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## **SUBMISSION TO THE INQUIRY INTO THE RENEWABLE ENERGY (ELECTRICITY) AMENDMENT (FEED-IN-TARIFF) BILL 2008**

The Conservation Council ACT Region has been protecting the environmental interests of Canberra and south east region since 1979. We are the peak community environment organisation in the region and our mission is to achieve the highest quality environment for the Canberra region. We represent the interests of community conservation organisations in the region as well as the broader environmental interests of all Canberrans.

Economist Sir Nicholas Stern and the IPCC (Intergovernmental Panel on Climate Change) have warned that immediate action must be taken on climate change. The investments we make now in initiatives such as the Renewable Energy Feed-In Tariff will protect us from the very high cost of inaction into the future.

Professor Ross Garnaut, commissioned by the Australian Labor Party to report on interim targets, has made it clear that an effective response to climate change necessitates real and significant action by all levels of Government and society. The Renewable Energy Feed-in Tariff represents a real opportunity for Canberra to lead the way on the implementation of a known and effective scheme to promote the uptake of renewable energy.

The Conservation Council strongly supports the introduction of a Renewable Energy Feed-in Tariff (FiT), such as the best practice Solar Tariff recently introduced in the ACT.

Feed-in Tariffs are proven to be an effective means of promoting renewable energy generation. A Feed-in Tariff is a mechanism to leverage private investment into renewable energy, which acts to provide a positive impetus to act on climate change, and shifts the financial obligation away from Government. Energy decentralisation must form a key part of our response to the challenges presented by climate change.

The Conservation Council is concerned that any national Feed-in Law passed will serve to strengthen or maintain, and must not weaken by a reduction of the premium rate or contract time, or change to net metering, the current Solar Feed-in Law in the ACT.

### **The Conservation Council Recommends:**

- A premium rate of 3.88 for solar PV systems
- A contract of at least 15 years
- Generators must not be included in the mandatory renewable energy scheme (MRET)
- Exemptions for pension and health care card holders
- Payment on Gross production of energy
- Scheme to include residential, commercial and industrial premises

## **Renewable Energy Sources**

The Conservation Council recognises that there are a number of renewable energy technologies currently in use and under development in Australia that will benefit from the proposed FiT. We support other forms of renewable energy being covered by the FiT at an acceptable rate (where the technology is at a lower cost, the FiT should reduce to reflect this). This allows the legislation to keep pace with technological developments.

Few opportunities are available for smaller renewable energy producers to gain access to the current, well established, energy market. Renewable energy relies on technology that has received relatively little government support, and so cannot compete with the currently cheap price of coal-fired energy. As a price is placed on carbon, and we heed the warnings of economists about the future price impacts of climate change, renewable energy will become the preferred generation technology. Incentives such as the Feed-In Tariff provide the opportunity for renewable energy to gain access to the market, and ensure that these technologies will become commercially viable.

*“At present, governments in Australia provide substantial financial support for the production and use of fossil fuels, through direct payments, favourable tax treatment and other actions. These subsidies keep the cost of fossil fuel energy artificially low and make it harder for renewable energy to compete. They distort energy markets, encourage greater use of fossil fuels, create higher levels of greenhouse gas emissions and improve the profitability of energy companies that produce or use fossil fuels.”<sup>1</sup>*

The Conservation Council supports the FiT being extended to commercial and industrial premises, which will stimulate industry, leading to price reductions in renewable energy technologies that will ultimately benefit the community.

Renewable energy generators that are supported through other mechanisms such as the MRET, or GreenPower must not be included in the FiT. “Double counting” will not achieve additional take-up of renewable energy technologies, and will render the FiT ineffective.

## **Existing Programs to Encourage Renewable Energy**

The Feed-in Tariff mechanism has been very successful where it has been implemented, the most notable case being that of Germany.

Germany is the world leader in solar power generation, experiencing growth in installed capacity from 11,448MW in 2000 to 30,893MW in 2006. In addition this has created 10,000 new jobs from 2004 to 2006 and significant emissions reductions.

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<sup>1</sup> Chris Riedy, Institute for Sustainable Futures, *Energy and Transport Subsidies in Australia: 2007 update for Greenpeace Australia*. 30 April 2007. Available at <http://www.greenpeace.org/australia/resources/reports/climate-change/energy-and-transport-subsidies>. Accessed 25/2/08

An effective FiT mechanism will stimulate the market enough to make renewable energy more affordable to many more people. The Feed-in Tariff instrument with a guaranteed contract period provides the long-term certainty necessary for industry to continue to grow, and is not limited, as subsidies generally are. FiT's have been proven to significantly boost renewable energy industries, and the use of renewable power, more than a subsidy scheme alone.<sup>2</sup>

## Effectiveness of policy instruments

### *On the Success of Policy Strategies for the Promotion of Electricity*

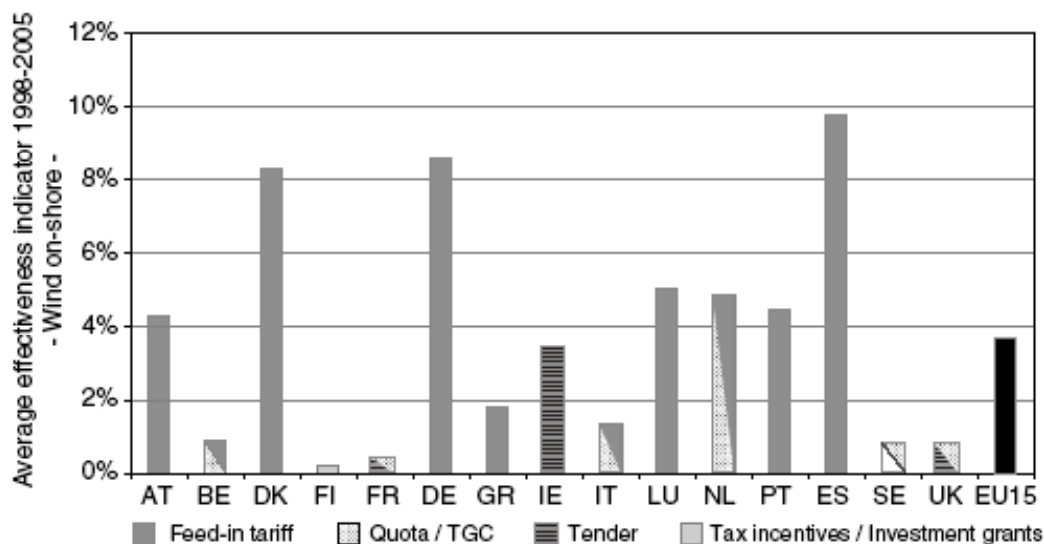


Figure 3: Effectiveness indicator for wind onshore electricity in the period 1998-2005 in the EU-15 showing the relevant policy schemes during this period

Several findings can be derived from these figures. Firstly, the three Member States showing the highest effectiveness during the considered period, Denmark, Germany, and Spain, applied fixed feed-in tariffs during the entire period 1998-2005 (with a relevant system change in Denmark in 2001). The resulting high investment security as well as low administrative barriers stimulated a strong and continuous growth in wind energy during the last decade. It is often claimed that the high level of the feed-in tariffs is the main driver for investments in wind energy especially in Spain and Germany.<sup>3</sup>

The FiT mechanism leverages private investment in renewable energy. Fitting solar PV panels to their rooftops is a tangible way in which Australians can contribute to a renewable energy future. A major benefit of the scheme is that it shifts the upfront infrastructure cost to the individual rather than the government. Not only does this mean that the Government does not have to worry about budgetary constraints to implement the scheme, it also gives individuals a real sense of ownership of the action and ongoing reward for their contribution.

<sup>2</sup> Held Ragwitz, *On The Success Of Policy Strategies For The Promotion Of Electricity From Renewable Energy Sources In The EU*, 2007

<sup>3</sup> *ibid*

## Cost Issues

### Rate of Tariff

The Conservation Council supports the premium rate being set at 3.88 times the price of retail electricity for Solar PV generated electricity. This rate has proven to be effective in Germany, and will work to grow the solar industry without imposing too high a cost to consumers. The premium must be paid on gross production, rather than net electricity exported to the grid. Payment on the gross ensures the FiT is effective in reducing the payback time of the solar array, and provides the market mechanism to stimulate growth in renewable energy production.

### Payback period

The Conservation Council strongly supports the provision of a minimum 15 year contract being included in the scheme. A contract provides the surety necessary for those considering making a significant investment to go ahead with that investment.

### Review of Tariff

It is appropriate that the rate of the tariff for all new systems be reviewed annually, however, generators must be provided the surety of a set contract time. The success of Germany's Solar FiT is based both on the rate of the premium and the provision for a 20 year contract. Every new photovoltaic system must be provided a guaranteed feed-in tariff.

## Equity Issues

In Germany, the Feed-in Tariff has been costed at about a cup of coffee a month per household.<sup>4</sup>

In 2007, the cost of electricity increased by 17% in the ACT, about half the increase requested by ActewAGL, the major energy supplier. We will continue to experience increases in the cost of coal-fired electricity as a price is placed on carbon, and generating capacity is limited by water shortages, predicted to increase under climate change.

The Interim Garnaut Report has made clear that we must act on climate change early, and that the cost of inaction is far greater than the cost of action. Rising temperatures will lead to an increase in the cost of living for all of us. The effects will be felt most strongly by those on lower incomes who are unable to absorb cost increases in essential items.

The FiT will reduce the price of solar, protecting us from price shocks in the future. Energy decentralisation and independence are essential in our adaptation to climate change.

Our strong preference is that the premium be paid according to consumption, not as a set levy. This will act to protect low-income earners who generally have smaller homes and less energy-intensive appliances than wealthier households. We would suggest that the tariff be paid on consumption in excess of a set minimum level that allows for the ordinary running of a relatively efficient household. Payment based on consumption will also encourage energy efficiency, further reducing emissions.

Concession and pension cardholders should be exempt from the tariff.

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<sup>4</sup> *Renewable Energy Sources In Figures -National And International Development - Status: June 2007*

## Environmental Impacts

Internationally, Feed-in Tariffs have proven to be a cost-efficient method of reducing greenhouse gas emissions, and of increasing solar energy use.

'Energy payback time' refers to the time it takes for a product to produce as much energy as was consumed in its production. Solar PV has an energy pay-back time of around 3 years. As the average lifespan of PV is about 25 years, they provide in excess of 20 years greenhouse free generation. Recycling options for PV are under development.

The FiT is essentially a market mechanism that stimulates the solar industry. Increased demand leads to greater investment in research and development, to develop even more efficient photovoltaics. The FiT will drive the market to produce and release technologies such as the sliver cells developed in Canberra at the Australian National University (ANU).

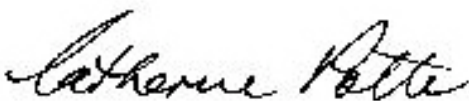
It is important to note that PV systems provide energy to the grid at the time that most of the eastern seaboard is at peak usage. The energy supplied by renewable energy is considerably cheaper than the electricity bought on the spot market at these times.

In conclusion, the Conservation Council strongly supports the introduction of a FiT and urge the Government to pursue this mechanism as expediently as possible. We are aware of the potential for the FiT, as with many other mechanisms to reduce greenhouse emissions, to have a social equity impact.

However, design of the scheme as proposed in this submission will minimize impact on the most vulnerable households whilst maximizing the effectiveness of the policy. Furthermore, good policy formation dictates that the focus should be on making the FiT an effective mechanism for increasing investment in solar generation in Australia.

Where this has an impact on households, other policy mechanisms should be introduced to address this without impacting on the effectiveness of the FiT.

Yours sincerely



Catherine Potter  
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