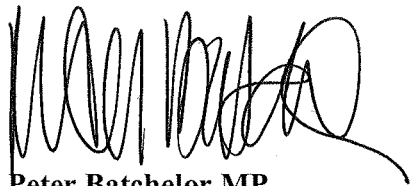
### **Other Initiatives**

The Victorian Government has recently announced the construction of a large scale desalination plant in Wonthaggi, which will deliver an estimated 150 billion litres of water per year. Sufficient renewable energy will be purchased to offset the anticipated 90 megawatts of electricity the plant will use to ensure the plant is carbon neutral.

If you would like to discuss any of the above initiatives further, please feel free to contact Mr John Krbaleski, Director Energy Investment and Sustainability, on telephone (03) 9658 4928 or [john.krbaleski@dpi.vic.gov.au](mailto:john.krbaleski@dpi.vic.gov.au).

I thank you once again for the opportunity to make this submission and hope that this information has been of some assistance.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Peter Batchelor', with a large, stylized flourish at the end.

**Peter Batchelor MP**  
**Minister for Energy and Resources**

10 / 8 /2007