



**Solar feed-in tariffs in NSW: Setting a fair price
for prosumers**

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Introduction

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 (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 NSW Trade and Investment for its work on energy and water, and from Allens 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 and Water Consumers' Advocacy Program

The Energy + Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in New South Wales. 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;
- Ethnic Communities Council NSW;
- Salvation Army;
- St Vincent de Paul Society;
- Physical Disability Council NSW; and
- Tenants Union.

Reflecting the real value of household solar PV in NSW

PIAC's comments in this submission will cover two broad issues. First, the issue that the wholesale value method is insufficient to capture the key components and benefits of solar-feed in tariffs. Second, that NSW is the only Australian state to have a deregulated feed-in tariff payment system.

PIAC recognises that IPART is prevented by its terms of reference from considering the introduction of mandatory feed-in tariffs. Nevertheless, PIAC reiterates the need for IPART to assess whether allowing retailers, and especially retailers who also own generation assets, to set feed-in tariffs is in fact conducive to efficiency and competitiveness.

PIAC is concerned that the basis for the calculation of the benchmark range does not reflect the real value of the electricity that PV owners feed into the grid. PIAC supports the payment of a fair price to the consumers who are generating electricity that is fed back into the National Energy Market (NEM). The current situation is one of both significant inequity and inefficiency.

PIAC has previously recommended that IPART develop a best practice method for setting feed-in tariffs in NSW based on a full and fair approach that takes into account externalities, the planning value and the broader societal costs and values. The externalities of health, social and environmental cost not accounted for in the market price for electricity or fuel are nevertheless borne by the community, especially low income and vulnerable Australians.

Our previous submission to IPART discussed both the direct benefits of household solar for the NEM and the broader societal and environmental benefits, evaluating them against the National Electricity Objective (NEO). Briefly, rooftop PV allows prosumers – individual consumers who generate electricity – to participate in electricity markets, thus creating greater competition in energy markets. Solar PV also encourages households and small generators to focus on the efficiency of their operations, especially if they are on a net metering tariff. It can also contribute to reducing peak pricing in summer and enable the more efficient use of networks, as well as reducing emissions intensity. More broadly, there is clear evidence that renewable energy lowers wholesale prices as a result of the merit order effect and contributes to both job creation and environmental and health benefits.

The payment of a fair price is a necessary recognition that the rise of household solar installations and prosumers supports the National Electricity Objective (NEO). In line with our previous submission, PIAC insists that the wholesale value method alone is insufficient; at a minimum, the calculation of the benchmark range should include avoided transmission and distribution losses, avoided NEM fees, and avoided network investment. It would be ideal if IPART went further and also included the value of externalities, the planning value and the broader societal costs and values.

PIAC is also of the view that along with a more sophisticated method of calculation, feed-in tariffs should be regulated. The reason that feed-in tariffs need to be regulated is to ensure that investment in distributed generation is directed efficiently to maximise the system-wide benefits and to ensure that customers have access to an efficient and fair price for exported electricity.

If setting feed-in tariffs is left solely to electricity retailers, many of which also own generation assets, feed-in tariffs will not incorporate the efficiency of being time-varying and location-specific payments. Australia's electricity industry is highly vertically integrated and all major electricity retailers own generation assets. Vertically integrated generator/retailers (also known as 'gentailers') gain a significant financial benefit at times of critical peak pricing. It follows that it would not be in the financial interest of a gentailer to enable distributed generators to compete to supply electricity at critical peak periods. There is an important role for regulators in opening up the critical peak electricity supply market to competition by distributed generators.

In this context, there is a clear equity deficit with benchmark calculations only incorporating the wholesale value of electricity without being location-specific, time-varying or including a critical peak payment. Currently, retailers are making a profit from selling solar generated electricity from one household (which they generally buy for approximately 6c/kWh) to a neighbouring household at full retail price.

It is important to remember the basic principles that underlie the rationale for the feed-in tariff; that is, that the primary aim of the feed-in tariff is to encourage the adoption of renewable energy and to promote the diversification and decentralisation of electricity production. Feed-in tariffs are a means to a more efficient ends and a fair basis for them is necessary if the contemplated benefits are to be reaped. These benefits were previously acknowledged and subsidised feed-in tariffs introduced as an industry development mechanism to support PV installations. While PIAC does not advocate for a return to such subsidies, if this mechanism is not used to its full potential through a fair price that is appropriately benefit-reflective, the result is that households are effectively subsidising the private sector.

The reason for a fair benefit-reflective price is so that effective competition is possible in the system. With fair and efficient pricing, there will be an incentive for investment where it is most economically beneficial. The potential benefits of distributed generation are currently being realised to only a limited extent. Aligning electricity prices and feed-in tariffs with the costs and benefits that customers generate will enable greater economic benefits from distributed generation, and this will ultimately reduce costs for all customers and across the entire economy.

IPART has made its determination on the 25th percentile wholesale market values on PV exports, as opposed to the median wholesale market values (stating that the unusually high PV export values in 2009-10 are unlikely in 2015-16). IPART's overall basis for reducing the rates is a reduction in wholesale energy prices. Of course, the reduction in wholesale prices can at least in part be attributed to a greater number of solar power systems in NSW. This outcome, which effectively punishes prosumers, demonstrates the narrow nature of IPART's current approach.

IPART also includes some detail of retailers' feed-in tariff offers in its report. However, it does not report on the level of cross-subsidy that NSW households are providing to electricity retailers. PIAC strongly recommends that IPART monitor and report on consumer acceptance of voluntary feed-in tariff offers and the level of cross-subsidy that NSW households are providing to electricity retailers.

IPART considers that the availability and rate of solar feed-in tariffs are likely to be secondary considerations for PV customers with net meters; the most important consideration will be the

retail price of electricity. It also references the uptake of battery storage which will make it possible for PV customers to use more of the electricity they generate to meet their own needs. IPART notes in its report that electricity contracts with higher feed-in tariffs do not necessarily deliver a better value to solar PV customers, stating that in some cases PV customers may be better off taking up contracts that do not offer any voluntary feed-in tariffs because some retailers are offering contracts with a bigger discount on supply and/or usage instead of high voluntary feed in tariffs.

While feed-in tariffs are certainly not the sole consideration when it comes to deciding which retailer to contract with or where the savings lie, it is undesirable to use this as a circular argument to not support a fair and reasonable feed-in tariff system. PIAC does not agree that the uptake of battery power will make feed-in tariffs less relevant. Certainly, the uptake of battery power will provide customers with the option of using home storage to service their own energy needs. However, home energy management systems with storage will not only enable households to shift demand away from peak times, they will also enable households to export additional power at times when the system most needs it. There is economic benefit to be gained from such distributed generation, but there will only be an incentive to do so if feed-in tariff structures provide the financial incentive.

Therefore, these technologies should not be excluded from eligibility for a feed-in tariff payment and feed-in tariffs should be fair and efficient, encouraging demand-side management and distributed generation at the times and in the places where it is of most benefit.

IPART should recognise that aligning incentives with costs and benefits will encourage efficient investment and reduce electricity costs across the board. Without a well-structured feed-in tariff, more is likely to be spent on core infrastructure such as poles and wires and transformers, which also means higher costs.

The current situation affects consumers negatively because investment could be directed more efficiently in a way that is likely to reduce electricity prices. Instead, we have a situation where electricity retailers in NSW do not offer a peak and off-peak feed-in tariff or any other form of time-varying feed-in tariff, and where consumers are effectively subsidising the private sector – this is neither fair nor efficient.

Recommendations

Overall, PIAC makes the following recommendations:

- *Feed-in tariffs should be mandated by regulation; the NSW Government should mandate a minimum solar feed-in tariff and instruct IPART to set a value for the tariff based on equity and the fair benefits of renewable energy to consumers.*
- *In the meantime, IPART should consider what methods other than regulation would encourage gentailers in particular to offer benefit-reflective feed-in tariffs.*
- *Feed-in tariffs should be:*
 - *technology-neutral*
 - *time-varying and include a critical peak payment, and*
 - *(ideally) location specific.*

- *IPART should develop a fair and effective price for household PV generation that takes into account externalities, the planning value and the broader societal costs and values.*
- *IPART should monitor and report on consumer acceptance of voluntary feed-in tariff offers and the level of cross-subsidy that NSW households are providing to electricity retailers.*