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Committee Secretary Senate Standing Committee on Environment, Communications and the Arts Department of the Senate PO Box 6100 Parliament House Canberra ACT 2600 Email: <u>eca.sen@aph.gov.au</u>

Dear Sir/Madam,

## Re: Inquiry into the Renewable Energy (Electricity) Amendment (Feed-in-Tariff) Bill 2008

The Nature Conservation Council of NSW welcomes the opportunity to comment on the proposed amendment to the Renewable Energy (Electricity) Act 2000, to establish a national feed-in tariff (FiT) scheme.

## **Scientific Context**

Climate change is a huge and urgent challenge to Australia and the world. With every new piece of research we learn more and more about the effects that anthropogenic warming will have on our ecosystems and communities and economies. The task we face in building a "post-carbon" economy is only getting more urgent.

The main driver of anthropogenic warming is the world's addiction to fossil fuels. Yet fully renewable sources of energy are widely available across the earth, and the technologies required to harness them are either fully proven or within reach.

## The Key Role of Renewable Energy

To respond to the challenge of climate change we need to be aiming for an energy grid that is sustainable and stable, features diverse sources of power, and minimises greenhouse gas emissions.

The Mandatory Renewable Energy Target (MRET) scheme has been successful in promoting cheaper and more mature renewable energy technologies such as wind power, but emerging technologies such as solar thermal, solar photovoltaic, geothermal, wave power and others, receive either very little or ad-hoc support.

These emerging technologies can be a very useful complement to wind power, and in the long term may prove the most cost-effective renewable energy option. In 20 years time, advances in solar thermal and geothermal technologies, for instance, may make these sources real alternatives for national base-load generation. For this reason these emerging technologies deserve long-term Federal Government support.

Furthermore, it is reasonable to expect that carbon constraints in other sectors of the economy will





make electric power more attractive than fossil fuels (e.g. a shift to electric vehicles for private transport). This amplifies the urgency of making our electricity generation sustainable and climate friendly.

A FiT scheme alone will not provide all the answers. The Government's other renewable energy policies must also be maintained and extended – for instance, funding and other support of research and development, but an effective financial incentive is required to overcome the numerous market barriers that lead households, businesses and industries to pass up on renewable energy opportunities – even those that are privately cost-effective.

European experience (e.g. in Germany and Spain) shows that implementing a FiT alongside funding for research and development is one of the best ways of giving renewable energy the support it needs.

## A National and Effective Scheme to Promote Emerging Renewable Energy Technology

A national renewable energy Feed-in Tariff (FiT) should be introduced to further encourage the use and production of renewable energy. As a policy measure, FiTs offer the following advantages:

- They reduce the hurdles faced by new entrants to the electricity generating market, particularly the high costs associated with renewable energy compared to established (and subsidised) fossil fuel power. By guaranteeing a premium price for the energy produced, over a long-term period such as 20 years, investors in renewable energy have the certainty and incentive they need. By contrast, alternative renewable energy policy measures such as investment subsidies or white certificate trading do not provide this long-term stability.
- 2. By fostering competitive renewable energy production, FiTs promote uptake of zeroemission electricity by homeowners, small businesses and others, including those who otherwise would not have the interest or resources to do so.
- 3. Where households and businesses install their own micro-generators connected to the grid, the FiT provides an inducement for them to use less energy so as to maximise the personal benefit from their renewable energy generation.
- 4. Because the premium price for renewable energy (the tariff) is spread across all electricity customers, the scheme is virtually revenue neutral. A small increase in the price paid by all customers (the levy) creates a powerful incentive for the adoption of otherwise expensive renewable energy.

Germany, due to their early introduction of a FiT (1999) is now a world leader in solar technology and installed capacity, currently sourcing 12% of their electricity from renewable technologies. The cost of solar photovoltaic arrays has halved in this time. In 2007, a quarter of a million jobs in the renewable sector existed in a market growing by 40% per year. According to Hans-Josef Fell, the key architect of the German scheme, the European Emissions Trading scheme reduced emissions by 9 million tonnes, compared to 100 million tonnes with a FiT over the same period. The scheme has been estimated to cost about a cup of coffee a month for the average consumer.

Renewable energy FiTs have been introduced recently in South Australia, Victoria, and the ACT. However this Bill proposes a national scheme that will go further and be much more effective thanks to the following key elements:

- ⇒ Covering a broad range of prospective renewable energy technologies, particularly those that are generally unsupported by the MRET scheme, and not just solar photovoltaic.
- Ensuring that the tariff is applied to all renewable electricity generated (the gross amount), not just that component which is exported to the grid (the net amount). The gross amount represents the amount of renewable energy electricity that has been fostered by the FiT i.e. the amount of fossil fuel electricity avoided. Therefore it is this amount that should attract the premium price.

- ⇒ Establishing a national register of renewable energy generators, which will provide (and promote the sharing of) information about the effectiveness of the various renewable energy technologies supported.
- Allowing the owners of renewable energy generators to claim the tariff direct from the regulator, rather than from electricity retailers, which will be administratively simpler for all.

The Nature Conservation Council further believes that, to be successful, a legislated national FiT scheme should meet the following criteria:

- ⇒ The guaranteed price premium must be a minimum 3.88 times the cost of coal-fired power;
- ⇒ Contracts should be made for a minimum 15 years;
- ⇒ Connection of renewable energy must be a priority obligation for the distributor; and
- Qualifying generators must not include those already in operation or already participating in the MRET scheme – ensuring the tariff applies only to genuinely additional renewable energy.

Renewable energy FiT schemes, where they have been implemented correctly, have been highly successful in stimulating the renewable energy industry, leading to new jobs across a range of sectors, reducing greenhouse emissions, removing the cost of infrastructure from government and allowing individuals to play a meaningful part in tackling the climate challenge. For these reasons the Nature Conservation Council of NSW strongly supports this Bill.

Yours sincerely

Cate Faehrmann Executive Director