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Dear Sirs,

# Solar Power Feed-in-Tariff (FIT) Review

Thank you for the opportunity to comment on the FIT.

For the record I have a 1.29KW (6x215W panels) pv solar system which has been working since 26th Feb 2009. I also have a solar water heat pump working since April 2009. Both were eligible for the maximum \$8,000 and \$1,600 subsidies plus additional RECs payments. I have also received the FIT for the solar pv system since 1 March, albeit with several issues with billing problems and metering issues.

However I make my comments based on:

- 1. experience with getting things installed, monitoring what's happening, and ensuring things are maintained;
- 2. following what is happening in the industry;
- 3. what I believe is in the overall best interests of the country and all Australians.

I was all very pro pv solar systems in late 2008. However after seeing the problems and issues with installations, metering, billing and GST I have changed my mind somewhat. Most people are only doing it because they get a nice subsidy and they think they are helping the environment. Most don't know if they will get the maximum benefit out of their system. I now think the installers and vendors are the ones making a killing. However the simple rate of return can be high and probably now greater than 15% return per year.

#### General

I believe that the current ACT (and soon NSW) gross FIT is a poorly thought out concept. It clearly doesn't encourage it's recipients to reduce power usage. It's a very inefficient design with numerous issues. It appears to have been conceived to encourage the maximum number of taxpayers/consumers to install pv systems and make it look as though the Governments are doing something. To an extent your discussion paper supports the last point.

Whilst most people seem to install such systems for environmental reasons, I have started to discern that there a quite a number of people installing such systems to make money. i.e. I know of some with 2.1KW and 4.2KW systems who whilst initially saying they were

helping the environment now think more about how much they earn from their panels. I have even heard of systems in the ACT up to 14KW.

The extra tariff provided to us that have pv solar systems has to come from somewhere. Whilst companies such as ACTEWAGL have recently made a large profit, it's inevitable that they will at some stage seek to recover the costs of the FIT scheme from others and obviously all electricity users. You define these figures in your paper, but such figures could of course escalate over time.

It seems really obtuse (I am being nice here! It really should be called obscene!) that those with lots of spare money, i.e. recent retirees, and those well off, will then be subsidised by those who can not afford it. I know this is generalising, but I know of a couple of other pv solar owners who are not that well off but are retirees. It somewhat upsets me to think they have adequate funds to invest in this FIT scheme but may eventually have to get a Government pension.

I have begun to realise that the Federal Government original \$8,000 subsidy that I received, plus the RECs value, now replaced with enhanced RECs for the first 1.5KW, then standard RECs afterwards is far too generous and has distorted the real market for solar pv systems.

Its also now seems to be effecting the value of RECs as a flood of subsidised virtual RECs might be part of the problem forcing down prices.

I understand that low RECs prices are also affecting the viability of other renewable energy systems such as wind and biofuel options.

There have been some press articles on these subjects. I also recommend you read the recent presentation by Ric Brazzale, Director, Green Energy Markets / Green Energy Trading. His presentation was dated 20th Nov 2009 and titled "Revitalising RECs Breathing life back into the market". If you search on your favourite engine this will pop up.

#### There is a Better way

I am starting to come to the conclusion that Governments should use their funds to assist with providing solar/thermal power stations eventually with hydrogen fuel cell or other energy storage solutions. These are much more efficient then lots of distributed pv installations. I understand the Californians are going to do this in a big way. Even the ACT Govt was planning this, although they seem very quiet on this lately.

One sensible way would be for the Government to establish an enviro investment fund through enviro bonds or similar allowing caring Australians to safely invest directly or through their super funds earning an adequate interest or dividend. Such funds could then be used to install or support installations of systems indicated above. This would both help the environment and provide a ready way of people to invest their retirement savings if they so desired.

Whilst I was once keen on the distributed model (i.e. a pv system on every house), I have come to realise that it's more a fee good activity and will result in many installations that will not be managed nor maintained as they should. Many are of course not installed to the highest standards you might expect. Many are not optimal installations with panels pointing in the less than perfect direction and not angled adequately to the sun.

# Particular Issues

There are a range of issues that are not really considered in your discussion paper and which are usually over looked in making decisions on installing such systems.

**Efficiency**. My electricity meter always records about 7.4% less than the inverter output reading. There may be several reasons for this. I did discover that the first meter ACTEWAGL put in was not programmed properly. I also discovered they use Indian produced meters (to Australian standards) verus my German made meter (designed to European standard).

**Pv Systems are Not Maintenance Free**. The solar panels do get dirty from dust and bird dung. They need occasional cleaning. The recent dust storms did coat my panels with a thick layer of dust, twice in a couple of months. The inverter is outside and was also quite dirty. On some roofs cleaning will not be easy. Technically we are not supposed to wash them.

**GST**. The ATO gave me a ruling that says yes I should pay GST but as I am not registered and it's well under their annual \$75,000 threshold, I do not have to remit GST to them. Thus I should not be paid it either. However ACTEWAGL effectively pays me GST which I cannot remit to ATO. Their debtors system can't handle the arrangements. Apparently if I got a cheque rather than a credit they wouldn't pay me GST. Apparently different retailers around Australia do it differently.

This means I am effectively getting 55.06c per KWH. ACTEWAGL pays the same; they are just paying slightly less GST to the ATO.

**Income Tax**. Well we are small generators selling 100% of our electricity to the network. If we were on a net tariff you could argue we only sell the balance (if any).

The ATO gave me a ruling that my expenditure was of a private nature and not considered ordinary or statutory income and is thus not assessable. I am also thus not allowed any deductions.

There is no exact formula to determine what would be classified as ordinary income. However if there was a strong likelihood that you could make a profit from the pv installation in a reasonable time frame, one could be considered as earning assessable income.

Those around with 4KW or higher installations might fit that category. This really needs the Government to seek class ruling for all users so those with small installations can continue without any worries.

**ACTEWAGL Bundling.** If ACTEWAGL can bundle multiple services and offer discounts up to 25% off any of the bills it means they have significant margin available and the ICRC needs to consider this in any review of tariffs and FIT rates.

Why would you spend thousands of dollars when you can get up to 25% off your total electricity bill by simply bundling?

## **Deals and Price Reductions**

The Governments new RET scheme with enhanced RECs has tendered to create a new flood of RECs onto the market which will continue over the next couple of years keeping the price of RECs down.

It's lucky that certain suppliers from certain countries have provided enhanced supplies of solar panels forcing down the price to counteract the RECs prices. It been suggested by some that we have been the subject of dumping. It's possible to get a 1.5kWH system installed for \$9,500 or even less if you shop around, and after RECs credits it could be as low as \$4,000, less than what I paid of \$6,580.

# **The FIT**

The FIT future truly needs to be integrated into some overall strategic thinking about where the country is going with renewable energy.

However as we have a large number of pv installations with probably many more to be installed over the next few years, until subsidies phase out, it will require the ICRC to recommend tariffs that:

 provide adequate compensation to those who have invested in pv systems;

- 2. balance the need for the Government to provide subsidies where they will better provide cleaner power to all Australians;
- 3. encourage consumers and end users to install things that do not really need subsidies, or ongoing subsidies but will assist with reducing their carbon footprint i.e. solar hot water systems, and eventually solar air conditioners; and
- 4. encourage consumers to reduce their energy usage i.e. move to a **net** FIT concept

### What Rate Should The FIT Be?

Consistent with my above comments I would like it to be a Net Tariff similar say to the Queensland tariff. But this is not going to happen as we already have a 20 year contract for a Gross Tariff.

Thus I think the Gross FIT should be more based on a subdued rate at twice the retail rate i.e. in 2009/10 FY terms 2 x 13.86 c/kWH thus 27.72 c per kWH.

Note that the Gross FIT of 50.05c per kWH is actually only 3.61 times the standard retail tariff and not 3.88 as it was in late 2008/09.

My cost of installation was \$15,725 gross, but only \$6,580 after rebate and 26 RECs @ \$44.

In the first full year I expect to generate 1,800 kWH (based on actual readings) paying me around \$900 (excluding GST). On a net cost of \$6,580 this is equivalent to a 13.7% simple annual return (tax free).

If the FIT was twice the retail rate, I would have earned only \$499 equivalent to a simple annual return of 7.6% (tax free). I would be happy with this. If people can get a 1.5KW installed for \$4,000 or so then their annual return even at twice the tariff will be quite lucrative.

#### The Payback Period

I have always worked on 7-8 years for my simple payback calculation. I note your comments about 5-15 years with 10 years being the most common mentioned. I think 8-10 years is the right sort of period.

I think it should be more about the return on investment per annum as compared to what on could get by investing their money in appropriate devices that might pay franking dividends, as well as provide capital growth. Solar panels will not provide any such growth and over time their output will deteriorate. Thus they are really a depreciating asset. They will be worth next to nothing in 10 years. So in effect one has to get the investment back in 10 years or less as well as earning a healthy return on top. So simply if you can get 10% per year to cover the asset payback plus 5% on top to generate return on

the money invested, one would come out after 10 years getting all their money back plus earning 5% per year (tax free) on that money. I think the current FIT is essentially doing this already and doing it quite generously. However inflation and ETS impacts will probably alter these concepts.

If you read the article I referenced above you will see that with reduced prices, enhanced RECs, the impact of the ACT/NSW gross tariff is to create the situation where the simple payback period is closing on 3-4 years.

This is significant and indicates that enhanced RECs and the gross tariffs may distort the market significantly.

The green attitude inherent in Government thinking and your discussion paper will no doubt say that this is a good thing as it will result in more pv systems being installed. Unfortunately it is drawing resources away from the main game which should be about investing in sustainable and well managed renewable large power stations. That's clearly where society as a whole can get the biggest bang for its buck.

# **Conclusions**

Its clear to me that the Labor party and subsequently the Greens were influenced by feel good factors and by what they discovered overseas in such countries as Germany. They did not fully understand the issues for many normal people to have highly technical equipment installed. Equipment that must be installed the right way and pointing in the right directions. They also never truly understood there would be an impact on all the community.

No one really thought about the tax and GST aspects.

Also no one thought about what is the most efficient way of generating renewal energy that provides the maximum benefit for all Australians.

There is nothing wrong with installing pv solar panels. However it should be done with minimal subsidy (i.e. just the RECs) and with a net FIT maybe only twice the normal retail tariff.

The Government should establish listed and tradable enviro bonds or similar with guaranteed backing and interest payment which are more suitable for small householders to invest in and which are then used to establish large renewable energy projects/power stations. All the planning, management, design and maintenance can then be done professionally.

With the impending impost of an Emissions Trading Scheme, Carbon tax or whatever we get, we need to do everything possible to keep electricity tariffs low to at least give the poor in our society a chance.

The gross FIT is only helping the asset rich and those with large disposable incomes. Its time to rethink and refocus.

I note that COAG in 2008 indicated that any premium rate FIT's should only be considered as transitional measure with clearly defined limits.

Regards

**Greg Hutchison**