

Submission from Lighter Footprints Climate Change Action Group

RENEWABLE ENERGY (ELECTRICITY) AMENDMENT (FEED-IN-TARIFF) BILL 2008

To

Committee Secretary
Senate Standing Committee on Environment, Communications and the Arts
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
Australia
Via email: eca.sen@aph.gov.au

From

Peter Campbell
Lighter Footprints Spokesperson and Administrative Committee member
www.lighterfootprints.org

Lighter Footprints is a local climate change action group with 300 supporters from in and around postcode 3127 in Melbourne.

This submission is endorsed and authorised by Lighter Footprints and issued on behalf of our supporters.

Submission

Lighter Footprints supports the **Bill to amend the Renewable Energy (Electricity) Act 2000 to establish a national feed-in tariff (FiT) scheme.**

Lighter Footprints recognises that climate change is a huge, urgent and immediate challenge to Australia and the world. The observable effects of climate change and the latest scientific reports indicate that we must take effective action to decarbonise our economy by all means at our disposal.

Moving towards renewable energy is an essential means of addressing climate change, solar photovoltaic (PV) micro-generation and other zero emissions energy technologies have an important role to play in boosting renewable energy.

For example, solar power generated from photovoltaic cells provides proven zero emissions electricity that can provide an important and significant contribution to replacing energy and transport infrastructure that currently relies on energy produced from polluting coal.

A **feed-in tariff** provides a fair price for solar electricity generated on rooftops and from other zero emissions sources that is fed into the electricity grid.

By offering a premium price for zero emissions electricity fed directly into the grid, feed-in tariffs recognise the wealth of benefits that arise from the adoption of zero emissions technologies. These include:

- **Environmental benefits** from reduced emissions of carbon dioxide and other pollutants
- **Network benefits** from reduced transmission losses and generation closer to the source of consumption
- **Supply benefits** from producing clean power for the grid during peak load times on very hot days
- **Economic benefits** through lowering of peak wholesale electricity prices
- **Network and supply benefits** from distributed generation providing resilience in power supply systems and improve stability in the power grid
- **Social benefits** via diversified electricity generation and job creation.
- **Transport benefits** by providing more renewable energy for zero emissions electric drive train vehicles, which are also more energy efficient than vehicles powered by internal combustion engines.

Combined with distributed storage systems, solar power can also supplement power supplies for both transport and nighttime uses.

However, for a feed-in tariff to create the level of take-up required to achieve these benefits, it is essential an adequate rate be paid, for a long enough time, and on the total production of the solar and other zero emission systems.

A reasonable feed-in tariff (for Australia) would be:

- Priced at least five times the retail rate for electricity
- Paid for at least 15 years; and
- Paid on the entire output of a system via gross production metering

A feed-in tariff of this structure will provide the necessary incentive for individuals to invest their personal finances into solar PV systems; safe in the knowledge that the price paid for electricity generated will adequately pay back this investment over the next 15 years.

Feed-in tariffs have been remarkably successful in over 40 countries internationally. An adequate feed-in tariff has the potential to build an industry in sustainable solutions to climate change, provide an alternative to polluting coal, and position Australia as a leader in renewable energy.

For example, feed-in tariffs in Germany encouraged the installation of 900MW of solar power in 2006 alone, compared with the total of 40MW of solar power installed on Australian rooftops over a 10-year period.

This bill would provide an appropriate national structure and legislation for feed-in tariffs and will also ensure that such tariffs are effective in increasing the installation and production of solar power and other zero emissions power, which in turn will be important for achieving the current Mandatory Renewable Energy Target (MRET) set by the Australian Government of 20% renewable energy by 2020.

While the MRET has been somewhat successful in promoting cheaper forms of renewable energy such as wind and solar hot water, emerging technologies such as solar thermal, solar photovoltaic (PV), geothermal, wave power and others, currently receive either very little or ad-hoc support. An appropriate national feed-in tariff would provide much needed support for all these zero emissions energy production technologies.

A strong national feed-in tariff structure is also required to avoid weaker, ineffective and different feed-in tariffs proliferating at State level.

For example:

- In **South Australia** feed-in tariff legislation only pays for electricity exported (net metering), which increases the payback period and reduces incentives for people to install solar systems
- In **Queensland**, feed-in tariff legislation similar to South Australia, with net metering, is about to be introduced
- In **Victoria**, feed-in tariff legislation is about to be introduced which only would pay on net metering, and includes a very small 2kW cap on array size. Both these factors greatly increase the payback period and greatly reduce incentives for installation. No coherent justification for this structure has been provided to date by the Victorian government.
- The **ACT** feed-in tariff legislation is currently the best in Australia as it pays on gross metering (the full production amount) and has a generous 10kW cap on array size.

Lighter Footprints regards the following features of the federal bill to be very important for improving the approaches recently taken by some Australian States by:

- Establishing national framework legislation for effective feed-in tariffs in all States and Territories.
- Allowing the Minister to apply a feed-in tariff to any technology, not just solar photovoltaic systems
- Ensuring that the feed-in tariff is applied to all renewable electricity generated, not just the smaller component exported to the grid. This is important as all the renewable energy generated replaces energy that would otherwise be obtained from carbon intensive sources, and thereby directly reduces carbon emissions.
- Establishing a national register, which will yield valuable information about the effectiveness of the various renewable energy technologies, supported.
- Creating a system whereby the owners of renewable energy systems make claims for the tariff directly to the regulator, thus simplifying the system from for electricity retailers.

The bill also allows the Minister to vary FiT rates according to the type and location of qualifying generators, and achieve the objective of supporting the economic viability of electricity generation from a range of prospective renewable energy technologies.

The Minister can also review the FiT rate applying to each renewable energy generator type each year – with adjusted rates applying to new installations.

The scheme must be funded by a FiT levy rate per MWh of electric energy acquisition from the electricity grid. The FiT levy rate must be sufficient to cover the estimated cost of payments under the feed-in-tariff rate scheme. The FiT levy would be payable by all electricity retailers and direct customers of electric energy from the grid.

Appropriate concessions should be provided to low-income households to offset the impact of any energy price rises resulting from FiTs.

Independent reporting on the operation of the FiT scheme is required in the interests of transparency and accountability. The report must include:

- Details of total renewable energy produced
- Total payments made under the feed-in-tariff rate scheme
- Total receipts from the feed-in tariff levy.
- Statements explaining how the feed-in-tariff rates and levy rates are calculated

In summary, climate change is one of the greatest threats facing humanity. Effective feed-in tariff policy measures and legislation will deliver a major expansion of renewable energy leading to real and immediate reductions in greenhouse gas pollution.

The urgency of climate change requires serious and immediate action to build a new post-carbon world. Lighter Footprints believes that this Bill will take a significant step in that direction.