

The Senate

Standing Committee on
Environment, Communications
and the Arts

Save our Solar (Solar Rebate Protection)
Bill 2008 [No. 2]

August 2008

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Acronyms and abbreviations

AC	alternating current
ACF	Australian Conservation Foundation
ATA	Alternative Technology Association
ATRAA	Appropriate Technology Retailers Association of Australia
BCSE	Business Council for Sustainable Energy
COAG	Council of Australian Governments
DC	direct current
DEWHA	Department of the Environment, Water, Heritage and the Arts
PV	photovoltaic
PVRP	Photovoltaic Rebate Program
REC	Renewable Energy Certificate
SHCP	Solar Homes and Communities Plan

Chapter 1

Background to the inquiry

1.1 The Save Our Solar (Solar Rebate Protection) Bill 2008 [No. 2] was introduced into the House of Representatives on 23 June 2008. On 25 June, the Senate referred the provisions of the bill to the Senate Standing Committee on Environment, Communications and the Arts for report by 15 August 2008. It also asked the committee to examine:

- (a) the impact of the means test threshold of \$100,000 on the \$8,000 solar rebate per household on the solar industry;
- (b) the effect on the uptake of solar panels by Australian households, comparing state-by-state results;
- (c) the impact on the number of applications for the \$8,000 since the budget decision to impose the means test;
- (d) the impact on jobs in the solar industry, comparing state-by-state results;
- (e) the impact on emissions reductions as a consequence of this decision, comparing state-by-state results;
- (f) the consultation that occurred within government, including departments and agencies, prior to the decision and the input of each department and agency on the measure;
- (g) the economic and environmental modelling underpinning the decision to impose the means test;
- (h) the extent of the discussion prior to the decision with the solar panel industry on the impact of the decision;
- (i) the future viability of, and effects on, the solar industry as a result of the means test;
- (j) the impact on the Solar Cities programs at various sites around Australia and other related programs; and
- (k) other relevant matters.

1.2 The committee provided an interim report on 15 August 2008, and is now presenting its final report.

1.3 In accordance with usual practice, the committee advertised the inquiry in *The Australian*, calling for submissions by 21 July 2008. A number of organisations and individuals were contacted directly and invited to make submissions. The committee received submissions from 157 individuals and organisations, which are listed in Appendix 1.

1.4 The Senate's resolution stated that 'as a minimum, the committee hold hearings in all Australian capital cities'. Having regard to the number and relevance of the submissions received and the availability of witnesses, the committee took evidence from witnesses in every state and territory, doing so through hearings that included teleconferences (see Appendix 2). The committee thanks the many people who expressed an interest in this inquiry and who made themselves available to give evidence at hearings around the country.

Background to the bill

1.5 The Australian government has an extensive range of policies designed to address climate change and support the development of renewable energy industries and generating capacity in Australia. These policies include the Mandatory Renewable Energy Target, the Solar Homes and Communities Plan, the National Solar Schools Program, the Renewable Remote Power Generation Program, a Green Loans scheme and the development of a Carbon Pollution Reduction Scheme.

1.6 One of the key renewable energy technologies being supported through these policies and programs is photovoltaic electricity generation, using what are commonly referred to as solar panels or solar cells. Using this technology, sunlight is converted directly into DC (direct current) electricity using panels of photovoltaic cells. The key chemical constituent of the cells is silicon. An inverter device is required to convert the DC into AC (alternating current), the mains voltage power that is used in the home, schools and businesses. A photovoltaic system may also be connected to the electricity grid and feed power into it, and this is referred to as a grid-connected system. The rate of energy production of these systems is measured in watts. A typical photovoltaic system installed on the roof of a home would have energy production in the range from one up to three or four kilowatts.

1.7 Within the Commonwealth's array of policies, one mechanism by which solar photovoltaic energy is being encouraged is through the Solar Homes and Communities Plan (SHCP). The aims of the SHCP are to encourage the use of solar photovoltaic technology, thereby reducing greenhouse gas emissions, assisting in the development of the Australian photovoltaic industry, and increasing awareness of renewable energy resources.¹ The SHCP (previously the Photovoltaic Rebate Program (PRP)) 'provides cash rebates for the installation of grid-connected solar photovoltaic systems [solar panels] on homes and community use buildings'.² A rebate of \$8 per watt (up to a maximum of \$8000) is available for electricity grid-connected households participating in the Plan.

1.8 In addition, some states and territories are in the process of implementing a feed-in tariff for renewable energy. Feed-in tariffs are the subject of another bill

1 Department of the Environment, Water, Heritage and the Arts, *Submission 147*, p. 1.

2 Department of the Environment, Water, Heritage and the Arts, <http://www.environment.gov.au/settlements/renewable/pv/index.html> (accessed 30 June 2008)

before the Senate³ that is also being examined by this committee. A report on that bill is to be presented to the Senate by 14 October 2008. However there was extensive discussion of feed in tariffs in evidence to the current inquiry, and they will be mentioned briefly in this report.

1.9 A feed-in-tariff offers a long term financial return by paying the home owner a premium price for the power generated by their grid-connected generating unit. Feed-in tariffs and rebates are complementary policies having the same objective: encouraging the installation of renewable energy electricity generation systems by providing a financial incentive to the purchaser.

1.10 The Commonwealth's Minister for Environment Heritage and the Arts, the Hon. Peter Garrett AM has indicated that at 'the next COAG meeting in October the Government plans to work towards a harmonised approach to renewable energy feed-in tariffs'.⁴

The history of the Solar Homes and Communities Plan rebate

1.11 The structure of the Solar Homes and Communities Plan rebate has change several times since the program was first introduced in the 1999-2000 budget. These can be summarised as follows:

Year	Rebate, \$ per watt	Eligible wattage	Maximum rebate	Other conditions
1999-2000	\$ 5.50	1.5 kW	\$ 8 250	
1 Oct 2000	\$ 5.00	1.5 kW	\$ 7 500	
2003-04	\$ 4.00	1.0 kW	\$ 4 000	
2007-08	\$ 8.00	1.0 kW	\$ 8 000	
2008-09	\$ 8.00	1.0 kW	\$ 8 000	Means test

1.12 On 13 May 2008, the Government introduced a means test for the solar rebate in order to make the Plan more equitable and 'to ensure that the rebates of up to \$8,000 get to households that need them most to pay for installing solar power systems'.⁵ Households with an annual taxable income of under \$100 000 are eligible for the rebates. Only owner/occupiers are eligible for the rebate, and the house must

3 Renewable Energy (Electricity) Amendment (Feed-in-Tariff) Bill 2008.

4 The Hon. Peter Garrett AM, speech to the Appropriate Technology Retailers Association of Australia conference, 2 August 2008.

5 The Hon Peter Garrett MP, Minister for the Environment, Heritage and the Arts, Media Release 13 May 2008, <http://www.environment.gov.au/minister/garrett/2008/pubs/budmr20080513f.pdf> (accessed 30 June 2008)

be the primary residence. Households are only eligible if it is the first solar rebate application, and the system must be installed by an accredited installer.⁶

The Terms of the Bill

1.13 In introducing the Save Our Solar (Solar Rebate Protection) Bill 2008, Senator Johnston stated that the bill is 'designed to remove the means test on solar panels by making the Government's Administrative Order a disallowable instrument',⁷ however the committee notes that the bill itself makes no reference to the rebate at all, including the means test, and that passage of the bill itself would not affect the scheme.

1.14 This bill recognises that, as is the case with many government programs, there is no legislative basis for the guidelines currently applying to the rebate program under the SHCP. The current guidelines are administrative in nature. The bill's main objective is to require that guidelines on the operation of the Solar Homes and Communities Plan are tabled in Parliament and subject to disallowance, in accordance with the *Legislative Instruments Act 2003*.⁸

1.15 Clause 3 sets out the object of the bill which are:

- to make the guidelines under which the Solar Homes and Communities Plan operates, legislative instruments disallowable by either house of Parliament ;
- to establish the general responsibility of the Secretary of the Department of the environment, Heritage and the Arts for the administration of the plan; and
- to establish the principles of administration for the plan.

1.16 The substance of the bill is contained in clauses 5 and 6 which require the responsible Minister to issue new guidelines for the plan which must specify the eligibility criteria 'to be satisfied by a person or an organisation in order to receive a payment under the plan' and the types of solar systems for which a rebate will be payable.

1.17 The new guidelines for the SHCP would be a legislative instrument under the *Legislative Instruments Act 2003*. Guidelines would, as a result, be subject to scrutiny and potential disallowance by either House of Parliament. In practical terms this would mean that the details of the operation of the Solar Homes and Communities Plan, including any means test or income threshold and other aspects of the

6 Department of the Environment, Water, Heritage and the Arts, *Solar Homes and Communities Plan, Guidelines for Residential Applicants*, May 2008, <http://www.environment.gov.au/settlements/renewable/pv/pubs/shcp-residential-guidelines-21may2008.pdf> (accessed 12 August 2008)

7 Senator David Johnston, second reading speech, *Senate Debates*, 24 June 2008, p. 3186.

8 See Section 42 of the Act.

administration such as how and when payments should be made, would be subject to scrutiny by and a decision of the Senate.

1.18 Clause 6 states that the Minister's responsibilities include:

(b) in the event of disallowance of guidelines, determining replacement guidelines so as to ensure that there is no time when the plan is not in operation.

This has the effect of requiring the Minister to issue guidelines acceptable to the Senate because, in the event of disallowance, the Plan would cease to operate unless replacement guidelines acceptable to the Senate were put in place.

1.19 It would not be possible for a Minister to 'spin out' the process by introducing new guidelines that were similar to those that had been disallowed. Section 48(1) of the *Legislative Instruments Act 2003* states that, where a legislative instrument has been disallowed:

... a legislative instrument, or a provision of a legislative instrument, that is the same in substance as the first-mentioned instrument or provision, must not be made within 6 months after the day on which the first-mentioned instrument or provision was disallowed.

1.20 The term 'same in substance' has tended to be interpreted broadly, thus any replacement guidelines issued after disallowance would have to be distinctly different from the disallowed guidelines.

1.21 The effect of this section is to change the intent of disallowance from a power of veto by either house to a constructive power vested in either house (but in practice the Senate) to dictate the guidelines for a government program. Since the Plan must continue in operation the executive must produce guidelines that are acceptable to the Senate.

Chapter 2

The Government's rebate and the means test

2.1 Government rebates have been a valuable policy in encouraging the adoption of solar photovoltaic technology, and increasing their profile as a source of renewable energy. The committee noted evidence that the industry is continuing to grow, and the use of photovoltaic systems is rapidly rising.

2.2 Evidence from the Department of Environment, Water, Heritage and the Arts (DEWHA) showed that the number of applications for the SHCP rebate continues to grow. Applications are at record levels, dwarfing the number of applications under previous forms of the Plan.¹

2.3 The Committee also heard that the number of accredited installers serving the industry is rising. Clean Energy Council figures quoted to the inquiry indicate that the number of installers has risen from 230 in 2007 to 470 by the first quarter of 2008.²

2.4 Major companies are showing confidence in the Australian industry and market by establishing significant operations here. Examples drawn to the attention of the committee included the extension of US company SunPower Corporation's operations into Australia through the acquisition of Solar Sales Pty Ltd,³ and the establishment of Suntech Power in Australia in December 2007.⁴

2.5 Demand for the SHCP rebate continues to be strong, and the minister has indicated that the government remains committed to the rebate. The minister recently stated:

Let me say this very clearly – the Government is committed to the future of the Australian solar industry, committed to providing assistance to those households who most need it, and we will continue meeting demand in this program.⁵

1 DEWHA, *Submission 147*, p. 4.

2 Clean Energy Council figures 19 May 2008, quoted in Conergy Pty Ltd, *Submission 98*.

3 SunPower Corporation, 'SunPower Acquires Solar Sales, a Leading Australian Distributor', *Media Release*, 24 July 2008.
<http://investors.sunpowercorp.com/releasedetail.cfm?ReleaseID=324345> (accessed 12 August 2008).

4 Suntech Power Australia, *Submission 96*, p. 1.

5 The Hon Peter Garrett AM MP, Minister For The Environment, Heritage And The Arts, *Speech To The Appropriate Technology Retailers Association Of Australia Conference, Melbourne*, 2 August 2008.

DEWHA confirmed this at the Brisbane hearing.⁶

2.6 The committee also notes that government support for renewable energy is at record levels. Commenting on the recent decision to accelerate the availability of funding in the SHCP, the Minister recently stated:

Combined with the \$480 million solar schools program, which has now commenced, and the \$300 million green loans program commencing next year, the recent Budget saw the most significant investment in the future of solar ever made by an Australian Government.⁷

2.7 The committee notes that debate about the current bill, and around the SHCP rebate, is taking place in the context of a rapidly growing and evolving policy environment supporting renewable energy development and greenhouse gas emissions reduction. Within this context two issues dominated discussion of the current bill: the implementation of a means test by the government in the May 2008 budget; and the relative merits of rebates versus other policies to support renewable energy, particularly feed-in tariffs.

The Means Test

2.8 Many submitters raised concerns about the implementation of the means test. These included installers who were worried about loss of business, and householders who had hoped to take advantage of the rebate but who were no longer eligible. Concern was expressed that the means test would discourage from installing photovoltaic systems the key group of people who would be most likely to adopt the technology: households with the relatively high income levels needed to pay the high price of solar energy systems.⁸

The reality is that it is the people with greater disposable income who have the capacity to change their carbon footprint. Not only that, they are also the people who have not stopped at the entry level solar system of 1 Kilowatt but have chosen in most cases to go for a bigger system.⁹

2.9 At the same time, there was widespread support for a means test as an appropriate mechanism to help target the scheme. The majority of people surveyed by the Adelaide Buyers Group believed a means test was appropriate.¹⁰ Many submissions from householders and installers supported a means test (though often at

6 Mr Stephen Oxley, Assistant Secretary, Renewable Energy Branch, DEWHA, *Proof Committee Hansard*, 11 August 2008, p. 20.

7 The Hon Peter Garrett AM MP, Minister For The Environment, Heritage And The Arts, 'Solid Growth in Solar Rebates', *Media Release*, 2 August 2008.

8 For example Dr Guy K White, *Submission* 112; Ms Helen Hutchinson, *Submission* 130.

9 Self Sufficiency Supplies, *Submission* 121.

10 Adelaide Buyers Group, *Submission* 146, responses to survey question 3.

a higher level than the current \$100 000).¹¹ The Australian Conservation Foundation (ACF) indicated it had 'no opposition to the principle of a means test on the solar PV rebate, and to the targeting of rebates to lower income applicants'.¹²

2.10 While such a test found broad acceptance, the committee heard a range of suggestions were made to modify the means test. The Clean Energy Council for example suggested:

A rebate of \$8 per watt up to a maximum of \$8000, restricted to households with an annual taxable income of less than \$150,000, and \$4 per watt up to a maximum of \$8000 for households above \$150,000.

The industry transition from a rebate scheme to a gross national feed in tariff which is to be put in place by 1 July 2009.¹³

2.11 Over the period of the committee's inquiry, it became clear that most concerns about the means test arose because submitters were worried that it would cause a cut in the number of systems being installed, and a loss of jobs and business in the industry. The Clean Energy Council, reporting on behalf of members in the industry, observed:

In the two weeks following the budget announcements, the industry reported a decline in the number of orders, with orders from households no longer meeting the threshold requirement being cancelled. In addition, staffing impacts were also reported with new employees not being engaged as a result of the uncertainty, casual staff laid off, and contractors having hours reduced.¹⁴

2.12 However, data provided by DEWHA shows the numbers of applications for the rebate has been rising since the introduction of the means test. DEWHA reported on three six-week snapshots of rebate applications from the industry to illustrate its point:

for the six week period up to 8 February 2008, the average number of applications received weekly was 178;

- for the six week period leading up to the 2008-09 Budget, the average number of applications received weekly was 324; and

- for the six week period up to 11 July 2008, the average number of applications received weekly was 544.¹⁵

11 For example, James McGlone, *Submission 77*; Solar Inverters, *Submission 87*; Dieter Nikolai, *Submission 138*; Mr Troy Ryan, Director, Adelaide Hills Solar and Solar Depot, *Proof Committee Hansard*, 6 August 2008, p. 2.

12 ACF, *Submission 82*, p. 1.

13 Clean Energy Council, *Submission 131*, p. 2.

14 Clean Energy Council, *Submission 131*.

15 DEWHA, *Submission 147*, p. 4.

2.13 While particular businesses experienced a loss of customers immediately following the budget announcement, this effect appears to have quickly been superseded by overall growth in the industry, and with changes in the customer profile of the sales and installation companies.

2.14 Examples from evidence taken in Adelaide and Perth highlight the complex nature of the evolution of the industry. Mr Troy Ryan is an installer in the Adelaide region who has been in the industry for most of the last two decades. When he made his initial submission to the committee on 14 July, he had been disappointed by the government's announcement:

Due to the publicity surrounding the decision, there was still a spike in interest and sales of systems stayed steady...

Now the publicity spike is over. We have put off one electrician and one salesman. Sales are down around 25% in numbers 40% in value...¹⁶

2.15 However less than a month later, by the time he came to Committee's hearing in Adelaide, his experience and perspective was changing:

I have done this chart here to show our sales over a comparative period immediately before and immediately after the budget. You can see a slight increase in sales. The main thing that I wanted to make clear was that we had a huge increase in single-occupant buyers. They are the sort of people who earn less than \$100,000 who can still afford a solar system...

I was as disappointed as everybody else to see a new government come in with all the great promises and then to have that policy announcement in the budget. It was pretty disappointing. Having said that, as you can see, we have not had a drop in sales, and I thought we would. I am surprised that we have not, but the publicity has been fantastic really. I would like to see that publicity every month. Our customers are ringing up in droves and they know whether they are eligible or not and they know what they want because they have heard all about it. It is fantastic. In that regard it has done a great job, but that is a short-term thing and cannot last forever.¹⁷

Similarly, Ms Drummond of EcoSouth Solar reported an increase in sales, while expressing concern that a fear of the rebates running out might be driving the growth.

2.16 In Perth Dr Wills, from the WA Sustainable Energy Association, was asked what had happened in the industry in the wake of the budget:

Dr Wills—It was within a few days of the budget measures, I guess. We were expressing concern then about the impact on our members. Certainly at that point we had members that were reporting cancelled sales; in fact, one member had reported that 72 per cent of sales were cancelled within a few days of the budget announcement...

16 *Submission 11.*

17 Mr Troy Ryan, Director, Adelaide Hills Solar and Solar Depot, *Proof Committee Hansard*, 6 August 2008, pp 2–3.

Senator PARRY—Going back to that member that had a 72 per cent cancellation of sales, is that replicated in other members? What is the anecdotal evidence—

Dr Wills—The 72 per cent was the largest figure, but most figures were well over 50 per cent, and usually in the range of 60 to 70 per cent. Some of those have now reported some recovery beyond those numbers.

Senator PARRY—What do you put the recovery down to?

Dr Wills—There certainly appears to have been an educative message in the announcement of the means test on the rebate, and the consequence of that is that there seems to be particularly more retirees taking up systems who had not realised that they were eligible even for the rebate; that the rebate was available. The news around it clearly has sparked some marked interest from that point of view, so that is certainly a positive, and we have some other suppliers who are saying that in some cases that has almost replaced their previous market.¹⁸

2.17 The committee believes that the industry is undergoing a process of maturation and restructuring. As part of this process, there may be changes in how photovoltaic systems are supplied and installed, and new business models emerging in the sector. This was clear from some comments by witnesses, such as Mr Lamond:

What has happened since then is that there has been a pick-up in our sales because of the larger marketing activities of the handful of larger dealers. So while overall we see our dealer base and our sales looking at dropping back 30 per cent, as a business we see our large dealers actually doing more work.¹⁹

2.18 Similarly the committee was persuaded by the analysis offered by Mr Mitra Ardron of Beyond Building Energy:

CHAIR—Mr Ardron, you were in the room when we were talking with the department about the number of installers and accreditation and that sort of thing. From your perspective, can you give us a view of how you think it will pan out in the industry if we take away the ongoing availability of the rebate, whether you believe there will be a consolidation of small retailers and installers into larger organisations?

Mr Ardron—Absolutely. I have spent some time looking at the industry in Newark in California where they have decent government support. In both those cases, in order to achieve the volume, the industry has changed. Australia's industry is based on a cottage industry model. It is based on mostly off-grid installations. In fact, until the current rebate system, I believe 90 per cent or so installations in Australia were off-grid. Don't quote me on that; I do not know the exact numbers. But it is of that kind of magnitude. It has been a cottage industry because of the high-touch, lots of

18 Dr Ray Wills, Chief Executive, WA Sustainable Energy Association, *Proof Committee Hansard*, 7 August 2008, p. 13.

19 Mr Alex Lamond, CEO, Solco Ltd, *Proof Committee Hansard*, 7 August 2009, p. 31.

personal attention that is required because every installation is different. If we look at Europe and California, what we are seeing is a model which is grid-tie dominated which means installations are essentially similar. They do not need nearly as much personal attention and they are industries that have organised their business model to scale that are actually achieving it; it is not the one or two-person installers where you do one or two a week. That was a long answer to your question, but we absolutely see a significant change in the industry towards an industry that is capable of supplying large volumes of solar and other renewables.

CHAIR—We have had installers and retailers come along to us and say their business has changed with the introduction of the means test. Is it possible that some of that business has gone to larger retailers and installers or organisations like your own?

Mr Ardron—Absolutely. Certainly, as the industry grows, as with any industry that changes this rapidly the people who are less efficient will either have to change and grow with it or they will be forced out of business. I see that as not necessarily a negative outcome as long as the overall industry itself is growing. But, yes, I believe we will see that kind of restructuring inside the industry.

CHAIR—And it could be happening now.

Mr Ardron—I think it is happening now.²⁰

2.19 DEWHA officials also thought that changes in the industry may have been factors in explaining recent growth:

we have certainly seen emerging new business models, and I think you will receive evidence later today from one such company. These are cluster-type developments where solar PV companies are going out and targeting neighbourhoods or towns and actually getting an economy of scale in the way they do their business, and I think that is also contributing. Changing business models in response to heightened public awareness and a more generous rebate program I think are the key factors [explaining growth in demand].²¹

2.20 The committee understands the frustration of some submitters over the recent change to the scheme. It asks them to consider, however, what the consequences might have been if a change to the rebate was announced to take effect at some future date. If several weeks or months' notice had been given, for example, this would have risked a sudden rash of applications, and a lull after the change. This could have been more damaging to the solar energy industry than the immediate announcement that was made, which has seen continuing strong demand for the rebate.

20 Mr Mitra Ardron, *Beyond Building Energy*, *Proof Committee Hansard*, 11 August 2008, p. 38.

21 Mr Stephen Oxley, Assistant Secretary, Renewable Energy Branch, DEWHA, *Proof Committee Hansard*, 11 August 2008, p. 25.

2.21 The committee also understands the frustrations felt by some businesses in trying to ensure prompt processing of rebates, which can present them with challenging cash flow issues. The committee notes that DEWHA is aware of, and trying to respond to, the problem:

What you are seeing there is a reflection of the increased demand for the rebate and the administrative workload that is placing on the department, and the reality that it takes us time to catch up in terms of increasing our human resources available to manage and administer the program relative to that demand. Just to give you an example, in April I had 14 staff working on the program. That is now up around 22 staff with a bit of supplementation, and the program manager is saying to me that he would like a couple more in order to get us back as quickly as we can to the time frames that are outlined in the guidelines.²²

2.22 The committee has concluded that, despite short-term concerns created by the budget decision, there has been no reduction in the desire of households to install photovoltaic systems, and no slow down the take-up of the rebates. The budget decision has not caused a dampening of demand for the services of the solar industry. The rebate is continuing to contribute to the policy objectives of encouraging the use of solar photovoltaic technology, thereby reducing greenhouse gas emissions; assisting in the development of the Australian photovoltaic industry; and increasing awareness of renewable energy resources. In fact, it appears that the policy debate triggered by the budget decision has led to unprecedented levels of awareness in the community of the rebate's availability.

2.23 There is one particular aspect of the operation of the rebate that concerns the committee. Several witnesses expressed concern that the rebate was encouraging the installation of smaller photovoltaic systems, and that, as a result, less renewable energy was being generated than might be possible, and the government may not be getting value for money from its rebate.²³

2.24 Ms Michelle Drummond described the problem from an industry perspective:

One of the problems that has been created from this is that people cannot afford a system as much as the people over \$100,000. What you are doing is forcing the industry into a decline because you are selling smaller systems and they are actually going to cost more. While we had people getting money over \$100,000 for the rebate they would buy a bigger system, you could buy bulk and therefore the people under were getting a better deal out it. We cannot afford to buy on bulk anymore. We have to buy as per system is sold.²⁴

22 Mr Stephen Oxley, Assistant Secretary, Renewable Energy Branch, DEWHA, *Proof Committee Hansard*, 11 August 2008, p. 21.

23 For example, Solaris Technology, *Submission* 18.

24 Ms Michelle Drummond, Business Coordinator, EcoSouth Solar, *Proof Committee Hansard*, 6 August 2009, pp 14–15.

2.25 Green Energy Trading argued that this handicapped the meeting of government policy objectives:

The means testing of the solar rebate is also a retrograde policy step as it will increase the amount of money that Government spends per unit of solar PV installed...

Under the previous PVRP scheme... the overall rate of Government spending under this scheme was only \$5,000 per kW of installed capacity, or in other words, each dollar invested by Government was more than matched by customers...

Anecdotal advice from installers since the means test indicates that recent systems being installed and financed via the Solar Homes and Communities Plan are typically much lower capacity – towards 1 kW – targeted at the minimum capacity required for maximum Government assistance. This results in minimal extra spending on the customers behalf. The impact of this is to increase the average rate of government support from \$5000 to more than \$7000 per installed kW and correspondingly reduces the level of private investment.²⁵

2.26 The analysis provided by industry figures appeared to be confirmed by figures provided by DEWHA:

Senator PARRY—What about the size of unit? Do you record data on the size of unit that has been pre-approved?

Mr Oxley—Yes, we do record that data. Over the life of the program the average size of system installed has been about 1.57 kilowatts. To anticipate your next question, since the introduction of the means test the average system installed is at approximately 1.24 kilowatts...²⁶

2.27 The tendency to install smaller systems limits the benefits that could be gained throughout the industry from economies of scale. Mr Brazzale gave an example:

there are economies of scale in system sizes too. For example, you only have to install a system once, whether it is one kilowatt or two kilowatts. It does not cost that much more to install a bigger system because there is a whole lot of one off costs. There are economies of scale in installing bigger systems.²⁷

2.28 This may contribute to explaining why the cost per-watt of systems installed has not dropped significantly as the number of systems has increased.²⁸ However the

25 Green Energy Trading, *Submission* 100.

26 Mr Stephen Oxley, Assistant Secretary, Renewable Energy Branch, DEWHA, *Proof Committee Hansard*, 11 August 2008, p. 20.

27 Mr Riccardo Brazzale, Managing Director, Green Energy Trading, *Proof Committee Hansard*, 28 July 2008, p. 48.

28 DEWHA, *Submission* 147, Attachment B.

committee also notes that this may partly be a result of increases in the price of silicon, a key component of the systems.²⁹

2.29 Witnesses suggested different ways in which the decline in the size of systems could be addressed. The commonest suggestion was to reduce the rebate offered per watt, generally to \$4/watt, and increase the number of watts up to which a rebate would be paid, generally to 2 kilowatts.³⁰ An alternative proposal was to change the basis for the rebate from dollars per watt installed to a percentage of the installation cost.³¹

2.30 The committee recognises the concerns raised by many witnesses. It appreciates that the government also recognises that the rebate system itself is not going to be the key long-term policy that will lead to a low-carbon economy. As the Minister recently stated:

[W]hat I want to say very clearly is that the idea we can achieve significant reductions in carbon pollution – the reductions we need – from the open-ended, non means-tested provision of \$8,000 rebates for any technology is not only financially irresponsible, it's environmentally misguided.

It's no way to build a solar industry with a strong and sure footing, the industry this country needs, as we rise to meet the great challenge of climate change.

If solar power in all its forms is going to play the role those of you here believe it can - and quite frankly, that is must - in our future energy mix, then it needs to become a mainstream solution.³²

2.31 The committee endorses these observations.

Policies to support renewable energy

2.32 The committee heard evidence in support of a gross feed-in tariff for electricity generated using renewable energy technologies. Support for the introduction of such a tariff on a national basis came from a range of submitters.³³

29 Lara Skinner, 'Solar Silicon Market a Seller's Paradise', RenewableEnergyWorld.com, 14 Feb 2005, <http://www.renewableenergyworld.com/rea/news/story?id=22425> (accessed 14 August 2008); 'Silicon price hike squeezes solar-product profit margins', China.org.cn, 18 Dec 2007, <http://www.china.org.cn/english/business/236109.htm> (accessed 14 August 2008); Mr Robert Blakiston, Managing Director Australia, SunPower Corporation Australia, *Proof Committee Hansard*, 7 August 2008, p. 27.

30 For example Mr Dickson, Adelaide Buyers Group, *Proof Committee Hansard*, 6 August 2008, p. 9.

31 Mr Riccardo Brazzale, Managing Director, Green Energy Trading, *Proof Committee Hansard*, 28 July 2008, p. 45.

32 The Hon Peter Garrett AM MP, Minister For The Environment, Heritage And The Arts, *Speech To The Appropriate Technology Retailers Association Of Australia Conference, Melbourne*, 2 August 2008, p. 8.

2.33 Experienced industry players recognised that there would need to be a carefully arranged transition from rebates to feed-in tariffs if the industry was to develop sustainably. There was also recognition that a means-tested rebate could work effectively in combination with feed-in tariffs, by focussing on removing the up-front cost barriers for poorer households that lacked the capital to make the initial investment that could then take advantage of feed-in tariff benefits.³⁴

2.34 Many advocates for the industry saw rebates as a short to medium-term policy, and that in the long term they should be reduced or phased out as other policy mechanisms are phased in. EcoTasmania for example recommended that the long term strategy should be:

- Set a sunset date on that rebate policy, pending the introduction of more comprehensive carbon market and feed-in tariff laws.
- Foreshadow a national feed-in tariff mandate, and a mechanism to bring such a policy into effect as soon as practicable.³⁵

2.35 The Clean Energy Council pointed out that rebates are an inherently volatile policy approach, and favoured a transition to feed-in tariffs:

It is both the Council's, and the industries view that it a Gross National Feed in Tariff is necessary to provide the ongoing certainty required for the industry to expand and reach its full potential over time. It is acknowledged that rebate type schemes are always vulnerable to budgetary considerations, and a Feed in Tariff will provide more sustainable support to both industry and households.³⁶

2.36 Conergy Pty Ltd made similar suggestions:

Have a smooth transition from the end of the rebate program into a National Gross Feed-in Tariff for various renewable SGU technologies, by 2010, so it falls in line with the introduction of the proposed Emissions Trading Scheme. An effective Gross FiT should provide a maximum payback

33 Glen McCarrick, *Submission 57*; Solar Sales (now SunPower Corporation Australia), *Submission 69*; Stuart Watson & Associates, *Submission 75*; Autonomous Energy, *Submission 81*; Beyond Building Energy, *Submission 88*; EcoTasmania, *Submission 137*; Mr Andrew McCarthy, Project Manager, Environment Shop, *Proof Committee Hansard*, 28 July 2008, p. 15; Mr Peter Bone, Director, Bone Electrical, *Proof Committee Hansard*, 28 July 2008, p. 83; Mr Troy Ryan, Director, Adelaide Hills Solar and Solar Depot, *Proof Committee Hansard*, 6 August 2008, p. 2; Mr Brian Jones, Manager, Switched On Solar, *Proof Committee Hansard*, 7 August 2008, p. 1; Conergy, *Submission 98*, p. 6; Alternative Technology Association, *Submission 52*; ACF, *Submission 82*; Darebin City Council, *Submission 90*; Mr Jon Stanhope MLA, Chief Minister, ACT, *Submission 126*; Professor Michael Christie, *Submission 68*; Professor Andrew Blakers, *Proof Committee Hansard*, 25 July 2008, p. 12.

34 For example, The Environment Association, *Submission 107*, pp 3–4.

35 EcoTasmania, *Submission 137*, p. 4.

36 Clean Energy Council, *Submission 131*, p. 2.

period of 10 years for householders and 15 years for commercial consumers.³⁷

2.37 The Australian Conservation Foundation supported a similar model of transition from rebate to feed-in tariff, with some overlap of the two schemes.³⁸ Mr Dickson from the Adelaide Buyers Group said:

I believe that in addition to the means test of \$150,000, \$4 per watt up to two kilowatts, and a gross metered feed-in tariff, preferably applied nationally, would be the optimal solution for generating growth in the solar PV industry.³⁹

2.38 Another suggestion, based on California's renewable energy policies, is to make government financial support dependent on whether households have already taken other steps to improve their energy efficiency. Energy efficiency standards have to be met before an existing household can access the California Solar Initiative.⁴⁰ Mr Warwick Ryan, representing Suntech Power Australia, discussed the arrangements:

Clearly, we have seen evidence from other witnesses before this committee who have said that households should be encouraged to reduce their overall energy consumption by other means before they look at getting assistance to put on a solar PV unit. Reducing their energy usage almost as a prerequisite to getting the Rolls Royce add-on is a clever strategy. In California this applies as well... CARE eligible homeowners, which is the California Alternate Rates for Energy program, actually receive a higher rebate or subsidy than those who are not eligible. There is actually a complementary system. If you are showing that you are taking other initiatives to reduce your energy use in your home, you fit into one category and you receive a higher subsidy.⁴¹

2.39 The Committee notes that the government appears to recognise the need for further policy development in the area. This is evident in both the Minister's support for discussions around a feed-in tariff, and through current steps being taken to consult with industry stakeholders:

Through the next COAG meeting in October the Government plans to work towards a harmonised approach to renewable energy feed-in tariffs...

I will shortly begin a series of roundtables with key stakeholders on practical action households can take to save on energy bills and reduce their environmental impact. The roundtables will include representatives of the

37 Conergy Pty Ltd, *Submission* 98.

38 ACF, *Submission* 82, p. 2.

39 *Proof Committee Hansard*, 6 August 2008, p. 8.

40 California Energy Commission, Frequently Asked Questions About the California Solar Initiative, <http://www.gosolarcalifornia.ca.gov/csi/faqs.html> (accessed 14 August 2008).

41 *Proof Committee Hansard*, 11 August 2008, p. 14.

community, NGOs, business groups and industries, including the energy services and renewable energy sectors...

We recognise that the industry faces a number of issues, including new and emerging business models, some on a scale we haven't seen in the past, and I look forward to hearing from you what the industry, in these changing times, considers critical for discussion.⁴²

2.40 The committee acknowledges the point, made by many industry players in their evidence, that repeated changes to the rebate scheme over a number of years have made it difficult for solar businesses to plan for growth. The rebate scheme has been intended to encourage householders to adopt renewable energy and to provide a platform from which the solar industry may grow and mature. The committee considers that, in the long term, a rebate of this size is not likely to provide a sustainable footing for industry growth.

2.41 The committee notes that feed-in tariffs are scheduled for discussion at COAG in October. They are also being considered in detail by this committee in its inquiry into the Renewable Energy (Electricity) Amendment (Feed-in-Tariff) Bill 2008, which is scheduled to report by 14 October 2008. In these circumstances, the committee leaves further discussion of feed-in tariffs to that report.

Recommendation 1

2.42 The committee recommends that the government:

- **Continue to provide support to households to take up renewable energy and energy efficiency initiatives, including through schemes such as the SHCP;**
- **Give consideration to providing incentives to householders to install larger photovoltaic systems; and**
- **As part of its deliberations with COAG on feed-in tariffs, note industry preference for the introduction of a feed-in tariff scheme as a sustainable, long term mechanism to encourage domestic uptake of solar energy systems.**

The Bill

2.43 The committee has considered the Save Our Solar (Solar Rebate Protection) Bill 2008. It notes that the bill is mis-named. While subtitled the Solar Rebate Protection bill, the bill itself does nothing to protect the rebates. It merely says that the scheme for administering the Solar Homes and Communities Plan should be subject to parliamentary disallowance. Passing the bill would do nothing to 'protect' rebates in any form.

42 The Hon Peter Garrett AM MP, Minister For The Environment, Heritage And The Arts, *Speech To The Appropriate Technology Retailers Association Of Australia Conference, Melbourne, 2 August 2008*, pp 7, 9.

2.44 The committee was also surprised at Coalition members' vociferous criticism of the means test. Less than two years ago, the then Environment Minister, Senator the Hon. Ian Campbell said:

In relation to PVRP, I am very keen to see a program to succeed PVRP that does what we did last time. I have extended it once already as environment minister. I am very keen to extend it again, but I am absolutely certain we can improve it more. One of the problems at the moment is that it goes generally to very wealthy people. It cuts out middle Australia and it is virtually unaffordable for low-income Australians. I have said to the renewable energy industry that, when a replacement for the PVRP scheme is negotiated and worked on, which I am working on at the moment, we want to make sure that people on lower and middle incomes can get it because, quite frankly, at the moment the people who generally get it are very, very high income earners, and I would like to see low- and middle-income earners be able to shift their homes and schools across to solar power.⁴³

Such targeting of the rebate to low- and middle- income earners is exactly what the current rebate policy achieves.

2.45 The committee received little evidence in either submissions or the public hearings that related directly to the substance of the bill, and the committee can not support the bill. It opposes it for four reasons.

2.46 First, the opposition has made it clear that it wishes to attempt to reverse the means test on the rebate, announced in the May budget. They have not stated any other ways in which they wish to reform administration of the SHCP. However, as evidence received from DEWHA has shown, the Plan is continuing to meet its environmental objectives, and is doing so while being targeted to lower income earners. The Committee cannot support a bill which some MPs wish to use as a vehicle for modifying administration of a government program that is already meeting its objectives.

2.47 Furthermore, even if the bill were passed, any move by Coalition Senators to use it to modify the administration of the SHCP would depend on the support of Senators from other parties who share the balance of power in the Senate. To the committee's knowledge, some of these Senators have not publicly stated their views about the SHCP. There is no certainty around what kinds of administrative arrangements would gain the support of enough Senators to avoid disallowance in the Senate. Passage of the bill could thus significantly increase uncertainty for industry and the community over the future of the program. This is the opposite of what industry wants.

2.48 Second, the rebates are already being taken up at record levels. Demand for the program is extremely strong, straining the resources of the Department, taking up

43 *Senate Debates*, 12 October 2006, p. 107.

an increasing share of available public funds for household renewable energy and water efficiency measures and causing rapid change and volatility within the industry. Removing the means test would therefore create even greater demand, to the detriment of both the long-term viability of the rebate scheme and the solar industry. Given that such volatility is precisely what the industry has complained about, removal of the means test would be ill-advised.

2.49 Third, administrative reform should be backed by coherent principles. However there is no plan underpinning the Coalition's approach to parliamentary scrutiny. The bill is at odds with how the Coalition approached the administration of other programs when they were in government. The Regional Partnerships and Sustainable Regions programs were the subject of critical comments by a Senate Committee and by the independent umpire, the ANAO.⁴⁴ Labor Senators recommended changes, but did not go as far as suggesting that the program guidelines become disallowable instruments.⁴⁵ Yet even Labor's modest reform proposals were rejected by Coalition Senators, and by the then government.⁴⁶ Furthermore, the committee is unaware of any previous examples of a bill having the effect of allowing one chamber to dictate the administrative arrangements for a government program (see Chapter 1). The committee has been offered no policy rationale to explain the Coalition's inconsistent approach to program administration revealed by this bill.

2.50 Fourth, the bill has the potential to significantly increase the amount of red tape in the program, and above all to reduce the ability of the government to respond quickly to what all agree is a fast-evolving industry. If the bill were to be passed, then every single proposal to reform the administration of the scheme would be required to go through lengthy consultation and clearance processes. Potentially valuable improvements could become hostage to the interests of individual political parties and lobby groups. The bill could seriously hamper efforts to respond to the evolving needs of the renewable energy industries, and to Australia's carbon emissions reduction strategy.

44 Australian National Audit Office, *Performance Audit of the Regional Partnerships Programme*, Audit Report No. 14 2007–08, ANAO, Canberra.

45 Senate Finance and Public Administration Committee, *Report of the Inquiry into the Regional Partnerships Program*, 6 October 2005.

46 Senate Finance and Public Administration Committee, *Report of the Inquiry into the Regional Partnerships Program*, Government Senators' Report, 6 October 2005.

2.51 The bill would also force the government to telegraph to energy markets possible changes in financial incentives, which could cause market distortions and potentially counter-productive strategic behaviours in the industry. This could artificially distort prices and increase market volatility. This would not be good public policy.

Recommendation 2

2.52 The committee recommends that the bill not proceed.

Senator Anne McEwen
Chair

Coalition Members' Dissenting Report

Introduction

Background

1.1 On 1 January 2000, the Howard Coalition Government introduced the Photovoltaic Rebate Program (PVRP). This initiative made cash rebates available to households to install grid-connected or stand alone photovoltaic (PV) systems. Under the PVRP, \$31 million was committed over four years by the then-Commonwealth Government. Another Howard Government initiative, the Australian Greenhouse Office (established in 1998), was charged with the administration of the program.

1.2 Following the success of the 2000 program, and in recognition of the worldwide growth of solar PV, the Howard Government introduced a direct rebate under the program to Australian consumers of \$4 per kilowatt, up to a maximum of \$4,000. With the PVRP due to expire in June 2007, a budget announcement in May 2007 of a \$150 million expansion of the program over a five year period signalled the Coalition's commitment to the ongoing reduction of carbon emissions.

1.3 Under the expanded program, rebates of up to \$8,000 were made available for households installing eligible PV system. In addition, grants of up to \$12,000 were made available to schools and public buildings to install PV panels.

1.4 In response to fear that the PVRP would be oversubscribed, then-Prime Minister Howard provided a very clear commitment that funds would be made available to meet demand under the expanded program:

[The PVRP] is a demand-driven program. So as many households as want it, can have it ... (and) if it turns out to be more popular, well, more money will be made available.¹

1.5 In the year following the budget announcement and the implementation of the \$8,000 rebate, total watts installed across all Australian states and territories rose from 250,000 in April 2007 to a high of approximately 850,000 in April 2008², indicating a huge increase that can be directly attributable to the increased rebate.

1.6 The \$8,000 rebate, coupled with the Prime Minister's announcement indicating a firm level of support for PV, increased awareness among Australians of renewable energy and solar in particular, and signalled a strengthening of Australia's emerging solar industry. It also provided the solar industry with the confidence to

1 Prime Minister John Howard, *Sunrise* program, Channel 7, 9 May 2007.

2 Department of Environment, Water, Heritage and the Arts, <http://www.environment.gov.au/settlements/renewable/pv/pubs/wattsbymonth-june08.xls> (accessed 12 August 2008).

invest in expanding businesses and encouraged many new entrants to gain the qualifications required to enter the industry:

The demand created by the PV Rebate program has driven large-scale investment by businesses, individuals and training institutions in the solar PV power industry. This has meant an upskilling of many electricians, investment in new technologies and installation methodologies.³

1.7 The first budget of the new Rudd Government contained the surprise announcement of the introduction of a mean test to the program. Despite being renamed the Solar Homes and Communities Plan (SHCP), the rebate was now available to less homes in fewer communities. Effective immediately following the 13 May budget, only households with an annual taxable income of less than \$100,000 are now eligible for a rebate. In addition, the five year PVRP was reduced to three years, eliminating the ability of industry to undertake long term planning or develop business models due to uncertainty surrounding the continuation of the SHCP.

1.8 Despite the vocal campaigning of the Labor Party on environmental and climate change issues prior to the 2007 election, including statements made by then Opposition Leader Kevin Rudd while visiting a solar installation business, this budget measure stood in stark contrast to the clear commitment of the previous Coalition Government to meet demand for the program, deliver maximum environment benefits and provide absolute certainty to industry.

1.9 In response to an outcry from those involved in the solar industry and average Australian households committed to reducing their carbon footprint but over the low threshold for the means test, the opposition introduced a bill into Parliament mandating a process by which the responsible Minister determines guidelines for the SHCP. The Save Our Solar [Solar Rebate Protection] Bill 2008 [No. 2] ensures that the guidelines 'would be subject to Parliamentary scrutiny and potential disallowance by either House of Parliament under section 42 of the *Legislative Instruments Act 2003*'.

3 Conergy Pty Ltd, *Submission 98*, p. 2.

Chapter 2

Impact of the Means Test

2.1 This chapter investigates the effect of the introduction of a means test, which was immediately implemented following the unexpected 13 May Budget announcement, on Australia's solar industry, solar uptake and impact on carbon emissions. It examines the rationale behind the Government's decision, demonstrating that the Government's lack of consultation on the initiative was made worse by a failure to undertake any analysis of the impact of the decision. Finally, this chapter will discuss the Save Our Solar [Solar Rebate Protection] Bill 2008 [No. 2] currently before the Senate for consideration.

Industry

2.2 Submissions and witness statements provided to the Committee over the course of this inquiry have indicated that the Labor Government's decision to impose a means test on eligibility for rebates has had a devastating effect on Australia's solar industry. More than 150 submissions have been received by the Committee, primarily from small businesses and environmentally conscious households, virtually all of which have been critical of the policy introduced by the Government and the manner in which it was introduced.

2.3 The most immediate impact of the announcement of the means test and the reduction of the program from five years of funding to only three years was an immediate loss of certainty and confidence in the industry¹. Under the previous government, the program was set over a five year period, with a personal assurance from the then-Prime Minister that more funds would be made available if required. With Mr Rudd campaigning for the November 2007 election on environmental issues, the solar industry felt confident that it would continue its growth under a new government. This confidence was betrayed with the sudden introduction of the means test. Mr Mitra Ardron, General Manager of Beyond Building Energy, noted that:

...for an industry to grow it needs certainty and the current rebate scheme provides anything but certainty. In our sales process, we have to tell customers whether there is a rebate available, however we do not know – from one month to the next – whether the rebates are still going to be there.²

2.4 Mr Garrett, the responsible Minister, did little to ease the concerns of industry when speaking at the recent Appropriate Technology Retailers Association of Australia (ATRAA) conference resulting in continued uncertainty.

1 For example, see EcoSouth Solar, *Submission 37*, p. 1.

2 Beyond Building Energy, *Submission 88*, p. 1.

I was actually there at that talk. To be honest, the industry spent the rest of that day—the last day of the conference—trying to understand exactly what had been said. I am sorry; I do not have the exact quote. Someone would have to find it for me. But the statement was: we expect to meet demand in the current program. Unfortunately, you can interpret that in a multitude of different ways, including the current program, meaning 6,000 people. I speak for everyone in the industry, our competitors as well I believe, in saying everyone was in turmoil and nobody knew whether that statement actually meant the rebates would continue beyond the next week.³

2.5 As a direct result of the loss of certainty within the solar industry, plans to build capacity have stalled. Under the Coalition Government's uncapped rebate, the solar industry was able to grow. Given Mr Rudd's stated dedication to environmental issues prior to the election, industry fully expected to continue to grow as it did under the previous government and:

- Build inventory to sustainable levels to support their dealer networks.
- Provide the investment to train and educate the new breed of installers necessary to meet the challenges.
- Provide employment to all levels of the industry.
- Attract the investment to the industry necessary for growth
- Increase the volumes that allow better buying power and reduction in costs.
- Enable us to plan the supply chain better with production schedules to bring full container loads more frequently and cost effectively.⁴

2.6 Plans for capacity building have instead ceased. At the time of the Budget announcement, businesses and individuals such as Mr Lee Rigley were in the process of business planning. That planning was disrupted by the Budget announcement, which caused the withdrawal of interest of potential customers due to the means test.⁵

2.7 It has become plain during this inquiry that the impact of the means test on businesses has led to many questioning their viability:

The decision to means test the solar PV rebate has all but stopped my business in its tracks. Customer desire has almost disappeared over night. I have no new orders for solar installation, since the means test. I am currently considering what to do with my business as a result of the means test decision.⁶

3 Mr Mitra Ardron, Beyond Building Energy, *Committee Hansard*, 11 August 2008, p. 35.

4 Solar Sales Pty Ltd, *Submission 69*, p. 1.

5 Mr Lee Rigley, *Submission 135*, p. 1.

6 SunWise Electrics, *Submission 28*, p. 1.

2.8 Given Australia's potential to become a world leader in the supply of solar energy due to its volume of sunlight hours, the Coalition considers the decision to means test the rebate to be short-sighted at best.

2.9 The Rudd Government has failed to consider its decision to means test the rebate in human terms. Under the previous Government's generous scheme, BCSE accreditations rose 2-3 fold.⁷ The Clean Energy Council, Australia's national clean energy peak body, notes that:

Data collected in a sample of twenty member companies in the two weeks following the budget announcements advised of the following employment impacts:

- Decisions to engage staff had been put on hold or abandoned;
- Contractors and staff had hours reduced; and
- Staff had been let go.

This has been confirmed again recently by some industry representatives who advise that in areas where there has been a profound negative impact (in the order of an 80% reduction in volume of work) there has been a reduction in staff numbers or at the very least, a halt to further investment in the business and a review of existing resources.⁸

2.10 This means that a significant number of people will need to find alternative or additional sources of employment to meet their financial commitments, a difficult task when Australians are already suffering under high cost of living pressures.

2.11 According to witnesses to this Senate inquiry, the introduction of the means test - and particularly a means test significantly lower than other Government means tests on rebates, such as the Baby Bonus at \$150,000 – came as an unpleasant surprise to industry. This has led to feelings of betrayal by a government that had claimed to have excellent environmental credentials:

I, and I speak for many small business owners in the industry, feel that whilst the signing of the Kyoto Protocol was a nice symbolic gesture, when it came to doing something that really made a difference, the Government not only failed to do something that kept the status quo, but have gutted a scheme that made a positive difference to "working families", to our solar industry and to climate change.⁹

2.12 The Budget announcement directly contradicted the impression given by the then Leader of the Opposition, Mr Kevin Rudd, that he was committed to supporting renewable energy. In March 2007, Mr Rudd, visited the Co-director of Solartec

7 Conergy Pty Ltd, *Submission 98*, p. 2.

8 Clean Energy Council, *Submission 131*, pp 1-2.

9 Self Sufficiency Supplies Pty Ltd, *Submission 121*, p. 1.

Renewables, Mr Phillip May, to highlight his climate change credentials. In conversation with Mr May, Mr Rudd used:

...words to the effect that the renewable energy industry and solar in particular would be heavily supported if the Rudd government got into power—which they did. It is my understanding that there was going to be a means cap. From what I recall, that was going to be at the \$250,000 mark. That would not have made much difference...Bringing in the \$100,000 means cap has totally gutted the industry...¹⁰

2.13 Mr May's fellow Co-Director, Ms Sophia Moody, appearing before this inquiry, spoke of the heartbreak that followed the means test announcement¹¹, exacerbated by the lack of prior notice:

Senator BIRMINGHAM—...did he give any indication that this type of measure might be forthcoming in a change of government?

Mr May—No, we had no warning at all.

Ms Moody—It was quite the opposite, actually. He was very supportive of the industry. He was saying, 'Yes, we need solar panels on rooftops.' He was doing the whole big pre-election spiel, basically.¹²

2.14 The Rudd Government has also compromised the Solar Cities Program, introduced by the previous government, which also provided employment within the solar industry. The aim of that program is to gather information to be able to manage energy into the future, including reducing greenhouse gas emissions. The website for the Department of the Environment, Water, Heritage and the Arts which manages this program describes the scheme as 'a partnership approach that involves all levels of government, the private sector and the local community'.¹³

2.15 However, the Government has directly jeopardised the success of the program through the means test introduction. The Clean Energy Council notes that:

Industry representatives have advised that the intention of this program when introduced, was to inform future energy policy through providing a stream of data and learnings over the life of the program. If annual changes are introduced, the benefit of this data will be negated as it will not be comparable, and therefore not useful in informing future energy policy.¹⁴

10 Mr Phillip May, Co-Director, Solartec Renewables, *Committee Hansard*, 25 July 2008, p. 4.

11 Ms Sophia Moody, Co-Director Solartec Renewables, *Committee Hansard*, 25 July 2008, p. 4.

12 *Committee Hansard*, 25 July 2008, p. 4.

13 Department of the Environment, Water, Heritage and the Arts, <http://www.environment.gov.au/settlements/solarcities/> (accessed 12 August 2008).

14 Clean Energy Council, *Submission 131*, p. 5.

2.16 Mr Brad Shone, Energy Policy Manager of the Australian Technical Association (ATA) also notes that the rebate was factored in to the cost of projects by Solar Cities, compromising the program's success.¹⁵

2.17 Despite the evidence provided to the Committee that the means test has been detrimental, The Hon. Peter Garrett, Minister for Environment, Water, Heritage and the Arts has declined to ease the burden now crippling what had become a vibrant and growing industry under the Howard Government by refusing to eliminate the means test.

Effect on the uptake of solar panels

2.18 An overwhelming sense of disappointment and anger was conveyed to the Committee from ordinary Australians no longer able to proceed with the installation of solar panels. Many submitters indicated that they held ordinary jobs, had children to support and mortgages, and were by no means wealthy. Concern for the environment had led them to investigate purchasing solar panels – something only possible with the help of a rebate from the government, as described by Mr Tony Hansen, who states that installing PV cells with the rebate, when added to a mortgage debt is:

...now not feasible. If the Government thinks that the "rich" earning over \$100,000 were only going to install the PV cells with the view to reducing their energy costs they are wrong, the cost of the cells even with the rebate will take years to be recouped. The people who were going to install the cells were going to do so for the environment and the government rebate made the idea feasible.¹⁶

2.19 The anger felt toward the government for their back handed decision was evident in numerous other submissions, particularly because of the apparent hypocrisy in ratifying the Kyoto Protocol while failing to support the local renewable energy industry:

The government also claims to support committed efforts to reducing carbon emissions, but I believe the introduction of means testing to the Solar Rebate program is not coherent with the claimed motives of the government.¹⁷

On the one hand, Mr Rudd has demonstrated to the world his agreement with the issues and signed the Kyoto Protocol, but one has to question his sincerity when on the other hand he places a means test on the solar rebate scheme.¹⁸

15 Alternative Technology Association, *Submission 52*, p. 4.

16 *Submission 24*, p. 1.

17 Mr Hugo Figgis, *Submission 6*, p. 1.

18 Mr Ian and Mrs Frances Toogood, *Submission 7*, p. 1.

I also struggle with the contradiction of our nation finally ratifying the Kyoto Protocol and then our Government introducing this means test on the rebate. It makes no sense to sign such an agreement and then put the entire solar industry into disarray.¹⁹

2.20 Installing photovoltaic cells is an expensive undertaking involving high upfront costs. The City of Darebin hosts solar forums to encourage the installation of photovoltaic cells and recently surveyed attendees at one such forum:

Senator BIRMINGHAM—Did you ask those 70 people what would stop them from undertaking solar?

Ms Hynes—The biggest barriers to inputting solar were the upfront costs. Obviously rebates would help with those.²⁰

2.21 Feedback to the Committee indicated that the Budget means test announcement has resulted in an avalanche of cancellations from customers who had already signed contracts and paid deposits for installation such as Mr Julian James:

We had signed a contract with Solar Wind Systems to provide the system and paid our deposit. Unfortunately the means test was introduced during this time and [we] were no longer eligible for the rebate. We had to pull out of the contract and get our deposit back.²¹

2.22 The impact of this phenomenon on solar businesses has been significant:

I have had numerous orders cancelled...²²

...when the means test was announced we had around 15 cancellations of appointments and had 10 signed customers whose paperwork was not done, withdraw.²³

I contacted those customers and informed them of the changes. Of those 17 customers, 14 of them were not eligible for the rebate any more, and none of them have decided to go ahead with installing a PV system on their home. The most frustrating thing is that 7 of these customers had earned between \$100k and \$108k in the last financial year...²⁴

2.23 During its inquiry, the Committee heard of the growth in bulk purchase plans, whereby an installer undertakes to put PV panels on roofs across a neighbourhood at a discounted price provided that a certain quota of households sign up to the plan. The means test resulted in a significant number of customers withdrawing from these bulk

19 Ms Susan Grant, *Submission 10*, p. 2.

20 Ms Libby Hynes, City of Darebin, *Committee Hansard*, 28 July 2008, p. 31.

21 *Submission 2*, p. 1.

22 Mr Todd Healey, *Submission 106*, p. 1.

23 Adelaide Hills Solar and Solar Depot, *Submission 11*, p. 1.

24 Environment Shop, *Submission 12*, p. 1.

purchase plans;²⁵ in some instances, the bulk purchase project has been abandoned. BSR Constructions undertook to complete a bulk installation at Beachmere Sands Lifestyle Resort, an over 55s independent living community, with retirees living on fixed incomes. Mr George Papallo of BSR noted that 'The massive support for installing the PVCs provided the residents with a greater purchasing power, ensuring value for money for everyone'. He went on to say that:

Unfortunately though, since the Federal Government's recent decision to introduce a means test for the installation of solar panels we will no longer be able to implement this beneficial approach to saving energy due to cost restraints that will now affect a number of residents.²⁶

2.24 Despite Mr Garrett's public statement that the means test is 'good public policy to make sure that it [the rebate] goes to families that need it most',²⁷ it appears to have backfired on the solar industry, with those earning over the \$100,000 threshold unable to afford PV without government support:

Initially, I thought the means test wouldn't deter families earning over \$100,000, to continue to install solar power grid connect systems. However NOT one customer has installed or intends to install a system, that hasn't applied for the \$8000 government rebate.²⁸

2.25 Estimates vary among installers, but the Clean Energy Council says that the reported impact of orders has varied from pre-announcement days up to 80%.²⁹ Mr Ric Brazzale, Managing Director of Green Energy Trading attributes this to the fact that 'customers willing to invest in PV typically had a family disposable income in excess of \$100,000'.³⁰ The 'families that need it most', as Mr Garrett claims, are therefore *less* likely to adopt solar clean energy.

2.26 During the course of this inquiry, the Department of the Environment, Water, Heritage and the Arts produced figures on applications for the rebate since the May Budget. These figures indicate that applications for the rebate have risen since the announcement:

- for the six week period up to 8 February 2008, the average number of applications received weekly was 178;
- for the six week period leading up to the 2008-09 Budget, the average number of applications received weekly was 324; and

25 M & H Power, *Submission 71*, p. 2.

26 BSR Constructions, *Submission 78*, p. 3.

27 The Hon Peter Garrett AM, *Doorstop interview*, ATRAA Conference, 2 August 2008, <http://www.petargarrett.com.au/595.aspx> (accessed 13 August 2008)

28 Blackmore's Power and Water, *Submission 32*, p. 1.

29 Clean Energy Council, *Submission 131*, p. 3.

30 Green Energy Trading, *Submission 100*, p. 2.

- for the six week period up to 11 July 2008, the average number of applications received weekly was 544.³¹

2.27 These figures are misleading in relation to the success of the means tested rebate. Mr Ardron noted that Mr Garrett's figures may well be a result of the nervousness from industry and concerns around the continuity of the rebates. He notes that this is because of fears of how long the rebate is going to last:

In fact, at the ATRRA conference there were rumours going around that the rebates had already run out. One installer had been unofficially told, 'Do not bother sending in your application because there are not any left.'³²

2.28 Given that industry figures indicate that the majority of those installing PV earn over \$100,000, there are also serious concerns over the sustainability of these current applications from lower income groups. The aura of uncertainty may well be forcing those in a position to install PV who earn under the means tested amount to move sooner than they had intended for fear of missing out on a rebate at all. This 'rush' is likely to have a finite span. Mr Shone of the ATA also presents the following argument:

ATA believes that, over time, there will most certainly be a drop-off in applications for the rebate. However, this might not be apparent in the rebate uptake statistics in the short term for a number of reasons:

- Many people may have believed the means test started in the new financial year, so may have tried to get applications in before the end of June, oblivious of the fact that the means test commenced on Budget night.
- Some families' household incomes may have been below \$100,000 during the 2006/07 financial year, yet they may have been expecting them to be higher than \$100,000 in 2007/08, and as a result they might have been applying before June 30th 2008.
- Increased publicity of the SHCP following the government's decision could have made people aware of the availability of the \$8000 rebate, and hence an increased take-up rate might be experienced momentarily.

As a result, we encourage the Committee to take a long term view of the statistics and not rely on the uptake figures from immediately after the announcement. We feel that any short-term spike in applications which may have resulted from the above effects won't be borne out over time.³³

2.29 As previously mentioned, bulk purchase groups are becoming an increasing presence in the solar industry. As a result of PV being made available at a discount

31 Department, of Environment, Water, Heritage and the Arts, *Submission 147*, p. 4.

32 Mr Mitra Ardron, *Beyond Building Energy, Committee Hansard*, 11 August 2008, p. 31.

33 Alternative Technology Association, *Submission 52*, p. 3.

price, it will become increasingly easy for those able to claim the rebate to afford solar panels. However, evidence given to the Committee suggests that those who join one of these plans are likely to install smaller, 1 kW systems only, given that their finances are unlikely to be able to stretch to accommodate the expenses associated with larger systems.

2.30 These bulk purchase schemes, now driven overwhelmingly by households installing systems of the smallest possible size, are also likely to be a cause of the increase in application numbers. The Committee heard evidence of a program coordinated by the Queensland Government for a bulk installation of 1,000 PV systems at the minimum 1 kW size. It is highly likely this program has artificially inflated the numbers. However, the Queensland Government refused to make a submission or appear before the Committee despite requests to do.

2.31 In light of the arguments above, made by industry experts, it is impossible for the Rudd Labor Government to claim that the means testing has, and will continue to have, a positive impact, either for the solar industry in Australia or for the environment.

2.32 While it is the Coalition's position that any use of clean solar power is better than none, it is logical and makes more financial sense to maximise the benefits of bulk purchasing groups by abolishing the means test and allowing those with additional disposable income to invest in larger systems, while taking advantage of discounted prices.

Impact on emissions reductions

2.33 Evidence of the effect on emissions reductions resulting from the means test has been provided to the Committee through reports from installers who note that their inquiries and installations have significantly reduced. Conergy Pty Ltd sums up succinctly:

The reduction in PV panels distributed around the country means the emission reductions occur at a greatly reduced rate. Isn't the idea to have as many solar panels on rooves in order to reduce our emissions? Emissions are not means tested so why should the rebate be means tested?³⁴

2.34 One of the stated aims of the Howard Government upon introducing the PVRP was to reduce Australia's harmful greenhouse gas emissions. With the \$8,000 rebate as an incentive, households on average installed PV systems of larger than 1kW, thereby outlaying a significant amount of money themselves to ensure a greater reduction of their carbon footprint and an increased benefit to the environment.

34 Conergy Pty Ltd, *Submission 98*, p. 4.

2.35 The introduction of the means test removed any government incentive for those households that can most afford to install larger systems. As a result, industry expressed fears that the rebate would now only drive the installation of small systems:

We have a major concern that what will happen now is it will drive, if you like, the lowest common denominator, a roll-out of smaller, one kilowatt systems and it is not going to leverage customer demand.³⁵

2.36 The concerns of industry proved to be accurate when the Department of Environment, Water, Heritage and the Arts produced figures for the Committee proving that the size of system purchased has decreased from an average 1.57 kW over the life of the program down to 1.24 kW since the introduction of the means test.³⁶ Evidence from the solar industry confirms this, with one installer noting that 'customers who do go ahead with installations are ordering smaller systems of around 1kW'.³⁷ Mr May notes that 'if someone has a higher income, they generally are going to put a bigger system in...so you are getting a greater carbon offset'.³⁸

2.37 In terms of increasing the benefit to the environment, it is clear that the more watts that a system can generate, the better. Mr May informed the Committee that it would take approximately a 4kW system to offset the amount of kilowatt hours generated by the average house in the ACT or NSW.³⁹ The figures provided by the Department indicate that, since the May Budget announcement, Australians are moving further away, rather than closer, to the goal of offsetting all of their carbon usage. The figures also demonstrate that each kW of renewable power generated will effectively cost 20 per cent more under the Rudd Government than under the previous Coalition Government, which is a direct result of the means test introduced with no consultation with industry or economic modelling.

2.38 The betrayal that many submitters and witnesses felt about the impact of this policy when contrasted with the stated environmental objectives of the Rudd Government was clearly enunciated by Dean Mighell, State Secretary, Electrical Trades Union, Southern States Branch:

The Rudd Government does not appear to be serious about tackling global warming. Rudd's claim that 'climate change is the great moral challenge of our age' has clearly been forgotten or blatantly disregarded.⁴⁰

35 Mr Ric Brazzale, Green Energy Trading, *Committee Hansard*, 28 July 2008, p. 39.

36 Mr Stephen Oxley, Department of the Environment, Water, Heritage and the Arts, *Committee Hansard*, 11 August 2008, p. 20.

37 SolarQuip, *Submission 118*, p. 1.

38 Mr Phillip May, Co-Director, Solartec Renewables, *Committee Hansard*, 25 July 2008, p. 4.

39 Mr Phillip May, Co-Director, Solartec Renewables, *Committee Hansard*, 25 July 2008, pp 3-4.

40 Electrical Trades Union – Southern States Branch, *Submission 101*, p. 3.

Consultation, modelling and analysis

2.39 The Government failed to consult with industry prior to implementing the means test. Evidence from the Department indicates that there was no modelling of the effect of the means test prior to the Budget announcement, and the lack of consultation denied the renewable energy industry, and in particular the solar industry, the opportunity to make an informed submission to the Government about the expected effects of the decision. This comes in spite of the Clean Energy Council approaching Government on behalf of its members to raise issues within the industry. In failing to use this available resource, it is possible to interpret the Government's silence as an unwillingness to act in the best interests of the solar industry for reasons unknown. Despite this, the Clean Energy Council remains 'keen to work constructively with Government to ensure a strong and sustainable Australian PV industry'.⁴¹ The Coalition suggests that the Government accept this offer.

2.40 In a doorstep interview at the recent ATRAA conference, Mr Garrett himself appeared to contradict the evidence provided to the Committee that no consultation took place prior to the announcement, when he stated that 'I am absolutely committed to making sure that we make decisions on the basis of reliable and accurate information...'⁴²

2.41 Irresponsibly, Minister Garrett has failed to undertake research into the effect of the means test on the solar industry in the months following the announcement:

Senator BIRMINGHAM—What research is the department undertaking in terms of the impact on industry? Senator Parry was mentioning companies that are laying off staff and there are different stories that we are getting from various companies with regard to the impact. Has the department initiated or has it undertaken any research in terms of what is happening in the industry?

Mr Oxley—That is not an area of analysis that the department has undertaken.⁴³

2.42 Since Minister Garrett chooses not to seek reliable and accurate information from industry or the general public, industry employment and capacity has suffered, and average households committed to helping the environment through the uptake of clean and renewable energy are now no longer supported to do so.

41 Clean Energy Council, *Submission 131*, p. 4.

42 The Hon Peter Garrett AM, *Doorstop interview*, ATRAA Conference, 2 August 2008, <http://www.petergarrett.com.au/595.aspx> (accessed 13 August 2008)

43 Mr Stephen Oxley, Department of the Environment, Water, Heritage and the Arts, *Committee Hansard*, 11 August 2008, p. 29.

Government cooperation with inquiry

2.43 Coalition Senators wish to record their disgust at the contemptuous manner in which the Minister for the Environment, Heritage and the Arts, Hon Peter Garrett AO MP, treated this inquiry. Departmental officials were scheduled to appear before the Committee in Canberra on 25 July but the evening prior to the hearing, at 6.13pm, the officials advised the secretariat in an email that 'the Minister has asked that the Department defer its submission and appearance before the inquiry'.⁴⁴ This was a disruptive intervention by the minister. It hampered the committee's work by delaying the availability of information not just to committee members, but to witnesses who would have been able to help assess the impact of the government's policy announcement. It also severely inconvenienced committee members who had travelled from several States in the expectation of being able to put questions to the Department. As a result, Coalition Senators became concerned that a summons might be necessary, to ensure the committee could get information that was vital to its inquiry.⁴⁵

2.44 Similar contempt appears to have been shown for the solar industry, already reeling from the introduction of the means test with Conergy indicating:

We have always been able to get access to these figures with a quick call to the Department. On the most recent phone call, we and others who called were told, the Department was "instructed from above not to release any information regarding installations for the solar rebate".⁴⁶

The Bill

2.45 The Save Our Solar [Solar Rebate Protection] Bill 2008 [No. 2] was introduced to make provisions for the better operation of the solar rebate scheme. The current Solar Homes and Communities program administered by Government has no legislative basis. As a result of this, changes to the solar rebate were not subject to Parliamentary scrutiny or potential disallowance. This bill will require the responsible Minister to develop guidelines for the Plan, done via legislative instrument under the Legislative Instruments Act 2003. If the bill is passed, both the Senate and the House of Representatives will examine and approve the guidelines.

2.46 Given the universal criticism of the introduction of the means test by the Rudd Government from consumers, industry, environment groups and minor parties – in addition to the Coalition Opposition – it is clear the Rudd Government cannot be trusted to set the right regulatory framework for this program. This bill will ensure they cannot do so in isolation of industry comment, community sentiment or expert opinion.

44 Mr Michael Preece, Department of the Environment, Water, Heritage and the Arts, *Email to ECA Committee*, 24 July 2008.

45 Senator Ian McDonald, *Proof Committee Hansard*, 28 July 2007, p. 73.

46 Conergy Pty Limited, *Submission 98*, p. 3.

2.47 The lack of consultation, modelling and analysis prior to the implementation of the means test has necessitated the introduction of the bill. The Rudd Government failed in its responsibility to the Australian people and the solar industry by their lack of care to ensure that the SHCP would work to the benefit of the solar industry and maximise environmental outcomes.

2.48 The key strength of the bill lies in Clause 6 which requires continuity of the Plan. As a result, the Government will have no option but to consult widely on proposed guidelines, and present appropriate and measured guidelines.

Recommendation 1

2.49 The Coalition Senators recommend that the bill be passed.

Chapter 3

Planning for the future

Rebates

3.1 The Coalition believes that rebates play an important role in developing industry capacity. The rebate of \$8 per watt under the Howard government clearly achieved this objective by encouraging PV uptake among Australians, resulting in strong growth:

The increase in the solar rebate to a maximum of \$8000 per household... in the 2007 Federal Budget saw the domestic solar industry literally take off in spectacular fashion. For the first time, along with an increased and growing public awareness of the environmental virtues of solar electricity, it allowed many more households to access solar for as little as a \$5000 outlay, not much more than a credit card payment for most.¹

3.2 The availability of a maximum \$8000 rebate has not only sparked growth in consumer interest in the installation of PV systems and begun building a larger industry with greater capacity to deliver environmental outcomes for Australia, but has also helped to reduce the price of PV units and sparked a new interest in bulk purchases to install units for a smaller cost. For example, the Queensland Government recently tendered to solar installers to supply 1000 1kW PV systems for \$8185 – a total cost of \$185 to households qualifying for the rebate.²

3.3 The Queensland Government Scheme, along with other bulk purchases, provides a stark example of why the introduction of the means test was the worst possible policy that the Rudd Government could have introduced. The means test limits the market to households with smaller incomes who install the smallest system available for the maximum rebate, resulting in 'less bang for the buck'. As a direct result of the means test taxpayers are now paying more per watt of renewable energy generated than was previously the case.

3.4 The Committee received evidence from numerous households with a taxable income of over \$100,000 who were prepared to install bigger systems using the \$8000 rebate as an offset to costs, rather than simply using the rebate to pay for a system in its entirety:

1 M & H Power, *Submission 71*, p. 1.

2 Ministerial Media Statement, *Bligh Government drives down solar prices*, <http://www.cabinet.qld.gov.au/MMS/StatementDisplaySingle.aspx?id=59374> (accessed 12 August 2008).

The initial cost of \$8500 less rebate meant a cost to me of \$500, and also being an electrician, this offer was too good to refuse. So we drew on our mortgage and paid in full for a **1.5kW** solar system. (emphasis added)³

I was prepared to spend \$15,000 to install the PV cells on my house but without the rebate this will blow out to \$23,000, which when added to a mortgage with an interest rate of nearly 10%... is now not feasible.⁴

3.5 Numerous witnesses to the inquiry suggested alternatives, such as a higher means test, a tapering of the means test or a restructure of the rate of rebate to encourage the installation of larger systems. All witnesses, except the government, opposed the means test in its current form.

3.6 The Coalition opposes the means test outright. It confuses a policy directed at achieving environmental outcomes with a social justice policy. If there were to be any change to the rebate system it should be one that encourages the generation of more renewable energy, not less. Those with strong environmental concerns who are willing to contribute more money to reduce their carbon footprint should be encouraged, not punished.

3.7 For example, Mr Andrew Bailey, who does not qualify for the rebate, noted that when he would have been prepared to contribute more of his own funds towards PV - 'I would have looked at 50 per cent of the rebate cost. I would have gone to \$4000'.⁵ With no access to a rebate, Mr Bailey will not proceed with the installation of PV at his residence.

3.8 The provision of the rebate also requires longer term certainty. The Howard Government guaranteed the solar industry five years of funding for the \$8000 rebate (free of any means test) and with a Prime Ministerial assurance that more funds would be made available to meet any increased demand. The Rudd Government has not only introduced a means test, but wound the five year program back to three and has even failed to give industry a clear assurance that all applications received this year will be funded. Their actions have sparked panic in the market and extreme uncertainty in the solar industry.

Recommendation 2

3.9 Coalition Senators recommend the Rudd Government reverse the means test and provide certainty to industry with ongoing funding of the rebate for the next five years.

3 Mr Andrew and Mrs Janette Bailey, *Submission 5*, p. 1.

4 Mr Tony Hansen, *Submission 24*, p. 1.

5 Mr Andrew Bailey, *Committee Hansard*, 11 August 2008, p. 40.

Renewable Energy Certificates

3.10 Renewable Energy Certificates or RECs provide additional support to the installation of photovoltaic systems as well as solar water heaters. RECs are provided as part of the Mandatory Renewable Energy Target and are usually sold to offset the cost of installation. The Committee heard evidence about the importance of RECs for both PV systems and solar hot water:

Primarily I can speak from a hot water perspective, if we did not have the RECs I would say I would be out of business in a minute. Obviously, particularly for those people who do not qualify for rebates, the RECs are the only contribution they get. A typical (hot water) system is about \$4,000 and RECs generally provide another \$1,000 back, so it reduces the cost by about 25 per cent.⁶

3.11 RECs generated by PV systems, especially larger systems, are of even greater value, providing another means to offset the high upfront cost of installation. Coalition Senators and the solar industry were concerned to learn during the course of the inquiry that the future application of RECs to this sector was also at risk:

Treatment of solar water heaters under the expanded national RET scheme will have implications for the cost of the scheme, the liquidity of the RECs market, the technology mix and the amount of electricity generated by renewables in 2020. Stakeholders views are sought on the treatment of renewable energy sources and technologies, including the treatment of biomass and solar water heaters.⁷

3.12 The shadow cast over the future application of RECs to the solar industry, coming on top of the means testing of the rebate, has caused further anxiety and unnecessary business uncertainty. Coalition Senators urge the Government to remove this uncertainty immediately and confirm the continued availability of RECs for solar water heaters and photovoltaic systems.

Feed-in-Tariffs⁸

3.13 The Coalition recognises the potential of gross feed-in-tariffs to provide a medium term payback period that encourages private sector investment in PV systems and, therefore, certainty for the solar industry over the medium term.

6 Mr Mark Rickards, *Committee Hansard*, 11 August 2008, p. 8.

7 COAG Working Group on Climate Change and Water, *Design Options for the Expanded National Renewable Energy Target Scheme*, p. 7.

8 Households with their own small-scale renewable energy systems can produce more energy than they use. If connected, they can feed this electricity back into the power grid. A feed-in tariff is a credit to households from power companies for the electricity that is fed back into the grid.
<http://www.dpi.vic.gov.au/dpi/dpinenergy.nsf/LinkView/47D19C1C08345367CA25736A001FCDF7866B51F390263BA1CA2572B2001634F9> (accessed 13 August 2008).

3.14 A gross feed-in-tariff system has received expert support from witnesses to this inquiry, with many citing the German feed-in-tariff model⁹ and others as ideals for Australia to strive towards because 'they provide long term certainty'.¹⁰

3.15 Professor Andrew Blakers, Director, Centre for Sustainable Energy Systems believes that Australia has the potential to match Germany's growth rates in solar PV and he notes that 'it would be a substantial method of meeting the government's 20 per cent renewable energy target by 2020'¹¹. Professor Blakers also described to the Committee the support that the photovoltaic industry receives in Europe, California and Singapore where 'there is support for solar commercialisations at every level – from the local council, the state government, the federal government...'¹².

3.16 The Coalition is committed to ensuring the growth of Australia's solar industry and believes that a national feed-in tariff regime is the logical next step in supporting the advancement and development of this important industry. However, there can and should be no 'gap' period in support for the solar industry. Rebates to support the upfront cost of PV systems must be either maintained in some form that is complementary to feed-in tariffs or phased out in a smooth, well planned transition from rebates to feed-in tariffs.

Recommendation 3

3.17 Coalition Senators recommend the Rudd Government strongly consider a national feed-in tariff system and immediately begin consultation with the solar industry and experts to establish the most cost effective mix of tariffs and rebates to maximise environmental outcomes.

9 The German system of feed-in-tariffs gives preferential tariffs for solar generated electricity. Under the tariff structure, the base level of compensation for ground-mounted systems can be up to 45.7 euro cents/kWh. Germany is the largest solar heating producer in the world with a 47% share of the global market. The industry employs more than 20,000 people, and has a turnover of €1.7 billion per year. The renewables industry as a whole in Germany had a turnover of €21.6 billion in 2006, up from €16.4 billion in 2005, and employed about 214,000 people – more than the nuclear and the hard and brown coal industries combined. It is expected that by 2020 the renewable energy industry will employ 500,000 people. <http://www.e-parl.net/eparimages/general/pdf/080603%20FIT%20toolkit.pdf> (accessed 13 August 2008)

10 Mr Warwick Ryan, KPMG, *Committee Hansard*, 11 August 2008, p. 15.

11 Professor Andrew Blakers, Director, Centre for Sustainable Energy Systems, *Committee Hansard*, 25 July 2008, p. 12.

12 Professor Andrew Blakers, Director, Centre for Sustainable Energy Systems, *Committee Hansard*, 25 July 2008, pp. 13 - 14.

Carbon pricing

3.18 The Coalition notes and shares the hopes of manufacturers, installers and environmental commentators that the effective pricing of carbon in the long term, combined with a reduction in costs associated with PV technology, will allow the equal competition of PV in the energy market.

3.19 These hopes are balanced against great concern about the capacity of the Rudd Government to effectively deliver such a system of carbon pricing. The failure to consider any of the negative impacts on the market, the solar industry or the production of renewable energy prior to introducing this means test leaves Coalition Senators with grave concerns about the capacity of the Rudd Government to introduce an emissions trading scheme (ETS) without again causing severe negative consequences. Rushed and ill-considered policy in an area as simple as solar rebates has caused chaos for this part of the renewable energy sector. The consequences of similarly rushing the introduction of an ETS are unthinkable.

3.20 The Coalition urges the development of a long term strategy for the solar industry to build the capacity and the sustainable market needed to achieve their goal of being an equal competitor in the energy market. This begins with the abolition of Kevin Rudd's means test on solar rebates.

Senator Simon Birmingham
LP, South Australia

Senator Stephen Parry
LP, Tasmania

Senator John Williams
NP, New South Wales

Senator the Hon Ian Macdonald
LP, Queensland

Minority Report from the Australian Greens

Inquiry into Save Our Solar (Solar Rebate Protection) Bill 2008 [No. 2]

The Australian Greens:

- Believe that the Committee report downplays the strong concerns expressed by the photovoltaic industry and gives too much credence to the Department of the Environment, Water, Heritage and the Arts data showing that rebate applications increased after the introduction of the means test. This increase in demand is very likely to be a short-term effect generated by the considerable media coverage surrounding the introduction of the means test. Until then many would not have known that a rebate existed.
- Share the Committee's concern about the anecdotal evidence suggesting that the average size of the installation has fallen since the introduction of the means test, thus effectively increasing the money the Government spends per unit of installed solar PV installed. We believe that the Committee Report should emphasise that this is further evidence that the Government did not adequately assess the implications of the means test prior to its introduction.
- Support the Save Our Solar Bill on the basis that the administration of the Solar Homes and Communities Plan quite clearly requires the scrutiny of the Senate. Further we consider the Committee's objections to the Bill to be weak and motivated by politics rather than a concern for good governance.
- Maintain our position that the decision to means test the rebate should be immediately reversed and that the Government should, by the next budget, commit to phasing in a national gross feed-in tariff to replace the rebate. The most damaging effect of the means test is that it reinforces the stop start stop nature of government support for solar technology. A gross feed in tariff will provide the certainty that the investment community needs and will facilitate business planning.

Senator Christine Milne
Australian Greens

Senator Scott Ludlam
Australian Greens

Appendix 1

Submissions

- 1 Mr James Cameron
- 2 Mr Julian James
- 3 Ms Patricia Wolff
- 4 Mr Graham and Mrs Fiona Moody
- 5 Mr Andrew and Mrs Janette Bailey
- 6 Mr Hugo Figgis
- 7 Mr Ian and Mrs Frances Toogood
- 8 Southern Metropolitan Regional Council, Western Australia
- 9 Mr Paul Baxter
- 10 Mrs Susan Grant
- 11 Adelaide Hills Solar and Solar Depot
- 11A Adelaide Hills Solar and Solar Depot (Supplementary Submission)
- 12 Environment Shop
- 13 Green Solar Group
- 14 Midwest Solar & Electrical
- 15 Energy Matters
- 16 RK Systems
- 17 Mr Gary Holt
- 18 Solaris Technology
- 19 Mr Ken Larkin
- 20 Macfarlane Generators Pty Ltd
- 21 Mr Steve Hopwood
- 22 Mr Graeme Hunter JP, North Australian Solar Pty Ltd

- 23 Mr Gary Thomas
- 24 Mr Tony Hansen
- 25 Mr Les Mutton
- 26 Mr Brett Easton, Renewablelogic
- 26A Mr Brett Easton, Renewablelogic (Supplementary Submission)
- 27 Mr Richard James
- 28 Mr Glen Holland, Sun Wise Electrics
- 29 Mr Harry Eleftheriou
- 29A Mr Harry Eleftheriou (Supplementary Submission)
- 30 Solartec Renewables Pty Ltd
- 31 Mr Craig Turnbull
- 32 Mr Chris Blackmore, Blackmore's Power and Water
- 32A Mr Chris Blackmore, Blackmore's Power and Water (Supplementary Submission)
- 33 Mr Rede Ogden, Ogden Electrical Pty Ltd
- 34 Mr Brian Jones, Switched-On Electrical/Solar
- 35 Mr Chris Thomson, Infinity Solar
- 36 Mr Alex Bruce, Better Living Energy Solutions
- 36A Mr Alex Bruce, Better Living Energy Solutions (Supplementary Submissions)
- 37 Ms Michelle Drummond, EcoSouth Solar
- 38 Mr Gerard Collins
- 39 Ms Ruth Young
- 40 Mr Peter and Mrs Janice Rowan
- 41 Mr Vince Barila
- 42 Mr Brendan Rogers, Water Dynamics Mildura
- 43 Ms Danielle Arrowsmith

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- 44 Mr Kevin R Buck
- 45 Mr Ken Holley
- 46 Mr Peter Bone, Bone Electrical Pty Ltd
- 47 Mr Drew and Mrs Alexis Vayro
- 48 Mr Garry Barbuto
- 49 Mr Pedro Schwindt
- 50 Mr Julian Bowron
- 51 Mr Kim Pett
- 52 ATA - Alternative Technology Association
- 52A ATA – Alternative Technology Association (Supplementary Submission)
- 53 Mr Dougal Plummer, Plummer Software
- 54 Ms Jennifer Douglas
- 55 Mr Simon Rogers, Gold Coast Solar Power Solutions
- 56 Mr Eddie Speed
- 57 Mr Glen McCarrick
- 58 Ms Meredith John
- 59 Mr Florian Geier
- 60 Mr Antony Zirngast
- 61 Ms Gaye Neaves
- 62 Mr Malcolm Ridyard
- 63 Ms Bindi and Mr Mike Hawkey
- 64 Mr Simon Barclay
- 65 Mr David Synnott
- 66 Ms Caroline Wenger
- 67 Mr Jak Grimm
- 68 Adjunct Professor Michael J Christie PhD

- 69 Solar Sales Pty Ltd
- 69A SunPower Corporation Australia Pty Ltd (formerly Solar Sales Pty Ltd)
(Supplementary Submission)
- 70 Ms Kirsten Miller; Attachment
- 71 MH Power
- 72 Mr Denis French
- 73 Mr Max Evans
- 74 Mr Robert Maher
- 75 Stuart Watson & Associates
- 76 Mr Geoff Thomas
- 77 Mr James Mcglone
- 78 BSR Constructions
- 79 Australian Sustainable Built Environment Council
- 80 Mr Corey Peterson
- 81 Autonomous Energy Pty Ltd
- 82 Australian Conservation Foundation
- 83 Ms Carol Bond
- 84 Mr Ian Drayton
- 85 Ms Melanie Roberts and Mr Ken Philpott
- 86 Ms Alexis Wadsley
- 87 Solar Inverters
- 88 Beyond Building Energy
- 89 Mr Christopher Monie
- 90 Darebin City Council
- 91 Mr Brandon Lewis
- 92 Climate Change Australia - Hastings Branch

93	Ms Patricia Ann Moran
94	BP Solar
95	Ms Anna Pilkington
96	Suntech Power Australia
97	Ms Diana Nunn
98	Conergy Pty Limited
99	Mr Dean Condon
100	Green Energy Trading
101	Electrical Trades Union - Southern States Branch
102	Mr Simon Tiller, Ozone Design
103	Mr Paul Gjeko
104	Ms Estelle Ross
105	Ms Janine Healey
106	Mr Todd Healey
107	The Environment Association (TEA) Inc
108	Mr Tim O'Loughlin
109	Mr Jason Locke
110	Ms Muriel Brown
111	Mr John O'Dell
112	Dr Guy K White
113	Ms Belinda Kendall-White
114	Mr Bill and Ms Jill Carney
115	All Natural Energy
116	Mr George and Ms Jennifer A Ettershank
117	Mr Mark Richards, Eco Tasmania
118	Mr Glen Morris, SolarQuip

- 119 Mr Glenn Moran, Eastland Energy
- 120 Solco Ltd
- 121 Mr Brian England, Self Sufficiency Supplies Pty Ltd
- 122 Mr Peter Campbell
- 123 Ms Jo Payne, Solarsave
- 124 Ms Rachel Howell
- 125 Mr Graydon Cocks
- 126 Mr Jon Stanhope MLA, Chief Minister, ACT Legislative Assembly
- 127 Mr Benjamin Carter
- 128 Mr Nathan Giblett, Energy Superstore
- 129 The Fairs Family
- 130 Ms Helen Hutchinson
- 131 Clean Energy Council
- 132 Mr Tim Kelly
- 133 Mr Wil Blackburn
- 134 Mr Ian Hall, Solar Xpress
- 135 Mr Lee Rigley
- 136 Mr Chris Turnbull
- 137 EcoTasmania
- 138 Mr Dieter Nikolai
- 139 Mr Sean Flanagan, Gecko Solar
- 140 Mr Mark Kelly
- 141 City of Randwick
- 142 Mr Mark Surgeon
- 143 Ms Jenny Issell
- 144 Ms Jayne Murdoch

- 145 Mr Luis Sanches
- 146 Adelaide Buyer's Group
- 147 Department of Environment, Water, Heritage and the Arts
- 148 Samford Valley Solar Neighbourhoods scheme for Pine Rivers Climate Action Group
- 149 Ms Narelle Young
- 150 Ms Tami Boehm
- 151 Ms Karla Fraser
- 152 Ms Robyn Heitmann
- 153 Mr David Bond
- 154 Independent Power Systems Pty Ltd
- 155 Lis Shelley
- 156 Mr Rob Mailler
- 157 Mr Robert Parry

Appendix 2

Public Hearings

Friday, 25 July 2008 – Canberra

Solartec Renewables

Mr Phillip May, Co-director

Ms Sophia Moody, Co-director

Professor Andrew Blakers (Private Capacity)

Mr Ray Meeuwisse (Private Capacity)

Mr Stephen Hopwood (Private Capacity)

Australian Conservation Foundation

Mr Graham Tupper, National Liaison Officer

Ms Vanessa Morris, Volunteer Climate Project Presenter

Monday, 28 July 2008 – Melbourne

Conergy Pty Ltd

Ms Dana Hughes, Government Relations

Environment Shop

Mr Rory Gutterson, Special Projects Manager

Mr Andrew McCarthy, Project Manager

City of Darebin

Ms Libby Hynes, General Manager, Environment and Amenity

Green Energy Trading Pty Ltd

Mr Riccardo Brazzale, Managing Director

Ozone Design Pty Ltd

Mr Simon Tiller, Director

Clean Energy Council

Miss Andrea Gaffney, National Government Relations Manager

Mr Robert Jackson, General Manager, Policy

Alternative Technology Association

Mr Bradley Shone, Energy Policy Manager

Bone Electrical Pty Ltd

Mr Peter Bone, Director

Electrical Trades Union

Ms Imogen Schoots, Environment and Research Officer, Southern States Branch

Mr Wesley Shields, Member

Wednesday, 6 August 2008 – Adelaide

Offshore Energy Pty Ltd trading as Adelaide Hills Solar and Solar Depot

Mr Troy Ryan, Director

Adelaide Buyers Group

Mr Andrew Dickson, Coordinator

EcoSouth Solar

Ms Michelle Drummond, Business Coordinator

Mrs Bindi Hawkey and Mr Mike Hawkey (Private Capacity)

Blackmores Power and Water

Mr Chris Blackmore, Chief Executive Officer

Mr Julian James (Private Capacity)

Mr Rede Ogden (Private Capacity)

Thursday, 7 August 2008 – Perth

Renewablelogic

Mr Brett Easton, Managing Director

Mr Ramon Gregory, Renewable Energy Manager

Switched On Solar

Mr Brian Jones, Manager

WA Sustainable Energy Association Inc

Dr Ray Wills, Chief Executive

SunPower Corporation Australia Pty Ltd

Mr Robert Blakiston, Managing Director Australia

Mr Wilfred Johnston, Project Manager

Solco Ltd

Mr Alex Lamond, Chief Executive Officer

Southern Metropolitan Regional Council

Ms Winifred Killick, Green Enterprise Facilitator

Dr Stephanie Jennings, Greenhouse Strategic Researcher

Better Living Energy Solutions

Mr Alexander Bruce, Director

Swan Energy Pty Ltd

Mr James Rhee, Director

Monday, 11 August 2008 – Brisbane

Mr David Synnott (Private Capacity)

Mr Mark Rickards (Private Capacity)

Suntech Power Australia Pty Ltd

Ms Jia Ying Lu, Regional Manager

Mr Warwick Ryan, KPMG

Department of the Environment, Water, Heritage and the Arts

Mr Ross Carter, First Assistant Secretary, Renewables and Energy Efficiency Division

Mr Stephen Oxley, Assistant Secretary, Renewable Energy Branch

Mr Andrew Bailey (Private Capacity)

Ms Susan Grant (Private Capacity)

Beyond Building Energy

Mr Mitra Ardron, CFO and General Manager Energy

Appendix 3

Tabled documents and additional information

Tabled documents

List of clients unwilling to proceed with installation of Photovoltaic systems due to the introduction of rebate means test, tabled by Solartec Renewables Pty Ltd, 25 July 2008.

Selection of comments from customers expressing frustrations with impact of rebate means test, tabled by Solartec Renewables Pty Ltd, 25 July 2008

Opening statement and comments concerning the introduction of the rebate means test, tabled by Mr Steve Hopwood, 25 July 2008.

Policy Brief: *Building on Australia's competitive advantage – sunlight – by supporting a million solar rooftops program*, October 2007, tabled by the Australian Conservation Foundation, 25 July 2008.

Energy & Equity, Preparing households for climate change: efficiency, equity, immediacy, tabled by the Australian Conservation Foundation, 25 July 2008.

Copy of media release dated 24 July 2008 entitled *Bligh Government drives down solar prices*, tabled by Green Energy Trading, 28 July 2008.

ATA Report, *The Solar Experience PV System Owners' Survey*, October 2007, tabled by ATA – Alternative Technology Association, 28 July 2008.

Copy of correspondence from Solaire Electrical and Nick Oakes Electrical Services, both dated 25 July 2008, concerning the introduction of the rebate means test, tabled by Bone Electrical Pty Ltd, 28 July 2008.

Document: *Path to Differentiated Margins, Suntech's Multiple Cost Reduction Initiatives*, tabled by Suntech Power, 11 August 2008.

Document: *California Low Income Solar Programs*, tabled by Suntech Power, 11 August 2008.

Chart: *Weekly Applications Received by Jurisdiction*, tabled by the Department of Environment, Water, Heritage and the Arts, 11 August 2008.

Additional information

Electrical Trades Union, Southern States Branch: Comments from members with direct quotes in response to the inquiry criteria indicated

Australian Conservation Foundation: A Bright Future: 25% Renewable Energy for Australia by 2020

WA Sustainable Energy Association Inc (WA SEA): Media Release 16 May 2008 - Mean test for industry - solar industry sinking on solar rebate cap.

WA Sustainable Energy Association Inc (WA SEA): Media Release 16 July 2008 - Carbon deals at run-out prices – use your carbon credit card and get an interest free period on fuel.