



public interest
ADVOCACY CENTRE LTD

FiT and Fair? Submission to the Review of the Solar Bonus Scheme

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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; and
- 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 (then) 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 Industry and Investment NSW for its work on energy and water, 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 review of the NSW Solar Bonus Scheme. The Solar Bonus Scheme currently offers electricity customers a Feed-in Tariff (FiT) of 60 cents per kilowatt hour (kWh) for renewable energy generated by a complying generator. The scheme offers a gross FiT, meaning that all renewable energy generated by an eligible generator attracts the tariff.

Under the *Electricity Supply Act 1995*, the Solar Bonus Scheme (the scheme) must be reviewed when the total generating capacity of all complying generators reaches 50 megawatts. As this milestone has now been reached, this review is charged with 'determining whether policy objectives of the scheme remain valid and whether the terms of the Act remain appropriate for securing those aims'.¹

PIAC's previous submission on feed-in tariffs, *A Good FiT*, noted that the loose nature of the objectives housed in the *Electricity Supply Act* provided an uncertain platform from which to develop substantive energy policy. With the benefit of further information, PIAC retains this view. In writing this submission, PIAC finds that important issues have come to light that cannot be adequately dealt with by reviewing the scheme against the objectives as they now stand.

To overcome this difficulty, PIAC has chosen to address more substantive issues arising from the initial phase of the scheme. This submission focuses on equity, access, value and consumer issues. The framework for evaluating the policy against some measureable targets is also discussed.

2. Access

Objective (a) of the Solar Bonus Scheme is 'to encourage and support persons who want to generate renewable energy as a response to climate change'.² Climate change is an issue that affects people of all circumstances. It is therefore reasonable to assume that a broad range of people want to participate in solutions—not just those who can afford to do so.

As it stands, the scheme advantages homeowners who have the financial resources to invest in solar panel systems. The Clean Energy Council estimates the cost of a 1.5kW solar photovoltaic (PV) system at between \$12,100–\$13,475.³ Under the Solar Credits scheme, a household in Sydney could expect credits to the value of around \$6,000 on this purchase price leaving over \$6,000 in out of pocket expenses.⁴ Upfront costs of this magnitude provide a huge barrier to low-income households accessing the scheme.

PIAC recognises that there are a number of deals that offer solar PV systems at low or zero upfront costs. However, PIAC asserts that many of these offers produce outcomes that are less than positive for electricity consumers and should therefore be scrutinised thoroughly before any contract is entered into.

¹ *Electricity Supply Act 1995* (NSW) s 195 (2).

² *Ibid* s 15A (1)(a).

³ Clean Energy Council, *Consumer guide to buying household solar panels (photovoltaic panels)* (2010) [4] <<http://www.cleanenergycouncil.org.au/cec/resourcecentre/Consumer-Info/solarPV-guide.html>> at 12 September 2010.

⁴ *Ibid* 8.

People who are renting are not specifically blocked from accessing the scheme. However, as it is the tenant that benefits from the feed-in tariff, it is highly unlikely that a landlord would invest in an eligible generator. Even if a tenant was willing to pay for a generator to be installed, relatively short term tenancies that are the norm in Australia would make such an investment prohibitively risky.

PIAC contends that meeting objective (a) in a socially just manner requires the development of mechanisms to enable low-income electricity consumers, including those who are renting, to have access to the scheme. The legislation compels the Auditor General to review the scheme in 2011.⁵ PIAC recommends that this review include an investigation of the socio-economic status and housing tenure of persons taking up the scheme. The data would also provide an evidence base capable of underpinning strategies to broaden the scheme's accessibility.

PIAC recommends

1. *That the Auditor General's investigates the socio-economic status and housing tenure of persons taking up the Solar Bonus Scheme.*
2. *That the NSW Government develops mechanisms to enable low-income earners and tenants to join the Solar Bonus Scheme.*

3. Equity

PIAC has continuing concerns about the equity of the NSW Solar Bonus Scheme because of the way the scheme is being funded. At present the Feed in Tariff (FiT) is funded through a levy on all electricity customers in NSW. This funding structure produces a transfer of wealth from those outside of the scheme to those participating in it. As PIAC stated in a previous submission:

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.⁶

Initial cost projections outlined that the average annual cost of a scheme with a 60-cent per kWh FiT would be between \$1.90 and \$7.47 per household per year.⁷ The higher figure was based on the assumption that a high take up rate would be 72,900 participants over the seven-year life of the scheme.⁸ The Minister's media release announcing the current review noted that almost 30,000 households are already feeding power into the grid.⁹

Although some homes were already in possession of eligible generators, it is reasonable to posit that the vast majority of the 30,000 households have joined since the current scheme's inception on the 1 January 2010.

⁵ *Electricity Supply Act 1995*, above n 1, s 194.

⁶ Public Interest Advocacy Centre, *A Good FiT: Designing an effective and fair Feed-in Tariff Scheme for NSW* (2009) [5] <http://www.piac.asn.au/sites/default/files/publications/extras/A_Good_FiT-Designing_an_effective_and_fair_Feed-in_Tariff_Scheme_for_NSW.pdf> at 12 September 2010.

⁷ NSW Government Taskforce, NSW Government, *NSW Solar Feed-in Tariff Report to Ministers*, (2009) 30.

⁸ *Ibid.*

⁹ Paul Lynch, 'Review for Solar Bonus Scheme' (Media release, 24 August 2010) <http://www.industry.nsw.gov.au/___data/assets/pdf_file/0010/349741/review-for-solar-bonus-scheme.pdf> at 24 August 2010.

Therefore in eight months, the scheme has attracted approximately 41% of the participants it was projected to attract over seven years under a high participation rate scenario.

Using the information available, PIAC conservatively estimates that the cost of energy generated under the scheme in the first year would raise electricity customers' bills by approximately \$14 per annum.¹⁰ This figure is exclusive of administration and implementation costs that will also be passed onto consumers.

Some may argue that an additional \$14 (plus administration and implementation costs) per year is not a huge sum. However, this cost is in addition to the price rises announced by the Independent Pricing and Regulatory Tribunal (IPART) this year. The financial impact of the FiT would also wipe out the \$14 increase to the Energy Rebate that became available on 1 July 2010, to assist low-income households cope with rising energy prices.¹¹ PIAC recommends that the NSW Government should permanently index the Energy Rebate to the energy price index in order to ensure that electricity prices rises do not erode this valuable assistance measure.

PIAC acknowledges the value of involving people in generating renewable energy as a response to climate change. However, with strong uptake likely to place upward pressure on electricity prices for all consumers, PIAC is concerned about the impact on consumers outside the scheme who have no means to recoup losses realised by higher tariffs.

When the Federal Government sought to introduce the Carbon Pollution Reduction Scheme (CPRS) there was an undertaking to shield low and middle-income households from price rises that flowed from the scheme. Tax offsets and government payments were planned to assist low-income households.¹² PIAC takes the view that a mechanism should exist to shield NSW energy customers on fixed and low-incomes from the electricity price rises stemming from the Solar Bonus Scheme and any future schemes designed to reduce carbon emissions.

In this year's Budget Estimates the Minister for Energy, the Hon Paul Lynch, was asked what the costs of the scheme were to date based on current uptake. The Minister's reply was:

That is something that will be dealt with in the review that we have announced.¹³

PIAC welcomes the Minister's acknowledgement that the cost of the Solar Bonus Scheme to NSW households will be investigated in the current review. EnergyAustralia has recently made a submission to the Australian Energy Regulator to pass through administration and implementation costs associated with the Solar Bonus Scheme.¹⁴ For this reason, PIAC asserts that the review of costs should not be limited to the financial impact of

¹⁰ Please see appendix for calculations.

¹¹ John Robertson MLC, 'One Million Households to Receive Energy Rebate' (Media Release, 18 March 2010) <http://www.industry.nsw.gov.au/__data/assets/pdf_file/0018/325035/one-million-households-to-receive-energy-rebate.pdf> at 13 August 2010.

¹² Australian Government, Department of Climate Change and Energy Efficiency, *Carbon Pollution Reduction Scheme: Households*, 2010 <<http://www.climatechange.gov.au/en/government/initiatives/cprs/who-affected/households.aspx>> at 16 September 2010.

¹³ Evidence to General Purpose Standing Committee No. 5, Parliament of New South Wales, Sydney, 16 September 2010, 25 (Paul Lynch).

¹⁴ Energy Australia, *Pass through application: NSW Solar Bonus Scheme* (2010) <<http://www.aer.gov.au/content/item.phtml?itemId=739766&nodeId=9c80159687f5bd2361d5cfce5780f0c&f=n=EnergyAustralia%20application.pdf>> at 3 September 2010.

the feed-in tariff alone, but should also include all costs associated with the implementation, administration and continuation of the scheme.

Moreover, PIAC contends that regular and transparent reviews of the costs of the scheme are necessary in establishing the level of upward pressure the scheme places on energy prices. This information will be particularly relevant in designing policy responses to ensure greater equity under the scheme.

PIAC recommends

3. *That the NSW Government permanently indexes the Energy Rebate to the Energy Price Index so price rises stemming from the Solar Bonus Scheme will be reflected in the Rebate.*
4. *That the NSW Government develops additional measures to assist low-income households to cope with electricity price rises stemming from the Solar Bonus Scheme.*
5. *That, as per the commitment made by Minister Lynch, the review of the Solar Bonus Scheme investigates all costs associated with the Solar Bonus Scheme and their impact on NSW households.*
6. *That the NSW Government includes, in all reviews of the scheme, a cost burden/access ratio to assess equity under the scheme.*

4. Efficiency and value for money

Two of the three objectives contained in the legislation refer to responding to climate change. However, none of the scheme's objectives relate to measuring the impact of the scheme in terms of reducing carbon emissions. PIAC's view is that any prudent climate change policy should seek to quantify reduction in carbon emissions.

An assessment of the scheme's impact on carbon emissions coupled with a review of costs, would enable a thorough cost benefit analysis to be undertaken. Given that NSW electricity customers are bearing the costs of the scheme, PIAC contends that the scheme should be evaluated to establish, not just the costs, but whether the scheme offers value for money.

Current evidence indicates that Feed-In Tariff schemes utilising Solar PV systems do not represent the most cost effective means of producing renewable energy and reducing carbon emissions. The Feed-in Tariff scheme in Germany is well known, yet researchers investigating the economic impacts of promoting renewable energies in Germany note that '[solar] PV is among the most expensive greenhouse gas abatement options'.¹⁵ More specifically, Australian research by McKinsey and Company demonstrates that other methods of generating renewable energy, such as on-shore wind and geothermal technologies, offer options for reducing greenhouse gases that are cheaper for consumers than solar PV.¹⁶ Further, energy efficiency options such as

¹⁵ Manuel Frondel et al, 'Economic Impacts from the Promotion of Renewable Energy Technologies: The German Experience' (2009) *RUHR Economic Papers*. 13.

¹⁶ McKinsey and Company, 'An Australian Cost Curve for Greenhouse Gas Reduction', (2008) 14.

residential and water heating efficiency offer opportunities to respond to climate change that come at zero cost to the general consumer.¹⁷

PIAC is concerned that the customer funded Solar Bonus Scheme has not had the benefit of rigorous assessment to establish efficiency and value that best practice procedure requires. PIAC does not have the expertise to comment on the fostering of jobs in the renewable energy sector as discussed in objective (b). However, PIAC asserts that objective (a) and (c) are so vague that it would be simple to meet these objectives without establishing either value or efficiency. To put it more simply, the scheme could be responsible for generating renewable energy at vast costs to respond to climate change, in a way that no one is going to quantify and still meet objective (a). One could also easily establish that the scheme meets objective (c)- 'to increase public exposure to renewable energy technology in order to encourage the whole community to respond to climate change'. People who are renting are exposed to renewable energy technology via the proliferation of solar panels in their neighbourhoods, even though it would be extremely difficult for them to access the scheme. While this sight may well encourage them to consider responding to climate change, the scheme does little to empower them to do so.

PIAC is forced to ask, should all electricity customers pay increased charges to increase exposure to solar energy, when there is evidence that cheaper actions offer more effective measures to reduce carbon emissions? This is really a rhetorical question because none of the objectives of the scheme are aimed at reducing carbon emissions. PIAC strongly contends that without any target to reduce carbon emissions, test the cost effectiveness and efficiency, further reviews will easily be able to establish that the scheme meets its currently vague objectives. In PIAC's view this is not enough to justify a levy on an essential service that all NSW electricity customers must pay, regardless of income or situation.

PIAC recommends

- 7. That the objectives of the Solar Bonus Scheme be broadened to include a quantifiable goal to reduce carbon emissions.***

- 8. That the Auditor General's review of the Solar Bonus Scheme include a comparative analysis of energy related strategies to reduce carbon emissions to ascertain the value of pursuing a Feed-In Tariff in lieu of more cost effective measures.***

- 9. That the objectives of the Solar Bonus Scheme should encourage the generation of cost efficient methods of generating renewable energy so as to limit the financial liability of the scheme.***

5. Consumer issues and dispute resolution

Renewable energy technology and feed-in tariffs are relatively new to NSW. PIAC contends that there is a need to provide more information to assist consumers to make informed decisions about joining the scheme.

Joining the scheme is complicated and can involve multiple service providers, an understanding of meter types, Renewable Energy Certificates (REC), Solar Credits, eligible generators, safety inspections and implications of altering supply agreements with energy retailers. The Clean Energy Council has produced a useful consumer

¹⁷ Ibid.

guide¹⁸ that includes an installation checklist, information and questions to ask your electricity retailer. While useful, this guide is not specific to NSW. PIAC asserts that a NSW specific guide including step-by-step information could greatly assist consumers to navigate the process of joining the scheme.

Guidance regarding approximate timeframes for each step of the process would be useful in setting reasonable expectations of service providers involved in installation, inspection and connection. Similarly, consumers would benefit from their energy retailer providing information about how feed-in tariffs may impact on their energy bills. This information should take into consideration any loss or change to off-peak hot water rates.

Given the complexity of the process, PIAC asserts that a clear pathway should exist for consumers to resolve any disputes arising from activities related to the Solar Bonus Scheme. Two key organisations, the Energy & Water Ombudsman NSW (EWON) and Fair Trading NSW are dealing with issues arising from the scheme. In addition, the Clean Energy Council deals with complaints regarding installation and equipment compliance.¹⁹ PIAC asserts that these three organisations should be consulted to ascertain whether complaints are emerging that do not fall into the jurisdiction of any of the three organisations; and whether disputes involving the Solar Bonus Scheme would be best dealt with via one organisation. PIAC takes the view that it is extremely important to gather all data on issues arising from the scheme. This information would assist decision makers to proactively deal with any negative consumer outcomes generated by the scheme.

PIAC recommends

- 10. That Industry & Investment NSW work with the Energy & Water Ombudsman NSW, Fair Trading NSW and the Clean Energy Council to develop a streamlined dispute resolution process for the Solar Bonus scheme.***

- 11. That data related to disputes arising from the Solar Bonus Scheme be collected, reported on and used to reduce the incidence of negative consumer outcomes arising from the scheme.***

12. Conclusion

In closing, PIAC would like to affirm support for renewable energy and climate change initiatives. PIAC takes the view that policy initiatives that seek to increase the uptake of renewable energy and empower people to respond to climate change need to be based on a solid evidence base. That evidence should show that all options for promoting renewable energy and reducing carbon emissions have been investigated to achieve a scheme that offers value to electricity consumers and a means to reach some measurable targets for reducing greenhouse emissions.

The design of the Solar Bonus Scheme has spread the costs across all NSW electricity consumers leaving many vulnerable households to pay increasing electricity prices to fund a scheme that is inaccessible to them. Facilitating more equitable access to the Solar Bonus Scheme requires urgent attention.

Vague objectives render it extremely difficult to assess the Solar Bonus Scheme's ability to provide valuable reductions in carbon emissions. PIAC submits that work is now required to ensure the scheme provides measurable outcomes that represent real value to NSW electricity consumers. Part of this work must include

¹⁸ Clean Energy Council, above n 3.

¹⁹ Clean Energy Council, above n 3, 23.

mechanisms to ensure that electricity, as an essential service, is not made less affordable to vulnerable households.

Appendix

Estimating costs of the Solar Bonus Scheme.

Approximate Number of Households = 30,000²⁰

PV Output = 2,493 kWh/yr²¹

Cost per kWh= \$0.60

This calculation is conservative in using only the number of households that were noted at the time the review was announced.

Estimated Cost of the Energy attracting a Feed-In Tariff for Year One @ 60 cent per kWh

Households x Energy x Cost

| Households | PV Output kWh/year | Cost/kWh \$ | Total \$ |
|------------|-----------------------|----------------|-------------|
| 30,000 | 2493 | 0.6 | 44,874,000 |

Estimated Cost of the Energy attracting a Feed-In Tariff for Year One @ 60 cent per kWh- Averaged over all electricity customers in NSW

Total \$ /Electricity Customers in NSW²²

| Total \$ | Electricity Customers in NSW | Cost per Household |
|-------------|------------------------------|--------------------|
| 44,874,000 | 3,175,229 | \$14.13 |

Please note: this is an estimate only using information that is publicly available.

²⁰ Paul Lynch, above n 9.

²¹ NSW Taskforce, above n 7, 52.

²² Ibid 54.