



## **A Good FiT: Designing an effective and fair Feed-in Tariff Scheme for NSW**

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## **The Public Interest Advocacy Centre**

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit law and policy organisation that works for a fair just and democratic society, empowering citizens, consumers and communities by taking strategic action on public interest issues.

PIAC identifies public interest issues and, where possible and appropriate, works co-operatively with other organisations to advocate for individuals and groups affected. PIAC seeks to:

- Expose and redress unjust or unsafe practices, deficient laws or policies;
- promote accountable, transparent and responsive government;
- encourage, influence and inform public debate on issues affecting legal and democratic rights;
- promote the development of law that reflects the public interest;
- develop and assist community organisations with a public interest focus to pursue the interests of the communities they represent;
- develop models to respond to unmet legal need; and
- maintain an effective and sustainable organisation.

Established in July 1982 as an initiative of the Law Foundation of New South Wales, with support from the NSW Legal Aid Commission, PIAC was the first, and remains the only broadly based public interest legal centre in Australia. Financial support for PIAC comes primarily from the NSW Public Purpose Fund and the Commonwealth and State Community Legal Services Program. PIAC also receives funding from the NSW Government Department of Water and Energy for its work on utilities, and from Allens Arthur Robinson for its Indigenous Justice Program. PIAC also generates income from project and case grants, seminars, consultancy fees, donations and recovery of costs in legal actions.

## **Energy + Water Consumer Advocacy Program**

This Program was established at PIAC as the Utilities Consumers' Advocacy Program in 1998 with NSW Government funding. The aim of the Program is to develop policy and advocate in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives policy input to the Program from a community-based reference group whose members include:

- Council of Social Service of NSW (NCOSS)
- Combined Pensioners and Superannuants Association of NSW (CPSA)
- Park and Village Service
- Ethnic Communities Council NSW
- Indigenous Australian Consumers
- Rural and remote consumer
- Institute of Sustainable Futures, University of Technology

# 1. Introduction

PIAC welcomes the opportunity to comment on the proposed NSW Feed-in Tariff (FiT) scheme. The FiT will see households paid for the electricity they produce and feed-in to the electricity grid.

The NSW FiT scheme will complement other measures in reducing the impact of climate change, most notably the Commonwealth Government's Carbon Pollution Reduction Scheme (CPRS) and Renewable Energy Target (RET). The interaction of the NSW FiT scheme with these Commonwealth programs, and the role of the FiT scheme as a subsidy after the programs have matured, is explored below.

The NSW FiT scheme will also reduce the need for electricity network augmentation, therefore avoiding added expense to electricity consumers.

Low-income households will be disproportionately affected by climate change<sup>1</sup>. It is for this reason that, once equity concerns have been addressed, PIAC supports the introduction of an effective FiT scheme. However, concerns are held about both potential impact of the FiT scheme on energy affordability and the NSW Government objective handed to the NSW Solar FiT Taskforce.

Particular concern is held for the affordability of energy for low-income and renting households not participating in the FiT scheme. The cross-subsidy nature of FiT schemes and the inappropriate objectives of the NSW FiT scheme are also addressed below.

This submission responds to the reference questions posed by the NSW Solar FiT Taskforce. Consistent with PIAC's focus, responses to these questions are framed from the perspective of low-income and other household electricity consumers.

## 2. The NSW Government objective in establishing the NSW Feed-in Tariff scheme

The NSW Government's objective in establishing the NSW FiT scheme is to:

- Encourage and support people who want to act on climate change by generating renewable energy locally
- Build the State's green collar jobs sector, by helping solar technology compete with non-renewable energy sources
- Expand the visibility of renewable energy technology to help motivate the whole community in responding to climate change<sup>2</sup>

The NSW Solar FiT Taskforce Terms of Reference state that the Taskforce will, "*Guided by the Government's objectives, investigate and cost options for the establishment of a feed-in-tariff in NSW*"<sup>3</sup>. For this reason it is important that the chosen objectives are the right ones.

Whilst acknowledging that the setting of the objectives is beyond the scope of the Taskforce, PIAC would like the following concerns noted:

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<sup>1</sup> Garnaut, R. *Garnaut Climate Change Review Draft Report*, (2008)

<<http://www.garnautreport.org.au/draft.htm#DraftReport>> 235

<sup>2</sup> Department of Energy and Water *Terms of Reference*, (2008)

<[http://www.dwe.nsw.gov.au/energy/sustain\\_renew\\_fit\\_terms.shtml](http://www.dwe.nsw.gov.au/energy/sustain_renew_fit_terms.shtml)> at 13 January 2009

<sup>3</sup> Department of Energy and Water *Terms of Reference*, (2008)

<[http://www.dwe.nsw.gov.au/energy/sustain\\_renew\\_fit\\_terms.shtml](http://www.dwe.nsw.gov.au/energy/sustain_renew_fit_terms.shtml)> at 13 January 2009

- The objectives make no reference to reducing carbon emissions.
- There is no mention of achieving carbon reductions using the most efficient technology or process, and with at the least possible impact on NSW households.

Reading as PR objectives rather than energy policy objectives, there is a chance that the Government's objectives will lead the NSW Solar FiT Taskforce to make poor energy policy decisions. The objectives as they stand will potentially lead to inefficient, expensive and environmentally irresponsible outcomes.

## 3. Consultation questions

### 3.1 What factors should be considered in setting a tariff rate?

The base rate for the feed-in tariff should reflect the wholesale market value of electricity fed into the grid. That is, households producing electricity should be paid the market price of that electricity. As retailers will be on-selling this electricity, they must contribute the market price of this electricity towards the cost of the NSW FiT scheme.

Additionally, in order to fulfil the objective of encouraging the generation of electricity locally, the tariff rate should provide a subsidy to assist households in the recovery of solar PV purchase and installation costs. This subsidy should be set at a rate sufficient to encourage participation in the scheme.

There are three factors that need to be balanced when setting the tariff rate:

- the overall size of the subsidy to be allocated by the scheme, which should be guided by the purchase cost of solar PV systems and encourage the installation of larger and more energy efficient solar PV systems
- the pay-off period, which should encourage participation in the scheme
- the need to balance affordability concerns for those unable to take part in the FiT (see part 5)

### 3.2 Should the tariff be set for gross or net?

PIAC supports the introduction of a gross tariff.

For the FiT scheme to be effective as a subsidy justified on environmental grounds, the scheme must be designed to encourage maximum participation. Providing certainty of return on the upfront investment in solar PV units will encourage participation. This certainty is best achieved through a gross metered tariff.

Secondly, the tariff must ensure that households that use energy during the day, the same time that solar PV units generate electricity, are included in the scheme. Households that include shift workers, residents who are retired, stay-at-home parents and carers, those otherwise not in the labour market and the underemployed are not likely to receive a return from a net FiT. It is unlikely that these households will produce more electricity than they use during daylight hours, therefore there would be no net export of electricity. These households would therefore be excluded from the scheme under a net tariff.

### 3.3 Should the tariff be based on a fixed rate or a variable rate consistent with time-of-use pricing for consumption?

A time-of-use tariff changes the price signal to reduce usage of the electricity grid at times of peak utilisation. A significant advantage of embedded generation, such as rooftop solar PV generation, is the reduced demand on energy networks at these peak times. This is particularly the case in NSW and other northern states, where peaks correspond with the hottest and sunniest time of day, which also generate more electricity through solar PV systems.

A variable FiT that mirrored time-of-use pricing would cancel the change in price signal and therefore reduce the incentive to change behaviour during peak times. At times when time-of-use pricing made electricity more expensive, the variable FiT tariff would start to pay for the extra expense with no action from the consumer required. The consumer would see little to no change in electricity costs. This effect is particularly strong under a gross tariff.

In order to maintain the price signal of a time-of-use tariff, PIAC recommends the FiT be fixed.

There is a further question relevant to time-of-use pricing, and that is the contribution made by retailers to the costs of the FiT scheme. Under time-of-use pricing, the market price of electricity entering the grid is higher in peak times. It would therefore be appropriate for retailer contributions to the cost of the FiT scheme to reflect time-of-use pricing.

### **3.4 Should the tariff be paid to solar PV owners by the electricity distributor or the electricity retailer?**

An effective FiT scheme encourages maximum participation. The decision on who pays the solar PV owner should be based on what is administratively easiest for the owner. This is most likely to be a credit for power generated on electricity retail bills.

The Taskforce should also consider billing administration that will allow property investors to be included in the scheme. For example, the possibility of split billing in a rental situation, with the owner receiving remuneration for electricity generated from a solar PV system and the occupier responsible for distribution and retail charges.

### **3.5 How long should the Government maintain the FiT and should the rate be fixed for the entire life of the program or varied over time?**

The FiT should be indefinite. If a household feeds electricity into the electricity grid, and retailers resell that electricity to other consumers, the household should be paid a fair price. However, the subsidy component of the FiT should only be in place until more appropriate climate change programs are adequately functional.

As at (3.1) above, the pay off period for solar PV purchase and installation must balance the size of the overall subsidy with equity for non-participants. PIAC supports a degression in the rate of subsidy available.

A decline in the FiT over time would encourage early participation in the scheme and reflect the cost efficiencies of new technologies. The declining FiT should dove-tail with the scaled introduction of the Federal Government's CPRS and RET.

When fully operational the RET will provide clean energy on a more efficient scale than small solar PV units supported by a feed-in tariff. The CPRS will provide a price incentive for the uptake of household solar PV. PIAC maintains that a FiT scheme should be considered complimentary to the CPRS and RET until these schemes are mature enough to provide the most efficient method of reducing carbon emissions.

### **3.6 What eligibility criteria should exist for the FiT?**

PIAC recommends that the FiT subsidy should be available on distributed generation systems up to 10 kw, and the market value of electricity should be paid on systems in excess of this threshold. This cap would limit the cost of the program on households not receiving a FiT. The FiT should be expanded to include renewable energy technologies other than solar PV in order to find the lowest cost production of renewable distributed generation.

## 4. Interaction with other climate change policies

In 2010 the Commonwealth Government will introduce the Carbon Pollution Reduction Scheme, a market based scheme designed to reduce Australia's overall carbon emissions in the lowest cost way. The Renewable Energy Target will be expanded at this time.

Although the CPRS will take a number of years to mature (expected 2020), the RET scheme will encourage embedded renewable energy technology in the meantime. However, this scheme will also take a number of years to sufficiently encourage the large-scale uptake of distributed generation. It is in this space that the FiT will be most effective.

As such, the NSW FiT scheme should be considered complementary to the CPRS. The implication of this is that the FiT should be scaled back as the CPRS is progressively introduced. When the CPRS is sufficiently operational to encourage the move away from new carbon intensive energy generation, the subsidy portion of the FiT should finish. However, it is important that the base rate of the FiT, reflecting the market value of the electricity, is maintained. It may at this time be relevant to introduce a subsidy reflecting the network augmentation avoided through ongoing development of embedded generation.

Importantly, the CPRS will encourage renewable electricity production at the lowest cost. By that time, the CPRS may encourage new technologies ahead of roof-top solar PV.

This submission has been written on the premise that the FiT will include a subsidy. This has influenced the answers in part 3, on the design of the scheme. As PIAC is suggesting that the subsidy should be removed over time, and the base rate of the FiT to remain, there will be a need to re-assess the tariff structure. For example, the effectiveness of a gross tariff over a net tariff may need to be explored under the new tariff levels.

## 5. Feed-in tariff design and energy equity

NSW Solar FiT Taskforce Terms of Reference state that the Taskforce will 'Identify the potential cost impact on NSW electricity consumers of a feed-in tariff'. PIAC is concerned about the cross-subsidy nature of a feed-in tariff scheme and the impact of this on vulnerable households.

It is standard to spread the cost of a FiT subsidy across all electricity consumers in the relevant jurisdiction. This design creates a wealth transfer from those outside the scheme to those participating in the scheme. This is of concern when the transfer is from low-income households excluded not through choice but through a lack of financial ability to participate in the scheme. Low-income households spend a higher percentage of their income on energy than other households<sup>4</sup>. Household electricity costs are already rising<sup>5</sup> and are set to rise further due to peak network demand, increased network reliability requirements<sup>6</sup> and climate policies. The Government must be careful not to further compound the challenges of energy affordability.

Young people and those on low-incomes are more likely to be in rental housing<sup>7</sup>. These households are likely to be renting not as a matter of choice, but through a lack of access to homeownership. Renting households will be excluded from the NSW FiT scheme.

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<sup>4</sup> ACOSS, ACF and Choice, *Energy and Equity, Preparing households for climate change: efficiency, equity, immediacy*. (2008) <<http://www.acoss.org.au/Publications.aspx?displayID=1&subjectID=11>> 6

<sup>5</sup> Australian Energy Regulator *State of the Market 2008* (2008) <<http://www.aer.gov.au/content/index.phtml/itemId/723386>> Figure 6.11 189

<sup>6</sup> Australian Energy Regulator *NSW Draft Distribution Determination 2009-10 to 2013-14* (2008) <<http://www.aer.gov.au/content/index.phtml/itemId/723822>> xii

<sup>7</sup> Australian Bureau of Statistics *Australian Social Trends – Renter Households*, (2008) Cat. no. 4102.0, 3

FiT subsidies in all jurisdictions are funded through a wealth transfer from those outside of the scheme to those included in the scheme. PIAC does not support a FiT scheme that imposes such a regressive and unfair wealth transfer.

PIAC has identified three ways that a FiT for NSW could be designed to exclude this wealth transfer.

Firstly, the Government could choose to consider the affordability concerns that result from the FiT scheme alongside other energy affordability policies. Particularly, the Unsworth report into privatisation of NSW energy assets recommended that energy rebates be expanded to include all Commonwealth Health Care Card holders<sup>8</sup>. Following this advice, and lifting the rebate amount to \$130 per annum, indexed to CPI, as previously announced by the Government, would suitably address these concerns. PIAC recommends this as the most appropriate response.

An alternative response is for the cost of the NSW FiT be met from Government revenue, instead of being spread across electricity consumers. It may be relevant for this to be funded from the Commonwealth Government's Climate Pollution Reduction Scheme, to which the FiT should be considered complementary.

The third option is for low-income and large households to be exempt from the FiT cost recovery. Whilst this is administratively more complex, it would prove to be of lower expense to the Government.

## 6. Conclusion

PIAC supports the introduction of an effective and equitable Feed-in Tariff as an interim measure until the Commonwealth Government Carbon Pollution Reduction Scheme and Renewable Energy Targets have matured, expected to be around 2020.

The program must be inclusive enough to encourage broad participation in the scheme. As outlined above, this can be achieved by encouraging households with different electricity usage patterns into the scheme, and by including rental-housing stock in the scheme.

A Feed-in Tariff can only be equitable if the design of the scheme directly addresses the concerns of low-income and vulnerable households. As the discussion above outlines, this can be achieved either through rebates to low-income households or through reconsidering the way the Feed-in Tariff is funded.

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<sup>8</sup> Unsworth Consultative Reference Committee *Report Provided to the NSW Government* (2008) 9